December 2024

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Planning & Architecture

Prepared by CWPA Planning & Architecture

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Remedial Environment Impact Assessment Report

In support of Substitute Consent Application

for existing development and historic and on-going use

at St. Margaret's Waste Recycling & Transfer Centre

CWPA

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Quality Assurance – Mandate Stature

This document has been prepared and reviewed in accordance with CWPA Planning & Architecture Quality Assurance team provisions.

Date of Preparation	Prepared By	Checked By	Approved By
December 2024	Roisin Corr Rachel Kenny	Rachel Kenny Joe Corr	Joe Corr

Application Information:

Applicant:	St Margaret's Recycling & Transfer Ltd.
Planning Authority:	An Bord Pleanála
Local Authority:	Fingal County Council
RE:	Retention of existing works and activities (including historic and current annual tonnage) at waste transfer and recycling centre at St. Margaret's, Co. Dublin
Subject Site:	St. Margaret's Recycling & Transfer Centre, Sandyhill, Co. Dublin
Prepared By:	CWPA Planning & Architecture

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1.0 Introduction

1.1 Introduction

CWPA Planning & Architecture has been retained by the client, Mr. Brian McDonnell of Saint Margaret's Recycling & Transfer Centre Limited, to prepare this remedial Environmental Impact Assessment Report (rEIAR) for the consideration by An Bord Pleanála in respect of the planning application submitted under Substitute Consent provisions, specifically having regard to the provisions of the Planning and Development, Maritime and Valuation (Amendment) Act 2022, in so far as it amended the principal Act, being the Planning & Development Act, 2000 as amended. The subject development for which substitute consent is being sought may be summarised as follows -

> *'Retention of development in respect of an existing waste recycling and transfer facility comprising industrial buildings, offices, staff facilities, plant and machinery and enabling infrastructure on a 1.75ha site, and Retention of the waste recycling & transfer activities from 2019 to 2023 for tonnages ranging from c.26,000 tonnes to c.42,500 tonnes, and from 2024 onwards for up to 21,900 tonnes per annum at St. Margaret's Recycling & Transfer centre, Sandyhill, Co. Dublin.'*

The **detailed development description** subject of retention is outlined as follows:

Permission is sought by Saint Margaret's Recycling & Transfer Centre Limited at St. Margaret's Metal Recycling, Sandyhill, St. Margaret's, Co. Dublin, under substitute consent provisions, for the Retention of:

1. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility. Existing development includes that previously permitted under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109, and specifically comprises -
   a. Prefabricated cabins (2no.) 177 sqm. - comprising ancillary offices, staff facilities, control room;
   b. Prefabricated w/c and; Steel Container (store) 29 sqm;
   c. recycling and transfer/Industrial buildings 1917 sqm;
   d. Weighbridge; and
   e. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.

2. Existing Infrastructure, ancillary and enabling works, comprising amendments to site access and boundary arrangements including dust mitigation measures, enhanced access and gateway, above and below ground surface water drainage, proprietary wastewater treatment plant, fire water storage and retention, attenuation and storage tanks, truck and vehicle parking. Works/Infrastructure the subject of retention includes

those constructed under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109.

3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6 ha (permitted under F97A/0109) to 1.75ha; comprising the area for an enhanced site access and that of the proprietary wastewater treatment system and percolation area, and the 1.6ha associated with the current waste permit and includes the installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system throughout.

4. The historic use (c.2009 to 2023) of lands comprising 1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity.

5. Historic use of the 1.6 ha of the site, as a waste transfer and recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, in particular during the period 2019 to 2023, where waste throughput at the facility rose from 26,000 to 42,500 tonnes per annum, and which was carried out without the benefit of planning permission.

6. Retention of the on-going use of the existing metal processing and transfer facility with waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction and demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles from January 2024 to date of application decision.

7. Retention of existing mitigation measures introduced up to 2023, and subject of retention, include –
   a. Change in operating regime from 1997 permission, to introduce a permanent restriction on acceptance of raw material to licensed waste collectors and trade/construction companies, with associated ban on acceptance of material from members of the public, ban on sale of material to members of the public.
   b. Enhancement of surface water drainage systems, fire prevention and firewater retention measures, dust suppression, etc.
   c. Enhancement of access arrangements and maintenance of sightlines at gateway onto the R122 St Margarets Road in compliance with the appropriate design standards.
   d. Upgrade of septic tank to proprietary wastewater treatment system
   e. Erection of/replacement of dust netting as required at site boundaries, where applicable.

8. Proposed mitigation measures include the restoration of 1.1 ha of compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands, generally in compliance with conditions 3 and 6 of F13A/0409.

A remedial Environmental Impact Assessment Report and a remedial Natura Impact Statement are submitted in respect of the above.

A simultaneous application is included as part of the Substitute consent process, which seeks:

Permission for –

1. The on-going use of the existing Waste Recycling and Transfer facility with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction and demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

2. A new underground surface water attenuation tank comprising c.675 cubic metres, and a new above ground overflow connected to same comprising 1500 sqm.

3. Enhancement of car parking provision, including installation of 2no. EV charging point and bicycle parking,

4. Alterations to site boundary arrangements, including replacement of existing internal boundary comprising stacked steel containers with 3m high concrete panel and steel post wall, and augmentation of dust netting where applicable, and

5. Revisions to the site area, such that the site will comprise the existing c.1.75 ha subject of the retention application and an additional 2,616sqm which will comprise the proposed surface water attenuation tank and basin (noted above, at item 2).

An Environmental Impact Assessment Report and a Natura Impact Statement are submitted in respect of the above and accompany the application relating to these elements for which permission is sought.

There is a complex development and planning history associated with the subject development, with the development first established in c.1995, and subject of an application for retention in 1997 (under F97A/0109). Permission was granted under F97A/0109 for a facility comprising c.0.6ha, 'industrial' buildings of c. 1083 sqm and offices of c.58sq, weighbridge, proprietary waste treatment system, etc. and tonnage of up to 10,000 tonnes per annum. F97A/0109, did not restrict or preclude the processing of ELVs (which prior to ELV Regulations, 2003 were considered to be 'metals') and nor did it place any restriction on outdoor processing of waste, or the type of plant and machinery required or used on site to enable the processing of the waste types on site.

It would appear that from c.1998 onwards, notwithstanding that permission was granted for an annual tonnage of up to 10,000 tonnes, that this tonnage was immediately exceeded, and

initially operated at c.22,000 tonnes per annum. In 2001 a waste licence for up to 60,000 tonnes per annum was granted by the EPA. The site was not operated by the applicant at the time, however, tonnages on site were recorded by the EPA, and are noted as follows –

Year	Tonnage
2002	59,259.23
2003	93,970
2004	83,510.4
2005	95,035.8
2006	49,006.61 (up to July)

After this period, it would appear that the Waste Licence was voluntarily relinquished, and the operators at that time (i.e. from 2007) operated under a Waste Permit granted by Fingal County Council. It is understood that the facility continued to operate at similarly high levels after this period, although the facility was operated by Barnmore Ltd. at this time. In respect of development on site, there was a significant amount of plant and machinery on site, and that the types of waste and materials processed includes end of life vehicles, and that the processing of certain waste occurs outdoors. It may be noted that the nature of 'waste processing', and in particular C&D and metal, existed on site prior to F97A/0109 being permitted (in 1998) and the types of waste accepted on site has not materially changed in nature in the intervening years, albeit operations have adapted to updated regulations and commercial requirements in line with the waste licences and permits issued.

A number of retention applications were lodged in 2003 in respect of alterations to the site size, in respect of F03A/1561, the site at this time was also noted as being larger than that permitted in 1997 and exceeded that subject of permission at that time. No reference was made to tonnage.

The current applicant took over operations in 2010 and sought retention for the works and activities on site. Under F10A/0177, regularisation of the enlarged site size was sought, however operations on the site had been taking place on this larger site prior to 2003. At this time, permission was granted for an annual tonnage of 25,000 tonnes per annum for a period of 3 years. Under F13A/0409 permission was granted for 21,900 tonnes per annum on a site of c.1.6ha, for a period of 5 years.

Retention for the unauthorised activities was sought and granted on a temporary basis, with the last being under F13A/0409, permission being granted in August 2014. Under F13A/0409, the physical development on site and use of the site for an annual tonnage of 21,900 tonnes was assessed and permitted, and as the development generally operated in accordance with this permission (with the exception of c.1.2ha of hard standing, and minor increases in tonnage but less than 25,000 tonnes), the substitute consent application in respect of 'use' has been limited to that element of the development not previously assessed. Therefore, while the development may have been unauthorised at times prior to the lapse of permission granted under F13/0409, these unauthorised developments appear to have been the subject of retention and temporary permission, and so any unauthorised use prior to the lapse in the temporary permission under F13A/0409 is not being assessed.

From a review of the planning history on site it would appear that the site has been developed and operated outside of the various permanent and temporary planning permissions, having been first established in c.1995 (i.e. prior to F97A/0109 application for retention). The waste recycling and transfer facility has also consistently operated at levels well in excess of 21,900 tonnes per annum since c.1998 and did so without the benefit of planning permission.

Fingal Development Plan(s) state that –

> *"Throughout the County there are uses which do not conform to the zoning objective of the area. These are uses which were in existence on 1st October 1964, or which have valid planning permissions, or which are un-authorised but have exceeded the time limit for enforcement proceedings. Reasonable intensification of extensions to and improvement of premises accommodating these uses will generally be permitted subject to normal planning criteria."*

It is our contention, that notwithstanding the various temporary permissions since 2010, the existing development is a 'non-conforming use' based on the fact that the development/use is "*un-authorised but [has] exceeded the time limit for enforcement proceedings"*. The development and use which we can demonstrate is unauthorised and outside of the time limit for proceedings is in respect of the c.1.6ha site, and c.22,000 tonnes per annum. We do not believe that the non-conforming use is limited to the development permitted in 1998 under F97A/0109, in circumstances where the development never operated in accordance with this permission, we believe Donegal County Council v. Planree, et al applies.

Notwithstanding the non-conforming nature of much of the physical development, being in existence since between 1995 and 2003, and that no enforcement action was taken within the statutory period, the applicant is seeking retention, on a without prejudice basis, for all works on site.

In respect of the 'use' and 'tonnage' from 19th August 2019 to 31 December 2023, the subject development no longer had the benefit of planning permission beyond that granted in 1998 for a smaller site and facility and lower tonnage. During this time, i.e. from 2019 to 2023, the facility operated at levels where a mandatory EIAR would have been required based on annual tonnage in excess of 25,000 tonnes. It is therefore considered that permission for the 'retention' of certain works and activities on site facilitating these operations must be sought under 'substitute consent' provisions, specifically during the above period. While the development no longer operates at this tonnage and the applicant does not propose to revert to the higher tonnage, it is considered appropriate to apply for retention for all past annual tonnage and use of the site in the same application, and therefore a 'remedial EIAR' is submitted for the period 2019 to date (relating to existing development on site).

During the above noted period, from 2019 to 2023, various 'mitigation' measures were introduced, and these included –

- Change in operating regime from 1997 permission, to introduce a permanent restriction on acceptance of raw material to licensed waste collectors and

trade/construction companies, with associated ban on acceptance of material from members of the public, ban on sale of material to members of the public.

- Enhancement of access arrangements and maintenance of sightlines at gateway onto the R122 St Margarets Road in compliance with the appropriate design standards.
- Enhancement of boundary treatments, replacing stacked steel containers with steel post and concrete panel walls.
- Installation of impermeable concrete surface, enhancement of surface water drainage systems with oil traps and increased surface water attenuation, fire prevention, water supply and fire water retention measures, dust suppression, etc.
- Upgrade of septic tank to proprietary wastewater treatment system

However, it should be noted that at the time of carrying out the works, the applicant had been advised by ecological experts that no NIS was required, and the Planning Authority (and their expert consultants) in their assessment of these measures also determined no NIS was required (refer to F20A/0029). Additionally, the applicant is proposing the restoration of c.1.1 ha of the existing compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands, which will improve the landscape characteristics, and biodiversity.

As a number of these mitigation measures related to the management of surface water intended to mitigate against potentially polluted surface water run-off from the site, and applying very strict criteria regarding precautionary principles, a remedial NIS has also been prepared. The decision to submit a remedial NIS addresses the Board's concerns (as outlined in F20A/0029) that there was insufficient information to assess whether or not there was potential to affect the integrity of the conservation objectives of the European sites in the wider area.

Irrelevant of whether a NIS is required or not, as there is no question arising as to the requirement for an EIAR for a waste transfer facility with a tonnage in excess of 25,000 tonnes per annum, the development is required to be considered under substitute consent provisions.

The substitute consent provisions in the Planning and Development, Maritime and Valuation (Amendment) Act 2022 and also new substitute consent regulations supplementing the provisions in that Act were commenced on 16th December 2023.

This rEIAR comprises an assessment of the site and the statutory planning context. In addition, and separate to this report, a Planning Statement has also been prepared by CWPA and sets out the planning rationale and justification for the proposed development and demonstrates how it complies with the 'exceptional circumstances requirements' in accordance with

s.177K(1J) and also that the proposed development accords with the proper planning and sustainable development of the area.

The applicant is also proposing the on-going use of the existing metal processing and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction and demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

Please note the remedial Environmental Impact Report (rEIAR)) should be read in conjunction with the planning application drawings prepared by CWPA and all other studies, plans and particulars, and the planning statement.

The non-technical accompanying this remedial Environmental Impact Report is submitted as a separate document for convenience of the reader and public.

1.2 Planning History

The planning history pertaining to the subject lands is of particular relevance in that the majority of the physical infrastructure was constructed and/or operated with the benefit of temporary planning permissions, and a permanent planning permission under F97A/0109 relating to the use of 0.6 hectares of the site, 1083sqm industrial building, 58sqm prefabricated office and control room building, and the site's use as a waste recycling and transfer facility for up to 10,000 tonnes per annum.

Operations and use on site are also regulated by way of a waste permit licence issued by Fingal County Council Environment Section for 21,900 tonnes per annum (ref. WFP-FG-13-0002-03). Up to 18th August 2019, permission for the current works on site and use on site for 21,900 tonnes per annum was permitted under F13A/0409. The development has also been informed by permissions Reg. Ref. F11A/0443, Reg. Ref. F10A/0177 and Reg. Ref. F03A/1561, which culminated in the current temporary permission Reg. Ref. F13A/0409 for which permanent permission is now being sought.

F13A/0409 was a temporary permission and expired on 18th August 2019, at which time those elements the subject of the temporary permission became unauthorised. When permitted under F13A/0409 and noting the waste permit licence and associated management and monitoring, the development was not considered to result in an undue or significant adverse environmental impact. When the operator continued to operate the day after the lapse of permission under F13A/0409, no greater an impact arose, and as such in carrying out the unauthorised development, the developer (i.e. operator of the waste transfer and recycling centre) had not intended to circumvent any EU directives or legislation. Following the carrying out of an EIA, we are satisfied that no significant adverse impacts arose. The development no

longer operates at a level that requires a mandatory EIA and operates at a level consistent with that permitted in 2014 (under F13A/0409).

A notable proportion of the physical works were originally permitted under the parent permission in 1997, and thereafter extended under temporary permissions from 2003 to 2014 (under F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109). To this end, the majority of works on site were originally designed and permitted having regard to the relevant Development Plans, and national and local policies applicable at that time, as well as environmental constraints. This will be outlined in full, in Section 4 of this rEIAR. It is, however, acknowledged, following on from advice at our pre-app consultation meeting with An Bord Pleanála (ABP) in February 2024, that these works and activities, in so far as they no longer had the benefit of planning permission from 19th August 2019, must be assessed *de novo* within the rEIAR, against relevant policies from that point onwards. It is also acknowledged that in respect of site size and tonnage, as well as office and processing buildings, the development did not conform with these permissions, and as such the development appears to be non-conforming prior to and from 1997.

To this end, the development subject of retention, and on-going use of the site (at previously permitted levels, i.e. 21,900 tonnes per annum), has been assessed having regard to all relevant policy objectives contained in the National Planning Framework: Project Ireland 2040 (NPF), the Regional Spatial Economic Strategy for the Eastern and Midlands Region (RSES), the Fingal Development Plan (FDP) 2017 – 2023 (FDP), the FDP 2023 – 2029, the Dublin Airport Local Area Plan, 2020 and all applicable Section 28 Ministerial Guidelines.

The applicant had endeavoured to regularise matters on site previously, lodging an application for retention and continuation of the use up to 24,900 tonnes per annum under FW20A/0029. Permission was granted by Fingal County Council under F20A/0029, although refused on appeal by An Bord Pleanála. This decision was the subject of Judicial Review proceedings, and a judgement issued in February 2024, upholding the Board's decision. In preparing this rEIAR and application, consideration is also given to the judgement as applicable, in particular noting the requirements for further information required under EU EIA Directives and Habitats Directive.

Separately, but in tandem, the applicant is seeking permission as part of the substitute consent application for a proposed development comprising the on-going/future use of the site and facility to enable annual waste throughput of up to 21,900 tonnes per annum and includes a number of additional mitigation measures. This proposal will be assessed in an EIAR and NIS, and application documentation relating to the future use, rather than in this rEIAR, et al. This division of 'retention' and 'permission' is the advised approach/process outlined by An Bord Pleanála at the pre-app consultation relating to this application.

1.3 Objectives of this remedial EIAR

This remedial Environmental Impact Assessment Report (rEIAR) has been prepared in parallel with the preparation and formulation of a Planning Application for the retention and ongoing use of existing development and activities at St. Margaret's waste processing and transfer facility located at Sandyhill, St. Margaret's, Co. Dublin which has been in existence on the lands for c. 25 years; first permitted in 1998, under F97A/0109.

The majority of this rEIAR was prepared by CWPA Planning, and where applicable, has regard to the work done by the previous consultants in 2013 under F13A/0409 and in 2019, as part of FW20A/0029, in order to provide relevant baseline data from which the subject development's potential impact can be assessed against.

ESC Environmental Ltd, Irwin Carr Noise Consultants, Waterman Moylan Engineering Consultants and RMDA Landscape Architects have provided significant additional inputs, and in addition to CWPA are the principal contributors to this rEIAR to date. Full details of the study team and expertise is provided in Section 1.4 of the report.

St. Margaret's Recycling & Transfer Centre Ltd. will apply to An Bord Pleanála for substitute consent under the Planning and Development, Maritime and Valuation (Amendment) Act 2022, Planning and Development Act 2000 (as amended), the Planning & Development Regulations 2001-2023 and the Protection of Environment Act 2003, seeking planning permission for the following -

Permanent retention of

1. Enabling Ancillary Works, including, but not limited to, works subject to permissions under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109, including amendments to site access and gateway, boundary arrangements, dust mitigation measures, installation of an impermeable concrete surface over c.1.75 ha, above and below ground surface water drainage, septic tank, fire water storage and retention tanks (105m3), surface water attenuation and storage tanks (206m3), truck and vehicle parking,
2. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility, and authorised facility for the treatment of 'end of life vehicles' (ATF for ELVs). Existing development comprises the weighbridge, offices, recycling and transfer/industrial buildings, hard standing, car parking, plant and machinery, detailed below:
    a. Prefabricated cabins (2no.) - 177sqm. - comprising ancillary offices, staff facilities, control room;
    b. Prefabricated w/c & Steel Container (store) - 29 sqm;

c. Recycling and transfer/Industrial buildings of 1917 sqm;

d. Weighbridge; and

e. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.

3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6 ha (permitted under F97A/0109) to 1.75ha of which 1.6ha is associated with waste permit with additional lands comprising site access, proprietary wastewater treatment system, installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system.

4. Historic use of 1.6 ha of the site (as per Waste Permit area under WFP-FG-13-0002-03), as a waste transfer and recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, during the period 2019 to 2023, where waste throughput at the facility ranged from c.26,000 to 42,500 tonnes per annum, without the benefit of planning permission, and from 2024 onwards with operations comprising waste throughput of up to 21,900 tonnes per annum.

5. Laying out and historic use (i.e. 2009 to 2023) of lands comprising c.1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity, and existence as a hardstanding area to date, pending restoration

Permission sought for -

6. Restoration of c.1.1 ha of the above noted compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands.

7. On-going use of the existing metal processing and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

This remedial Environmental Impact Assessment Report (rEIAR) has been prepared to comply with the requirements of the 2014 Directive 2014/52/EU, as amended. The purpose of this rEIAR is to assist and inform An Bord Pleanála, as the Competent Authority, in undertaking an environmental assessment of this development from 19 August 2019 to date, noting that between 2019-2023, the development would have been subject to a mandatory EIAR).

Future Use of Site

Under the substitute consent provisions, in addition to the elements for which retention and ongoing use is sought, permission may be sought for new works. In this respect, the application includes for the future use of the site for continuation of the use of the existing and previously permitted waste processing and transfer facility and authorised treatment facility for end-of-life vehicles, on a 1.75 ha site, at St. Margaret's for up to 21,900 tonnes per annum, and permission for upgrades to the surface water drainage system, and changes to certain site boundaries". This application and associated documentation will consider the predicted potential impacts of the proposed development/use.

Under planning applications submitted in 2019 and 2020, a number of infrastructural improvements were proposed in the context of the longer-term permanent use of the site and tonnages ranging from 24,900 to 45,000 tonnes. These infrastructural improvements were not originally considered necessary to facilitate a development of a waste recycling and transfer centre accepting 21,900 tonnes.

However, having reviewed in full the current drainage, boundary and parking arrangements, it is considered that some of these improvements would bring the development in line with the current development plan, and best practise standards, and as such would be of benefit if the long term continuation of the site as a waste recycling facility and ATF for ELVs (i.e. the proposed development) were permitted. As such some of these works will be proposed in the application for permission for the permanent continuation of use of the site for metal waste recycling facilities up to 21,900 tonnes per annum, notwithstanding that they were and are not deemed necessary in respect of historic use of the site. This matter will be considered in full in the rEIAR and EIAR, as applicable.

1.4 Format

This rEIAR follows what is referred to as a grouped format structure. Using this structure, the rEIAR examines each specialist environmental topic in a separate chapter. It should be noted that an EIAR examines the likely impact of a proposed development, however, this document comprises a remedial EIAR, and as such will look at possible 'predicted or known' environmental impacts associated with the previous and existing unauthorised development, and noting that operations are on-going will also examine current and on-going possible impacts.

It is noted that the development, in terms of the majority of physical works and a throughput of up to 21,900 tonnes per annum, were to a large extent previously permitted by Fingal County Council, and many mitigation measures were already conditioned and are in place, potential impacts were already considered and mitigated, and therefore did not materialise as an impact following the lapse of permission in 2019.

Some mitigation measures (e.g. Restoration of 'agricultural lands') were not implemented and this will be the subject of assessment and retention and mitigation as applicable.

Notwithstanding that the development is now in substantial compliance with the 2013 permission, and as such operating at a level where impacts were envisaged and not considered to be unacceptable, with the passage of time, it is acknowledged that additional mitigation measures may also benefit the scheme, bringing it in line with current standards and best practise and these will be considered as part of the rEIAR, and/or EIAR as applicable.

The application is also the subject of a rNIS, and while this is a separate process, the conclusions of same will be considered where relevant in this document.

The rEIAR chapters generally follow the following format (see tables below)-

- Study Team (overview - Table 1 .1)
- Typical Structure and Authors of specialist chapters (Table 1.2)
- Impact Predictions are set out as per the criteria in Table 1.3
- Consideration of Alternatives (as they relate to the chapter)
- Project Description
- Description of Receiving Environment (as it relates to the chapter)
- Identification and Assessment of Impacts (as they relate to the chapter)
- Mitigation and Monitoring Proposals

1.5 Study Team

Table 1.1: Study team for rEIAR

Role	Personnel	Company
Study Manager	Rachel Kenny	On behalf of CWPA
Study Co- Ordinator	Joe Corr	CWPA
Ecological Assessment Manager	Peter McCormick	ESC Environmental Ltd
Environment & Waste Permit Manager	Martijn Leenheer	ESC Environmental Ltd
Engineering Aspects Study Manager	Ian Worrell	Waterman Moylan

Table 1.2: Specialist Topics –
Chapter 2 Screening & Scoping sets out the basis for the selection of these topics.

Chapter/Parts	Personnel	Company
Population & Human Health	Rachel Kenny	CWPA
Biodiversity	Serena Alexander	CWPA
AA/NIS	Serena Alexander/ Rachel Kenny/ Peter McCormick	ESC Environmental Ltd
Land, Soils, Geology, Hydrogeology,	Martijn Leenheer/Peter McCormick	ESC Environmental Ltd
Water & Hydrology	Peter McCormick/Martijn Leenheer. Ian Worrell/Brian McCann	ESC Environmental Ltd Waterman Moylan
Air Quality & Climate	Main Authors – Martijn Leenheer/Peter McCormick	ESC Environmental Ltd
Noise and Vibration	Shane Carr	Irwin Carr Consulting
Landscape & Visual Impact	Ronan MacDiarmada	RMDA landscape Architects
Traffic & Transportation	Ian Worrell/Brian McCann	Waterman Moylans
Archaeology & Cultural Heritage	Rachel Kenny/ Fran Whelan	CWPA
Material Assets	Rachel Kenny	CWPA
Waste Management	Martijn Leenheer	ESC Environmental Ltd
Accident & Disaster Risks	Martijn Leenheer	ESC Environmental Ltd
Interactions & Cumulative Effects	Rachel Kenny/ Joe Corr	CWPA

1.7 Impact Predictions

Rating of potential environmental impacts in the specialist chapters generally follows the Glossary of Impacts contained in the EPA Guidelines as shown in Table 1.3 below. This takes account of the quality, significance, duration, and type of impact characteristic identified.

Table 1.3 Impact predictions

Impact Characteristic	Term	Description
Quality	Positive	A change which improves the quality of the environment
	Neutral	A change which does not affect the quality of the environment
	Negative	A change which reduces the quality of the environment
Significance	Imperceptible	An impact capable of measurement but without noticeable consequences
	Slight	An impact which causes noticeable changes in the character of the environment without affecting its sensitivities
	Moderate	An impact that alters the character of the environment in a manner consistent with existing and emerging trends
	Significant	An impact, which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment
	Profound	An impact which obliterates sensitive characteristics
Duration	Short-term	Impact lasting one to seven years
	Medium-term	Impact lasting seven to fifteen years
	Long-term	Impact lasting fifteen to sixty years
	Permanent	Impact lasting over sixty years
	Temporary	Impact lasting for one year or less
Type	Cumulative	The addition of many small impacts to create one larger, more significant impact
	'Do Nothing'	The environment as it would be in the future should no development of any kind be carried out
	Indeterminable	When the full consequences of a change in the environment cannot be described
	Irreversible	When the character, distinctiveness, diversity, or reproductive capacity of an environment is permanently lost
	Residual	Degree of environmental change that will occur after the proposed mitigation measures have taken effect
	Synergistic	Where the resultant impact is of greater significance than the sum of its constituents
	'Worst Case'	The impacts arising from a development in the case where the mitigation measures may substantially fail

1.8 Difficulties Encountered

The EIA Regulations require that difficulties such as technical deficiencies, lack of information or knowledge encountered in compiling any specified information for the EIAR be described. In general, there were no significant difficulties encountered in the production of this EIAR. Any issues encountered during assessment of individual factors are noted within the specialist chapters.

1.9 Level of detail in project description

The project description details provided in Chapter 4 and in the specialist Chapters 5 to 16 are generally the outermost ('not to exceed') characteristics of the proposed development, which is maximum dimensions and emissions that could arise from the range of technologies and processes that could be employed. These are the characteristics that have potential to cause the greatest environmental effects. This facilitates an evaluation of 'worst case' environmental effects which is in keeping with the Guidelines and with best practice. Actual effects will not exceed the predicted effects.

1.10 Quotations

By their nature, EIARs contain statements about the proposed development, some of which are positive, and some less than positive. Selective quotation or quotations out of context can give a misleading impression of the findings of the study. Therefore, the study team urges that quotations should, where reasonably possible, be taken from the conclusions of specialists' chapters.

1.11 EIA Report Quality Control

CWPA is committed to consistently monitoring the quality of EIA Report documents prepared both in draft form and before they are finalised, published and submitted to the appropriate competent authority taking into account latest best-practice procedure, legislation and policy.

While every effort has been made to ensure that the content of this EIA Report document is error free and consistent there may be instances in this document where typographical errors and/or minor inconsistencies do occur. These typographical errors and/or minor inconsistencies are unlikely to have any material impact on the overall findings and assessment contained in this EIA Report.

1.12 References

- Guidelines on the information to be contained in Environmental Impact Statements, EPA, 2022
- European Communities (Environmental Impact Assessment) Regulations, 1989, as amended
- European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (SI 296/18)

2.0 Screening & Scoping

2.1 Legislation and Guidance

Environmental Impact Assessments (EIAs) are carried out in response to the requirements of the European Directive on the assessment of the effects of certain public and private projects on the environment, particularly as codified in Directive 2011/92/EU and amended by Directive 2014/52/EU.

The enabling statutory instruments (S.I.s) which transpose the Directive into law in Ireland are the European Communities (Environmental Impact Assessment) Regulations, 1989, as updated by the Planning and Development Acts 2000 to 2006 (the EIA Regulations), with the key legislation being the Planning and Development Regulations 2001 (S.I. 600/2001), as amended. These regulations prescribe the classes of projects subject to Environmental Impact Assessment (EIA). Amendments introduced by Directive 2014/52/EU were transposed into Irish planning law by the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (SI 296/18). These set out the statutory format and content for an EIAR.

2.2 Screening

Under the Planning and Development Regulations, 2001 (SI 600 of 2001), Environmental Impact Assessment Report (EIAR) is to accompany a planning application where a proposed development meets the criteria outlined under Schedule 5, Development for the purposes of Part 10; Part 2, (11), Other Projects, (b) Installations for the disposal of waste with and annual intake greater than 25,000 tonnes not included in Part 1 of this Schedule.

In respect of the current proposal, we note the lapse of permission (as of August 2019), and therefore the 'unauthorised' nature of much of the development and increase in tonnage on site. Noting recent case law, the level of activity on site (in excess of 25,000 tonnes per annum), and the Board's previous consideration of development of the site (under ABP 310169), we consider in accordance with the above, an Environmental Impact Assessment Report (EIAR) would be required to support the development, i.e. works on the site, which comprised excess of 25,000 tonnes per annum for the period 2019 to 2023. In these circumstances, we note that the Planning Authority are precluded from considering this 'retention application' under s.34, as it would appear based on recent 'tonnage' history, an EIAR is mandatorily required and 'substitute consent provisions' apply.

2.2.1 Substitute Consent Provisions

Any person who has carried out development (or the owner, occupier of the land) may apply to the Board for substitute consent in respect of development carried out where an EIA or AA or both are required and where the applicant considers exceptional circumstances exist. Section 177A provides for applications for substitute consent. Section 177B provides that where a

planning authority becomes aware that a development would have required an EIA, determination as to whether an EIA was required or an AA and/or a court within the state of the ECJ had invalidated a grant of permission in relation to that development the planning authority must inform the developer that an application for substitute consent should be made to the Board.

Section 177C provides that in the absence of a notice under 177B the owner or occupier of land where development has been carried out where that development would have required an EIA, determination as to whether an EIA was required, or an AA may apply to the Board for substitute consent if:

- There is a material defect in a permission as determined by a court within the state, the ECJ because of the absence or inadequacy of an EIA or AA, any error of fact or law or,

- where the applicant is of the opinion that exceptional circumstances exist, which would make it appropriate to permit the regularisation of the development by way of an application for substitute consent.

In respect of the subject matter, the applicant is satisfied that an EIAR is required (noting previous operating levels exceeding 25,000 tonnes per annum), and that even at the sub-threshold limit permitted by the PA, the Board's Inspector under ABP-310169, and thereafter the Board in accepting the Inspector's assessment of the case, considered a subthreshold EIA to be required.

There is also provision for pre-application consultations with the Board regarding proposed substitute consent applications (as per the Planning & Development, Maritime and Valuation (Amendment) Act, 2022 and specifically s.27 of this Act, amending s.177E of the Principal Act.), and to this end, the applicant has availed of pre-app consultation, and this rEIAR and application have been informed by the advice given by the Board's inspectors (although it is acknowledged that this advice is given without prejudice to the Board's consideration of the application).

This rEIAR has been prepared in accordance with the above and has had due regard to other relevant regulations and guidance including Guidelines on information to be contained in Environmental Impact Statements, EPA, 2022, Advice Notes on Current Practice in preparation of Environmental Impact Statements, EPA, 2003 and relevant European Commission guidance documents, as relevant.

In addition, and as required, we have considered the matter of 'exceptional circumstances,' and are satisfied that they exist, although this matter is considered separately (please refer to CWPA Planning Statement).

2.3 Scoping

Basis of scoping for this rEIAR

Scoping is the process of identifying potential concerns that need to be examined in a rEIAR. The determination of potential concerns to be addressed in this case was based on:

- the requirements of the EIA Regulations;
- the requirements of the EIA Directive;
- the Environmental Protection Agency's Guidelines on the information to be contained in Environmental Impact Statements (EPA, 2022) and Advice Notes on Current Practice (in the preparation of EISs) (EPA, 2003);
- the EIA team's experience of preparing and submitting previous EIARs.

2.4 Related Projects

The proposed project consists of an existing facility which has been in place for over 25 years, albeit with some infrastructural additions in place since 2003 onwards. The principal changes on site relate to an increase in site size, increase in annual tonnage relating to 'waste recycling' activities including a treatment facility for 'End of Life' vehicles, and introduction of plant and machinery to allow for conversion of 'waste materials' for reuse (as part of the 'circular' green economy). We would argue that these changes, many of which were the subject of assessment and permission by the competent authority and waste licence permit, do not result in a significant intensification of the potential impacts associated with recycling activities.

As this is an existing development and is not directly linked to other projects, related projects are not relevant.

2.5 Relationship between rEIAR and Assessments under other EU Directives.

This rEIAR takes account of available results from other relevant assessments while avoiding duplication of those assessments, particularly the following:

The Habitats and Birds Directives (92/43/EEC and 79/409/EEC)

The proposal's potential to affect the integrity of the Natura 2000 network, as required under these Directives, has been assessed and an Appropriate Assessment (AA) screening has been formulated and has resulted in the preparation of a remedial Natura Impact Site (rNIS).

The Appropriate Assessment Screening and remedial NIS is included as a separately bound document within the planning application document set. It is referred to in the biodiversity chapter of this rEIAR as relevant.

The Waste Framework Directive (2009/98/EC)

Chapter 14, Waste Management, considers aspects which fall under this Directive, as appropriate.

2.6 References

- European Communities (Environmental Impact Assessment) Regulations, 1989
- European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (SI 296/18)
- Advice Notes on Current Practice in preparation of Environmental Impact Statements, EPA, 2003

3.0 Alternatives

3.1 Introduction

This section of the rEIAR focuses on alternatives that were considered during the preparation of this rEIAR and planning application. This section of the rEIAR has been assessed and written by Rachel Kenny on behalf of CWPA.

Rachel Kenny is a senior planning consultant with CWPA, Planning & Architecture consultancy, and has 30 years' experience as a planner in public and private sector organisations, including Fingal, Meath, and Louth County Council and An Bord Pleanála (as Director of Planning). She holds a degree in Civil Engineering (be (Civil) (Hons) and Masters in Regional and Urban Planning (MRUP), both from University College Dublin. She is a fellow and corporate member of the Irish Planning Institute. She has experience in both forward planning and development management, and specialises in, inter alia, Strategic Infrastructure Development, and large scale EIAR projects.

Before looking at the impacts of any development on the environment, the 2018 regulations require an EIAR to include: A description of the reasonable alternatives studied by the person or persons who prepared the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment.

For the purposes of this rEIAR, as the application and proposed/subject development is one of retention of what was once permitted (albeit on a temporary basis), consideration of alternatives is somewhat limited and on a practical level would have been restricted to a large extent to 'use' of the site, rather than the physical works on site.

3.1.1 Planning Description

The **detailed development description** of the application and the subject of retention is outlined as follows:

Permission is sought by Saint Margaret's Recycling and Transfer Centre Limited at St. Margaret's Metal Recycling, Sandyhill, St. Margaret's, Co. Dublin, under substitute consent provisions, for Retention of:

1. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility. Existing development includes that previously permitted under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109, and specifically comprises -

    a. Prefabricated cabins (2no.) 177 sqm. - comprising ancillary offices, staff facilities, control room;

b. Prefabricated w/c and; Steel Container (store) 29 sqm;
c. Recycling and transfer/Industrial buildings 1917 sqm;
d. Weighbridge; and
e. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.

2. Existing Infrastructure, ancillary and enabling works, comprising amendments to site access and boundary arrangements including dust mitigation measures, enhanced access and gateway, above and below ground surface water drainage, proprietary wastewater treatment plant, fire water storage and retention, attenuation and storage tanks, truck and vehicle parking. Works/Infrastructure the subject of retention includes those constructed under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109.

3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6 ha (permitted under F97A/0109) to 1.75ha; comprising the area of an enhanced site access and that of the proprietary wastewater treatment system and percolation areas and the 1.6ha associated with the current waste permit and includes the installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system throughout.

4. The historic use (c.2009 to 2023) of lands comprising 1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity.

5. Historic use of the 1.6 ha of the site, as a waste transfer and recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, in particular during the period 2019 to 2023, where waste throughput at the facility rose from 26,000 to 42,500 tonnes per annum, and which was carried out without the benefit of planning permission.

6. Retention of the on-going use of the existing metal processing and transfer facility with waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction and demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles from January 2024 to date of application decision.

7. Existing mitigation measures introduced up to 2023, and subject of retention, include –
   a. Change in operating regime from 1997 permission, to introduce a permanent restriction on acceptance of raw material to licensed waste collectors and trade/construction companies, with associated ban on acceptance of material from members of the public, ban on sale of material to members of the public.

   b. Enhancement of surface water drainage systems, fire prevention and fire water retention measures, dust suppression, etc.

c. Enhancement of access arrangements and maintenance of sightlines at gateway onto the R122 St Margarets Road in compliance with the appropriate design standards.
d. Upgrade of septic tank to proprietary wastewater treatment system
e. Erection of/replacement of dust netting as required at site boundaries, where applicable.

8. Proposed Mitigation measures include –
The restoration of 1.1 ha of the existing compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands.

A remedial Environmental Impact Assessment Report and a remedial Natura Impact Statement are submitted in respect of the above.

A simultaneous application is included as part of the Substitute consent process, which seeks:

Permission for –

1. The on-going use of the existing Waste Recycling and Transfer facility with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction and demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.
2. A new underground surface water attenuation tank comprising c.675 cubic metres, and a new above ground overflow connected to same comprising 1500 sqm.
3. Enhancement of car parking provision, including installation of 2no. EV charging point and bicycle parking,
4. Alterations to site boundary arrangements, including replacement of existing internal boundary comprising stacked steel containers with 3m high concrete panel and steel post wall, and augmentation of dust netting where applicable, and
5. Revisions to the site area, such that the site will comprise c.1.75 ha subject of the retention application and an additional 2,616sqm which will comprise the proposed surface water attenuation tank and basin (noted above, at item 2).

An Environmental Impact Assessment Report and a Natura Impact Statement are submitted in respect of the above and accompany the application relating to these elements for which permission is sought.

3.1.2 Guidelines

The EPA Guidelines give considerable coverage to alternatives, partly because the consultation about the effectiveness of EIA practice found that “the acceptability and credibility of EIA findings can be significantly affected by the extent to which this issue is addressed.”

The consideration of alternative routes, sites, alignments, layouts, processes, designs or strategies, is the single most effective means of avoiding environmental impacts. The acceptability and credibility of EIA findings can be significantly affected by the extent to which this issue is addressed.

However, it is important, from the outset, to acknowledge the existence of difficulties and limitations when considering alternatives. The EIAR will deal with the issue of alternatives under two key headings:

- Non-Environmental Factors
- Site Specific Issues

Non-environmental Issues

EIA is confined to the environmental effects which influence the consideration of alternatives. It is important to acknowledge that other non-environmental factors may have equal or overriding importance to the developer, e.g. project economics, land availability, engineering feasibility, planning considerations.

Site Specific Issues

The consideration of alternatives also needs to be set within the parameters of the availability of land (it may be the only suitable land available to the developer) or the need for the project to accommodate demands or opportunities which are site specific. Such considerations should be on the basis of alternatives within a site e.g. design, layout.

For the purposes of the Regulations, alternatives may be described at three levels:

1. Alternative Locations
2. Alternative Designs
3. Alternative Processes

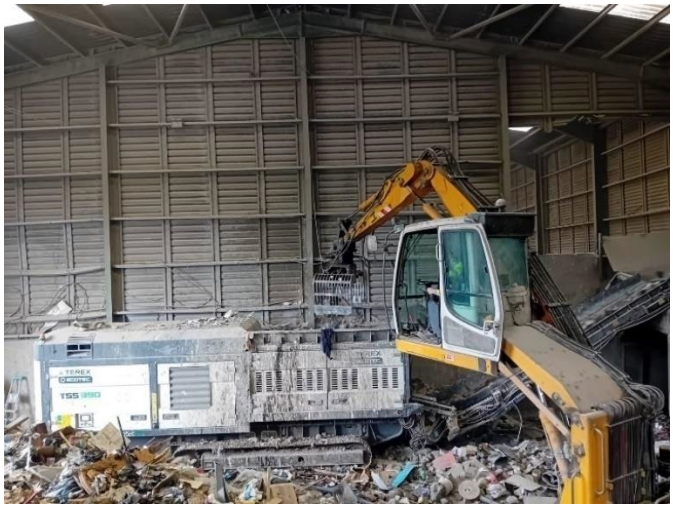
3.2 The Design Hypothesis

A waste recycling facility was permitted on site in 1997, for 10,000 tonnes per annum, with an EPA waste licence in effect during this period for 60,000 tonnes per annum. During this time, and as would have been in place when permission was granted under F97A/0109, the site comprised metal, C&D, timber and domestic general waste recycling activities serving individual as well as commercial waste/metal disposal.

In 1997, and as was permitted at that time (under F97A/0109), much of the waste recycling activity, including car dismantling and crushing, with the associated machinery, including the hammermill, shredders and compactors were housed within the existing buildings on site. (refer to Photos 3.1 to 3.3). The 2001 permitted EPA Waste License provides details of the plant and machinery on site and testifies to the extent of such plant on site.

To this end, the established and permitted use on the site was and is 'waste recycling.' Over a 25-year period, the site was permitted for this purpose. In the making of the County Development Plan, the non-conforming waste recycling and transfer use of these lands was known and in the adopted 2023-2029 CDP is noted as an objective on these lands.

Photos 3.1 to 3.3
– depicting historic development/operations within the permitted 'industrial buildings' comprising waste recycling activities.



The subject site has been in operation as a waste transfer and recycling centre, albeit evolving in its nature and scale to reflect changing requirements relating to 'waste management', including greater efforts on the part of the Government to reduce waste sent to landfill or incineration, and to minimise and repurpose waste material (as part of the evolving circular economy). Development on site was understood to have had the benefit of a permanent planning permission for up to 10,000 tonnes per annum on a c.0.6 hectare site (under F97A/0109); and thereafter over the subsequent 2 decades temporary permissions allowing the site to increase tonnage intake to 21,900 tonnes and almost 3 hectares. However, following a review of the planning and waste licence history, it is acknowledged however that the activities as they operated from c.1995 to c.2010 did not have the benefit of permission, in so far as they were substantially non-compliant with the relevant permissions. The applicant did not operate the site during this time, but did endeavour to regularise matters from 2010 onwards when he took control of the site, and with the exception of tonnages, works on site are largely as permitted in 2010, 2011 and 204 (under F13A/0409).

In examining the design of operations on site, and its evolution over the last 25 years, the applicant has introduced 'waste recovery and recycling' activities and processes to reflect market demand and best practice in terms of environmental management and the circular economy, and has endeavoured to do so with the benefit of various temporary permissions.

These design and operational changes include –

1. A change from taking in public and commercial waste to taking in just commercial waste due to a request from Fingal County Council Environment Section (as part of the Waste Permit management and monitoring). This change reduced the number of individuals travelling to the site, and therefore reduced traffic movements; and also ensured that the 'quality and homogeneity' of waste being brought to site was improved. This also resulted in improved efficiency and capacity to recycle waste material into products for re-use. The consequence of accepting waste from only commercial sources also led to larger quantum of waste in each waste delivery, and an increase in tonnage to site to reflect the demands of commercial operators. While there was an increase in the tonnage received on site, overall traffic coming

to the site reduced (in respect of the traffic movements associated with the 10,000 (1998) permitted tonnage compared to the 21,900 previously permitted and licenced tonnage).

2. A change in the nature/type of waste materials received has also occurred since permitted in 1997, with organic waste no longer being accepted on site. This change removes potential adverse impacts associated with odour, vermin, etc. More minor changes in intake also reflects changing markets and product types; including recycling of 'Nespresso' coffee capsules (with this type of domestic coffee making product being a relatively new phenomena).

3. While cars were recycled on the site prior to 2003, statutory requirements changed at this time, requires waste recycling centres to specifically apply for permission to deal with 'End of Life' vehicle (ELV) recovery and dismantling (hence the 2011 retention application for this use/waste source). The ATF (authorised treatment facility) of ELV (end of life vehicles) on site is one of only three in the County (i.e. in Fingal) where ELV disposal is permitted. This activity is critical to the county and facilitates authorised disposal of vehicles when they come to the end of their useful life, facilitating a change over to electric vehicles, and additionally allowing the Gardai dispose of vehicles in accordance with their statutory obligations. The primary source of ELVs on site is a result of the facility accepting ELVs that have been seized by An Garda Siochana.

The above noted changes also responded to the market, and the need to recycle in a more responsible manner; and to convert recovered waste into reusable raw material in onward processes (with such recovery at c.95% at this facility).

Metal and related products were always accepted on site, albeit in a different 'original' shape than is the case, but nonetheless, the 1997 permission did envisage steel, metals, plastics and other similar material (from construction and demolition, domestic sources) being disposed of on site, including sorting, shredding, bundling and removal from site (previously to landfill elsewhere). The nature of 'recycling' and 'waste transfer' taking place on site is also reflected in the 2001 EPA Waste Licence for 60,000 tonnes of waste per annum.

The change in 'design' and the new design hypothesis, did not significantly alter the nature of materials arriving to site, however increased processing capabilities on site to allow this waste to be converted into a reusable raw material rather than for 'landfill', was introduced to deliver a net environmental gain and to reflect changes in waste management and green agenda/circular economy objectives, all intended to reduce wider adverse environmental impacts.

It may be further noted that over the last number of years Fingal County Council and/or An Bord Pleanála have granted planning permissions, with the EPA issuing waste licences for waste collection, transfer and recycling facilities throughout Fingal. However, none of these permitted facilities have the metal processing capability that St Margaret's has, which ultimately means

that at this time, only the St Margaret's facility can ensure that Fingal County Council meets its obligations to recycle this type of metal waste within the County.

If St. Margaret's Waste Recycling & Transfer Facility were not in operation, metal waste could not be recycled/processed within the county to the extent needed to allow it to be useable in a future product. This waste metal would therefore be leaving the county and country as a waste product, instead of a raw material suitable for reuse (as part of the circular economy).

3.4 Alternatives

3.4.1 'Do nothing scenario'

An alternative typically considered is to 'do nothing.' In the case of the subject development, being that of retention, 'do nothing' makes little sense, in that the physical development and operations on site were already in existence, and during the period in question are in existence.

In effect, in continuing to operate the development, and not remove the development, the applicant did nothing to alter the existing environment.

However, we have also examined the scenario of 'do nothing' as in 'do not operate,' and the existing recycling centre use to be discontinued. In terms of this scenario, and its appropriateness as a response, the following is noted.

To cease operations on site would result in –

- Closure of an essential piece of waste infrastructure for Fingal
- Reduction in waste recycled for reuse within the Fingal Area and thus potential for a negative environmental impact.
- Increase in carbon emissions, and greater transport costs for commercial waste collection operators (required to travel outside the county and country) to dispose of waste, and thus potential for a negative environmental impact
- Job losses for the local community
- Difficulties/Inability of An Garda Siochana to dispose of ELVs at an authorised treatment facility.
- Non-Compliance with Government and County Council objectives re. recycling and reusing 'waste' transfer within the area in which it is generated.

In that the development is a non-conforming use, and outside the period of enforcement, this is not considered a realistic or reasonable 'do nothing' scenario.

The Government and indeed Fingal County Council's commitment to increasing waste recycling and to reduce landfill waste is clear and evident at National, Regional and Local Planning Policy level. There are clear guidelines for the provision of high-quality recycling

facilities across Fingal that meets the recycling needs of the area but also to ensure that the legally binding targets for reducing carbon emissions through re-use and recycling is met.

The Centre also facilitates the collection, and recycling of An Garda Siochana seized vehicles that become ELVs which account for approx. 90% of ELVs coming to site, and again recognising the obligations and requirements for such a facility to meet the county's needs, refusing to take in this waste, was considered to result in an adverse impact for the community and state services.

The need for the services and facilities provided for recycling at St. Margaret's is demonstrated in the fact that the recycling facility has been providing essential services to the waste management sector for over 25 years and continues to operate successfully in an environmentally safe way in accordance with a waste facility permit (again operating within the 21,900 limit as of 2024).

There is significant demand for waste recycling facilities such as St. Margaret's and this is also evident noting that permission has been sought over the years to increase the tonnage accepted on site to meet this increasing demand. The demand on St Margaret's was, in a very significant part, as a direct result of the permissions granted to waste collectors in the county, without the corresponding requirement for these facilities to process metals to the extent that St Margaret's can. Therefore, to meet their obligations, authorised commercial waste collectors in Fingal transferred greater quantities of waste to St Margaret's.

The closure of this facility and resulting transfer of waste outside of the county and country, i.e. removing the 'recycling' and 'circular economy' element to waste collection, is contrary to the proper planning and sustainable development of the area. In the absence of St. Margaret's Waste Transfer and Recycling Centre and having to return the site to its previous agricultural use, demand would have to be met elsewhere, either by extending other facilities in the area, or through the intensification and/or expansion of such facilities or indeed providing for a new recycling centre. A lack of recycling facilities could lead to longer term issues in ensuring that materials are recycled and reused in an appropriate and environmentally safe manner.

With the implementation of the Circular Economy and Miscellaneous Provisions Act 2022 it is expected that a higher rate of recovery is required. As one of 5 companies nationwide with the infrastructure to achieve a high recovery rate, St. Margaret's Recycling is an essential part of the recovery of metals for other waste companies within the area. Should the temporary permission expire, there will only be four such facilities in the Republic which will reduce reuse and recovery significantly. Furthermore, St. Margaret's Recycling is only one of three Authorised Treatment Facilities for end-of-life vehicles within the entire Fingal area (in comparison with South County Dublin which has c. 8 facilities). Should the temporary permission expire, there will only be two such facilities in Fingal which will reduce reuse and recovery significantly.

Both the Development Plan and the Eastern Midlands Region Waste Management Plan 2015-2021 recognised that the European Union (End of Life Vehicles) Regulations 2014 help facilitate the achievement of a rate of reuse and recovery of a minimum of 95% by an average weight per vehicle and year and the reuse and recycling of a minimum of 85% by an average weight per vehicle and year from January 2015.

Therefore, a do-nothing scenario which would result in permission expiring on the lands would be contrary to Policy IUP22 of the Fingal Development Plan 2023-2029 which seeks to transition from a waste economy towards a green circular economy and make Fingal self-sufficient in terms of resource and waste management. The reality is that a substantial proportion of (waste)companies are and will continue to be reliant on St. Margaret's Recycling to dispose of vehicles and metal recovery in a way that is not harmful to the environment. This means that the demand for waste recycling facilities will continue in the long term and a larger capacity will be required. This will continue to be the case even with the provision of additional services for the Fingal Area as it is of national importance to ensure every effort is made by local authorities and consumers to ensure that as much material is recovered and recycled in a manner that is not harmful to the environment.

The return of the subject site to agricultural use would give rise to the inefficient use of serviced lands. The lands are also subject to specific development constraints particularly the location of the lands within the Outer Public Safety Zone. The purpose of Public Safety Zones (PSZ's) is to protect the public on the ground from the small but real possibility that an aircraft might crash in a populated area. Essentially, a PSZ is used to prevent inappropriate use of land where the risks to the public are the greatest. The existing development on site is wholly appropriate in terms of intensity of use on site (with no individual members of the public arriving on site), thereby ensuring that concerns relating to the PSZs are respected and reflected in the design and use of the site.

The development of the site as a waste recycling facility has not prejudiced the DA zoning objective in this area. As is evident from Fingal County Council's 'economic and employment' analysis published in Feb 2022, in preparation of the County Development Plan, there are c.840 ha of DA land zoned and undeveloped. This figure remains applicable to date (within less than 200ha of the total DA zoned lands being developed and c.840 undeveloped).

The continuation of use on the site is in line with the Development Plan objectives, and with national policy to recycle at source/close to source, with adverse social, economic and environmental impacts associated with its closure.

To close the site would result in a long-term, negative and significant impact.

3.4.3 Alternative Sites

Again, as the site is in operation, and the subject proposal relates to one of retention, the alternative site scenario equally makes little sense. The development was permitted at this location, on the subject site, and generally at the scale in place during the relevant period.

All of the infrastructure associated with St. Margaret's Recycling is in place on the subject site including hardstanding area, entrance road, existing building infrastructures, weighbridge etc. The existing facility has been previously assessed and approved by Fingal County Council and is in accordance with the proper planning and sustainable development of the area.

The applicant is seeking to retain a development at a location and on a site permitted for the use. Where the proposal relates to 'retention' the location is already determined on the basis of the original existence, and as such, no alternative sites were examined.

The development of a new recycling centre and facility on a greenfield site would require new infrastructure including underground drainage etc., new roads and associated surface treatments, service buildings etc which would be contrary to the proper planning and sustainable development of the area noting that St. Margaret's Recycling is an existing serviced and operational facility. In addition, the development of new recycling centre on an alternative greenfield site could potentially have adverse environmental impacts on biodiversity, soils, water, air, human health, visual impacts, traffic, cultural heritage during both the operational and indeed construction stage of the development, all of which would require detailed assessment in due course (although the applicant will only be considering site that are appropriately zoned, and have been through the SEA process to ensure that the principle and level of possible environmental impact is minimal and design solutions can mitigate).

In conclusion, the option of the continued use of the existing recycling centre and acceptance of tonnage as per waste licence and previous permission, i.e. 21,900 tonnes per annum as presented in this application is the most suitable option available in the vicinity.

The use of the lands at St. Margaret's is environmentally sound having regard to the impact that would be generated by the development of a recycling facility at an alternative location. It should be noted that the environmental impact of the proposed development had been previously assessed by the Competent Authority and (at 21,900 tonnes per annum) permitted planning permission and a waste licence.

3.4.3 Alternative Designs and Processes

The site at St Margaret's uses state of the art mill technology for the recycling of waste on site. The alternative technology would be a pre-shredder with a picking line, but the residue of this technology could be recovered further in a mill as present at St Margaret's Recycling.

Bans on the acceptance of incoming material from members of the public and on the sale of material to members of the public have been implemented by the applicants at St. Margaret's. Commencing in 2021, the applicants have more proactively restricted the acceptance of raw material to a small number of licensed waste collectors and trade / construction companies. The number of permitted and licenced commercial operators in Fingal, and the associated tonnage intake that these facilities are permitted, has increased the demand for St Margaret's services, being the only such 'recycling' facility in the county with the capability of processing metal to the extent required to allow this metal to become a 'product' for reuse within the circular economy rather than the alternative which is transfer out of the country as a waste product.

As a consequence of the changed dynamics the demand for the facility to take in higher tonnage has been increased. The increase in population and the general demand for a waste facility that can reach 95% recycling targets, adds to this pressure.

There has been no change in plant, or staff, or operation procedures of the site over the last c.25 years. The existing infrastructure on site, which was in existence prior to the expiration of the 2014 permission, is more than capable of accommodating the increase in tonnage and there was no requirement for additional facilities within the existing recycling centre to accommodate this increase. While there may appear to be a significant increase in activity as a result of increase in site size and tonnage, the site size was increased to allow for the additional environmental, legislative and fire safety requirements which require greater separation distances and separation of materials. Equally, vehicle movements to and from the site are lower than that permitted in 1997. As the commercial operators use larger vehicles, less frequently and more efficiently in their trips, etc. the facility as a whole operated more efficiently with the levels noted during the relevant period. Having reviewed potential impacts and activities, we are satisfied that the increases in tonnage do not lead to a material increase in terms of impact, whether that is traffic, noise, dust, surface water run-off, etc. and therefore the increase in tonnage and site size does not constitute an int3.5ensification of activity on the site.

Alternatives re. the removal of the hardstanding and underground infrastructure or reducing site size were considered, however, in respect of 'retention' this is not a feasible alternative, and in terms of mitigation and ongoing use it was considered that such alternatives would reduce efficiency and result in poorer working conditions on site, resulting in a greater environmental impact and carbon footprint.

Additionally, since 1997, improvements to the site entrance and sight lines have also taken place, and again reverting to the 1997 built form is considered to result in a negative impact on traffic safety when compared with that in place today, as permitted in 2014. In so far as we do not believe that the applicant ever operated in accordance with the permission granted under F97A/0109, any reversion of activities would be to the point at which the 'non-conforming use' was established, which is broadly reflected in the development as outlined in 2003, ie. on a site of c.1.6ha; and for a tonnage well in excess of 22,000 tonnes (as recorded by the EPA for the period 2002 to 2006) and as noted in the permission of 2010 (for 25,000 tonnes per annum).

3.5 Conclusion

In conclusion, the St Margaret's Waste Recycling & Transfer Centre effectively addresses the growing demand for high-capacity waste management in Fingal, leveraging advanced mill technology to maximise recycling efficiency within a circular economy by encompassing the three core principles: designing out waste and pollution; keeping products and material in use; and regenerating natural systems. Despite the increased tonnage and site size, the facility operates utilising existing infrastructure on site and without intensifying environmental or operational impacts be it traffic, noise, dust or surface water run-off, etc. The alternatives to the current configuration were deemed infeasible due to their potential to reduce efficiency,

compromise safety, and increase environmental impacts. The facility's evolution, including improved safety measures and operational enhancements since 1997, ensures that it continues to provide a critical service while maintaining compliance with legislative and environmental standards.

3.6 References

- European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (SI 296/18)
- Guidelines on the information to be contained in Environmental Impact Statements, EPA, 2022.

4.0 Project Description

4.1 Introduction

This Chapter provides a description of the nature and scale of the proposed development, i.e. development subject of retention and the proposed on-going operations associated with the same. It also provides a context for the subject development in terms of its wider catchment area and its local environment. This chapter was written by Rachel Kenny on behalf of CWPA.

Permission is sought by St. Margaret's Recycling & Transfer Centre Ltd. at St. Margaret's Metal Recycling, Sandyhill, St. Margaret's, Co. Dublin, under substitute consent provisions, for the Retention of:

1. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility. Existing development includes that previously permitted under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109, and specifically comprises -

   a. Prefabricated cabins (2no.) - 177 sqm. - comprising ancillary offices, staff facilities, control room;
   b. Prefabricated w/c and; Steel Container (store) - 29 sqm;
   c. recycling and transfer/Industrial buildings - 1917 sqm;
   d. Weighbridge; and
   e. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.

2. Existing Infrastructure, ancillary and enabling works, comprising amendments to site access and boundary arrangements including dust mitigation measures, enhanced access and gateway, above and below ground surface water drainage, proprietary wastewater treatment plant, fire water storage and retention, attenuation and storage tanks, truck and vehicle parking. Works/Infrastructure the subject of retention includes those constructed under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109.

3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size to 1.75ha; comprising the area of an enhanced site access and that of the proprietary wastewater treatment system and percolation areas and the 1.6ha associated with the current waste permit and includes the installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system throughout.

4. The historic use (c.2009 to 2023) of lands comprising 1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for

the temporary storage of vehicles, plant and machinery associated with the waste recycling activity.

5. Historic use of the 1.6 ha of the site, as a waste transfer and recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, in particular during the period 2019 to 2023, where waste throughput at the facility rose from 26,000 to 42,500 tonnes per annum, and which was carried out without the benefit of planning permission.

6. Retention of the on-going use of the existing metal processing and transfer facility with waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction and demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles from January 2024 to date of application decision.

7. Existing mitigation measures introduced up to 2023, and subject of retention, include:
   a. Change in operating regime from 1997 permission, to introduce a permanent restriction on acceptance of raw material to licensed waste collectors and trade/construction companies, with associated ban on acceptance of material from members of the public, ban on sale of material to members of the public.
   b. Enhancement of surface water drainage systems, fire prevention and fire water retention measures, dust suppression, etc.
   c. Enhancement of access arrangements and maintenance of sightlines at gateway onto the R122 St Margarets Road in compliance with the appropriate design standards.
   d. Upgrade of septic tank to proprietary wastewater treatment system.
   e. Erection of/Replacement of dust netting as required at site boundaries, where applicable.

8. Proposed Mitigation measures include –
   The restoration of 1.1 ha of compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands, generally in compliance with conditions 3 and 6 of F13A/0409. These lands were included in an enlarged site area, comprising 2.93 ha under F13A/0409 and F20A/0409.

Both a remedial Environmental Impact Assessment Report and a remedial Natura Impact Statement are submitted in respect of the above.

A simultaneous application is included as part of the Substitute consent process, which seeks: Permission for –

1. The on-going use of the existing Waste Recycling and Transfer facility with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction and demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-

biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

2. A new underground surface water attenuation tank comprising c.675 cubic metres, and a new above ground overflow connected to same comprising 1500 sqm.

3. Enhancement of car parking provision, including installation of 2no. EV charging point and bicycle parking,

4. Alterations to site boundary arrangements, including replacement of existing internal boundary comprising stacked steel containers with 3m high concrete panel and steel post wall, and augmentation of dust netting where applicable, and

5. Revisions to the site area, such that the site will comprise c.1.75 ha subject of the retention application and an additional 2,616sqm (62m length and 47m breadth) which will comprise the proposed surface water attenuation tank and basin (noted above, at item 2).

An Environmental Impact Assessment Report and a Natura Impact Statement are submitted in respect of the above and accompany the application relating to these elements for which permission is sought.

Separately, but in tandem, the applicant is seeking permission as part of the substitute consent application for a proposed development comprising the on-going/future use of the site and facility to enable annual waste throughput of up to 21,900 tonnes per annum, to include:

The on-going use of the existing metal processing and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

This ‘permission’ element is addressed in a separate EIAR and NIS submitted with the simultaneous application for the proposed development and on-going activities.

Noting the planning history on site, the nature of the permissions which over time essentially would equate to the granting of a temporary permission for approx.20 years, the duration and extent of non-conforming use established on the site (c.1.6ha, and c.22,000 tonnes at minimum) at the existing St. Margaret's Recycling & Transfer Centre facility serving the Fingal area; the reasons and justification for permanent permission are as follows:

- The site is a long established non-conforming use, which comprises an existing permission and unauthorised development (on a c.1.6ha site, at an annual tonnage of c.22,000 tonnes per annum from 1998). The subject development satisfies the non-conforming objective of the applicable Fingal Development

Plans, and as such is a development for which 'reasonable intensification would be permitted subject to normal planning criteria.'

- The St. Margaret's Recycling & Transfer facility provides the necessary and key waste processing and transfer facility to the Fingal and wider Dublin area. This would be in accordance with the Fingal Development Plan Policy 2023-2029 Objective IUO29.

- The granting of permanent planning permissions for this site are integral for fulfilling the policy objective Policy IUP22 of the Fingal Development Plan 2023-2029 which seeks to transition from a waste economy towards a green circular economy and make Fingal self-sufficient in terms of resource and waste management.

- St Margaret's Metal Recycling (SMMR) Facility is the only facility in the county which has the capability and capacity to process metals collected in the country (by the permitted commercial operators) and recycle them to the extent that 95% of this material can be re-used. Without such a facility the permitted existing operators would be required to transport this waste outside of the county and country, therefore being non-compliant with FCC and national objectives to reduce waste and to recycle as close to source as is practicable.

- SMMR facility also provides an invaluable service to An Garda Siochana who are legally obligated to dispose of end-of-life vehicles (ELVs) in an authorised treatment facility (ATF). 90% of the ELVs disposed of and recycled at SMRR ATF are from the Garda Siochana. Again, the recycling capability of SMMR ATF allows for the maximum level of recycling for reuse.

- As the population of Fingal is increasing significantly, there is an increase of demand for waste facilities to meet waste objectives and achieve binding targets to separate and process waste streams at municipal and national levels.

- Planning permission for the continuation of the waste processing and transfer facility has been granted planning permission by Fingal County Council on several occasions since 1997 and the development was considered to be compliant with the policies and objectives of the Fingal Development Plan at those times.

- The waste processing and transfer facility since 1997 has continually been compliant with planning and regulatory guidelines applicable to the subject site and surrounding area. In addition to this, the DAA had no objection to the principle of the extant planning permission granted under Reg. Ref. F13A/0409 provided mitigation measures are being met. It is submitted that the mitigation measures will continue to be implemented as part of the proposed application.

- The granting of permission does not preclude the lands from any future applications for alternative developments, and it should be noted that there is

some 840ha of undeveloped DA zoned lands available for development for DA uses.

- The granting of permanent planning permission will put an end to the costly recurrence and administrative burden of repeat applications for temporary planning permissions.

- The granting of permanent planning permission will provide job security to approx.25 employees and the waste facility owner/operator. It will also provide security to ensure that an existing and waste transfer and recycling facility is available to the Fingal Area to safeguard its efficient operation and will have regard to the importance of increased recycling facilities as part of national and regional policy guidance.

Permanent planning permission is being sought for the ongoing use of the facility and is considered appropriate having regard to the established nature of the facility which is fully constructed and in situ. As one of only 3 Authorised Treatment Facilities for End-of-Life Vehicles (ELV's), the granting of permission will be in accordance with waste management strategy for Fingal and particularly Objective WM01 which seeks to facilitate the sustainable expansion of existing Authorised Treatment Facilities for end-of-life vehicles complying with European Union (End of Life Vehicles) Regulations 2014, other relevant legislation and the Eastern Midlands Regional Waste Management Plan 2015-2021.

Permanent planning permission would allow for long term investments such as low carbon and sustainable energy generation. This would be in line with Policy IUP33 and Policy IUP30.

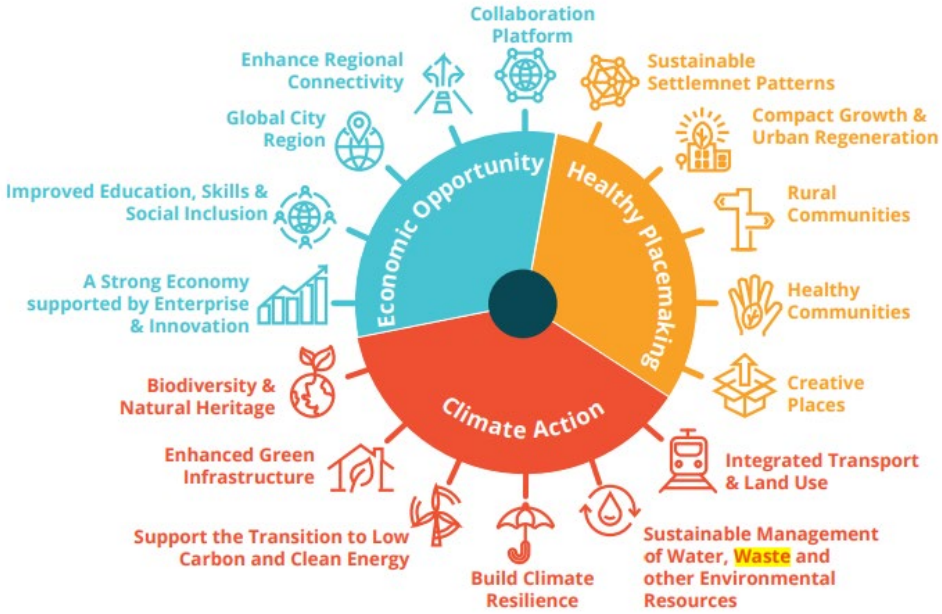
4.2 Fingal Development Plan 2023-2029

Relevant policies from the development Plan are listed below:

Objective IUO29 *– Sustainable Waste Recovery and Disposal*
Provide for, promote and facilitate high quality sustainable waste recovery and disposal infrastructure/technology in keeping with the EU waste hierarchy, national legislation and regional waste management policy to adequately cater for Fingal's growing population.

Policy IUP22 *– Transition From A Waste Economy Towards A Green Circular Economy*
Support the principles of transition from a waste economy towards a green circular economy and implement good waste management and best practices to enable Fingal to become self-sufficient in terms of resource and waste management and to enhance employment and increase the value recovery and recirculation of resources, in accordance with the Whole-of-Government Circular Economy Strategy 2022.

Figure 1.3: Regional Strategic Outcomes of the RSES



Policy CAP10 *– Climate Mitigation Actions in the Built Environment Promote low carbon development within the County which will seek to reduce carbon dioxide emissions, and which will meet the highest feasible environmental standards during construction and occupation. New development should generally demonstrate/provide for: inter alia*

f. Minimising the generation of site and construction waste and maximising reuse or recycling;

5.5.4.1 Circular Economy Chapter 11 Infrastructure and Utilities and Chapter 14 Development Management Standards of this Plan, *seeks to integrate a more sustainable approach to waste based on circular economy principles. National climate action policy emphasises the need to take action to address climate action across all sectors of society and the economy. In the waste sector, policy on climate action is focused on a shift towards a 'circular economy,' encompassing three core principles: designing out waste and pollution; keeping products and material in use; and regenerating natural systems.*

5.5.4.1 Circular Economy

Chapter 11 Infrastructure and Utilities and Chapter 14 Development Management Standards of this Plan, seeks to integrate a more sustainable approach to waste based on circular economy principles. National climate action policy emphasises the need to

take action to address climate action across all sectors of society and the economy. In the waste sector, policy on climate action is focused on a shift towards a 'circular economy,' encompassing three core principles: designing out waste and pollution; keeping products and material in use; and regenerating natural systems.

Chapter 11 – Infrastructure and Utilities

Supports the promotion and delivery of more sustainable forms of waste management in line with circular economy principles.

Supports minimising/preventing waste and maximising material recycling, reuse and repurposing.

Fingal County Council in their Plan, state-

"Successful waste management strategies and policies play an essential role in protecting public health, maintaining a high-quality environment and supporting sustainable development in Fingal and the wider eastern region. In managing our waste needs, we need to minimise waste going to landfill and maximise waste as a valuable resource, as we make the transition from a linear to a circular economy"

"Fingal County Council will continue to support the principle of the circular economy on reusables and water and waste reduction. Promoting and delivering more sustainable forms of water and waste management in Fingal in line with circular economy principles will be central to the overall approach of the Plan"

4.3 Fingal Development Plan 2017-2023

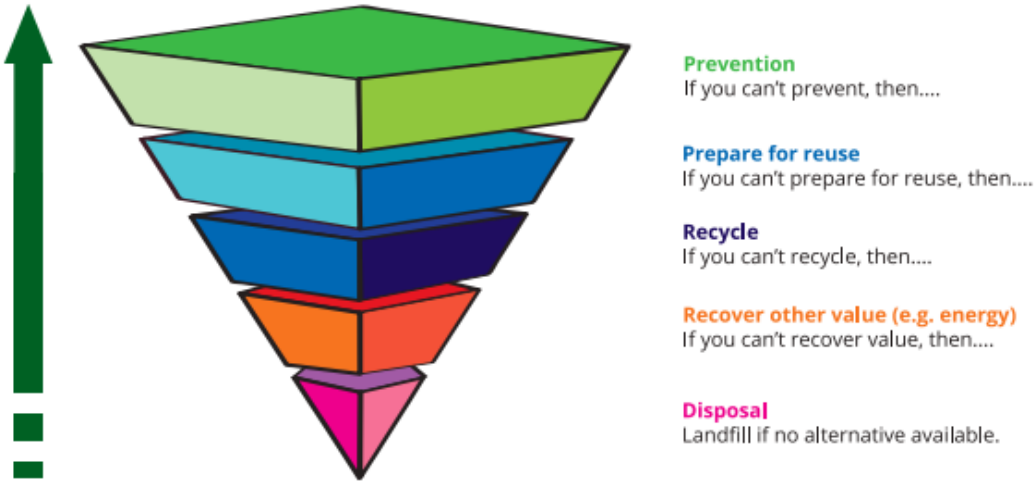
Relevant policies from the previous Development Plan, which was in place during the period 2019 to 2023, during which time the development was 'unauthorised', and the substitute consent application relates are listed below. It is noted that the planning application will be assessed based on current policy, which in a local context is the Fingal County Development Plan 2023 – 2029:

Strategic Policy (section 1.6)
18. Secure the timely provision of infrastructure essential to the sustainable development of the County, in particular in areas of resource and waste management, energy supply, renewable energy generation and Information and Communications Technology (ICT)
22. Minimise the County's contribution to climate change, and adapt to the effects of climate change, with particular reference to the areas of land use, energy, transport, water resources, flooding, waste management and biodiversity, and maximising the

provision of green infrastructure including the provision of trees and soft landscaping solutions

Objective RF93
Encourage the recycling of construction and demolition waste to reduce the need for extraction.

Figure WM01: Waste Hierarchy



Fingal County Plan relies on and incorporates the Eastern Midlands Region Waste Management Plan, 2015-2021, as follows –

> *"The Eastern Midlands Region Waste Management Plan 2015 -2021 was adopted in May 2015. The overall vision of the Regional Waste Management Plan is to rethink the approach taken towards managing waste and that waste should be seen as a valuable material resource. The Plan also supports a move towards achieving a circular economy which is essential if the region is to make better use of resources and become more resource efficient. In the global economy, the demand and competition for finite and sometimes scarce resources will continue to increase, and pressure on resources is causing greater environmental degradation and fragility. Making better uses of these resources, reducing the leakage of materials from our economies, will deliver benefits economically and environmentally. The move to a circular economy replacing outdated industrial take-make-consume and dispose models, is essential to deliver the resource efficiency ambition of the Europe 2020 Strategy.*

The Plan contains three targets:

- *1% reduction per annum in the quantity of household waste generated per capita over the period of the Plan.*
- *Achieve a recycling rate of 50% of Managed Municipal Waste by 2020.*

• Reduce to 0% the direct disposal of unprocessed residual municipal waste to landfill (from 2016 onwards) in favour of higher value pre-treatment processes and Indigenous recovery practices.

Source: Eastern Midlands Region Waste Management Plan 2015-2021"

Objective WM01
Facilitate the sustainable expansion of existing Authorised Treatment Facilities for end-of-life vehicles complying with European Union (End of Life Vehicles) Regulations 2014, other relevant legislation, and the Eastern Midlands Regional Waste Management Plan 2015-2021.

Objective WM04

Facilitate the transition from a waste management economy to a green circular economy to enhance employment and increase the value recovery and recirculation of resources.

Furthermore, the Plan states that *"The Council will promote an increase in the amount of waste reused and recycled consistent with the Eastern Midlands Region Waste Management Plan 2015-2021 and the waste hierarchy. Re-use, preparing for re-use and repair activities can contribute to the community and local economy. Re-use of materials is key to preventing them from becoming waste. Objective WM07 Promote the increased re-use of waste in accordance with the Eastern Midlands Region Waste Management Plan 2015 -2021 (or any subsequent plan). Objective WM08 Promote and encourage the establishment of re-use, preparing for re-use and repair activities in accordance with the Eastern Midlands Region Waste Management Plan 2015 -2021 (or any subsequent plan)"*

"The EC (Waste Directive) Regulations 2011, sets a 70% target for the re-use, recycling and recovery of man-made C&D waste in Ireland by 2020. Objective WM18 Ensure that construction and demolition Waste Management Plans meet the relevant recycling / recovery targets for such waste in accordance with the national legislation and regional waste management policy."

In recent years there has been a move away from the disposal of waste to landfill. In Fingal, Balleally landfill has closed for the acceptance of waste with soil being accepted for restoration / capping purposes only. Dunsink landfill has been closed since the late 1990's".

Dublin Airport (DA) Land Use Zoning

The lands in question are currently (in the 2023 – 2029 County Development Plan) zoned DA, and under normal circumstances, waste recycling facilities are not permitted on such zoning objective lands. However, Fingal's County Development Plans over the years provide for non-conforming land uses even though they are not normally permitted.

Non-Conforming Use-

Section 11.5 of the Plan stated -

> *Throughout the County there are uses which do not conform to the zoning objective of the area. These are uses which were in existence on 1st October 1964, or which have valid planning permissions, or which are unauthorized but have exceeded the time limit for enforcement proceedings. Reasonable intensification of extensions to and improvement of premises accommodating these uses will generally be permitted subject to normal planning criteria.*

The subject development has been permitted in that context for over 20 years. In 2023, notwithstanding the Board decision (F20A/0029), the County Development Plan included a specific map-based objective for the continued use and reasonable expansion of the existing non-conforming use on site.

The development has a permanent parent permission relating to 10,000 tonnes per annum under F97A/0109. The Local Planning Authority and An Bord Pleanála have over the years considered that the non-conforming use related to the development and scale of activity which had the benefit of planning permission, i.e. 10,000 tonnes per annum.

However, this fails to have full regard to the criteria outlined in the development plan, i.e. that a non-conforming use can also include uses "*which are unauthorized but have exceeded the time limit for enforcement proceedings.*" To this end, we can confirm that a non-conforming use, namely waste recycling activities of c.22,000 tonnes has taken place on site since 1997.

Since this time, prior to the lodgement of the application for retention in February 1997, the site has operated at a tonnage of approx.22,000 tonnes per annum and had a waste licence for operations of up to 60,000 tonnes per annum. Notwithstanding, the attachment of a condition to limit the waste intake to 10,000 tonnes per annum, the non-compliance relating to the condition limiting the tonnage (attached to the 1997 permission, and in operation since 1997) continued, and no enforcement notice was issued. A period of in excess of 5 years lapsed (from 1997 onwards), being the period available to the planning authority to do so, under the **Planning & Development Act, 1963 - Section 31**.

> ***31.***—*(1) (a) Where any development of land, being neither exempted development nor development commenced before the appointed day, has been carried out after the appointed day without the grant of permission required in that behalf under this Part of this Act, or any condition subject to which such permission was granted in respect of any development has not been complied with, the planning authority* ***within five years of such development being carried*** *out, or, in case of non-compliance with a condition, within five years after the appropriate date, may, if they decide that it is expedient so to do, and shall, if they are directed by the Minister so to do serve on the owner and on the occupier of the land a notice under this section.*

(b) In the foregoing paragraph "the appropriate date" means, in relation to a condition, the date specified in the condition (or in default of being specified in the condition, specified by notice served by the planning authority on the owner and on the occupier of the land) as the latest date for compliance with the condition.

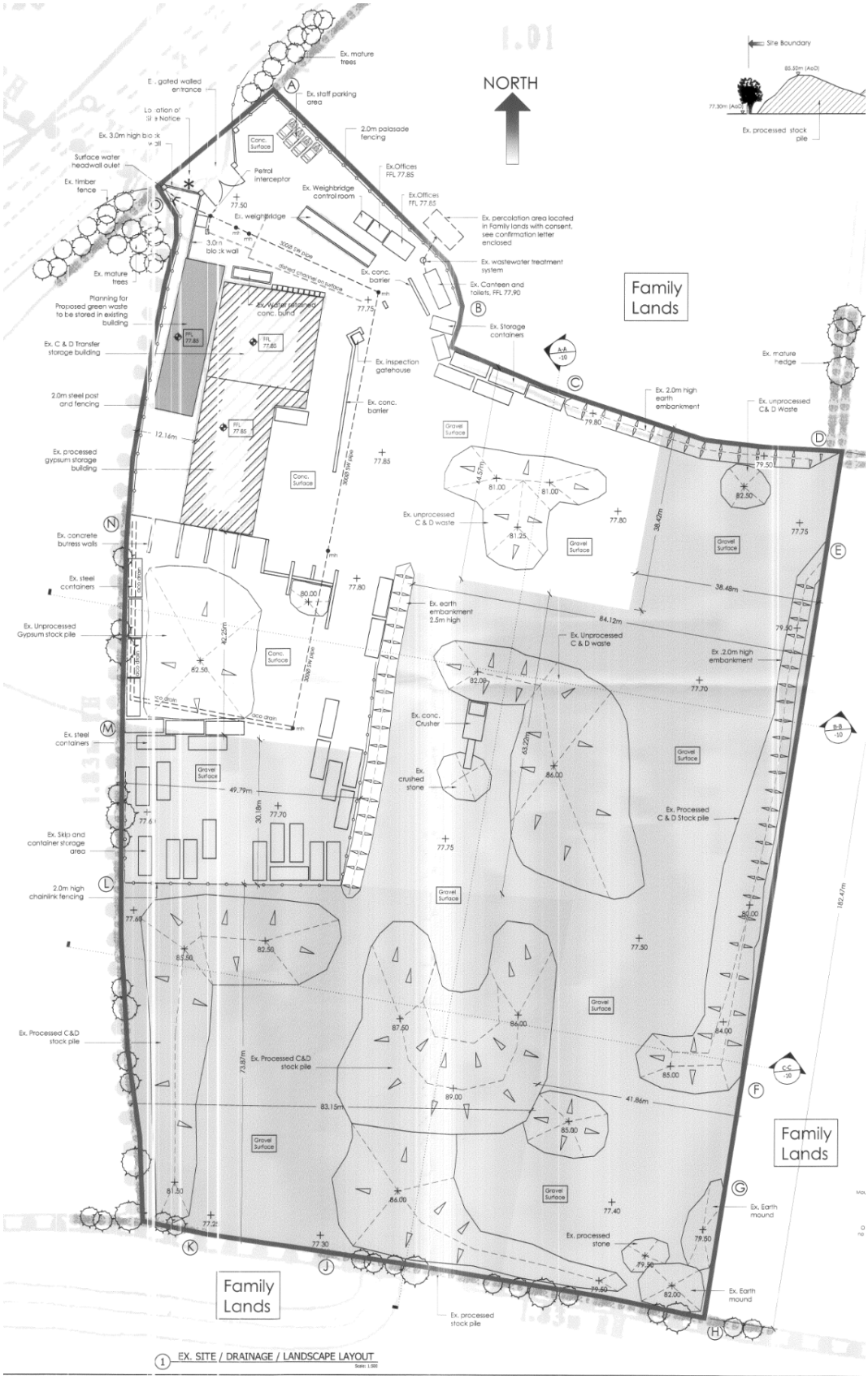
The 2000 Planning & Development Act, as it related to 'Enforcement' under section VIII of the Act, did not come into effect until March 2002. At this point in time, the unauthorised operations on site, pertaining to the 22,000 tonnes had been in effect for in excess of five years.

In any event, in December 2003, the applicant applied for permission for "The permanent retention of 5 no. existing prefabricated single storey buildings, comprising: office accommodation, canteens, toilets and weighbridge control room. Permanent retention is also sought for existing security fencing to the boundary and skip storage area to the south of the site. All on an enlarged site from previously granted permission F97A/0109 and under F03A/1561. This site possessed an EPA waste licence (EPA Licence No. 134-1)" in 2001 for 60,000 tonnes per annum (although annual waste returns indicated tonnages of up to 95,000 tonnes per annum). The 2003 permission was granted, although the planner noted in the decision the extension of the site beyond that in the application, and did not include any conditions relating to the restriction of the tonnage intake to the site.

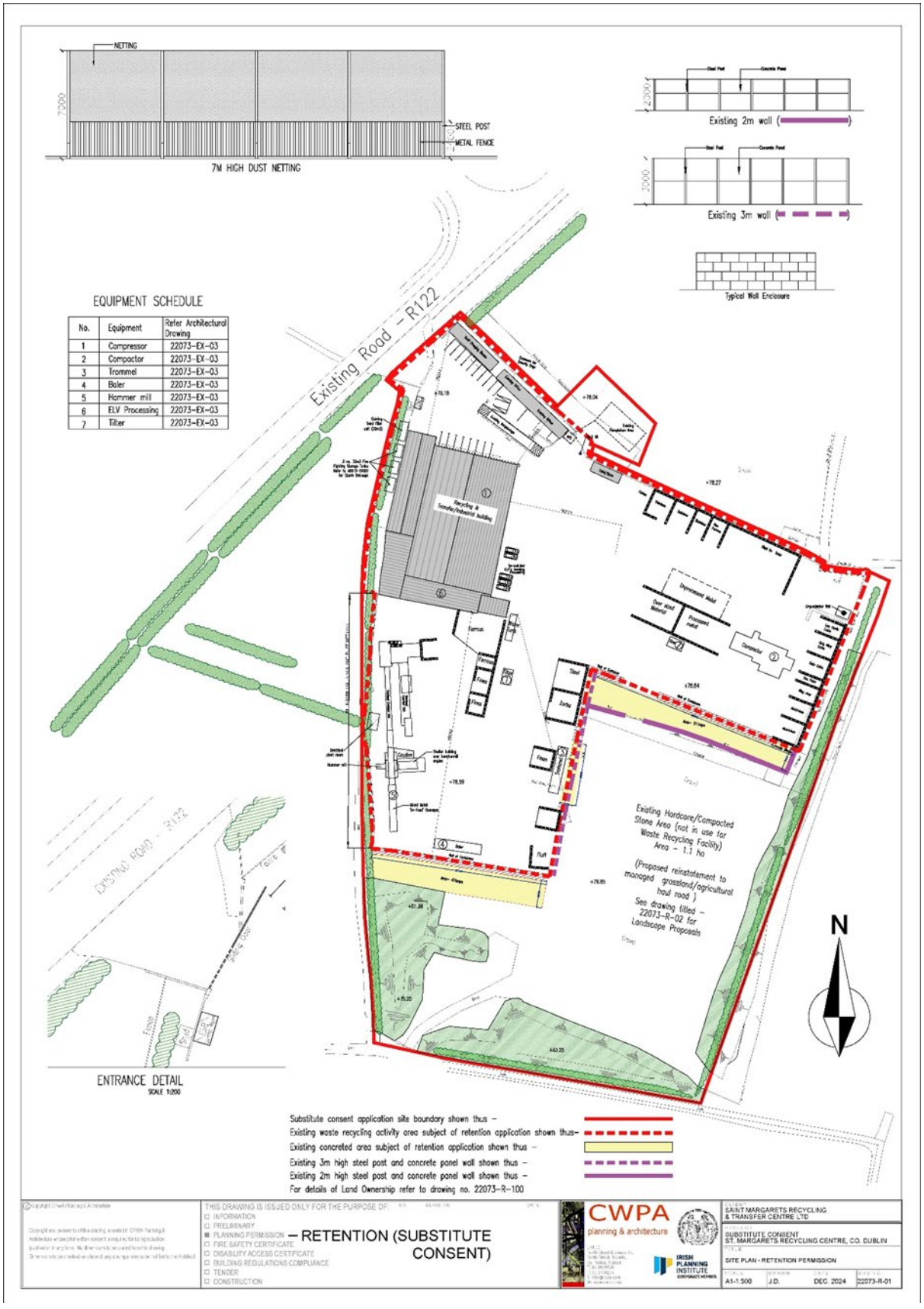
The site therefore operated without the benefit of permission, from 1997 and from 1998 onwards beyond the permitted tonnage, and did so without enforcement action being taken, and without any introduction of conditions confirming or introducing a tonnage limit when next considered and permitted by Fingal County Council in 2004. In 2010, when assessed again by the Local Planning Authority, the development was acknowledged as operating at this higher tonnage and permission to retain this tonnage (noted as 25,000 tonnes per annum) was permitted albeit for a period of 3 years (under 10A/0177). However, at this time, the site had operated as a waste transfer and recycling centre accepting waste tonnage of in excess of c.22,000 tonnes per annum, and had done so for in excess of 13 years, or from Feb.1998 (being the date of permission and the 10,000 tonnes limiting condition under F97A/0109) to December 2010, when permission was granted under F10A/0177. Therefore, the tonnage levels at minimum of 22,000 tonnes are in effect a non-conforming use and intensity level, part of which may be understood to be 'permitted' (as per ABP assessment under the 2020 planning application for retention) and part of which is '*unauthorized but has exceeded the time limit for enforcement proceedings*'. Attaching a condition some 12 plus years later does not, in our opinion, alter the long-standing unauthorised nature of the use on site, and therefore this should be considered the non-conforming use established on site.

In addition, under consideration in respect of F03A/1561, the site at this time was also noted as being larger than that permitted in 1997. And exceeded that subject of permission at that time. Under F10A/0177, regularisation of the enlarged site size was sought, however operations on the site had been taking place on this larger site prior to 2003. Therefore, in December 2010, when permitted, and a restriction of 3 years placed on the use of the enlarged site was introduced, the 7-year period beyond which the planning authority could commence enforcement action had passed. The use of subsequent planning applications (submitted by an

applicant to regularise matters) where the Planning Authority attaches a planning condition to deal with planning enforcement through the extension of the period of action is not provided for within the legislation, and case law pertains to this. Therefore, notwithstanding the temporary permissions which proceeded, from 1998 onwards the site was operated without the benefit of planning permission and was de facto unauthorised (to a large extent) due to non-compliance with conditions. These unauthorised activities continued for a period of in excess of 7 years, and in fact continued for over 12 years, without enforcement. The granting of temporary permissions to alter this fact and to endeavour to change the time frame for enforcement action is not a legally sound or reasonable approach.



Extract from F10/0177, showing existing layout (for representational purposes only).
This layout, in particular as it relates to the core site (comprising c.1.6ha) is consistent with that in existence at the time of assessment of F03A/1561.



Existing Layout as of 2023, and subject of retention (for representational purposes only).

We will therefore be asking the Board to consider the proposed development as a long established non-conforming use, under both provisions available to the applicant and provided for in the Development Plan, i.e. being included as "*uses which do not conform to the zoning objective of the area. These are uses which were in existence on 1st October 1964, or which have valid planning permissions, or which are unauthorized but have exceeded the time limit for enforcement proceedings. Reasonable intensification of extensions to and improvement of premises accommodating these uses will generally be permitted subject to normal planning criteria."*

In summary, while we acknowledge the permitted development and tonnage on site is unauthorised, it has been so since 1998, and therefore, the non-conforming nature of the activity must be considered from this period onwards.

This application, rEIAR, and separate EIAR, will confirm that having regard to the duration of activities on site, and the nature and extent of development on this zoned landbank, that the development does not result in an adverse impact and should be permitted to continue on a permanent basis.

The subject development, in particular at the current scale of 21,900 tonnes, is consistent with that permitted on site in 2013, and noting no change in the zoning objectives, and also no material change in the socio-economic or environmental considerations, including the on-going availability of c.840 ha of DA zoned lands, with no significant planning applications lodged to reduce this quantum of available lands there is no planning rationale to preclude the granting of permission for the current and historic unauthorised use of the site, subject of consideration in this application. The use of the site as outlined did not and does not prejudice the development or activity at the airport and therefore did not does not conflict with or prejudice the DA zoning objective for this wider area.

Notwithstanding that the subject development is a non-conforming use, the development has been permitted and operated at this scale (i.e. c.22,000 tonnes per annum) since first opening. As such, based on current levels and the levels in place at the time the map based objective was adopted in the current plan, specifically allowing for this use, and the various permissions granted by Fingal County Council over the last two decades, we believe that the level and scale of the non-conforming use is a reasonable and appropriate scale and is not contrary to the County Development Plan objectives.

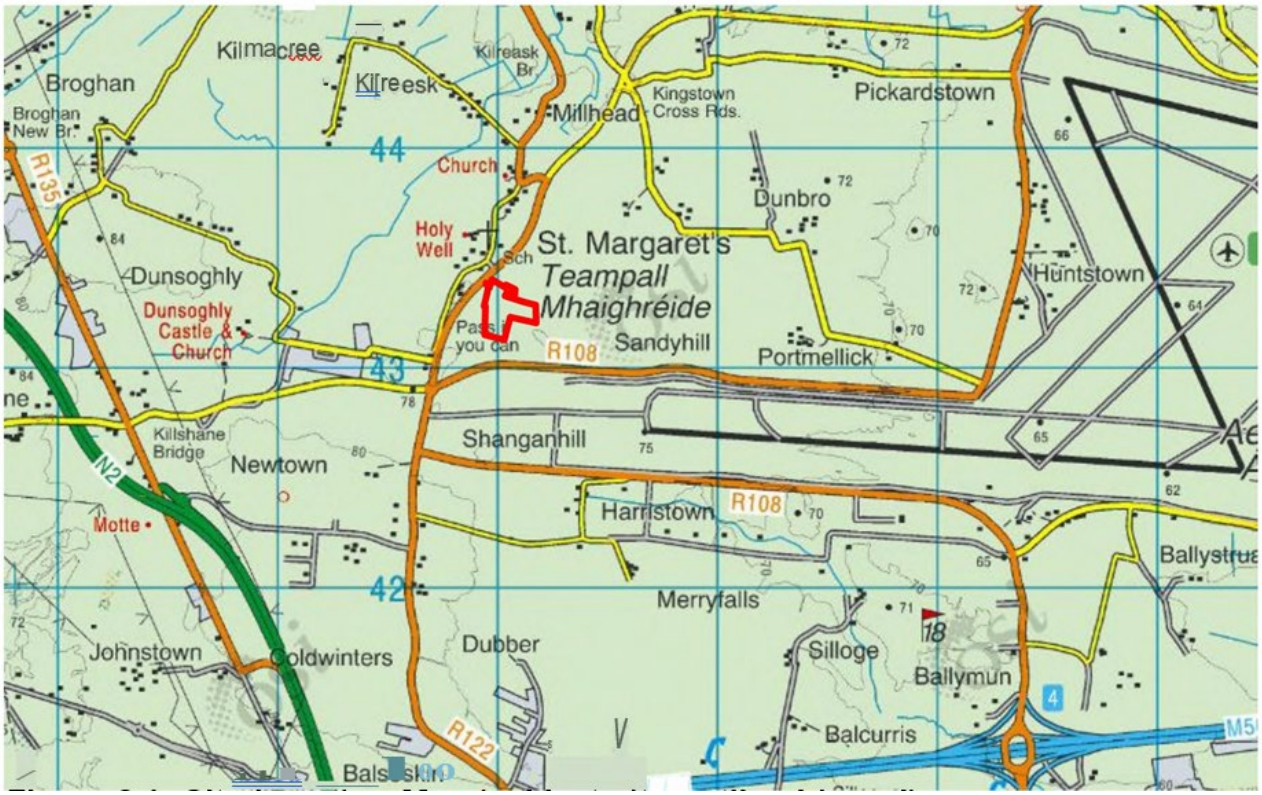
While it may appear on the face of it that the development has doubled in scale, since first permitted, the nature, scale and intensity of development is consistent with that in place on site since c.2003. Furthermore, if the intensification was measured by reference to the potential adverse impacts then there would in fact be a reduction in intensification – i.e. traffic movements have reduced, noise levels are consistent or reduced as machinery has improved, dust levels are consistent, and mitigation has been introduced, surface water run-off is contained within the site and energy consumption is now 50% renewable (solar). On the other hand, employment levels have increased, commercial rates paid have increased, levels of monitoring have increased, and compliance with 'green and circular economy' objectives have been introduced. The site provides an essential service to the county, and particularly to An Garda Siochana, and other permitted waste collection operators (e.g. Panda, Thornhills, etc.).

4.4 General Description of Site and Surroundings

The site is located in the townland of Sandyhill, approximately 100 m south of St. Margaret's village and 6 km southwest of Swords, County Dublin. The R122 passes in a north-south direction close to the western edge of the site, adjoining the boundary only at the northwestern corner, where the site entrance is located. The R108 lies to the south which runs to the south of the site and Dublin Airport is located immediately to the west within the southern runway lying to the southeast.

The site is relatively isolated, bounded to its southern, western, and eastern boundaries by agricultural lands, much of which is in family ownership. The village of St. Margaret's is located on the western side of the R122 and as such, the facility is somewhat disconnected and separate from the village.

Figure 4.1 Site Location



4.5 Description of the Subject Development

4.5.1 General Description

The site is located in the town land of Sandyhill, approximately 100 m south of St. Margarets village and 6 km southwest of Swords, County Dublin. The R122 passes in a north-south

direction close to the western edge of the site, adjoining the boundary only at the northwestern corner, where the site entrance is located.

In terms of regional topography, lands are considered to be flat and low lying, decreasing in gradient from west to east towards the coastline. Undulations are within a narrow range between 70-85 m OD; the nearest feature outside this range being a hill 3 km to the west at Ward which reaches 91 m OD.

At a more local scale topography is very flat and shown on OSI 1: 50,000 Discovery maps to be at an elevation between 70-80 m OD.

With the exception of the site entrance the site is bounded on all sides by agricultural fields which support a mixture of medium to high intensity grassland and tillage production. The boundary of Dublin Airport lands comes to within 240 m of the southern site boundary. This part of the airport contains the western end of the east-west runway. The nearest buildings directly connected to airport activity are 2.3 km to the east.

The small village of St. Margaret's is located 100 m to the north and includes a national school, church, a small number of one-off houses and farmyards. A small manufacturing facility which appears to have ceased trading is located 100 m west of the site.

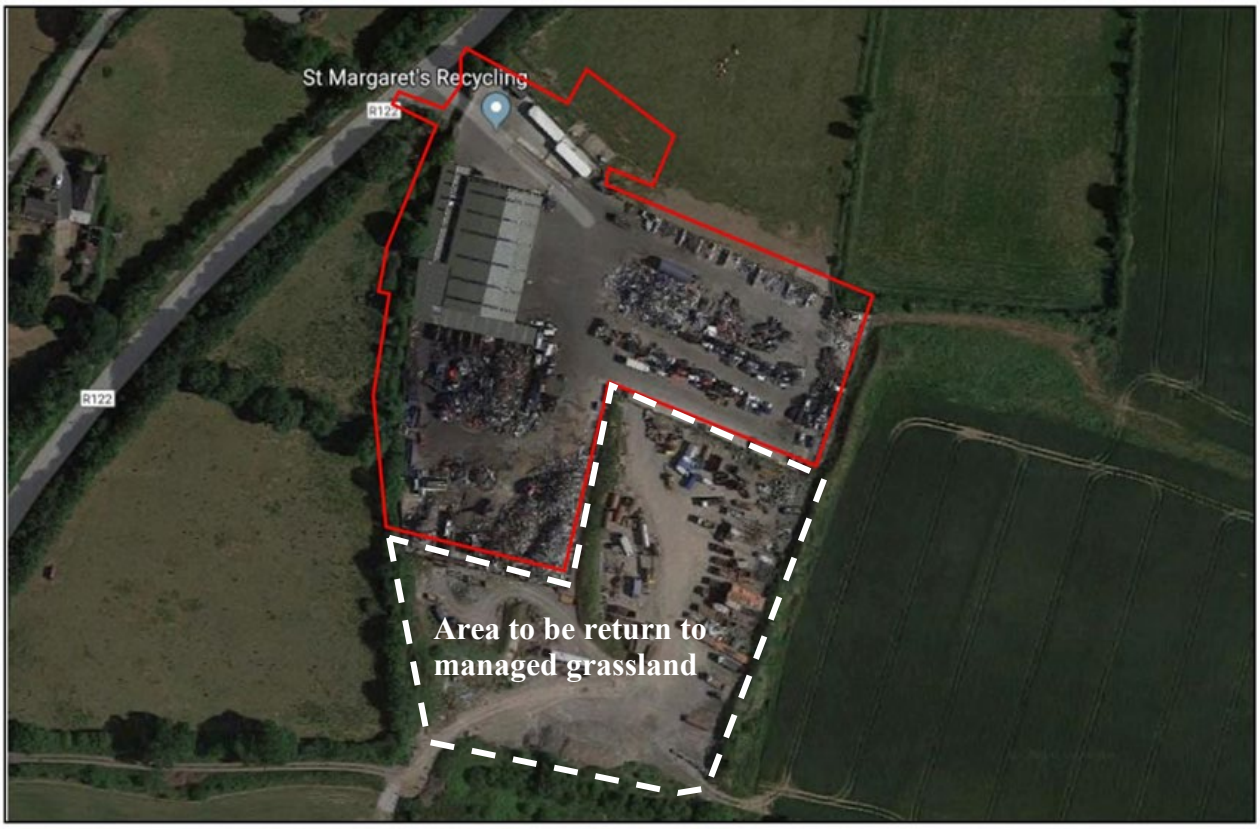
The site is an existing brownfield site that is relatively isolated, bounded to its southern, western, and eastern boundaries by agricultural lands, much of which is in family ownership. The subject site comprises an area of approximately 2.93ha of which 1.6 hectares is used as a waste transfer and recycling centre. The vast majority of the site is hard surfaced. A number of galvanised steel sheds are located to the western boundary of the site. These sheds access onto a concrete yard area.

The active site is irregular in shape with a width of 50 m at the rear (eastern) end which widens to 250 m at the front (west). Maximum length is 160 m in the northern portion, which narrows to 50 m at the southern boundary. The remainder of the site comprises compacted hardcore and surrounded by existing tress and hedgerow – and is located to the south of the permitted area. The site functions primarily as a metal and C&D waste transfer and recycling centre and an Authorised Treatment Facility (ATF) for end-of-life vehicles (ELVs).

Access to the site is from the existing approved entrance onto the R122 and the entrance is formed by a high block concrete wall with metal panel gate. A concrete splayed area is situated between the entrance and roadside boundary. On entering the premises, a car parking area is provided to the left. A weighbridge and several portacabins which function as office space, canteen and toilets is situated within the application site.

Figure 4 .2 Site Context

Figure 4 3- 'Waste Recycling' Site Aerial Photo (for representational purposes only).



The site is an established waste facility and has been in operation for the past 26 years (c. 1997) and operates as an authorised treatment for end-of-life vehicles (ELVs) from others under Waste Facility Permit from Fingal County Council (WFP-FG-13-0002-02).

All input material is weighed and recorded at the facility weighbridge. Input tonnages are monitored on a monthly and quarterly basis by the applicant. The waste types accepted on site comprise the following:

- Metals
- Construction and demolition waste
- Bulky/skip waste
- Wood waste
- Glass
- End-of-Life Vehicles (ELVs)
- Batteries

The above waste types, including that from members of the public, were recycled on site at the time of the 1997 permission.

4.6 Overall Process Description

The procedure for the acceptance of waste or indeed the waste types accepted at the facility will not be modified from that in existence i.e. all input material is weighed and recorded at the

facility weighbridge. Should planning permission be forthcoming, the applicant will adhere with the Waste Facility Permit condition that will be applicable to the application. The waste types accepted on site will remain in accordance with materials granted under temporary planning permission Reg. Ref. F13A/0409 where the following materials will be accepted at the facility:

- Metals
- Construction and demolition waste
- Bulky/skip waste
- Wood waste
- Glass,
- End-of-Life Vehicles (ELVs)
- Batteries

The St. Margaret's Recycling Facility does not and will not accept food waste (putrescible wastes) or green waste. Waste acceptance procedures are in place to ensure that food waste is not presented as part of the Construction & Demolition waste or other incoming waste streams.

It was noted within the previous application on the lands that there were concerns relating to birds. It must be noted that the only organic/biodegradable waste stream accepted on site is wood/timber waste, which is not a food source and therefore not deemed to be an attraction to scavenging birds. Design proposals provide for the moving of wood chipping operations indoors. All handling and processing of Construction & Demolition waste skips is carried out undercover and indoors.

The facility has no record of complaints/non-compliance or history associated with bird nuisance.

Potential impacts relating to bird nuisance are therefore considered to be insignificant for this facility and operation. Continued implementation of the Waste Acceptance Procedure, in line with the requirements of the site's Waste Facility Permit, and the procedure of works as part of the development procedure will continue to be applied. The Dublin Airport Authority had no objection to the principle of the extant temporary planning permission granted under Reg. Ref. F13A/0409 provided mitigation measures were met. It is submitted that mitigation measures will continue to be implemented on site as there are no proposed amendments in relation to the recyclable waste and material accepted on site.

There are no changes proposed to the existing layout for the remainder of the site in terms of buildings etc.

Permission is being sought for the continued use of the existing facilities, including mitigation measures comprising existing internal roads, surface water drainage and attenuation (c.206cu.m), fire water retention (105cu.m) etc. Please refer to the enclosed plans prepared by Waterman Moylan/CWPA which sets out the existing and proposed site layout and the existing and proposed engineering details.

Permission is also being sought for enhanced vehicle parking provision (to accommodate EVs), minor alterations to boundary arrangements and additional stormwater attenuation proposals, however, this is considered in the accompanying EIAR.

4.7 Operating Hours

The site operates from 8 am to 5.30 pm on weekdays, 8am to 2pm on Saturday, and the site is closed on Sundays and bank/public holidays.

4.8 Construction

From 2019 to date, limited construction/new works took place, with the following being the only additional elements –

1. 2 no. areas comprising c. 0.05ha and c.0.05 ha of hardstanding and replacement of stacked steel containers as boundary to kerb and steel post and concrete panel wall;
2. Replacement of previously permitted prefabricated office buildings with new prefabricated office buildings on the same footprint, replacement of hammermill plant and miscellaneous machinery.
3. Fire safety measures.
4. Enhancement of surface water drainage measures.
5. Installation of dust monitoring and mitigation measures.
6. Topsoil and Seeding of c.1.1ha of land.

Their works are of a very minor nature and no material or significant construction works were noted during the period 2019 to 2024 that would have resulted in a significant or notable environmental impact.

4.9 Emissions

This is an existing site with an existing Waste Facility Permit (WFP-FG-13-0002-03) under which the emissions monitoring is required and reported.

Noise and vibration on site was measured and considered to be below acceptable levels, whether at the higher or lower tonnage levels.

No other emissions pertain.

5.0 Population & Human Health

This section of the remedial Environmental Impact Assessment Report assesses the impact of the development to be retained on the human environment in the general area of the subject site at Sandyhill, St. Margaret's, Co. Dublin.

Specific aspects that will be examined will include population levels, human health, fire risk and safety, impact on employment, community infrastructure and social facilities.

This section of the rEIAR has been assessed and written by Rachel Kenny on behalf of CWPA. Rachel Kenny is a senior planning consultant with CWPA, Planning & Architecture consultancy, and has 30 years' experience as a planner in public and private sector organisations, including Fingal, Meath, and Louth County Council and An Bord Pleanála (as Director of Planning). She holds a degree in Civil Engineering (be (Civil) (Hons) and Masters in Regional and Urban Planning (MRUP), both from University College Dublin. She is a fellow and corporate member of the Irish Planning Institute. She has experience in both forward planning and development management, and specialises in, inter alia, Strategic Infrastructure Development, and large scale EIAR projects.

5.1 Population Introduction

This section of the remedial EIAR assesses the impact of the proposed development on population and human health in the vicinity of the site. Insofar as possible, this assessment has also considered impacts on the future workers and visitors to the subject lands.

5.2 Research Methodology

The following assessment of the predicted impacts on population and human health was undertaken based on local population information from the Central Statistics Office's Census of Population reports, the Regional Planning Guidelines for the Greater Dublin Area 2010-2022, Fingal County Development Plan 2023-2029, and the Dublin Airport Local Area Plan 2020. A site visit was undertaken to appraise the location, whilst a desktop study was also undertaken to assist in characterising the environment in relation to human beings.

5.3 Receiving Environment

The subject lands are located at Sandyhill, St. Margaret's, on the east side of the R122 (Finglas – Balbriggan Regional Road), on a site located directly south of the main settlement known as St. Margaret's. To the south are lands that support the main southern runway to Dublin Airport with the M50 located further south of the subject site. The surrounding area comprises primarily

greenfield agricultural lands with clusters of housing and commercial developments located along the R122 road both to the north and south of the application site.

The subject lands comprise an existing recycling centre that has been in existence since 1997 (albeit in different ownerships) on c.1.6 ha of lands. The site functions primarily as an Authorised Treatment Facility (ATF) for end-of-life vehicles (ELVs). It also serves as a waste recovery and recycling facility which is permitted to accept waste metals, C & D waste material and batteries. The site comprises, concrete hardstanding entrance laneway and public parking area in the northwestern corner; hardstanding for the storage of cars awaiting depollution, covered waste processing shed, site offices, welfare facilities and a weighbridge at the entrance and secure perimeter fencing.

5.4 The Subject Development

"Permission is sought by St. Margaret's Recycling & Transfer Ltd. at St. Margaret's Recycling & Transfer, Sandyhill, St. Margaret's, Co. Dublin, under substitute consent provisions, for -

Retention of:

1. Enabling Ancillary Works, including, but not limited to, that subject of permissions under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109, including amendments to site access and gateway, boundary arrangements, dust mitigation measures, installation of an impermeable concrete surface over c.1.75 ha, above and below ground surface water drainage, septic tank, fire water storage and retention tanks (105m3), surface water attenuation and storage tanks (206m3), truck and vehicle parking,

2. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility, and authorised facility for the treatment of 'end of life vehicles' (ATF for ELVs). Existing development comprises the weighbridge, offices, recycling, and transfer/industrial buildings, hard standing, car parking, plant and machinery, detailed below:

    a. Prefabricated cabins (2no.) - 177sqm. - comprising ancillary offices, staff facilities, control room;

    b. Prefabricated w/c & Steel Container (store) - 29 sqm;

    c. Recycling and transfer/Industrial buildings of 1917 sqm;

    d. Weighbridge; and

    e. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.

3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6 ha (permitted under F97A/0109) to 1.75ha of which 1.6ha is associated with waste permit with additional lands comprising site access, proprietary wastewater treatment system, installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system.
4. Historic use of 1.6 ha of the site (as per Waste Permit area under WFP-FG-13-0002-03), as a waste transfer and recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, during the period 2019 to 2023, where waste throughput at the facility ranged from c.26,000 to 42,500 tonnes per annum, without the benefit of planning permission, and from 2024 onwards with operations comprising waste throughput of up to 21,900 tonnes per annum.
5. Laying out and historic use (i.e. 2009 to 2023) of lands comprising c.1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity, and existence as a hardstanding area to date, pending restoration
6. Proposed Restoration of c.1.1 ha of the above noted compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands.
7. On-going use of the existing metal processing and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

This application will be assessed in an rEIAR and rNIS, and application documentation relating to the historic use and development on site, and any mitigation proposed to address potential impacts associated with the historic use/development.

A simultaneous application for the future use of the site, and proposed mitigation measures is considered in a separate EIAR, NIS and application documents and report.

5.5 Population

The population of the state experienced rapid growth in the period between 1996 and 2022. The latest Census results (i.e. 2022) show that Ireland's population stood at 5,149,139 in April 2022, an increase of 8% since April 2016.

In particular, the population growth of Fingal County Council has been strong with an 11.6% rise on 2016 levels, more than twice that of the state overall. The population of the County has been attributed to the availability of zoned and serviced land, strong inward investment, and its strategic position in the Greater Dublin Area.

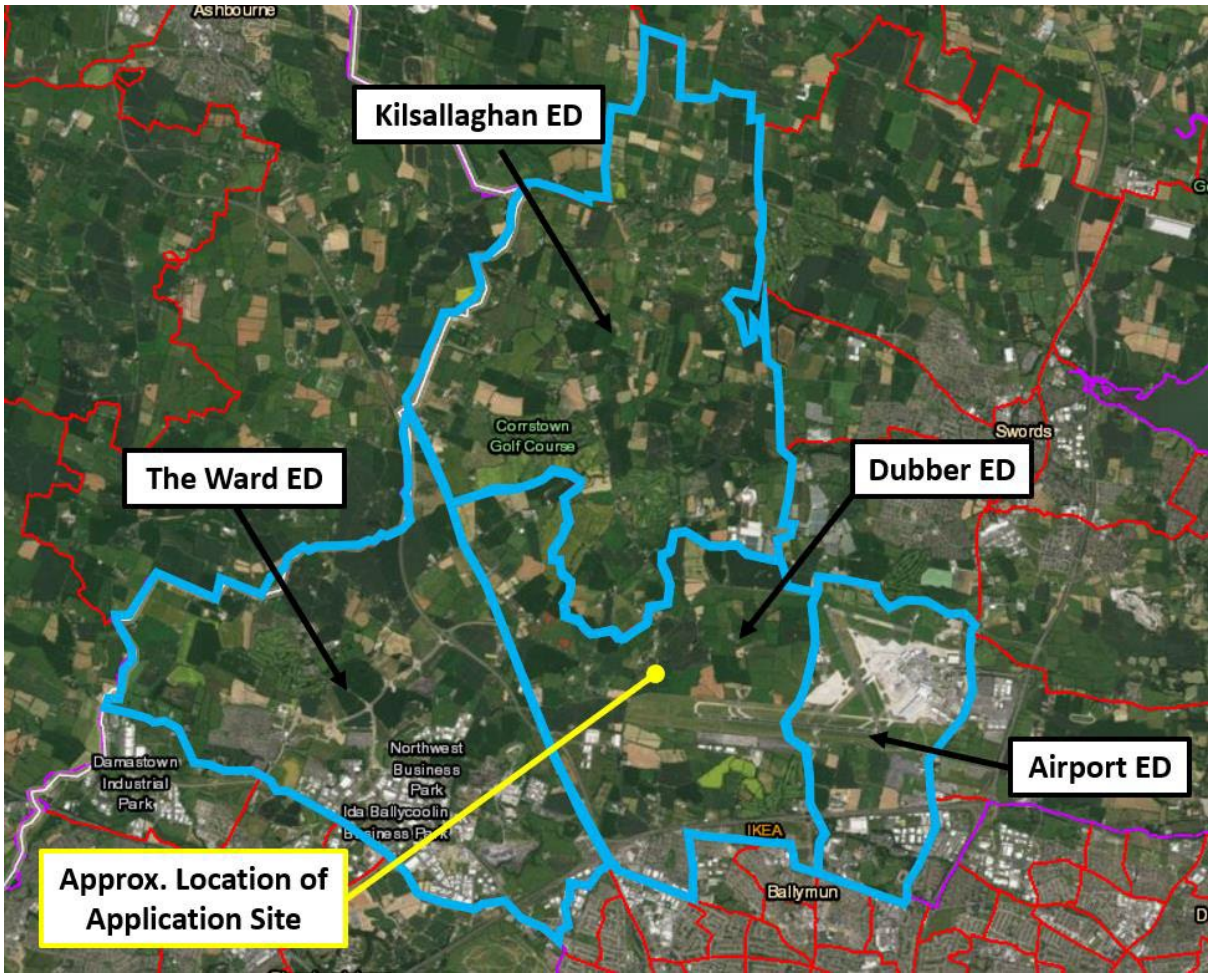


Figure 5.4.1: Electoral Division Map (subject site indicated in yellow)

Table 5.1 Population Trends 2011-2022

Location	Population			Percentage	Change	
	2011	2016	2022	2011-2016	2016-2022	2011-2022
Airport ED	4,032	5,018	6,139	+24.45	+22.34	+52.26
Dubber ED	6,359	7,372	8,812	+15.93	+19.53	+38.58
The Ward ED	8,241	9,602	13,242	+16.51	+37.91	+60.68
Kilsallaghan ED	2,205	2,263	2,427	+02.63	+07.25	+10.07
Total Catchment	20,837	24,255	30,620	+16.40	+26.24	+46.95
Fingal County	273,991	296,020	330,358	+08.04	+11.60	+20.57
Dublin City	527,612	554,554	592,818	+05.10	+06.90	+12.36
Dun Laoghaire - Rathdown	206,261	218,018	233,933	+05.70	+07.30	+13.41
South Dublin	265,205	278,767	301,068	+05.11	+08.00	+13.53
Dublin	1,273,069	1,347,359	1,458,177	+05.83	+08.22	+14.54
Kildare	210,312	222,504	247,869	+05.79	+11.40	+17.86
Wicklow	136,640	142,425	155,813	+04.23	+09.40	+14.03
Meath	184,135	195,044	206,552	+05.92	+13.20	+12.17
State	4,588,252	4,761,865	5,149,139	+03.78	+08.00	+12.22

On a regional level, aside from Fingal, the Dublin Local Authorities experienced a steady rate of growth when compared with the other counties in the Greater Dublin Area. This mirrors an identifiable and inevitable trend that emerged during the last two intercensal periods (2011-2016, 2016-2022) where the population in some of Dublin's traditional residential areas declined, whereas areas in the hinterland of Dublin including Fingal experienced exponential growth.

Table 5.1 (above) also shows the population growth within the District Electoral Divisions (DEDs) within the catchment area. The majority of DEDs within the area have experienced significant growth over the past decade. The subject lands are situated within the Dubber ED, an area that has seen major growth over the past decade with an increase of 19.53% recorded in the period between 2016 and 2022. Table 5.1 indicates that population within the vicinity of the Airport is relatively low due to safety restrictions or residential development and indeed the nature and extent of the airport area.

While the population within the catchment area may have increased since the 2016 Census due to significant residential developments at Finglas, Ballymun, Poppintree, Meakstown, Santry Demesne, Tyrrelstown, Hollywoodrath etc, the proposed development itself has no residential component and will not result in any increase in the permanent population of the area.

5.5.1 Potential Impact of the Subject Development

5.5.1.1 Construction Phase

It is acknowledged that the construction of any project has the potential to give rise to impacts on the health and safety of human beings if activities are not managed properly. During any construction project undertaken on site, while under the control of the applicant, measures to address Health and Safety considerations were addressed in various construction management plans for the development in accordance with best practice, and as applicable were submitted to Fingal County Council Environment Section.

The construction phase of the subject development, for the most part occurred prior to 1997, with the exception of prefabricated offices, surface water management infrastructure, installation of an impermeable concrete yard, and small lean-to type extensions to the existing (pre-1997) sheds. These works were understood to have been assessed in the various temporary permissions relating to their retention.

Construction works not previously assessed in past applications and permissions is limited. The construction works during the period 2019 to 2024 were minor in nature, include (i) enhancement of the fire prevention and waste water retention measures (i.e. use of above ground tanks and containers), (ii) upgrade of septic tank to proprietary waste water treatment system, (iii) replacement of prefabricated buildings on the site or previously permitted prefabricated buildings, and (iv) minor extension of concrete slab (c.0.1ha) and erection of steel post and concrete panel internal boundary wall.

These works did not have any direct impact on the population of the area or the subject lands. The potential/predicated impact of these works on population and human health is considered to have been imperceptible, neutral, and short term.

Proposed restoration of c.1. 1 ha of hardcore, through topsoiling (from soil on site) et al, and seeding same, is not considered to be ‘construction’ in that the impact of same would be consistent with the agricultural use of the lands, which was previously conditioned.

5.5.1.2 Operational Phase

The operational phase of the subject development should not have any significant direct impact on the population of the area or the subject lands. Predicted impact on employment is dealt with separately below (at section 5.6)

The proposed development will attract a small number of visitors to the site, in respect of a potential or predicted impact on population, this will only be of an imperceptible, neutral, and short-term nature.

5.5.1.3 Monitoring.

There is no requirement for population monitoring.

5.6 Employment.

5.6.1 Introduction

This section of the rEIAR assesses the impact of the subject development on employment in the vicinity of the subject site.

5.6.2 Research Methodology

The employment context of the receiving environment is set out drawing principally on the most recently available statistics for the total number of persons at work, unemployment levels and employment categorised according to social group. Therefore, information on the economic performance of the area and the wider Fingal region is derived primarily from the 2022 Census results and statistics obtained from the ESRI.

5.6.3 Receiving Environment

CSO 2022 statistics noted a State employment level of 2,300,000 compared with 2,006,641 in 2016 which resulted in an 16% increase in employment over the 6-year period. CSO figures released in Q2 2022 indicate 2,301,900 persons are in employment with an unemployment level of 176,276.

The unemployment rate as measured by the Census was 8%, down from 13% in April 2016. The CSO states that as of Q2 of 2023 the unemployment rate stood at 4.4% (121,200, Labour Force Survey Quarter 2 2023).

The long-term unemployment rate and the seasonally adjusted unemployment rates have also declined. This represents a considerable period where unemployment has declined indicating the continuing strong growth in the economy.

5.6.4 Characteristics of the Subject Development

The subject development has taken place on a site area of approximately 2.93 hectares. The continuation of the existing waste processing and transfer facility on an on-going basis has ensured the existing employment on the lands was retained, generally at 20 to 25 employees. When operating at 42,500 tonnes, approximately 35 people were employed, although the number of employees on site remains around 20 persons, with some additional employees working off site as drivers.

5.6.5 Potential Impact of the Subject Development

5.6.5.1Construction Phase

The construction phase of the subject development works, outlined in 5.1.1.1, being of such a minor nature, did not have any direct impact on the receiving environment of the area as it related to 'employment.' The impact was neutral, imperceptible, and temporary.

5.6.5.2 Operational Phase

The operational phase of the subject development comprised the on-going use of the site/facility and ensured the retention of c.35 to 25 direct jobs. This is considered to be a positive, slight, and long-term impact.

Securing retention and permanent planning permission will safeguard the existing employment at St. Margaret's Recycling who have over c.25 staff employed in the daily operation of the facility. This is considered to be a positive, slight, and long-term impact arising from the development.

5.6.5.3 Remedial and Reductive Measures

No adverse impacts on employment are predicted to have occurred during the construction or operational phase of the development or are predicted to occur with the ongoing use. No remedial or mitigation measures are considered necessary.

5.6.5.4 Predicted Impact of the Subject Development

The predicted impact of the subject development will be the same as that set out for potential impacts.

5.6.5.5 Monitoring.

There is no requirement for employment monitoring.

5.7 Community Infrastructure and Social Facilities

5.7.1 Introduction

This section of the rEIAR assesses the impact of the subject development on the local community, social infrastructure, and facilities in the vicinity of the subject site.

5.7.2 Research Methodology

This section was undertaken with regard to existing community facilities in proximity to the site, which may have been affected by the subject development or may be affected going forward during ongoing use.

5.7.3 Receiving Environment

The Fingal County Development Plan 2023-2029 defines the term 'community infrastructure' as including infrastructure and facilities such as education facilities, facilities associated with social service provision, public health facilities, childcare facilities including private nurseries, community facilities, libraries and arts centres, religious buildings, and cemeteries. The current situation in relation to these facilities in the subject area is set out in the following sections.

Previous development plans defined community infrastructure in a similar vein.

Community

The subject site is located on the periphery of the urban area of Dublin. The immediate vicinity of the site is very sparsely populated.

There is a full range of community facilities in Finglas and Ballymun where they are located within the urban area proper include a wide provision of schools, churches, library services and health services. These areas are well provided for in terms of active community recreation facilities, including playing fields, parks, and sports facilities. These areas are also well provided for in terms of passive recreation facilities including public houses, restaurants, cinemas etc.

Education

The nearest primary school to the waste transfer and recycling facility is St. Margaret's National School which is situated within c. 150 meters north of the subject site. It is envisaged that the existing facility together with the increase in waste throughput at the facility will not impact upon educational facilities in the vicinity of the application site.

The nearest educational facilities excluding the St. Margaret's National School are located in Finglas to the south of the M50 and Kilbrook to the north of the waste and transfer facility. This is reflective of the location of the lands in close proximity to the airport and the safety restrictions associated with an International Airport.

Recreation

There are a number of recreational and sporting facilities located approximately 1.4 km north of the facility is St. Margaret's GAA club, with the St. Margaret's Golf & Country Club and grounds of Rivermeade Football Club located in Kilbrook further north of it. A number of recreational and sporting facilities located approximately 2.5 km south/southeast of the site beyond the airport runway include grounds of the Royal College of Surgeons, and the GAA facilities of Ballymun Kickhams and Parnell's and Silloge Park Golf Club.

5.7.4 Characteristics of the Subject Development

The subject development is on a site area of approximately 2.93 hectares. The continuation of the existing waste processing and transfer facility on a permanent basis will ensure the existing employment on the lands is retained.

5.7.5 Potential Impact of the Subject Development

5.7.5.1 Construction Phase

As outlined in para 5.1.1.1., construction phase is not of relevance to community and social infrastructure.

5.7.5.2 Operational Phase

The continuation of use is unlikely to have had any significant operational impacts on the community and social infrastructure in the vicinity of the application site. Impacts are therefore considered to be imperceptible, neutral and short-term (momentary).

5.7.6 Remedial and Reductive Measures

5.7.6.1 Construction Phase

The construction phase of the development will have had a negligible or neutral impact on the community and social facilities. No mitigation is therefore required.

5.7.6.2 Operational Phase

The subject development is not predicted to have had or to have going forward any adverse impacts on community facilities in the area. No remedial or reductive measures are proposed with reference to community facilities/infrastructure.

5.7.7 Predicted Impact of the Proposed Development

5.7.7.1 Construction Phase

The continuation of use is unlikely to have had any significant operational impacts.

5.7.7.2 Operation Phase

There is no predicted impact on community facilities as a result of the subject development.

5.7.8 Monitoring

There is no requirement for community monitoring.

5.8 Human Health

The subject development and use of the existing St. Margaret's Waste Transfer and Recycling facility had an imperceptible, neutral, and long-term impact on human health including mental health or wellbeing. There have been no perceptible, significant adverse impacts on social, economic or environmental living conditions as a result of the continued use of the facility.

No mitigation measures were required in respect of Population and Human Health during the operational phase of the development.

No monitoring measures were required in respect of Population and Human Health during the operational phase of the development, although it may be noted that noise and dust is monitored, and this is considered under these chapters.

5.9 Fire Risk & Safety

The operation of any project of this nature has the potential to give rise to unplanned events or accidents, including fire, which impact on the health and safety of human beings if such activities are not managed appropriately. Subject to adherence to best practice operation measures, such impacts are not considered to have been likely or significant.

In this instance, fire events arose in 2018. No loss of life or injury arose, and the impact was short-term, negative, and imperceptible in respect of population and human health.

However, on foot of these events, additional mitigation measures were put in place in 2019 and outlined in a fire prevention and management plan submitted to Fingal County Council Environment Section, as this is managed under the Waste Permit provisions rather than planning. (Please refer to Fire Prevention Plan included in Appendix).

Residual risks of fire and road traffic accidents are managed by emergency services as per their standard procedures.

5.10 Cumulative

The cumulative effect of the subject development and increase or variation in respect of annual throughput on Population and Human Health, alongside other developments due to take place in the area will be long term, imperceptible and positive as the proximity principle would mean a significant reduction of transportation and thus emissions, and noting the scale of existing, permitted and proposed development adjacent in Dublin Airport.

5.11 Difficulties Encountered

There were no difficulties encountered during the production of this chapter of the rEIAR.

5.12 References.

- Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, 2022),
- Draft Advice Notes for Preparing Environmental Impact Statements (EPA, 2015), and European Commission (EC),
- Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report (EU, 2017)
- Central Statistics Office. Statbank Databases (Accessed August 2024, https://www.cso.ie/en/databases/)., incl.
    - Census 2022
    - CSO Quarterly Figures.
    - Labour Force Surveys (various quarters)
- Planning Department at Fingal County Council (FCC)
- Chemicals Act (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2015 (S.I. No. 209 of 2015)
- Pobal HP Deprivation Index (Accessed August 2024, https://data.gov.ie/dataset/pobalhp- deprivation-index).
- Seveso Directive (Directive 82/501/EEC, Directive 96/82/EC, Directive 2012/18/EU)

6.0 Biodiversity

6.1 Introduction

This chapter of the remedial Environmental Impact Assessment Report (rEIAR) was carried out by ESC Environmental Ltd, by Serena Alexander, Ecologist; Peter McCormick, Environmental Scientist and Martijn Leenheer, Environmental Scientist (with over 15 years' experience in this sector).

Peter McCormick is a Senior Consultant with ESC Environmental Ltd., and has 7 years' experience in the Environmental Sector, working with both the public and private sector. He holds a degree in Level 8 BSc (Hons) degree in Environmental Science from Atlantic Technological University (previously IT Sligo). He has experience in many aspects of environmental works including wastewater treatment system design, environmental permitting, water management, and specialises in ecological assessments (EcIAs), Appropriate Assessments and Natura Impact Statements.

Martijn Leenheer holds a 1st Class BSc (Hons) degree in Environmental Science from Atlantic Technological University (previously IT Sligo) and has 11 years' experience in Ireland in soil remediation, invasive species commercial Wastewater Treatment, Discharge Licences, Waste Permits and Licences has been involved in Risk Assessments, NIS and EIAR reports for various commercial projects. Before moving to Ireland Martijn worked in the Netherlands as an Environmental Field Technician in soil research. He has been an Operations Director of Environmental Services Consultancy for 11 Years and a Founding Director of ESC Environmental LTD since 2021.

Serena Alexander graduated from University College Dublin with a 1st Class Hons BSC degree, in Zoology in 2023, and works as a graduate ecologist with ESC Environmental Ltd. She has experience working in commercial and research-based labs, as well as familiarity with general genetics, phylogenetics and ecology. She specialises in data analysis, microbial/biological techniques, and has strong IT skills incl. R&Rstudio, Mega Software and LinRegPCR.

This chapter assesses the biodiversity value of the proposed development area and the potential impacts of the development on the ecology of the surrounding area and within the potential zone of influence (ZoI), and proposes measures for the mitigation of these impacts, where appropriate. Separately, an Appropriate Assessment has been carried out under separate legislative and EU Directive provisions, and this rEIAR may be read in conjunction with this assessment (and enclosed rNIS).

Under the EIA Directive, as well as best practice methodology from the EPA, the analysis of impacts to biodiversity is an essential component of the EIA process, and so is a required chapter in any EIAR.

Under Article 6(3) of the Habitats Directive an "Appropriate Assessment" of projects must be carried out to determine if significant effects are likely to compromise the integrity of Natura 2000 sites. An Appropriate Assessment (containing an Appropriate Assessment Screening Report and Natura Impact Statement (NIS)) has been prepared as a separate stand-alone report.

6.2 Relevant Legislation

6.2.1 National Legislation

6.2.1.1 Wildlife Act 1976 and amendments

The Wildlife Act 1976 was enacted to provide protection to birds, animals, and plants in Ireland and to control activities which may have an adverse impact on the conservation of wildlife. With regard to the listed species, it is an offence to disturb, injure or damage their breeding or resting place wherever these occur without an appropriate licence from the National Parks and Wildlife Service (NPWS). This list includes all birds along with their nests and eggs. Intentional destruction of an active nest from the building stage up until the chicks have fledged is an offence. This includes the cutting of hedgerows from the 1st of March to the 31st of August. The act also provides a mechanism to give statutory protection to Natural Heritage Areas (NHAs). The Wildlife Amendment Act 2000 widened the scope of the Act to include most species, including the majority of fish and aquatic invertebrate species which were excluded from the 1976 Act. The current list of plant species protected by Section 21 of the Wildlife Act, 1976 (and amendments) is set out in the Flora (Protection) Order, 2022 (S.I. No. 235/2022). The Flora (Protection) Order affords protection to several species of plant in Ireland. This Act makes it illegal for anyone to uproot, cut or damage any of the listed plant species and it also forbids anyone from altering, interfering, or damaging their habitats. This protection is not confined to within designated conservation sites and applies wherever the plants are found.

6.2.1.2 EC (Birds and Natural Habitats) Regulations 2011

The EU Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive 1992) provides protection to particular species and habitats throughout Europe. The Habitats Directive has been transported into Irish law through the EC (Birds and Natural Habitats) Regulations 2011.

Annex IV of the EU Habitats Directive provides protection to a number of listed species, wherever they occur. Under Regulation 23 of the Habitats Directive, any person who, in regards to the listed species, "*Deliberately captures or kills any specimen of these species in the wild, deliberately disturbs these species particularly during the period of breeding, rearing, hibernation and migration, deliberately takes or destroys eggs from the wild or damages or destroys a breeding site or resting place of such an animal shall be guilty of an offence.*"

6.2.1.3 Invasive Species Legislation

Certain plant species and their hybrids are listed as Invasive Alien Plant Species in Part 1 of the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011, as amended). In addition, soils and other material containing such invasive plant material, are classified in Part 3 of the Third Schedule as vector materials and are subject to the same strict legal controls.

Failure to comply with the legal requirements set down in this legislation can result in either civil or criminal prosecution, or both, with very severe penalties accruing. Convicted parties under the Act can be fined up to €500,000.00, jailed for up to 3 years, or both. Extracts from the relevant sections of the regulations are reproduced below. *"49(2) Save in accordance with a licence granted [by the Department of Arts, Heritage and the Gaeltacht], any person who plants, disperses, allows or causes to disperse, spreads or otherwise causes to grow in anyplace [a restricted non-native plant], shall be guilty of an offence.*

49(3) ... it shall be a defence to a charge of committing an offence under paragraph (1) or (2) to prove that the accused took all reasonable steps and exercised all due diligence to avoid committing the offence. 50(1) Save in accordance with a licence, a person shall be guilty of an offence if he or she [...] offers or exposes for sale, transportation, distribution, introduction, or release —(a) an animal or plant listed in Part 1 or Part 2 of the Third Schedule,(b) anything from which an animal or plant referred to in subparagraph (a) can be reproduced or propagated, or(c) a vector material listed in the Third Schedule, in any place in the State specified in the third column of the Third Schedule in relation to such an animal, plant or vector material."

6.2.2 International Legislation

6.2.2.1 EU Birds Directive

The Birds Directive constitutes a level of general protection for all wild birds throughout the European Union. Annex I of the Birds Directive includes a total of 194 bird species that are considered rare, vulnerable to habitat changes or in danger of extinction within the European Union. Article 4 establishes that there should be a sustainable management of hunting of listed species, and that any large-scale non-selective killing of birds must be outlawed. The Directive requires the designation of Special Protection Areas (SPAs) for: listed and rare species, regularly occurring migratory species and for wetlands which attract large numbers of birds. There are 25 Annex I species that regularly occur in Ireland.

6.2.2.2 EU Habitats Directive

The Habitats Directive aims to protect some 220 habitats and approximately 1000 species throughout Europe. The habitats and species are listed in the Directives annexes, where Annex I covers habitats and Annex II, IV and V cover species. There are 59 Annex I habitats in Ireland and 33 Annex IV species which require strict protection wherever they occur. The Directive requires the designation of Special Areas of Conservation for areas of habitat deemed to be of European interest. The SACs together with the SPAs from the Birds Directive form a network of protected sites called Natura 2000.

6.2.2.3 Water Framework Directive

The EU Water Framework Directive (WFD) 2000/60/EC is an important piece of environmental legislation which aims to protect and improve water quality. It applies to rivers, lakes, groundwater, estuaries, and coastal waters. The Water Framework Directive was agreed by all individual EU member states in 2000, and its first cycle ran from 2009 – 2015. The Directive runs in 6-year cycles; the second cycle ran from 2016 – 2021, and the current (third) cycle runs from 2022-2027. The aim of the WFD is to prevent any deterioration in the existing status of water quality, including the protection of good and high-water quality status where it exists. The WFD requires member states to manage their water resources on an integrated basis to achieve at least 'good' ecological status, through River Basin Management Plans (RBMP), by 2027.

6.2.2.4 Bern and Bonn Convention

The Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1982) was enacted to conserve all species and their habitats. The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention 1979, enacted 1983) was introduced to give protection to migratory species across borders in Europe.

6.2.2.5 Ramsar Convention

The Ramsar Convention on Wetlands is an intergovernmental treaty signed in Ramsar, Iran, in 1971. The treaty is a commitment for national action and international cooperation for the conservation of wetlands and their resources. In Ireland there are currently 45 Ramsar sites which cover a total area of 66,994 Ha.

6.3 Methodology

This section details the steps and methodology employed to undertake an Ecological Impact Assessment of the subject development, and follows best practices methodology, as noted in 6.3.2.

A comprehensive desk-based assessment has been undertaken, and site visits have been carried out by Serena Alexander, Peter McCormick and Martijn Leenheer at the site during March and August 2024 as detailed in the following sections.

Serena Alexander graduated from University College Dublin with a 1st Class Hons BSC degree, in Zoology in 2023, and works as a graduate ecologist with ESC Environmental Ltd. She has experience working in commercial and research-based labs, as well as familiarity with general genetics, phylogenetics and ecology. She specialises in data analysis, microbial/biological techniques, and has strong IT skills incl. R & Rstudio, Mega Software, and LinRegPCR.

Peter McCormick is a Senior Consultant with ESC Environmental Ltd., and has 7 years' experience in the Environmental Sector, working with both the public and private sector. He holds a Level 8 BSc (Hons) degree in Environmental Science from Atlantic Technological University (previously IT Sligo). He has experience in many aspects of environmental works including wastewater treatment system design, environmental permitting, water management, and specialises in ecological assessments (EcIAs), Appropriate Assessments and Natura Impact Statements.

Martijn Leenheer holds a 1st Class BSc (Hons) degree in Environmental Science from Atlantic Technological University (previously IT Sligo) and has 11 years' experience in Ireland in soil remediation, invasive species commercial Wastewater Treatment, Discharge Licences, Waste Permits and Licences has been involved in Risk Assessments, NIS and EIAR reports for various commercial projects. Before moving to Ireland Martijn worked in the Netherlands as an Environmental Field Technician in soil research. He has been an Operations Director of Environmental Services Consultancy for 11 Years and a Founding Director of ESC Environmental LTD since 2021.

6.3.1 Zone of Influence

The "zone of influence" (ZoI) for a project is the area over which ecological features may be affected by changes as a result of the proposed development and associated activities. This is likely to extend beyond the development site when there exists ecological or hydrological links beyond the site boundaries (CIEEM, 2018). The ZoI varies with different ecological features depending on their sensitivity to environmental change.

Given the location of the site of the subject development (its placement adjacent to Dublin Airport-zoned lands) and distance from Natura 2000 sites (minimum distance >10km away), the ZoI is regarded to be relatively limited, with the exception of potential hydrologically linked habitats to the site. As noted in the Appropriate Assessment, on the basis of precautionary principles, indirect hydrological links cannot be excluded. There are no direct pathways to any other Natura 2000 site.

6.3.2 Desk Study

This rEIAR chapter has been prepared in accordance with the following publications:

- Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland (the Institute of Ecology and Environmental Management (IEEM), 2016)
- Guidelines on the Information to be contained in Environmental Impact Assessment Reports (the Environmental Protection Agency (EPA), 2022)

A desktop study was carried out to collate and review available information, datasets and documentation sources pertaining to the site's natural environment. The desktop study relied on the following sources:

- Information on species records [cite] and distributions, obtained from the National Biodiversity Data Centre (NBDC) at www.maps.biodiversityireland.ie;
- Information on water bodies, catchment areas and hydrological connections obtained from the Environmental Protection Agency (EPA) at www.gis.epa.ie;
- Information on bedrock, groundwater, aquifers and their statuses, obtained from Geological Survey Ireland (GSI) at www.gsi.ie;
- Information on the network of designated conservation sites, boundaries, qualifying interests and conservation objectives, obtained from the National Parks and Wildlife Service (NPWS) at www.npws.ie;
- Satellite imagery and mapping obtained from various sources and dates including Google, Digital Globe, Ordnance Survey Ireland;
- Information on the existence of permitted developments, or developments awaiting decision, in the vicinity of the proposed development from the National Planning Application Database available at: https://housinggov.ie maps.arcgis.com

There are a number of designations for nature conservation in Ireland, including but not limited to Special Protection Areas (SPA; Birds Directive), Special Areas of Conservation (SAC; Habitats Directive) - both of which fall under the umbrella of Natura 200 sites - RAMSAR sites, and Natural Heritage Areas. The mechanism for these designations is through national or international legislation. Proposed NHAs (pNHA) are areas that have yet to gain full legislative protection and are generally protected through the relevant County Development Plan. Surface hydrological pathways lead from the development site to the Malahide Estuary, which is designated as an SPA, SAC and a pNHA. Malahide Estuary is also internationally recognised as a Ramsar wetland site.

6.3.3 Assessment of Significance

An ecological assessment of the site was completed on behalf of ESC Environmental to assist in the preparation of the Biodiversity Chapter of the rEIAR. The value of the ecological resources – the habitats and species present or potentially present was determined using the ecological evaluation guidance given in the National Roads Authority's Ecological Assessment Guidelines (NRA, 2009). This evaluation scheme, which scales from locally important to internationally important, seeks to provide value ratings for habitats and species present that are considered ecological receptors of impacts that may ensue from a proposal. The NRA (2009) defines key ecological receptors as those ecological features which are evaluated as Locally Important (higher value) or higher, that are likely to be impacted significantly by the Proposed Development. Internationally important receptors would include Special Areas of Conservation (SAC) or Special Protected Areas (SPA) while those of national importance would include Natural Heritage Areas (NHA).

This evaluation scheme has been adapted here to assess the value of habitats and fauna within the Site of the Proposed Development. The value of habitats is assessed based on the condition, size, rarity, conservation and legal status. The value of fauna is assessed on its

biodiversity value, legal status and conservation status. Biodiversity value is based on its national distribution, abundance or rarity, and associated trends.

Using the evaluation criteria as described above, the habitats and species identified as being present or potentially present within the ZOI were assessed. As per the NRA guidelines, assessment is only undertaken of key ecological receptors (KERs).

6.3.4 Assessment of Impact

Once the value of the identified Key Ecological Receptors (KERs) was determined, the next step was to assess the potential effect or impact of the Proposed Development on these KERs. This was carried out with regard to the criteria outlined in various impact assessment guidelines (NRA, 2009; CIEEM, 2018) that set down a number of parameters such as quality, magnitude, extent and duration that should be considered when determining which elements of the proposal could constitute impact or sources of impacts. Once impacts are defined, their significance was categorised using EPA Guidelines 2022.

Identification of a risk does not constitute a prediction that it will occur, or that it will create or cause significant impact. However, identification of the risk does mean that there is a possibility of ecological or environmental damage occurring, with the level and significance of the impact depending upon the nature and exposure to the risk and the characteristics of the ecological receptor.

Table 6.3.1 Criteria for assessing ecological importance.

Importance	**Criteria**
International Importance	- European Site' including Special Area of Conservation (SAC), Site of Community Importance (SCI), Special Protection Area (SPA) or proposed Special Area of Conservation. - Proposed Special Protection Area (pSPA). - Site that fulfils the criteria for designation as a 'European Site' (see Annex III of the Habitats Directive, as amended). - Features essential to maintaining the coherence of the Natura 2000 Network - Site containing 'best examples' of the habitat types listed in Annex I of the Habitats Directive. - Resident or regularly occurring populations (assessed to be important at the national level) of the following: • Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; and/or • Species of animal and plants listed in Annex II and/or IV of the Habitats Directive - Ramsar Site (Convention on Wetlands of International Importance Especially Waterfowl Habitat 1971).

	- World Heritage Site (Convention for the Protection of World Cultural & Natural Heritage, 1972). - Biosphere Reserve (UNESCO Man & The Biosphere Programme) - Site hosting significant species populations under the Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals, 1979). - Site hosting significant populations under the Berne Convention (Convention on the Conservation of European Wildlife and Natural Habitats, 1979). - Biogenetic Reserve under the Council of Europe. - European Diploma Site under the Council of Europe. - Salmonid water designated pursuant to the European Communities (Quality of Salmonid Waters) Regulations, 1988, (S.I. No. 293 of 1988).
National Importance	- Site designated or proposed as a Natural Heritage Area (NHA). - Statutory Nature Reserve. - Refuge for Fauna and Flora protected under the Wildlife Acts. - National Park. - Undesignated site fulfilling the criteria for designation as a Natural Heritage Area (NHA); Statutory Nature Reserve; Refuge for Fauna and Flora protected under the Wildlife Act; and/or a National Park. - Resident or regularly occurring populations (assessed to be important at the national level) of the following: • Species protected under the Wildlife Acts; and/or • Species listed on the relevant Red Data list. • Site containing 'viable areas' of the habitat types listed in Annex I of the Habitats Directive
County Importance	- Area of Special Amenity. - Area subject to a Tree Preservation Order. - Area of High Amenity, or equivalent, designated under the County Development Plan. - Resident or regularly occurring populations (assessed to be important at the County level) of the following: • Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; • Species of animal and plants listed in Annex II and/or IV of the Habitats Directive; • Species protected under the Wildlife Acts; and/or • Species listed on the relevant Red Data list. • Site containing area or areas of the habitat types listed in Annex I of the Habitats Directive that do not fulfil the criteria for valuation as of International or National importance. - County important populations of species; or viable areas of semi-natural habitats; or natural heritage features identified in the National or Local BAP; if this has been prepared.

	- Sites containing semi-natural habitat types with high biodiversity in a county context and a high degree of naturalness, or populations of species that are uncommon within the county. - Sites containing habitats and species that are rare or are undergoing a decline in quality or extent at a national level.
Local Importance (higher value)	- Locally important populations of priority species or habitats or natural heritage features identified in the Local BAP, if this has been prepared; - Resident or regularly occurring populations (assessed to be important at the Local level) of the following: • Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; • Species of animal and plants listed in Annex II and/or IV of the Habitats Directive; • Species protected under the Wildlife Acts; and/or • Species listed on the relevant Red Data list. • Sites containing semi-natural habitat types with high biodiversity in a local context and a high degree of naturalness, or populations of species that are uncommon in the locality; - Sites or features containing common or lower value habitats, including naturalised species that are nevertheless essential in maintaining links and ecological corridors between features of higher ecological value.
Local importance (lower value)	- Sites containing small areas of semi-natural habitat that are of some local importance for wildlife; - Sites or features containing non-native species that are of some importance in maintaining habitat links.

6.3.5 Impact Assessment Criteria

Criteria used to define the quality, significance, and duration of effects.

In line with the EPA Guidelines 2022, the following terms are defined when quantifying the quality of effects. See Table 6.3.2 below.

Table 6.3.2: Definition of quality of effects.

Quality	**Definition**
Positive Effects	A change which improves the quality of the environment (for example, by increasing species diversity; or the improving reproductive capacity of an ecosystem, or by removing nuisances or improving amenities).
Neutral effects	No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error

Negative/adverse effects	A change which reduces the quality of the environment (for example, lessening species diversity or diminishing the reproductive capacity of an ecosystem; or damaging health or property or by causing nuisance).

In line with the EPA Guidelines (EPA, 2022), the following terms are defined when quantifying the significance of impacts. See Table 6.3.3 below.

Table 6.3.3 Criteria for Assessing Impact Magnitude.

Impact magnitude	Definition
No change	No discernible change in the ecology of the affected feature
Imperceptible impact	A change in the ecology of the affected site, the consequences of which are strictly limited to within the development boundaries
Slight impact	A change in the ecology of the affected site which has noticeable ecological consequences outside the development boundary, but these consequences are not considered to significantly affect the distribution and/or abundance of species or habitats of conservation importance (1)
Moderate impact	A change in the ecology of the affected site, which has noticeable ecological consequences outside the development boundary. These consequences are considered to significantly affect the distribution and/or abundance of species or habitats of conservation importance.
Substantial impact	A change in the ecology of the affected site, which has noticeable ecological consequences outside the development boundary. These consequences are considered to significantly affect species or habitats of high conservation importance and to potentially affect the overall viability of those species or habitats in the wider area (2)
Profound impact	A change in the ecology of the affected site, which has noticeable ecological consequences outside the development boundary. These consequences are considered to be such that the overall viability of species or habitats of high conservation importance in the wider area[4] is under a very high degree of threat (negative impact) or are likely to increase markedly (positive impact).

(1) It is not possible to define specific numerical thresholds, as different species/habitat have varying degrees of resilience to ecological perturbation
(2) i.e. the area relevant to the assessed importance of the feature

Table 6.3.4 Criteria for Assessing Impact Duration.

Impact type	Duration
Temporary impact	Impact lasting for one year or less
Short term impact	Impact lasting one to seven years
Medium term impact	Impact lasting seven to fifteen years
Long term impact	Impact lasting fifteen to sixty years
Permanent impact	Impact lasting over sixty years

6.4 Project Description

"Permission is sought by Saint Margaret's Recycling & Transfer Centre Limited at St. Margaret's Metal Recycling, Sandyhill, St. Margaret's, Co. Dublin, under substitute consent provisions, for the

Retention of -

1. Enabling Ancillary Works, including, but not limited to, that subject of permissions under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109, e.g. ancillary and enabling works/infrastructure, comprising amendments to site access and boundary arrangements including dust mitigation measures, access and gateway, above and below ground surface water drainage, septic tank, fire water storage and retention (105m3), attenuation and storage tanks (206m3), truck and vehicle parking,
2. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility, and authorised facility for the treatment of 'end of life vehicles' (ATF for ELVs). Existing development comprises the weighbridge, offices, recycling and transfer/industrial buildings, hard standing, car parking, plant and machinery, detailed below:
    a. Prefabricated cabins (2no.) - 177sqm. - comprising ancillary offices, staff facilities, control room;
    b. Prefabricated w/c & Steel Container (store) - 29 sqm;
    c. Recycling and transfer/Industrial buildings 1917 sqm;
    d. Weighbridge; and
    e. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.
3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6

ha (permitted under F97A/0109) to 1.75ha of which 1.6ha is associated with waste permit, and additionally lands comprising site access, proprietary wastewater treatment system, installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system.

4. Historic use of 1.6 ha of the site (as per Waste Permit area under WFP-FG-13-0002-03), as a waste transfer recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, during the period 2019 to 2023, where waste throughput at the facility rose from 26,000 to 42,500 tonnes per annum, without the benefit of planning permission, and from 2024 onwards operations comprising waste throughput of 21,900 tonnes per annum.

5. Development and Historic use (i.e. 2009 to 2023) of lands comprising 1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity,

6. Proposed restoration of c.1.1 ha of the above noted existing compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands,

7. On-going use of the existing metal processing and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

Separately, but in tandem, the applicant is seeking permission as part of the substitute consent application for a proposed development comprising the on-going/future use of the site and facility to enable annual waste throughput of up to 21,900 tonnes per annum. This 'permission' element is addressed in a separate EIAR and NIS submitted with the application.

6.5 Receiving Environment

Field Study

A number of site visits were carried out between March & August 2024 by Serena Alexander (ESC Environmental LTD), Martijn Leenheer (Director of ESC Environmental LTD) and Peter McCormick (Senior Consultant with ESC Environmental Ltd)

The site was surveyed in accordance with the Heritage Council's Best Practice Guidance for Habitat Survey and Mapping (Smith et al., 2010). Habitats were identified in accordance with Fossitt's Guide to Habitats in Ireland (Fossitt, 2000). Species abundance was determined using the DAFOR scale, which is a subjective form of habitat description commonly used in conjunction with habitat classifications.

6.5.1 Habitat and Flora Survey

Following Fossitt's Guide to Habitats in Ireland (Fossitt, 2000), the site can be described as the following:

The site, comprising the waste recycling facility and adjacent fields (See Figure 6.5.2 for habitat map) is nearly entirely composed of buildings and artificial surfaces (BL3). The external boundary to the south and west is composed of a native hedgerow – WL1 with Hawthorn Crataegus monogyna, Elder Sambucus nigra, Ash Fraxinus excelsior, Brambles Rubus fruticosus agg. and Ivy Hedera helix. A drainage ditch – FW4 along the western boundary had no flowing water but was partly wet. Using methodology from the Heritage Council these hedgerows can be assessed as of 'higher significance' due to their age, structure and species diversity (Foulkes at el., 2013).

Fig 6.5.1: Habitat map.

Elsewhere semi-natural boundaries, where they exist, are composed of earth banks – BL2 which are grassy with Docks Rumex sp., Vetches Vicia sp., Thistles Cirsium sp. and Ragwort Senecio jacobaea.

Fig 6.5.2.: hedgerow (WL1) along drainage ditch (FW4) in grassland area.

Fig. 6.5.2: Earth banks present at the site along the eastern border

There are no alien invasive species (as listed on SI No 477 of 2011) or plants which are rare or protected. Overall, hedgerows on the site are of local biodiversity value but are not associated with habitats listed on Annex I of the Habitats Directive or for which SACs/SPAs are typically designated. Other habitats are of low or negligible biodiversity value; see hatched lands in Fig 6.5.3 below, denoting areas marked "A," "B" and "C," conditioned to be restored to agricultural lands (under F13A/0109) - this area comprises compacted stone over existing ground.

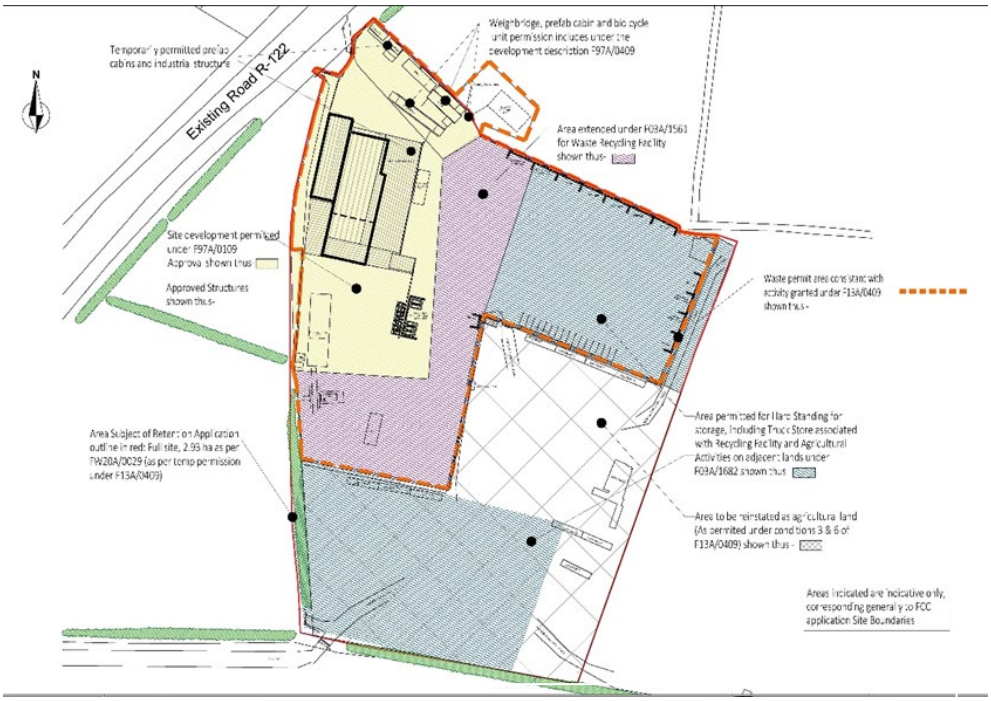


Fig 6.5.3. Planning History Drawing – Hatched area to north and northeast of site denotating compacted stone over existing ground.

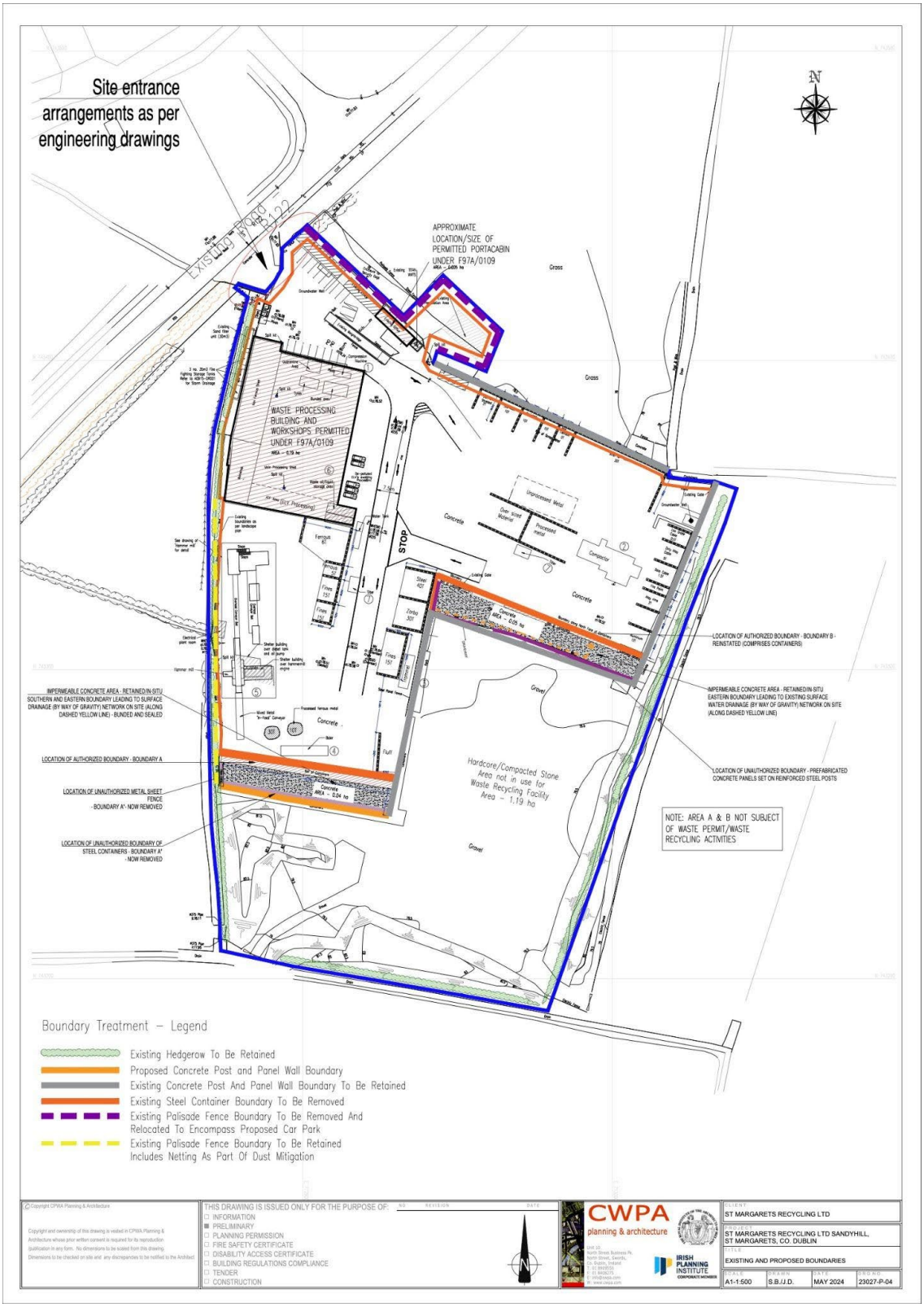


Fig 6.5.4: existing and proposed boundaries of the proposed development site at St. Margaret's Recycling & Transfer Centre Ltd.

6.5.2 Fauna Survey

Faunal surveys were carried out by Serena Alexander during the course of ecological walkover surveys carried out between March and August 2024. Walkover surveys were carried out within the site boundary; surveys involved a walkover of the site to identify any species present; or incidental sightings or proxy signs (prints, scats etc.) of activity.

6.5.2.1 Mammal Surveys

Footprints of Irish Hare were noted from the main portion of the site. No other direct evidence of mammals was recorded.

While limited data are available on the distribution of Hedgehog, Pygmy Shrew, and Irish Stoat, they are considered ubiquitous in the Irish countryside and suitable habitat is available for them at and around the proposed development site (Hayden & Harrington, 2001).

No evidence of badger activity was found in any area of the site. The habitats on the site are considered suboptimal for set construction, particularly as drainage ditches accompany the hedgerow (Byrne et al., 2012). There are no records from this locality of badgers from the National Biodiversity Data Centre.

There are no habitats on the site suitable for otters.

6.5.2.2 Bat Surveys

Features on the site are considered to be of low value to roosting bats (Hundt, 2012), with no suitable buildings or veteran trees with holes, cracks, etc. Thus, a detector survey was not carried out.

While hedgerow features provide foraging opportunities and it can be presumed that bats are present for this purpose, there are no hedgerows with the operational site of the waste recycling and transfer facility. The site has been in operation since c.1995, and in its current form since c.1998-2003, and has had the benefit of assessment and permissions since this time. The site boundaries which may comprise hedgerows have not been alter as a result of the subject development. No nighttime lighting, noise, human or vehicular traffic on site exists such as would affect foraging opportunities.

6.5.2.3 Avian Surveys

Of the species listed by BirdWatch Ireland as being of high conservation concern (Colhoun & Cummins, 2013) Grey Partridge Perdix perdix, Corncrake Crex crex, Barn Owl Tyto alba, and Yellowhammer Emberiza citrinella were recorded as breeding in North Dublin during the 2007-11 Bird Atlas project (Balmer et al., 2013). There is no suitable breeding habitat for Barn Owl on the subject lands while records for Corncrake and Grey Partridge date from pre-1972. Yellowhammer is typically associated with arable farmland and is not likely to be present on this site.

It is worth noting that there are active bird control measures at the nearby Dublin Airport and that the on-going planning process near the airport ensures that no features are included in the wider area that attract birds.

6.5.2.4 Herpetofauna and Aquatic Fauna Surveys

Common Frog Rana temporaria and Common Lizard Lacerta vivipara are protected under the Wildlife Act 1976 and are likely to be present on this site. Suitable habitat for spawning Frogs is present within the drainage ditch however no spawn was noted in 2018. Smooth Newts Lissotriton vulgaris are to be found in Dublin but there are no permanent ponds on this site in which they are likely to be breeding.

Monitoring by Inland Fisheries Ireland, from 2011, indicated that the Broadmeadow River system holds populations of Brown Trout Salmo trutta, European Eel Anguilla anguilla, Minnow Phoxinus phoxinus, Nine-spined Stickleback Pungitius pungitius, and Three-spined Stickleback Gasterosteus aculaetus (this list is an agglomeration from all three sampling points along the Broadmeadow). These fish may also be present along the River Ward.

It should be noted that the Broadmeadow River system is circa 10km from the site; the potential hydrological connection is mainly limited to surface runoff, and to a lesser extent bedrock aquifer flow or vertical infiltrating water. Surface water run-off on site is mitigated by way of a permitted and monitored water drainage system. These measures were permitted and are in operation and an integral component of the existing development, rather than new mitigation. The system is monitored and has been found to be effective. As such, the two (i.e. the site and the Broadmeadow) are considered to be minimally connected but are considered on the basis of precautionary principles.

6.5.2.5 Invertebrates

Most habitats, even highly altered ones, are likely to harbour a wide diversity of invertebrates. In Ireland only one insect is protected by law, the Marsh Fritillary butterfly Euphydryas aurinia, and this is not to be found on farmland. Other protected invertebrates are confined to freshwater and wetland habitats and so are not present on this site.

6.6 Survey Constraints or Limitations

Habitats

It is acknowledged that due to the seasonality of various floral species, not all species will be apparent at any one time in the year. However, this limitation is in this case not considered material insofar as the site's boundaries are, for the most part, not natural boundaries. Where natural boundaries exist, the development has not altered these boundaries, and they have been retained.

Invasive species

Throughout the survey work, the opportunity was taken to record the presence of any invasive non-native species. However, it is acknowledged that the detectability of such species can vary throughout the year and depend on their life stage or recent management.

6.7 Interaction of rEIAR & Assessments under EU Habitats & Birds Directives

6.7.1 Designated sites

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats and wild fauna and flora by the designation of Special Areas of Conservation (SACs) and the Birds Directive (79/409/EEC) seeks to protect birds of special importance by the designation of Special Protection Areas (SPAs). It is the responsibility of each member state to designate SPAs and SACs, both of which will form part of Natura 2000, a network of protected sites throughout the European Community. SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and other regularly occurring migratory birds and their habitats. The annexed habitats and species for which each site is selected correspond to the qualifying interests of the sites; from these the conservation objectives of the site are derived.

When assessing ecological impacts, the CIEEM Guideline recommends a 15km pathway consideration zone as an adequate assessor for potential effects. Due to the characteristics and scale of the proposed project, all other Natura 2000 sites and pNHA/NHA sites beyond threshold distances of 15km are considered to be of sufficient distance from the proposed site, that no significant effects could be caused either directly or indirectly or in combination with other plans or projects to their interest features. Any impacts caused by the proposed development have no valid impact pathway to transfer along to reach any of the receptor interest features. These sites are thus ‘screened out’ and not considered further.

A stand-alone remedial Natura Impact Assessment is submitted separately to this assessment and expands on the potentially affected designated sites and their conservation objectives in more detail. Figure 6.7.1 displays the Natura 2000 sites within a 15km pathway consideration zone of the proposed project; hydrological pathways were considered beyond 15km also.

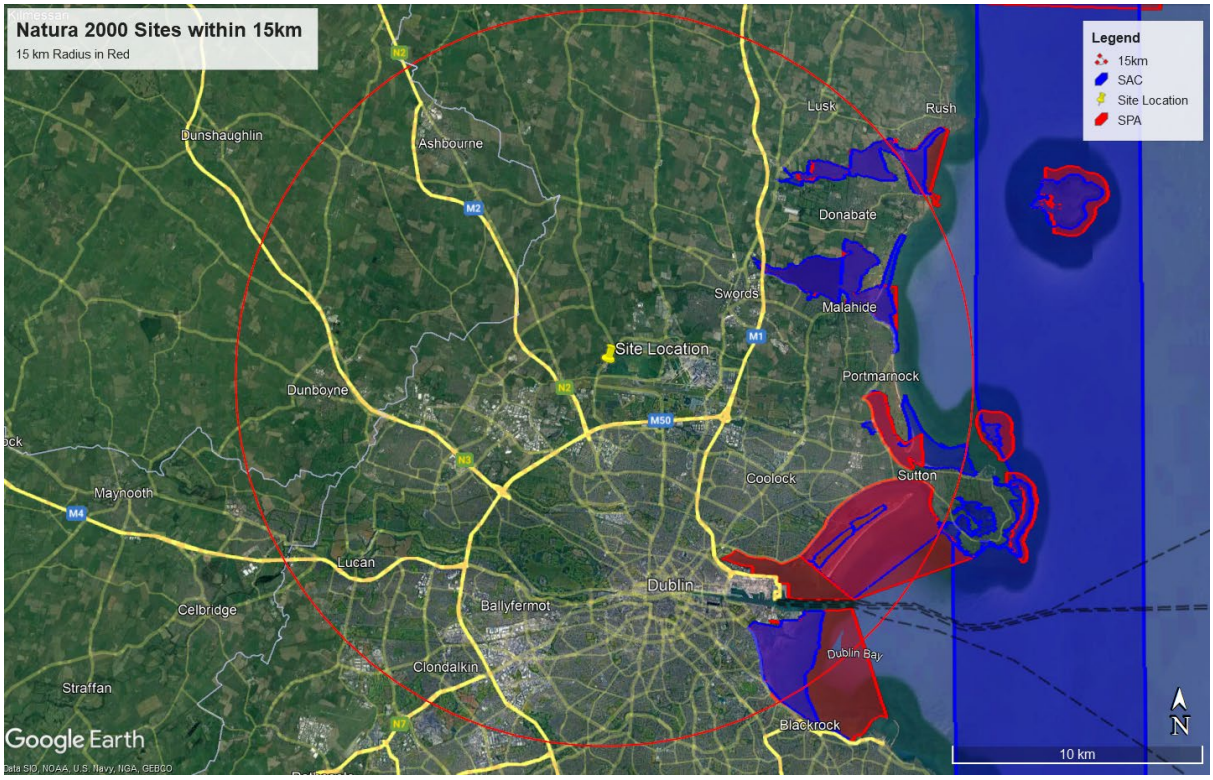


Fig 6.7.1: Natura 2000 sites within a 15km pathway consideration zone of the proposed development area

6.7.2 Records of Protected, Rare or other Notable Flora & Fauna Species

The site survey included incidental sightings or proxy signs (prints, scats etc.) of faunal activity, while the presence of certain species can be concluded where there is suitable habitat within the known range of that species. Table 6.7.1 details those mammals that are protected under national or international legislation in Ireland.

Table 6.7.3: Protected mammals in Ireland

(including their known status within the zone of influence (Harris & Yalden, 2008) Those that are greyed out indicate either that suitable habitat is not present or that there are no records of the species from the National Biodiversity Data Centre.)

Species	Level of Protection	Habitat	Red List Status
Otter *Lutra lutra*	Annex II & IV Habitats Directive; Wildlife (Amendment) Act, 2000	Rivers and wetlands	Near Threatened
Lesser horseshoe bat *Rhinolophus hipposideros*		Disused, undisturbed old buildings, caves, and mines	Least Concern
Grey seal *Halichoerus grypus*		Coastal habitats	-
Common seal *Phocaena phocaena*		Coastal habitats	-
Whiskered bat *Myotis mystacinus*	Annex IV Habitats Directive; Wildlife (Amendment) Act, 2000	Gardens, parks and riparian habitats	Least Concern
Natterer's bat *Myotis nattereri*		Woodland	Least Concern
Leisler's bat *Nyctalus leisleri*		Open areas roosting in attics	Near Threatened
Brown long-eared bat *Plecotus auritus*		Woodland	Least Concern
Common pipistrelle *Pipistrellus pipistrellus*		Farmland, woodland and urban areas	Least Concern
Soprano pipistrelle *Pipistrellus pygmaeus*		Rivers, lakes & riparian woodland	Least Concern
Daubenton's bat *Myotis daubentonii*		Woodlands and bridges associated with open water	Least Concern
Nathusius' pipistrelle *Pipistrellus nathusii*		Parkland, mixed and pine forests, riparian habitats	Least Concern
Irish hare *Lepus timidus Hibernicus*	Annex V Habitats Directive; Wildlife (Amendment) Act, 2000	Wide range of habitats	Least Concern
Pine Marten *Martes martes*		Broad-leaved and coniferous forest	Least Concern
Hedgehog *Erinaceus europaeus*	Wildlife (Amendment) Act, 2000	Woodlands and hedgerows	Least Concern
Pygmy shrew *Sorex minutus*		Woodlands, heathland, and wetlands	Least Concern
Red squirrel *Sciurus vulgaris*		Woodlands	Near Threatened
Irish stoat *Mustela erminea hibernica*		Wide range of habitats	Least Concern
Badger *Meles meles*		Farmland, woodland and urban areas	Least Concern

Species	Level of Protection	Habitat	Red List Status
Red deer *Cervus elaphus*	Wildlife (Amendment) Act, 2000	Woodland and open moorland	Least Concern
Fallow deer *Dama dama*		Mixed woodland but feeding in open habitat	Least Concern
Sika deer *Cervus nippon*		Coniferous woodland and adjacent heaths	-

6.7.4 Protected Species in the Area

The site of the proposed development is located within the Ordnance Survey Ireland National Grid 2km square O14. Species records from the National Biodiversity Data Centre (NBDC) online database for this grid square was studied for the presence of rare or protected flora and fauna. In addition, data from various sources (e.g. Inland Fisheries Ireland) were used to determine the presence of species in the vicinity of the Development. Table 6.7.2 below outlines the results of this assessment. It must be noted that this list cannot be seen as exhaustive as suitable habitat may be available for other important and protected species.

Table 6.7.2

Species	Habitat	Date of last record
Red hemp-nettle *Galeopsis angustifolia*	Calcareous gravels	Record pre-1970
Meadow barley *Hordeum secalinum*	Upper parts of brackish marshes, chiefly near the sea	Record pre-1970
Hairy St. John's-wort *Hypericum hirsutum*	Woods and shady places	Current, record from Santry Court
Hairy violet *Viola hirta*	Sand dunes, grasslands, limestone rocks	Current, record from Santry Demesne

6.8 Potential Impact of the Subject Development

In that the development is understood to be non-conforming and unauthorised in full following the lapse of permission in August 2019, the existing development is assessed having regard to the planning and development history and evolution of the site. It should be noted that up to the lapse of permission in 2019, the potential impacts of the subject development were assessed and considered to be reasonable and acceptable.

Impact Prediction

Construction Phase

1. Loss of Habitat:
   The loss of grassland and hedgerow habitat arose initially on foot of the development permitted in 1998, and was expanded under subsequent permissions, including that permitted in 2014, under F13A/0409. We note the extension of impermeable concrete surface of c.0.1ha, however this involved the replacement of compacted stone with concrete surface, and not a loss of a habitat, whether grassland or hedgerow. Therefore, since 2019 there has been no additional adverse impact associated with this loss. There is no land clearance proposed as part of the retention application.
   Treelines and hedgerows surrounding the site remain intact and were not damaged in the initial construction period or subsequently.
   However, that some 1.1ha of the larger 2.93ha site has not been returned to agricultural use may be considered to be a loss of habitat, albeit not of significance given the existence of this habitat type in the area.

2. Species Mortality
   As outlined above, there is no significant construction phase proposed as part of this retention application, and while there may be some upgrades/replacement of existing boundaries there are within an established brownfield site, and do not result in loss of any habitat or area where there are any species breeding, living or feeding. No adverse impact arises in this regard.

3. Pollution of Water courses
   Noting the construction method employed at the time (i.e. that outlined in 2013), which was in line with best practice; and provided for the inclusion of surface water drainage arrangements which feed into the permitted on-site surface water drainage network, with associated oil interceptors throughout; the limited area and limited time period associated with the operation of the extended area, it is not likely that there was an adverse impact to the groundwater or potential contamination of soils.

Potential impacts during normal operation

4. Impacts to species through the disruption of ecological corridors.
   As no ecological corridors are to be fragmented or disrupted surrounding the development, resulting in a neutral or slightly positive impact.

5. Pollution to the water from foul water arising from the development.
   The subject development is not served by Ringsend wastewater treatment plant, and therefore this WWTP and its operation has no direct bearing on the subject development. The development is served by a proprietary wastewater treatment system which is operating in accordance with standards set out by the EPA and as such in operating in this manner and being monitored accordingly does not adversely impact on groundwater.

6. Pollution to the water from surface water run-off arising from the development.
The use of accepted SUDs techniques and overall compliance with GDSDS in the design of the project which when constructed was permitted will ensure that negative effects to water quality do not arise from the surface water runoff.
Additionally, as there has been no long-term increase in activity (tonnage associated with the unauthorised extension of the centre) and it is now operating at or under 21,900 tonnes per annum, there is unlikely to be undue associated environmental impact as a result.

7. Fire Water
In assessing this development, we have also considered the possibility and worst-case scenario of a fire on site and the use of water to put out such a fire. Fire water retention has been provided for onsite as outlined in the chapter dealing with hydrology. Additional measures are proposed if the development were to be permitted to continue to operate, and these are assessed further in the accompanying EIAR. These are considered to be satisfactory mitigatory measures and are to a large extent in place with the additional precautionary over and above attenuation proposed in the event of permission for on-going use being granted. The predicted impact associated with the proposed development is dealt with in the EIAR accompanying same.

Table – Nature of predicted impacts

	impact	Direct/ indirect	Cumulative	Duration	Reversible	Positive/ negative
Construction Phase						
1	Habitat loss	Direct	Yes	Permanent	No	Neutral
2	Species mortality	Direct	No	Permanent	No	Neutral
3	Pollution of water courses	Indirect	Yes	Temporary	Yes	Neutral
Operation Phase						
4	Impacts to species	Direct	Yes	Permanent	No	Neutral
5	Pollution to the water from foul water	Indirect	Yes	Permanent	Yes	Neutral
6 & 7	Pollution to the water from surface water run-off, incl. firewater	Indirect	Yes	Permanent	Yes	Neutral

Interaction with plans or projects

It may be noted that these lands are zoned for development and were so zoned at the time of development. The development of these lands in principle was assessed in the Fingal Development Plan SEAs and not considered to be such that would preclude their zoning and development.

Do nothing

As outlined in the preceding chapters, there is no 'do nothing scenario' applicable, in that the development has already taken place and continues to exist and is operating at a level previously permitted and deemed to be acceptable and not result in undue adverse impact.

Remedial and Reductive Measures

Remedial measures proposed relevant to this section of the rEIAR include the conversion of an existing area of 1.1ha of hard standing to managed grassland, importing topsoil and reseeding same.

The 1.1 Ha will be sown with N1 General Purpose Meadow Mixture, comprising a mix of 15 native wildflower species (NIF) and 6 species of grass(NVG). Proposed plant species include Achillea millefolium, Centaurea nigra, Daucus carota, Galium verum, Leontodon huspidus, Leucanthemum vulgare, Plantago Lanceolata, Primula veris, Prunella vulgaris, Rannuclus acris, Rhinanthus minor, Rumex acetosa, Sanguisorba minor, silene latifola, Silene dioica, mixed grass seed, Cynosurus Cristatus, Agrostis capillaris, Festuca Trachyphylla, Festuca Rubra ssp and Poa pratensis.

Predicted impacts assuming mitigation

The proposed mitigation, with the creation of c.1.ha of managed grassland/wildflower meadow will improve the biodiversity generally in the area, but noting the species and habitats supported by managed grassland/wildflower meadow the impact will be minor and positive. It is not anticipated that the impact will necessarily be long term as the lands are zoned for development, being zoned DA. However, this future impact is not the subject of this assessment.

Interactions and Cumulative Impacts

As the subject development is existing, and all impacts are already known or experienced, interactions and cumulative impacts are minimal.

Previously assessed and conditioned mitigation in respect of surface water run-off is already in place, and has been as such since permitted in 2014, by way of surface water drainage, with oil interceptors. Attenuation tanks to cater for storm water and fire water events are also in place and subject of retention. These are considered in full under hydrology. The inclusion of these features is long-term, significant and positive.

The only element of construction and proposed mitigation is that noted above which is considered in greater depth in soils and geology and is considered to be a minor but positive impact.

Monitoring

Monitoring is carried out as part of the waste permit and will continue to be carried out with sampling for dust and water run-off being carried out on an on-going basis. To date monitoring has been effective and demonstrates no material or significant adverse impact.

6.9 Natura 2000 Site Review

An appropriate assessment (AA) was carried out, and on the basis of this assessment, a remedial Natura Impact Statement (rNIS) is also submitted as part of the application.

The AA reviews the impact of the proposed development on Natura 2000 sites within the (WHO) recommended radius of 15km. Natura 2000 sites are a list of Special Protection Areas (SPAs) under the Birds Directive and Special Areas of Conservation (SACs) under the Habitats Directive, which are protected under European and Irish legislation.

A review of the Natura 2000 sites within the designated zone of 15km of the proposed site was completed via desktop study and reference to (**Fingal Development Plan 2017-2023 and 2023 - 2029 and Dublin Airport Local Area Plan 2020**). There are no Natura 2000 sites in the immediate proximity to the proposed site nor in the Local Area plan for Dublin Airport. There are, however, 10 Natura 2000 sites within the 15km radius of the proposed site location, listed in table 6.7.1.

Table 6.8.1Assessment of SACs/SPAs within 15km of the proposed site

Special Area of Conservation (SAC)	**Code**	**Proximity**
Malahide Estuary SAC	(0000205)	10.37km NE
North Dublin Bay SAC	(0000206)	12.82km SE
Rogerstown Estuary SAC	(0000208)	14.01km NE
Baldoyle Bay SAC	(0000199)	12.88km SE
South Dublin Bay SAC	(0000210)	13.91km SE

Table 6.8.2: SPAs within c.15km radius of the site.

Special Protection Areas (SPA)	**Code**	**Proximity**
Malahide Estuary SPA	(004025)	10.42km NE
Sandymount Strand/Tolka Estuary SPA (0004024)	(004024)	14.19km SE
North Bull Island SPA (0004006)	(000206)	13.18km SE
Baldoyle Bay SPA	(004016)	12.88km SE
Rogerstown Estuary SPA (0004015)	(004015)	14.01km NE

The subject site and associated development is not located within or adjacent to a SAC or SPA, and is of a relatively small scale, on zoned lands and immediately proximate to Dublin Airport. In considering the zone of influence and the potential for the subject development on impact on a SAC or SPA, it is considered that the only likely possible risk would be related to possible pollution of water, and therefore in considering the potential for impact, a review of the SACs and SPAs identified was undertaken in the context of impact from a hydrological perspective from the proposed development and is detailed in the table below.

Table 6.8.3: 'potential hydrological link' with SACs/SPAs within c.15km radius of the site.

Special Areas of Conservation (SAC)/ Special Protection Area (SPA)		**Distance from Proposed Site**	**Potential Pathway for impact**
Site Name	**Site Code**		
Malahide Estuary SAC	0000205	c. 10km	River near the site flows into this Natura site
Malahide/Swords/Broadmeadow Estuary SPA	004025	c.10 km	As above

6.9.1 Characteristics of Designated Sites Potentially Affected

The following sections describe the Conservation Objectives and Qualifying Interests of the Natura 2000 sites which may be affected by the project.

6.9.2 Malahide Estuary SAC

Malahide Estuary is situated immediately north of Malahide and east of Swords in Co. Dublin and is an estuary of the Broadmeadow River.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I/II of the EU Habitats Directive (* = priority; numbers = Natura 2000 codes)

Table 6.8.4: Qualifying interests of Malahide Estuary SAC

Code	Habitat/species	Level of Protection	Status
1140	Tidal Mudflats and Sandflats	Habitats Directive Annex 1	Inadequate
1310	*Salicornia* mud	Habitats Directive Annex 1	Inadequate
1330	Atlantic Salt Meadows	Habitats Directive Annex 1	Inadequate
1410	Mediterranean Salt Meadows	Habitats Directive Annex 1	Inadequate
2120	Marram Dunes (White Dunes)	Habitats Directive Annex 1	Inadequate

2130	Fixed Dunes (Grey Dunes) *	Habitats Directive Annex 1 Priority Habitat	Bad

- Tidal mudflats (1140). This is an intertidal habitat characterized by fine silt and sediment most of the area in Ireland is a favourable status however water quality and fishing activity including aquaculture are negatively affecting some areas.
- Salicornia Mudflats (1310). This is a pioneer salt marsh community and so is associated with intertidal areas. It is dependent upon a supply of fresh bare mud and can be promoted by damage to other salt marsh habitats. It is chiefly threatened by the advance of alien invasive Cordgrass Spartina Anglica. Erosion can be destructive, but in many cases, this is a natural process.
- Atlantic and Mediterranean salt meadows (1330 and 1410). These are intertidal habitats that differ somewhat in their vegetation composition. They are dynamic habitats that depend on processes of erosion sediment and colonization by a typical suite of salt tolerant organisms. The main pressures are invasion by non-native Spartina Anglica and overgrazing by cattle and sheep.
- Shifting dunes along the shoreline with Ammophila arenia (white dunes) (2120). These are the second stage in dune formation and depend upon the stabilizing effects of marrow grass. The presence of the grass traps additional sand thus growing the dunes; they are threatened by erosion, climate change, coastal flooding and built development.
- Fixed coastal dunes with herbaceous vegetation (grey dunes) (2130 - priority habitat). These are more stable dune systems, typically located on the landward side of the mobile dune. They have a more or less permanent and complete covering of vegetation, the quality of which depends on local hydrology and grazing regimes they are the most endangered of the dune habitat types and are under pressure from built developments such as golf courses and caravan parks overgrazing, undergrazing and invasive species.

Site synopsis of Malahide Estuary SAC (0000205)

The outer part of Malahide Estuary is mostly cut off from the sea by a large sand spit, known as 'the island.' The outer estuary drains almost completely at low tide, exposing sand and mud flats. There is a large bed of Eelgrass (Dwarf Eelgrass, *Zostera noltii*, and Narrow-leaved Eelgrass, *Z. angustifolia*) in the north section of the outer estuary, along with Beaked Tasselweed (*Ruppia maritima*) and extensive mats of Cord-grass (*Spartina anglica*) is also widespread in this sheltered part of the estuary.

The dune spit has a well-developed outer dune ridge dominated by Marram Grass (*Ammophila arenaria*). The dry areas of the stabilised dunes have a dense covering of Burnet Rose (*Rosa pimpinellifolia*), Red Fescue (*Festuca rubra*) and species such as Yellow-wort (*Blackstonia perfoliata*), Autumn Gentian (*Gentianella amarella*), Hound's tongue (*Cynoglossum officinale*), Carline Thistle (*Carlina vulgaris*) and Pyramidal Orchid (*Anacamptis pyramidalis*). Much of the interior of the spit is taken up by a golf course. The inner stony shore has frequent Sea-holly (*Eryngium maritimum*). Well- developed salt marshes occur at the tip of the spit. Atlantic salt meadow is the principal type and is characterised by species such as Sea-purslane (*Halimione tripolium*), Thrift (*Armeria maritima*), Sea Arrowgrass (*Triglochin maritima*) and Common Saltmarsh-grass (*Puccinellia maritima*). Elsewhere in the outer estuary, a small area of

Mediterranean salt meadow occurs which is marshes. There are good examples of pioneering glasswort (*Salicornia spp*.) swards and other annual species, typified by *S. dolichostachya* and Annual Sea-blite (*Suaeda maritima*).

The inner estuary does not drain at low tide apart from the extreme inner part. Here, patches of saltmarsh and salt meadows occur, with Sea Aster, Sea Plantain (*Plantago maritima*) and Sea Club-rush (*Scirpus maritimus*). Beaked Tasselweed occurs in one of the channels.

The site includes a fine area of rocky shore south-east of Malahide and extending towards Portmarnock. This represents the only continuous section through the fossiliferous Lower Carboniferous rocks in the Dublin Basin and is the type locality for several species of fossil coral.

6.9.3 Malahide/Broadmeadow/Swords Estuary SPA (004025)

Malahide/Swords Estuary SPA (004025) Site Synopsis

Malahide/Swords Estuary is situated in north Co. Dublin, between the towns of Malahide and Swords. The site encompasses the estuary, saltmarsh habitats and shallow subtidal areas at the mouth of the estuary. A railway viaduct, built in the 1800s, crosses the site and has led to the inner estuary becoming lagoonal in character and only partly tidal. Much of the outer part of the estuary is well-sheltered from the sea by a large sand spit, known as "The Island." This spit is now mostly converted to golf-course. The outer part empties almost completely at low tide and there are extensive intertidal flats exposed. Substantial stands of eelgrass (both *Zostera noltii* and *Z. angustifolia*) occur in the sheltered part of the outer estuary, along with Tasselweed (*Ruppia maritima*). Green algae, mostly *Ulva spp*., are frequent on the sheltered flats. Common Cord-grass (*Spartina anglica*) is well established in the outer estuary and also in the innermost part of the site. The intertidal flats support a typical macro- invertebrate fauna, with polychaete worms (*Arenicola marina* and *Hediste diversixolor*), bivalves such as *Cerastoderma edule, Macoma balthica* and gastropod *Hydrobia ulvae* and the crustacean *Corophium volutator*. Salt marshes, which provide important roosts during high tide, occur in parts of the outer estuary and in the extreme inner part of the inner estuary. These are characterised by such species as Sea Purslane (*Halimione portulacoides*), Sea Aster (*Aster tripolium*), Thrift (*Armeria maritima*), Sea Arrowgrass (*Triglochin maritima*) and Common Saltmarsh-grass (*Puccinellia maritima*).

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Great Crested Grebe, Light-bellied Brent Goose, Shelduck, Pintail, Goldeneye, Red-breasted Merganser, Oystercatcher, Golden Plover, Grey Plover, Knot, Dunlin, Black-tailed Godwit, Bar-tailed Godwit and Redshank. The E.U. Birds Directive pays particular attention to wetlands and, as associated waterbirds are of special conservation interest for Wetland & Waterbirds.

Table 6.8.5 Qualifying interests of Malahide Estuary SPA

Code	Habitat/species	National Status[1]
A005	Great Crested Grebe (*Podiceps cristatus*)	Amber (Breeding and Wintering)
A046	Light-bellied Brent Goose (*Branta bernicla hrota*)	Amber (Wintering)
A048	Shelduck (*Tadorna tadorna*)	Amber (Breeding and Wintering)
A054	Pintail (*Anas acuta*)	Red (Wintering)
A067	Goldeneye (*Bucephala clangula*)	Red (Wintering)
A069	Red-breasted Merganser (*Mergus serrator*)	Green (Breeding and Wintering)
A130	Oystercatcher (*Haematopus ostralegus*)	Amber (Breeding and Wintering)
A140	Golden Plover (*Pluvialis apricaria*)	Red (Breeding and Wintering)
A141	Grey Plover (*Pluvialis squatarola*)	Amber (Wintering)
A143	Knot (*Calidris canutus*)	Amber (Wintering)
A149	Dunlin (*Calidris alpina*)	Red (Breeding and Wintering)
A156	Black-tailed Godwit (*Limosa limosa*)	Amber (Wintering)
A157	Bar-tailed Godwit (*Limosa lapponica*)	Amber (Wintering)
A162	Redshank (*Tringa totanus*)	Red (Breeding and Wintering)
A999	Wetland and Waterbirds	

- Pintail. Dabbling duck wintering on grazing marshes, river floodplains, sheltered coasts and estuaries. It is a localised species and has suffered a small decline in distribution in Ireland for unknown reasons.
- Light-bellied Brent goose. There has been a 67% increase in distribution of this goose which winters throughout the Irish coast. The light bellied subspecies found in Ireland breeds predominantly in the Canadian Arctic.

[1] Birds of Conservation Concern in Ireland, Colhoun & Cummins, 2013

- Goldeneye. This duck wintering throughout Ireland on suitable coastal areas, river valleys and wetlands. There has been an 11% contraction in its Irish wintering range since the early 1980s and a 37% decline in abundance since the 90s.
- Dunlin. Although widespread and stable in numbers during the winter season, the Irish breeding population has collapsed by nearly 70% in 40 years. Breeding is now confined to just seven sites in the north and West as habitat in former nesting areas has been degraded.
- Knot. These small wading birds do not breed in Ireland but gather in coastal wetlands in winter. Their numbers have increased dramatically since the mid-1990s although the reasons for this are unclear.
- Oystercatcher. Predominantly coastal inhabitant Oystercatchers are resident birds whose numbers continue to expand in Ireland.
- Bar tailed godwit. These wetland wading birds do not breed in Ireland but are found throughout the littoral zone during winter months. They prefer estuaries where there are areas of soft mud and sediments on which to feed.
- Black tailed godwit. Breeding in Iceland these waders winter in selected sites around the Irish coast, but predominantly to the east and southern halves. Their range here has increased substantially in recent times.
- Red breasted merganser. A widely distributed duck in winter red breasted mergansers also breed in Ireland at certain coastal and inland locations to the north and West. They have suffered small declines in both their wintering and breeding ranges and possible reasons have been cited as predation by American mink and shooting.
- Golden plover. In winter these birds are recorded across the Midlands and coastal regions; they breed only in suitable upland habitat in the northwest. Wintering abundance in Ireland has changed little in recent years although it is estimated that half of its breeding range has been lost in the last 40 years.
- Grey plover. These birds do not breed in Ireland but winter throughout coastal estuaries and wetlands. Its population and distribution is considered to be stable.
- Great crested grebe. These birds breed predominantly on freshwater sites north of the River Shannon while coastal areas along the East and South are used for wintering. Numbers in Ireland have declined by over 30% since the 90s.
- Shelduck. The largest of our ducks, Shelduck both breed and winter around the coasts with some isolated stations inland. Its population and range is considered stable.
- Red Shank. Once common breeders throughout the peatlands and wet grasslands of Midlands, Red Shanks have undergone a 55% decline in distribution in the past 40 years. Agricultural intensification, drainage of wetlands and predation are the chief drivers of this change.

This site is of high importance for wintering waterfowl and supports a particularly good diversity of species. It has internationally important populations of Light-bellied Brent Goose (1,104 individuals or 5% of the all-Ireland total) and Black-tailed Godwit (409 individuals or 2.9% of the all-Ireland total). See table 6.8.5 above for further figures on the site's wintering bird populations.

Malahide Estuary SPA is a fine example of an estuarine system, providing both feeding and roosting areas for a range of wintering waterfowl. The lagoonal nature of the inner estuary is of

particular value as it increases the diversity of birds which occur. The site is of high conservation importance, with internationally important populations of Light-bellied Brent Goose and Black-tailed Godwit, and nationally important populations of a further 12 species. Two of the species which occur regularly (Golden Plover and Bar-tailed Godwit) are listed on Annex I of the E.U. Birds Directive. Malahide Estuary (also known as Broadmeadow Estuary) is a Ramsar Convention site.

The estuary is an important wintering bird site and holds an internationally important population of Brent Goose and nationally important populations of a further 15 species. The high numbers of diving birds reflect the lagoon-type nature of the inner estuary.

The estuary also attracts migrant species such as Ruff, Curlew Sandpiper, Spotted Redshank and Little Stint. Breeding birds of the site include Ringed Plover, Shelduck and Mallard. Up to the 1950s there was a major tern colony at the southern end of the island and the habitat remains suitable for these birds.

The inner part of the estuary is heavily used for water sports. A section of the outer estuary has recently been infilled for a marina and housing development.

This site is a fine example of an estuarine system with all the main habitats represented. The site is important ornithologically, with a population of Brent Goose of international significance.

6.10 Potential Impact of the Proposed Development

The potential impacts of the proposed project on biodiversity in the absence of mitigation are detailed below.

Impact Prediction

Under Article 6 of the habitats directive the term significance is taken to mean an effect on the SAC or SPA as measured against the relevant conservation objectives. Unlike EIA for instance there are no degrees of significance and where an effect is determined to be significant mitigation or avoidance measures must be considered.

In order for an impact to occur there must be a pathway between the development (the source) and the SAC or SPA (the receptor). Where a pathway does not exist then the impact cannot occur.

The subject site is not located within or directly adjacent to an SAC or SPA; however, a pathway for impacts exists via surface water and wastewater to the SACs or SPAs in the Malahide estuary, and potentially Dublin Bay.

The development will not result in direct impacts to habitats within any designated area either through habitat removal or disturbance as no construction phase will occur.

Site specific conservation objectives have been set for all aforementioned SACs and SPAs, and none of these objectives relate to water quality. There is no evidence that poor water quality, e.g. in the Malahide Estuary, is negatively affecting habitat or bird populations. Pollution is in any case undesirable and this development should not infringe upon efforts to enhance water quality under the water framework directive.

Potential impacts during normal operation

The use of accepted suds techniques and overall compliance with GDSDS in the design of the project which when constructed was permitted will ensure that negative effects to water quality do not arise from the surface water runoff.

The subject development is not served by Ringsend wastewater treatment plant, and therefore this WWTP and its operation has no direct bearing on the subject development. The development is served by a proprietary wastewater treatment system which is operating in accordance with standards set out by the EPA and as such in operating in this manner and being monitored accordingly does not adversely impact on groundwater.

Fire Water

In assessing this development, we have also considered the possibility and worst-case scenario of a fire on site and the use of water to put out such a fire. Fire water retention has been provided for on-site as outlined in the chapter dealing with hydrology. Additional measures are proposed if the development were to be permitted to continue to operate. These are considered to be satisfactory mitigatory measures and are to a large extent in place with the additional precautionary over and above attenuation proposed.

6.11 Monitoring & mitigation

On-going monitoring occurs through site management, and in accordance with the conditions of the waste permit.

Mitigation is in place and will remain in place. In such circumstances where the Planning Authority, Environment Section, on foot of motoring results consider there to be a requirement for further mitigation the applicant will be instructed to carry out the same. This has not arisen to date and is not anticipated. However, the applicant is committed to implementing any and all improvements conditioned.

6.12 Interactions

The interaction between the potential impacts associated with the EIAR, in particular in respect of biodiversity on site and in the environs and the potential effect on the integrity of the consideration objectives of any European site has been considered, and no material adverse interactions are noted.

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7.0 Land, Soils & Geology

7.1 Introduction / Methodology

The following remedial EIAR chapter has been prepared by Peter McCormick of ESC Environmental Ltd.

Peter McCormick is a Senior Consultant with ESC Environmental Ltd., and has 7 years' experience in the Environmental Sector, working with both the public and private sector. He holds a degree in Level 8 BSc (Hons) degree in Environmental Science from Atlantic Technological University (previously IT Sligo). He has experience in many aspects of environmental works including wastewater treatment system design, environmental permitting, water management, and specialises in ecological assessments (EcIAs), Appropriate Assessments and Natura Impact Statements.

The site is an operational recycling and waste transfer facility and also an Authorised Treatment Facility (ATF) for end-of-life vehicles (ELVs).

The aims of this rEIAR section are to establish the following:

- Baseline conditions relevant to the land, soil and geological environment within the site boundary, and the local surrounding environs;
- Significant impacts, if any, on the land, soil and geological environment, which occurred as a result of the subject development;
- Cumulative impacts with respect to subject activities within the application site and other nearby activities of a similar nature;
- Suitable mitigation measures to address identified adverse impacts.

7.1.1 Criteria for Rating of Effects

This chapter evaluates the effects, if any, which the Proposed Development will have on Land, Soils, Geology and Hydrogeology as defined in the Environmental Protection Agency (EPA) 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports' (EPA, 2022).

Due consideration is also given to the guidelines provided by the Institute of Geologists of Ireland (IGI) in the document entitled Guidelines for the Preparation of Soils, Geology and Hydrogeology Chapters of Environmental Impact Statements' (IGI, 2013).

The rating of potential environmental effects on the land, soil, geological and hydrogeological environment is based on the standard EIAR impact predictions table included in Section 1 which takes account of the quality, significance, duration, and type of effect characteristic

identified (in accordance with impact assessment criteria provided in the EPA Guidelines (2022) publication).

The principal attributes (and effects) to be assessed include the following:

- Geological heritage sites in the vicinity of the perimeter of the development site;
- Landfills, industrial sites in the vicinity of the subject site and the potential risk of encountering contaminated ground;
- The quality, drainage characteristics and range of agricultural uses of soil around the site;
- Quarries or mines in the vicinity, the potential implications (if any) for existing activities and extractable reserves;
- The extent of topsoil and subsoil cover and the potential use of this material on site as well or requirement to remove it off-site as waste for disposal or recovery;
- High-yielding water supply springs/ wells in the vicinity of the subject site to within a 2km radius and the potential for increased risk presented by the Proposed Development;
- Classification (regionally important, locally important etc.) and the extent of aquifers underlying the site perimeter area and increased risks presented to them by the Proposed Development associated with aspects such as for example removal of subsoil cover, removal of aquifer (in whole or part), drawdown in water levels, alteration in established flow regimes, change in groundwater quality;
- Natural hydrogeological/karst features in the area and potential for increased risk presented by the activities at the site; and
- Groundwater-fed ecosystems and the increased risk presented by operations both spatially and temporally.

7.1.2 Sources of Information

The initial evaluation consisted of inspections of the site and adjacent lands through the examination of aerial photography and Ordnance Survey plans, followed by a site walkover survey in June 2024. As part of a desktop study relevant data was collated and reviewed from sources at Geological Survey of Ireland (1:100,000 Sheet 13: Geology of Dublin), Fingal County Council, Environmental Protection Agency (EPA), National Parks & Wildlife Service (NPWS), Ordnance Survey of Ireland (OSI), Teagasc and Met Eireann. A review of previous site investigation data was also included, as noted above this included data collated by Colin O'Reilly PhD (Hydrology) of Envirologic Ltd and Niamh Murray of Boylan Engineering

The report has been compiled primarily taking cognisance of:

- Guidelines for the preparation of soils, geology and hydrogeology chapters of environmental impact statement. Institute of Geologists of Ireland (2013);
- Revised guidelines on the information to be contained in Environmental Impact

- Guidelines on the information to be contained in Environmental Impact Assessment Reports. Environmental Protection Agency (2022);
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment. Department by the Department of Housing, Planning and Local Government (August 2018 and last updated on 18 December 2019)

7.2 The Subject Development

"Permission is sought by St. Margaret's Recycling & Transfer Centre Ltd. at St. Margaret's Metal Recycling, Sandyhill, St. Margaret's, Co. Dublin, under substitute consent provisions, for the

Retention of:

1. Enabling Ancillary Works, including, but not limited to, that subject of permissions under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109, e.g. ancillary and enabling works/infrastructure, comprising amendments to site access and boundary arrangements including dust mitigation measures, access and gateway, above and below ground surface water drainage, septic tank, fire water storage and retention (105m3), attenuation and storage tanks (206m3), truck and vehicle parking,
2. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility, and authorised facility for the treatment of 'end of life vehicles' (ATF for ELVs). Existing development comprises the weighbridge, offices, recycling and transfer/industrial buildings, hard standing, car parking, plant and machinery, detailed below:
    a. Prefabricated cabins (2no.) - 177sqm. - comprising ancillary offices, staff facilities, control room;
    b. Prefabricated w/c & Steel Container (store) - 29 sqm;
    c. Recycling and transfer/Industrial buildings 1917 sqm;
    d. Weighbridge; and
    e. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.
3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6 ha (permitted under F97A/0109) to 1.75ha of which 1.6ha is associated with waste permit, and additionally lands comprising site access, proprietary wastewater treatment system, installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system.

4. Historic use of 1.6 ha of the site (as per Waste Permit area under WFP-FG-13-0002-03), as a waste transfer recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, during the period 2019 to 2023, where waste throughput at the facility rose from 26,000 to 42,500 tonnes per annum, without the benefit of planning permission, and from 2024 onwards operations comprising waste throughput of 21,900 tonnes per annum.
5. Historic use (i.e. 2009 to 2023) of lands comprising 1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity,
6. Restoration of c.1.1 ha of the above noted compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands is proposed by way of mitigation.
7. Permission is also sought for the on-going use of the existing metal processing and waste recycling and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

A simultaneous application for 'permission' for the future use of the subject site, as a waste recycling and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum is submitted, and the predicted impacts associated with the proposed development are addressed in a separate EIAR and NIS submitted with the application.

7.3 The Receiving Environment

The receiving environment is discussed in terms of land geology, soils, hydrogeology, and site history including potential for existing and historical contamination.

7.3.1 General Description of the Site

The site is located in the townland of Sandyhill, approximately 100 m south of St. Margarets village and 6 km southwest of Swords, County Dublin. The R122 passes in a north-south direction close to the western edge of the site, adjoining the boundary only at the northwestern corner, where the site entrance is located.

In terms of regional topography, lands are considered to be flat and low lying, decreasing in gradient from west to east towards the coastline. Undulations are within a narrow range between 70-85 m OD; the nearest feature outside this range being a hill 3 km to the west at Ward which reaches 91 m OD.

At a more local scale topography is very flat and shown on OSI 1: 50,000 Discovery maps to be at an elevation between 70-80 m OD.

With the exception of the site entrance, the site is bounded on all sides by agricultural fields which support a mixture of medium to high intensity grassland and tillage production. The boundary of Dublin Airport lands comes within 240 m of the southern site boundary. This part of the airport contains the western end of the east-west runway. The nearest buildings directly connected to airport activity are 2.3 km to the east.

The small village of St. Margaret's is located 100 m to the north and includes a national school, church, a small number of one-off houses and farmyards. A small manufacturing facility which appears to have ceased trading is located 100 m west of the site.

The application site comprises an area of approximately 2.93ha of which 1.6 hectares is currently used as a waste transfer and recycling centre. The active site is irregular in shape with a width of 50 m at the rear (eastern) end which widens to 250 m at the front (west). Maximum length is 160 m in the northern portion, which narrows to 50 m at the southern boundary. The remainder of the site comprises compacted hardcore and surrounded by existing trees and hedgerow – and is located to the south of the permitted area.

The site previously functioned primarily as a metal and C&D waste transfer and recycling centre and an Authorised Treatment Facility (ATF) for end-of-life vehicles (ELVs). With the change from serving the public to more commercial sites, the facility serves as a waste recovery and recycling facility for further recovery of waste metals, C & D waste material and batteries. The site has been operational as a waste facility since 1997 and held an EPA Waste License (W0134-01) up to 2007 on which an annual throughput of 60,000 tonnes was granted.

During the operational phase, the subject site had an annual throughput of approx.26,000 to 42,500 tonnes (as noted below).

Year	Turnover (tonnes pa)
2019	33,524
2020	26,233
2021	42,263
2022	42,522
2023	33,695
2024	21,900

It may be worth noting, that the site has operated at a minimum annual tonnage of circa 22,000 tonnes per annum since 1997, with permissible operating tonnage dictated by the various waste licences and thereafter the waste permits (see below)

Year	Turnover (tonnes pa)
1997	21,000
2013	22,250
2014	21,900

Note – from 2001 to 2006, the site was subject to EPA License for 60,000 tonnes per annum and operated at that level and up to c.95,000 tonnes per annum. As the EPA were managing and monitoring operations at that time, and the applicant was not operating the site, assessment is focused on c.2010-2013 onwards.

During the Operational phase, the main source of air quality impacts were the result of fugitive dust emissions from site activities.

Emissions from site traffic and plant have the potential to impact climate.

The outputs of the facility are exported for reuse in production processes which reduces the need for raw materials to be mined and waste going to landfill.

Notwithstanding that longstanding higher tonnages (as per above), and that there is de facto no increase in tonnage, to address An Bord Pleanála's previously raised concerns, the scope of the application comprises an increase in the permanently permitted annual throughput at the facility from 10,000 tonnes to 21,900 tonnes per annum, however, it should be noted that this tonnage is as per that permitted in 2013, and had been in operation until 2019 with the benefit of planning permission.

In brief, the existing facility comprises:

- Concrete hardstanding entrance laneway and public parking area in the northwestern corner;
- Concrete hardstanding area for storage of cars awaiting depollution and storage of parts;
- Large, covered waste processing shed including depolluting area in the western portion of the site;
- Site offices, welfare facilities and a weighbridge located in close proximity to the entrance;
- Concrete hardstanding area for storage of depolluted cars;
- Secure perimeter steel fencing.

And the adjacent lands (subject of restoration to managed grassland/wildflower meadow under proposed works assessed in the EIAR) comprises compacted hard core. No recycling activities have taken place on these lands, in accordance with permission F13A/0409 condition 6. Ad hoc temporary storage of unused or obsolete plant and machinery has occurred on these lands on occasion during the period 2014- 2023. However, they are no longer used for any purpose associated with the recycling centre. The lands have yet to be restored to agricultural use, however, the applicant is proposing to introduce a managed grassland/wildflower meadow, and agricultural haul roads on these lands on a temporary basis (pending their planned and permitted use in accordance with the DA zoning objective), and as assessed further in the accompanying EIAR

Topography on the site follows the general patterns in the area as described above, being mainly flat within the central works area (78.2 - 78.2 mOD). There is a marginal slope from south (79.4 mOD) to north (77.7 mOD).

Figure 7.1: Site Location and Surroundings

7.3.2 Land Use

The site comprises an existing development. With the exception of the site entrance the site is bounded on all sides by agricultural fields which support a mixture of medium to high intensity grassland and tillage production. The boundary of Dublin Airport lands comes within 240 m of the southern site boundary. This part of the airport contains the western end of the east-west runway. The nearest buildings directly connected to airport activity are 2.3 km to the east.

7.3.3 Soils

Reference was made to Teagasc soil maps which show that the agricultural soils that originally overlaid ground at the existing facility, consisted principally of deep mineral soils displaying good drainage Figure 7.2.

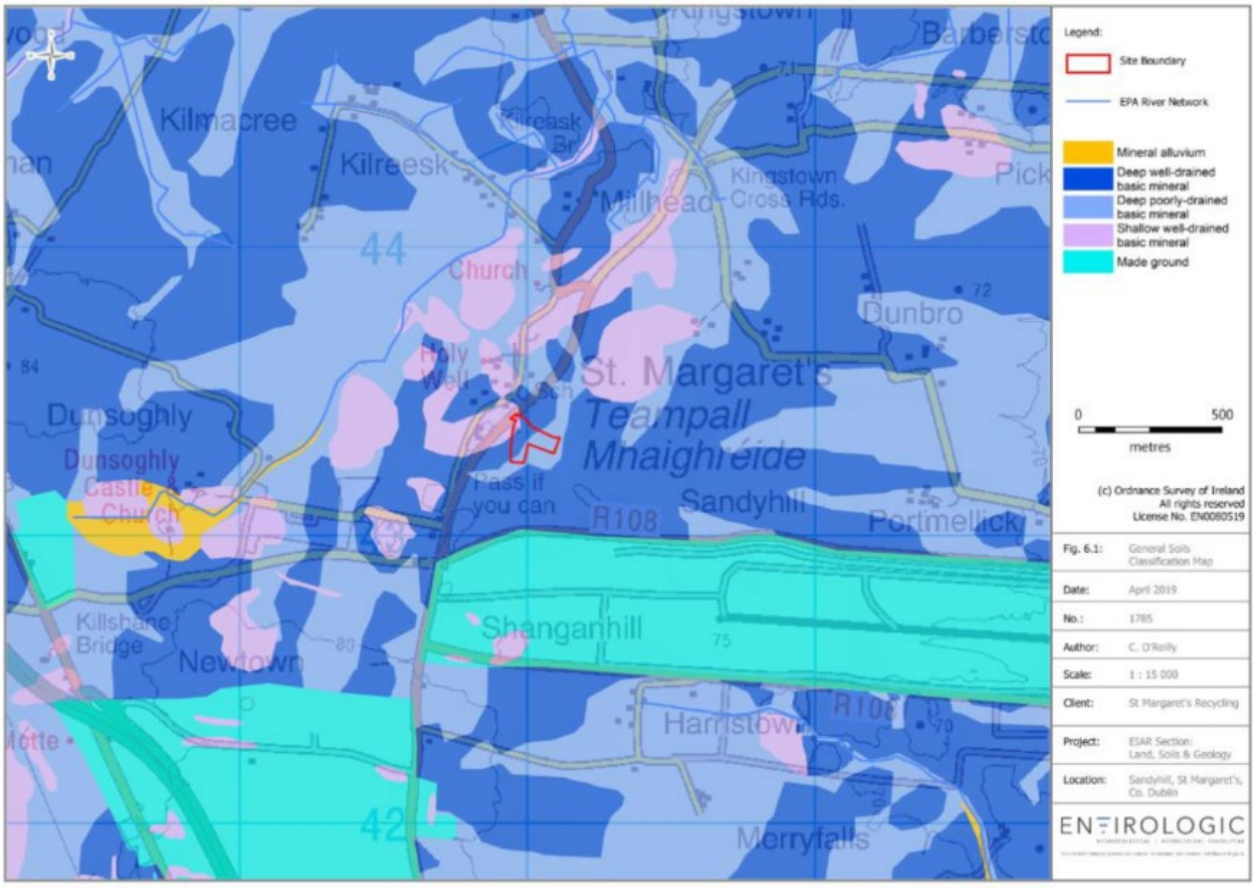

Figure 7 2 General Soils Classification Map

Gardiner and Radford (1980) report the soils as predominantly moderately well-drained grey brown podzolics of loam to clay loam texture. The profile is characterised by a slightly plastic consistency and weak structure which becomes massive in the lower part of the B horizon. The soil can become less well-drained in the very flat, lower-lying areas. Where gravels are present in the subsoil the surface texture can contain a higher sand content and exhibit rapid permeability. Combined with the low annual rainfall in the area this soil has a wide use range supporting a variety of high-quality agricultural production, including vegetables.

Soils in the region to the west tend to display poorer drainage characteristics with gleys becoming more prominent. The headwaters of the Huntstown River, including that segment passing adjacent to the site, are underlain and flanked by alluvial deposits which infer that it may not have been naturally formed along its full route. The Ward River, located approximately 3 km to the northeast of the site, is underlain by alluvium deposits in its entirety.

7.3.4 Subsoils

The Quaternary is the geological period which began 2.6 million years ago and is characterised by ice-ages; cycles of colder, glacial conditions in mid-to high-latitudes interspersed with the warmer 'interglacial' periods in which we live today. In Ireland, our Quaternary history of

repeated glaciations has resulted in sculpted landforms and thick sedimentary deposits overlying bedrock across much of the country.

Figure 7-3 shows that subsoils underlying the site, and the majority of the surrounding area, consist predominantly of limestone-derived till which was carried in from the Irish Sea and intermixed with the local limestone and shale. Minor, isolated pockets of glaciofluvial limestone sands and gravel have been deposited in linear form close to the western boundary of the site. These extend north through St Margaret's to Millhead.

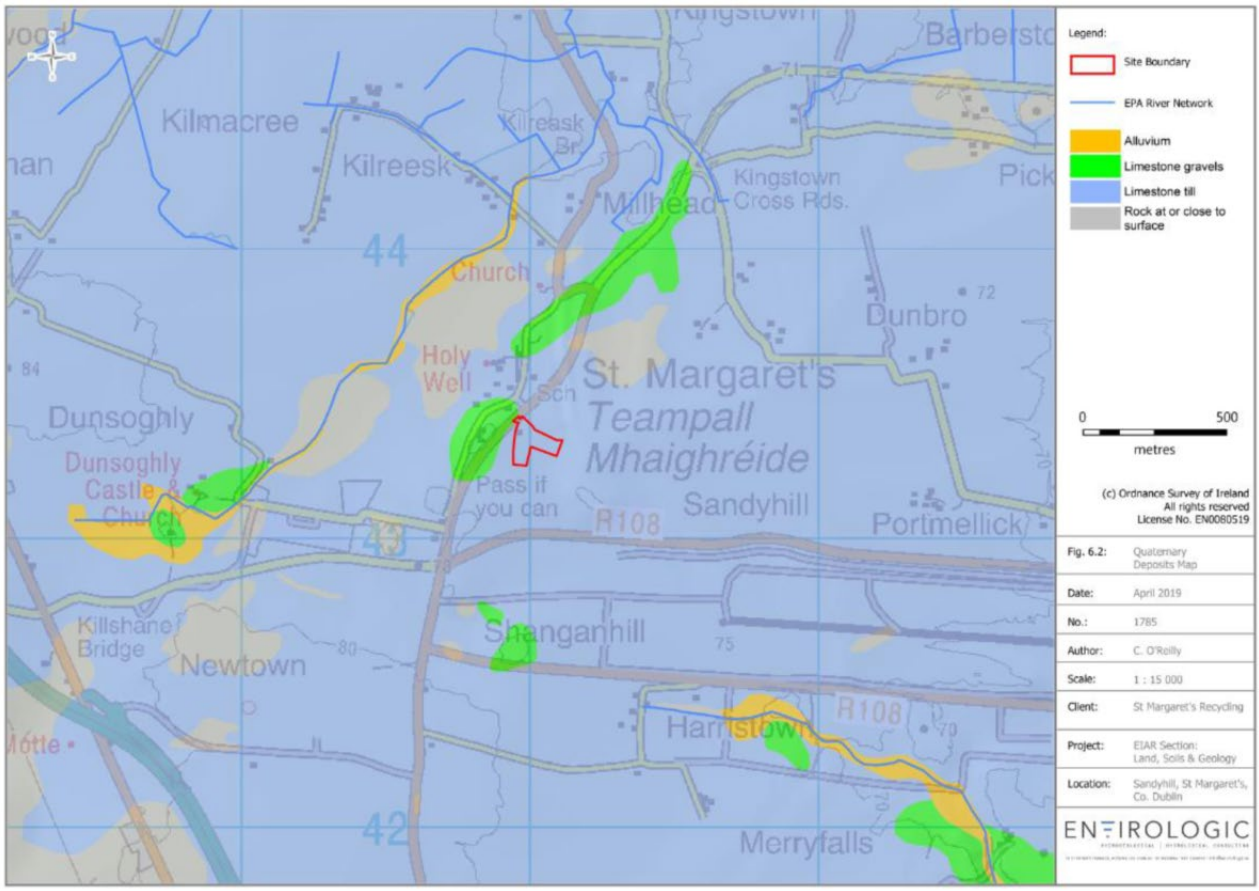

Figure 7 3 Subsoils Map (Source: GSI)

7.3.5 Bedrock Geology

The bedrock and structural geology in the vicinity of the site is illustrated in Figure 6.3. The 1:100,000 GSI bedrock geology map (McConnell et al., 2001) shows the subject site and surrounding area to be underlain by limestone and shale belonging to the Malahide Formation. This unit is classified as Lower Impure Limestones.

There is prominent structural deformation in the area, most notably along a northwest-southwest axis through the Carboniferous. Faulting has been mapped at surface in close proximity to the site. Two of these northwest-southeast trending structural faults are mapped as being evident in close proximity to the eastern and western boundary of the site.

The GSI groundwater well database shows that bedrock was recorded at 4 m below surface in an area west of the site. The GSI geotechnical database reports bedrock at 6.5 m below ground level 260 m west of the site in a 128 m deep borehole

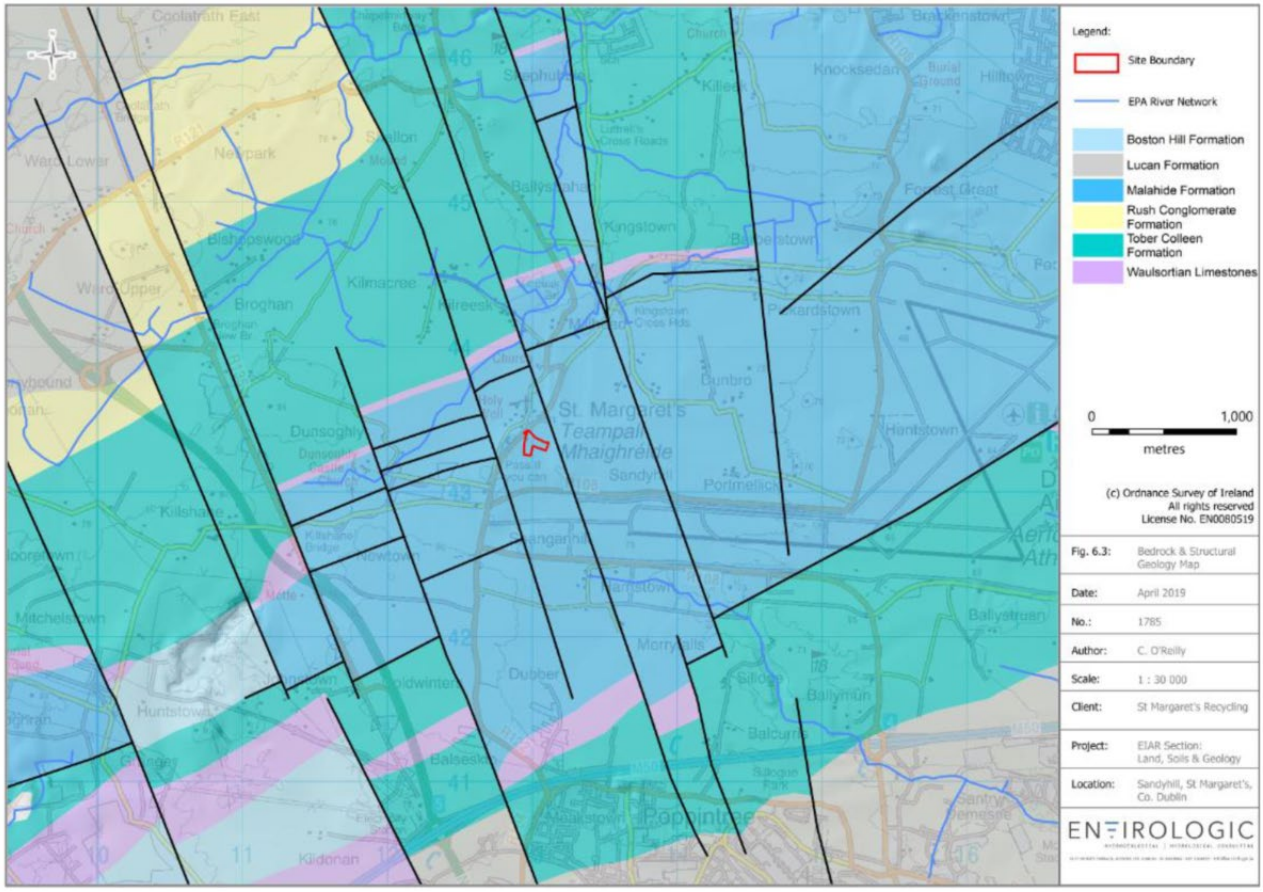

Figure 7 4 Bedrock Geology Map (Source: GSI)

7.3.6 Regional Hydrogeology

Locally Important Aquifers: Locally important aquifers are capable of supplying locally important abstractions (e.g. smaller public water supplies, group schemes), or good yields (100-400 m3/d). In the bedrock aquifers, groundwater predominantly flows through fractures, fissures, joints or conduits. Locally important sand/gravel aquifers are typically >1 km2, and groundwater flows between the sand and gravel grains. This group is subdivided into the following types: Lm Locally Important Bedrock Aquifer, Generally Moderately Productive Ll Locally Important Bedrock Aquifer, Moderately Productive only in Local Zones Lk Locally Important Karstified Bedrock Aquifer Lg Locally Important Sand/Gravel Aquifer.

The aquifer around the facility is classed as Ll, Moderately Productive only in Local Zones. This is further discussed in chapter 8 Water and Hydrology.

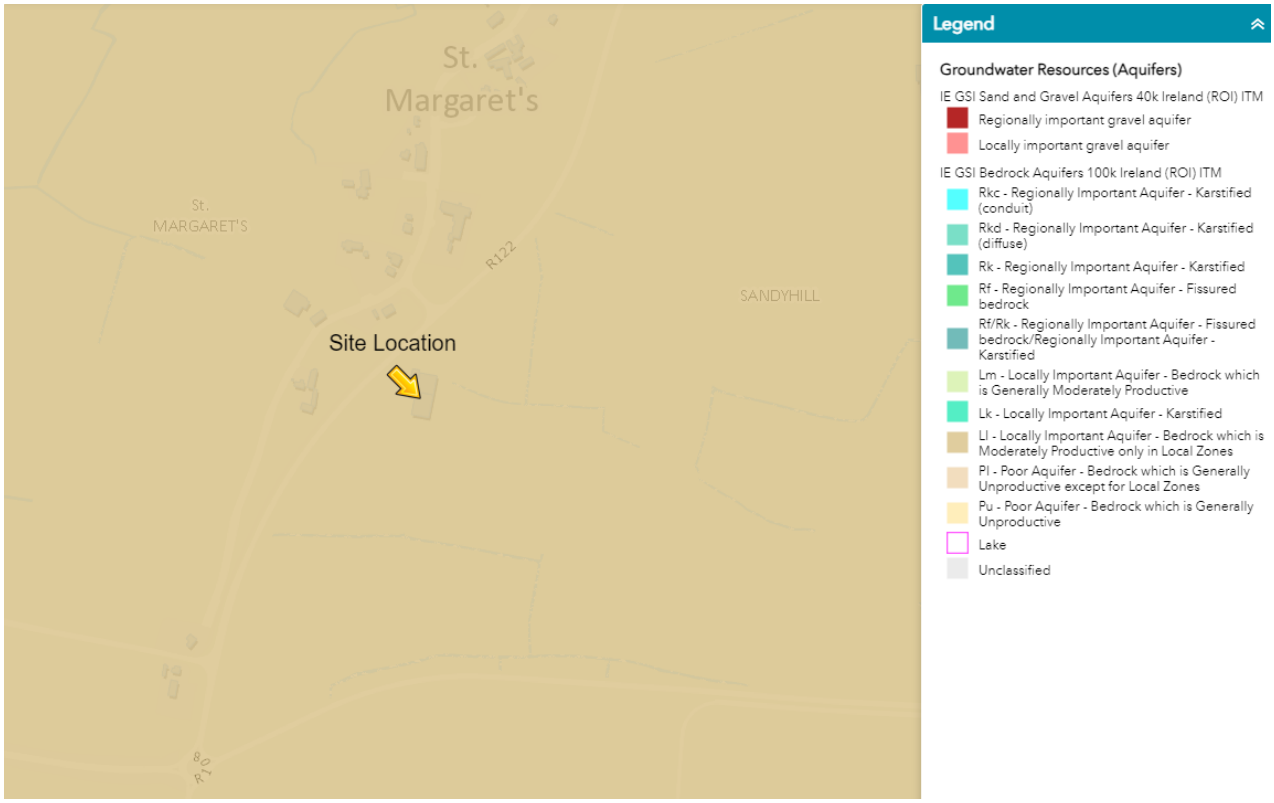

Figure 7 5 Aquifer Classification Map (Source: GSI, 2023)

7.3.7 Aquifer Vulnerability

The Aquifer vulnerability of the existing facility is divided between high and extreme classification on the GSI mapping tool. This is further discussed in chapter 8 Water and Hydrology.

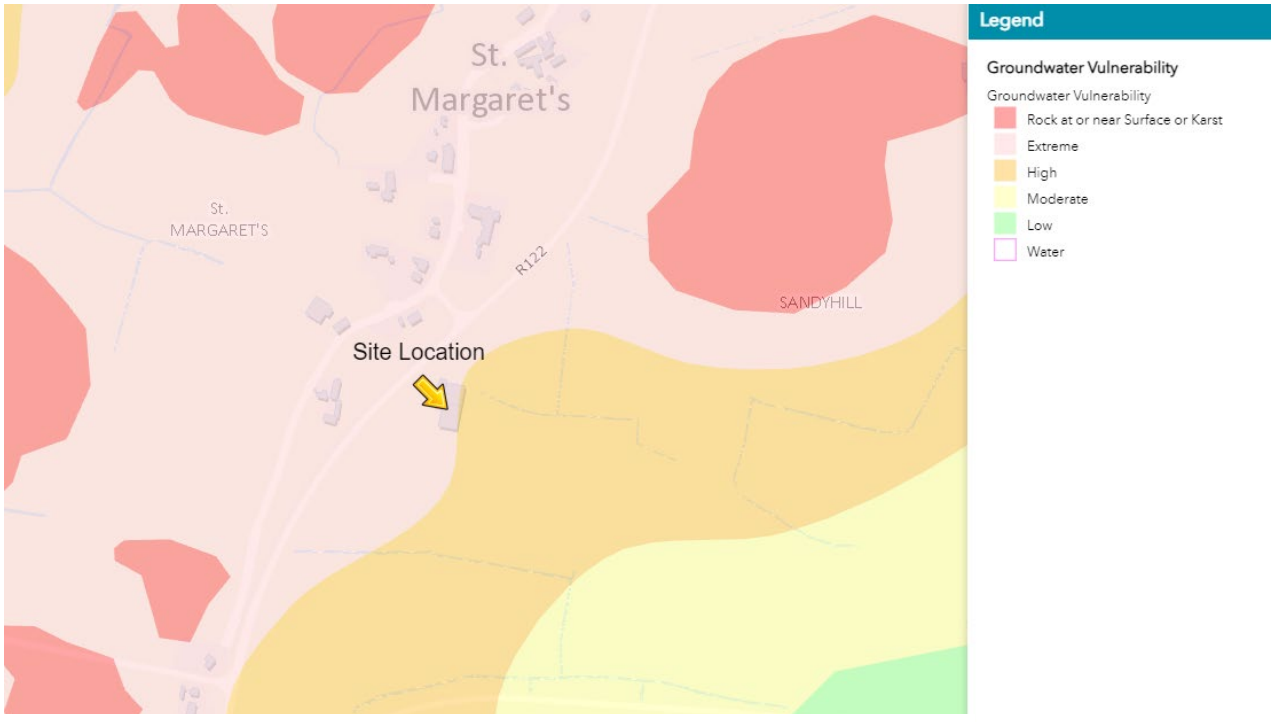

Figure 7 6 Aquifer Vulnerability Map (Source: GSI, 2023)

7.3.8 Groundwater Flow Direction

Groundwater elevations are mapped in Figure 7-7 Groundwater flow direction is shown to be from east to west, with the Huntstown Stream serving as the local baseflow sink. There is little or no hydraulic connectivity between surface waters in the open drain between the site and the Huntstown Stream.

Figure 7- 7 Groundwater elevation

7.3.9 Soil Quality

Limited records from historical site investigation and well drilling works were made available and information contained within was deemed sufficient for the purposes of characterising site-specific lithology. Hence no additional intrusive site investigation works were carried out as part of this assessment.

An EIA Screening Report for the site (Patel Tonra, 2014) refers to a site investigation undertaken in 1997 to inform historical site development. Individual trial pit logs were not available for review.

Findings of the 1997 site investigation is summarized as:

- Maximum trial pit depth = 3.0 m;
- Subsoil consists of brown, sandy clay till underlain by stiff, black clay;
- Till permeability =1 x 10° m/s, representative of moderate permeability subsoil;
- Groundwater encountered at 2.0 m below ground.

7.3.10 Groundwater Quality

The site is situated in the Swords Groundwater Body (IE_EA_G_011). This groundwater body is monitored by the EPA and is considered "Not at Risk" in terms of the Water Framework Directive risk. The groundwater body has "Good quality" in the period of 2016-2021, the most recent available monitoring results from the EPA.

7.3.11 Economic Geology

The GSI (2024) mineral database was consulted to determine whether there were any mineral sites in the area of the subject site. As stated, the Huntstown Quarry is 2.7 km to the southwest to the subject site and is an active limestone quarry.

7.3.12 Geologic Heritage

There are no sites of geological heritage on the site or in the immediate surrounding area. The closest geological heritage site is Huntstown Quarry, 2.7 km to the southwest.

7.3.13 Geohazards

Much of the Earth's surface is covered by unconsolidated sediments which can be especially prone to instability. Water often plays a key role in lubricating slope failure. Instability is often significantly increased by man's activities in building houses, roads, drainage, and agricultural changes. Landslides, mud flows, bog bursts (in Ireland) and debris flows are a result. In general, Ireland suffers few landslides. Landslides are more common in unconsolidated material than in bedrock, and where the sea constantly erodes the material at the base of a cliff and leads to recession of the cliffs. Landslides have also occurred in Ireland in recent years in upland peat areas due to disturbance of peat associated with construction activities. The GSI landslide database was consulted and the landslide in closest proximity to the proposed development was approximately 2 km to the southwest of the site, referred to as the M3 J4 Clonee 2014 which occurred on 3rd February 2014. There have been no recorded landslide events at the site. Due to the generally flat/level local topography and the underlying strata there is a negligible risk of a landslide event occurring at the site.

In Ireland, seismic activity is recorded by the Irish National Seismic Network. The Geophysics Section of the School of Cosmic Physics at the Dublin Institute for Advanced Studies (DIAS) has been recording seismic events in Ireland since 1978. The station configuration has varied over the years. Currently there are five permanent broadband seismic recording stations in Ireland and operated by DIAS. The seismic data from the stations comes into DIAS in real-time and is studied for local and regional events. Records since 1980 show that the nearest seismic activity to the proposed location was in the Irish sea (1.0 – 2.0 Ml magnitude) and ~55 km to the south in the Wicklow Mountains.

There is a very low risk of seismic activity to the proposed development site. There are no active volcanoes in Ireland so there is no risk from volcanic activity.

7.4 Predicted Impacts

The procedure for determination of the potential impacts on the receiving soil and geological environment is to identify potential receptors within the site boundary and surrounding environment and use the information gathered during the desk study and field work to assess the degree to which these receptors will be impacted upon.

Impacts are described in terms of quality, significance, duration, and type in accordance with current EIAR guidelines (EPA, 2017; DHPLG, 2018), and as outlined in Table 1.3 of the rEIAR.

In accordance with the NRA Guidelines (2009) (as included in 'Guidelines for the Preparation of Soils, Geology and Hydrogeology Chapters of Environmental Impact Statements' (IGI, 2013)), the site is deemed to be an attribute of low importance as a function of it being of low quality and significance or value on a local scale, and its current use as a waste facility. There are no in-situ soils exposed on the site.

The potential impacts from the construction and operational phases of the proposed development are summarised below and in further detail in Table 7.1.

7.4.1 Construction Phase

The only construction which has occurred since 2019 have been the replacement of the hammermill, the extension of the concrete yard and the portacabins on site. The installation of the hammermill was an upgrade for the existing machinery on site. The hammermill was constructed on the footprint of the existing concrete yard and no soil was moved for the construction. The construction of the portacabins was similar, with the current portacabins being installed on the footprint established by the previous portacabins. Due to the same location, there were no earthworks involved in the installation of these buildings.

The construction of the two additional concrete slabs were of a relatively small size which would have a very limited impact on the soil and/or geology considering the existing activities on site.

During the enabling phase diesel will be consumed by plant and machinery, predominantly excavator and tractor-trailer.

Accidental Spills and Leaks

As with all construction projects there is potential for water (rainfall and/or groundwater) to become contaminated with pollutants associated with construction activity. Contaminated water which arises from construction sites can pose a significant temporary risk to

groundwater quality for the duration of the construction if contaminated water is allowed to percolate to the aquifer.

During the construction of the development, there was a risk of accidental pollution incidents from hydrocarbons (ecotoxic) due to accidental spillages from construction plant or onsite storage.

Accidental spillages which are not mitigated may result in localised contamination of soils and groundwater underlying the site should contaminants migrate through the subsoils and impact the underlying groundwater. Groundwater vulnerability at the site is currently classified as extreme, high, and moderate in the south, central portion, and north of the site respectively. No soil stripping occurred which can also further reduce the thickness of subsoil and the natural protection they provide to the underlying aquifer.

The effect on the local and regional environment is likely to be brief***, temporary, imperceptible,*** and ***neutral***. This is due to the potential for accidental spills having an impact on the local and regional soils is minimized by the construction occurring on a fully impermeable surface from which any accidental spills or leaks are directed through silt traps and oil interceptors before being introduced to the environment.

7.4.2 Operational Phase

The operational phase has one direct discharge to ground from the current operations on site. These are due to the wastewater treatment system and percolation area on site for staff use. The wastewater treatment system was installed in and has been designed according to all relevant guidance. Due to this there is no potential for impact due to direct discharges to ground.

Chemical pollution (e.g. hydrocarbon spillages as a result of operational activities) has the potential to occur at the site. However, as the entire footprint of the site has been capped with hardstanding for the purposes of site operations and storing of de-polluted vehicles, there will be no resultant impacts to the underlying geological environment as a result of the continued operation.

The magnitude of the direct impacts to the land, soils and geological environment due to the operational phase is considered to be ***long-term, neutral***, and ***insignificant***.

7.4.3 Do Nothing Scenario

This item requires consideration of the effect on the environment as it would be in the future should the proposed works not be carried out. As the application is for retention permission, the do-nothing scenario is not relevant in terms of the physical works, and it is the physical works that altered the land, soils, and geological environment of the site.

Additionally, the use is on-going and did take place during the assessment period, and therefore, the potential impact of it ceasing to operate is not considered relevant in the context of this chapter where the 'operations' potential to impact on the lands, soil or geology of the site, is imperceptible, whether continued or not is not a scenario that could impact on the site itself.

7.4.4 Alternatives

If the waste was not accepted into this facility, it would have been redirected to different sites resulting in further land take and land being surfaced on a different site. This was not an option during the assessment period, but were this to occur the potential impact could have been slight, negative, and permanent on other lands.

Retention of the site in its current physical form, without a use, would be considered negative, medium-term (where redevelopment of Dublin Airport (DA) zoned lands is probably/likely) and moderate.

7.5 Mitigation Measures

There is no potential for an impact on land, soils and geology from either the operational phase or the construction phase, as occurred between 2019 (following the lapse of the temporary permission) to date, and therefore there are no mitigation measures necessary.

The proposed restoration of c.1.1ha of compacted hard core, previously permitted and used for agricultural storage and truck parking and storage associated with the waste recycling facility, to managed grassland/wildflower meadow and agricultural haul roads is considered to be a medium term, positive and slight impact. As the lands are zoned DA, it is unlikely that the lands will be retained as grassland/wildflower meadow and agricultural haul roads, and as the area is relatively small in the context of the surrounding agricultural lands, the positive impact is deemed to be slight.

7.6 Residual Impacts

Residual impacts refer to the degree to environmental change that will occur after the proposed mitigation measures have taken effect.

As the retention of the core site on which the waste recycling and transfer facility is sited has no potential for impact prior to mitigation measures, the residual impacts are assessed to be ***momentary, neutral*** and ***negligible*** in both the construction phase and the operational phase.

The proposed restoration of c.1.1ha of compacted hard core to managed grassland/wildflower meadow and agricultural haul roads is considered to be **a medium term, positive** and **slight** impact.

7.7 Cumulative Assessment

The locality is still predominantly agricultural land, with the site and lands subject of temporary restoration comprising a relatively small area within the wider environment. Hence, the cumulative impact to the land, soils and geological resources in the area is considered to be ***momentary, neutral*** and ***negligible***.

7.7.1 Construction Phase

The cumulative effects of the construction phase are negligible due to the scale of the construction occurring during the development. Therefore, the cumulative impact of the construction phase is considered ***momentary, neutral*** *and* ***imperceptible***.

While not considered construction, albeit it is considered development, the proposed restoration of c.1.1ha of compacted hard core to managed grassland/wildflower meadow and agricultural haul roads is considered to be **a medium term, positive** and **slight** impact.

7.7.2 Operational Phase

The overall operation of the site did not significantly change, other than a temporary increase in annual throughput, which appears to have occurred sporadically over the last 3 decades. The various increases or changes in tonnage have no impact on the land, soils, and geology, of the site and is therefore considered ***long-term, neutral*** and ***imperceptible***.

7.8 Interactions

Due to the inter-relationship between land, soils, geology, and hydrogeology and hydrology, - there is a strong overlap between the assessed impacts and mitigation measures in both chapters, with the potential impact noted as ***long-term, neutral*** and ***imperceptible***.

7.9 References

- Directive 2014/52/EU of the European Parliament
- Environmental Protection Agency (EPA) Advice notes on current practice in the preparation of Environmental Impact Statement, Draft (EPA, 2015) and Guidelines on the Information to be contained in Environmental Impact Statements (EPA, 2022).

- Water Framework Directive (WFD) - Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy. This relates to the improvement of water quality across Ireland including rivers and groundwater bodies.
- River Basin Management Plan 2018-2021 (including regional plans by Local Authority Waters Programme (Waters and Communities 2020)). Draft River Basin Management Plan 2022-2027.
- Institute of Geologists Ireland (IGI) -Geology in Environmental Impact Statements, a guide (IGI, 2002) and Guidelines for the Preparation of Soils, Geology and Hydrogeology Chapters of Environmental Impact Statements (IGI, 2013).
- European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010).
- European Communities Environmental Objectives (Groundwater) Amendment Regulations 2016 (S.I. No. 366 of 2016); European Communities Environmental Objectives (Groundwater) (Amendment) Regulations 2022 S.I. No. 287 of 2022.
- Part IV of the First Schedule of the Planning and Development Act 2000, as amended.
- European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003)
- Environmental Protection Agency 'Towards Setting Guideline Values for the Protection of Groundwater in Ireland Interim Report,' (EPA 2003).
- European Union (Drinking Water) Regulations 2014 (S.I. No. 122/2014).
- European Union (Drinking Water) (Amendment) Regulations (S.I. No. 464 of 2017).
- Geological Survey of Ireland (GSI) - on-line mapping, Geo-hazard Database, Geological Heritage Sites & Sites of Special Scientific Interest, Bedrock Memoirs and 1: 100,000 mapping;
- Teagasc soil and subsoil database;
- Ordnance Survey Ireland - aerial photographs and historical mapping;
- Environmental Protection Agency (EPA) – website mapping and database information;
- National Parks and Wildlife Services (NPWS) – Protected Site Register.
- Control of Water Pollution from Construction Sites, Guidance for Consultants and Contractors" (CIRIA 532, 2001)
- Transport Infrastructure Ireland - Road Drainage and Water Environment (TII, 2015).
- Transport Infrastructure Ireland (previously National Road Authority) - Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes (TII, 2009)

8.0 Water & Hydrology

8.1 Introduction/Methodology

This chapter assesses and evaluates the potential impacts of the Subject Site on the hydrological aspects of the site and surrounding area, in accordance with the requirements of Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (i.e. the EIA Directive) (European Union, 2014a).

The following rEIAR section has been prepared by Peter McCormick, Martijn Leenheer, and Ian Worrell. Peter McCormick is a Senior Consultant with ESC Environmental Ltd., and has 7 years' experience in the Environmental Sector, working with both the public and private sector. He holds a degree in Level 8 BSc (Hons) degree in Environmental Science from Atlantic Technological University (previously IT Sligo). He has experience in many aspects of environmental works including wastewater treatment system design, environmental permitting, water management, and specialises in ecological assessments (EcIAs), Appropriate Assessments and Natura Impact Statements.

Martijn Leenheer holds a 1st Class BSc (Hons) degree in Environmental Science from Atlantic Technological University (previously IT Sligo) and has 11 years' experience in Ireland in soil remediation, invasive species commercial Wastewater Treatment, Discharge Licences, Waste Permits and Licences has been involved in Risk Assessments, NIS and EIAR reports for various commercial projects. Before moving to Ireland Martijn worked in the Netherlands as an Environmental Field Technician in soil research. He has been an Operations Director of Environmental Services Consultancy for 11 Years and a Founding Director of ESC Environmental LTD since 2021.

Ian Worrell, BScEng, DipEng, CEng, MIEI, DipPhyPlg. Ian has over 28 years' experience of civil engineering design, leading civil engineering teams responsible for civil and infrastructure planning and design for development projects. Ian is a Chartered Civil Engineer with a degree in engineering from Dublin Institute of Technology and a Diploma in Physical Planning from TCD. He works on a wide range of projects, including industrial and commercial development and has been responsible for planning and design of infrastructure. Ian has particular expertise in the design of efficient foul and stormwater drainage systems, and he has been responsible for the development of successful SuDS strategies for many schemes, generally using a combination of solutions to provide the site strategy. His expertise in drainage encompasses the assessment of flooding risk.

Additionally, it has availed of the baseline and data included in the previous EIAR prepared for St Margarets Metal Recycling by Colin O'Reilly PhD (Hydrology) of Envirologic Ltd and Niamh Murray of Boylan Engineering, on behalf of St. Margaret's Recycling and Transfer Centre Limited (St. Margaret's Metal Recycling - SMMR). This Chapter also provides a characterisation of the receiving hydrological environment within the Subject Site and within a wider study area in the

vicinity of the Subject Site. In assessing likely potential and predicted effects, account is taken of both the importance of the attributes and the predicted scale and duration of the likely effects.

The aims of this rEIAR Section are to establish the following:

- baseline conditions relevant to the hydrological and hydrogeological environment within the site boundary and the local surrounding environs;
- significant impacts, if any, on the water environment, which can be reasonably expected to occur as a result of the Subject Site;
- cumulative impacts with respect to activities within the application site and other nearby activities of a similar nature;
- suitable mitigation measures to address identified adverse impacts.

Revenant Guidance

The hydrological baseline assessment has been carried out in accordance with the following guidance and established best practice:

- Environmental Protection Agency (EPA) Advice notes on current practice in the preparation of Environmental Impact Statement (EPA, 2015) and Guidelines on the Information to be contained in Environmental Impact Statements (EPA, 2022).
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment. Department by the Department of Housing, Planning and Local Government (August 2018 and last updated on 18 December 2019)
- Environmental Impact Assessment of Projects, Guidance on the preparation of the Environmental Impact Assessment Report (European Commission, 2017).
- Transport Infrastructure Ireland - Road Drainage and Water Environment (TII, 2015).
- Transport Infrastructure Ireland (previously National Road Authority) - Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes (TII, 2009).
- Water Framework Directive (WFD) - Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy. This relates to the improvement of water quality across Ireland including rivers and groundwater bodies.
- The Planning System and Flood Risk Management, Guidelines for Planning Authorities (Department of the Environment, Heritage and Local Government (DoEHLG) and the Office of Public Works (OPW)).
- Guidelines on protection of fisheries during construction works in and adjacent to waters (Inland Fisheries Ireland, 2016).
- Guidelines for the Crossing of Watercourses during Construction of National Road Schemes, (TII, 2008)
- Water resource management in Ireland is dealt with in the following key pieces of legislation and guidelines:
- European Communities Environmental Objectives (Surface Waters); Regulations, 2009 (S.I. No. 272 of 2009 as amended by SI No. 77 of 2019).
- Part IV of the First Schedule of the Planning and Development Act 2000, as amended.
- European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003).

- Environmental Protection Agency 'Towards Setting Guideline Values for the Protection of Groundwater in Ireland Interim Report,' (EPA 2003).
- European Union (Drinking Water) Regulations 2014 (S.I. No. 122/2014).
- European Union (Drinking Water) (Amendment) Regulations (S.I. No. 464 of 2017).

Criteria for Rating of Effects

This chapter evaluates the effects, if any, which the development has had or will have on Hydrology as defined in the Environmental Protection Agency (EPA) 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports' (EPA, 2022). The Draft EPA document entitled 'Advice Notes for Preparing Environmental Impact Statements' (EPA, 2015) is also followed in this hydrological assessment and classification of environmental effects. In addition, the document entitled 'Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes' by the National Roads Authority (NRA, 2009) is referenced where the methodology for assessment of impact is appropriate.

The rating of potential environmental effects on the hydrological environment is based on the standard EIAR impact predictions table included in Chapter 1, Table 1.3, which takes account of the quality, significance, duration, and type of effect characteristic identified (in accordance with impact assessment criteria provided in the EPA Guidelines (2022) publication).

The principal attributes (and effects) to be assessed include the following:

- River and stream water quality in the vicinity of the site (where available);
- Surface watercourses near the site and potential impact on surface water quality arising from Subject Site related works including any discharge of surface water run-off;
- Localised flooding (potential increase or reduction) and floodplains including benefiting lands and drainage districts (if any); and
- Surface water features within the area of the site.

Sources of Information

Desk-based hydrological information on the substrata (both Quaternary deposits and bedrock geology) underlying the extent of the subject site was obtained through accessing databases and other archives where available. Data was sourced from the following:

- Environmental Protection Agency (EPA) – website mapping and database information. Envision water quality monitoring data for watercourses in the area;
- River Basin Management Plan for Ireland 2018-2021.
- The Planning System and Flood Risk Management, Guidelines for Planning Authorities (Department of the Environment, Heritage and Local Government (DoEHLG) and the Office of Public Works (OPW));
- Office of Public Works (OPW) flood mapping data (www.floodmaps.ie)
- Flood Risk Assessment and Management Plan for the Meath CDP 2021-2027.
- 'Control of Water Pollution from Construction Sites, Guidance for Consultants and Contractors' (CIRIA 532, 2001);

- National Parks and Wildlife Services (NPWS) – Protected Site Register.

Site specific data was derived from the following sources:

- Various design site plans and drawings
- Consultation with site engineers.

The initial evaluation consisted of inspections of the site and adjacent lands by examination of aerial photography and Ordnance Survey plans, followed by a site walkover survey in March 2019, by Ian Worrell, Martijn Leenheer and Peter McCormick. Relevant hydrogeological data from the Geological Survey of Ireland (1:100,000 Sheet 16: Geology of Meath) was reviewed, together with additional data collated from data sources at Fingal County Council, Environmental Protection Agency (EPA), Ordnance Survey of Ireland (OSI), National Parks and Wildlife Service (NPWS), the Office of Public Works, (OPW) and Met Eireann.

A review of historical groundwater and surface water sampling data was undertaken with additional sampling of receiving surface waters, along with a groundwater and surface water level survey.

8.2 The Receiving Environment

Hydrology

Aquifer Classification

The site is underlain by a locally important bedrock aquifer (Ll), consisting of bedrock which is generally moderately productive only in local zones Figure 8.1. This aquifer is made up of a limited and relatively poorly connected network of fractures, fissures and joints. giving low permeability. which decreases with depth. The aquifer has a low recharge acceptance. Most groundwater flows occur in an upper zone of about 15 m with a zone of interconnected fissures that extends approximately 10 m below this. Some recharge in the upper, more weathered zone (3-5 m) is likely to flow along the relatively short flow paths and rapidly discharge to streams, small springs and seeps. Baseflow to streams can significantly decrease in the drier summer months, resulting in low dry weather flows.

There are no karst features in the surrounding area. The site lies within the Swords Groundwater Body which states that permeability is likely to be moderate to low (1-10 m/d).

Dwellings in the area are all reportedly supplied potable water from the local mains water network. The GSI well database shows two warm springs west of the site. Typical spring temperatures range from 12.5 - 25 °C. It is thought that groundwater issuing from these springs comes from deep fractures. One other well is recorded in the area west of the site, this being 9.1 m deep and having a good yield of 164 m/d.

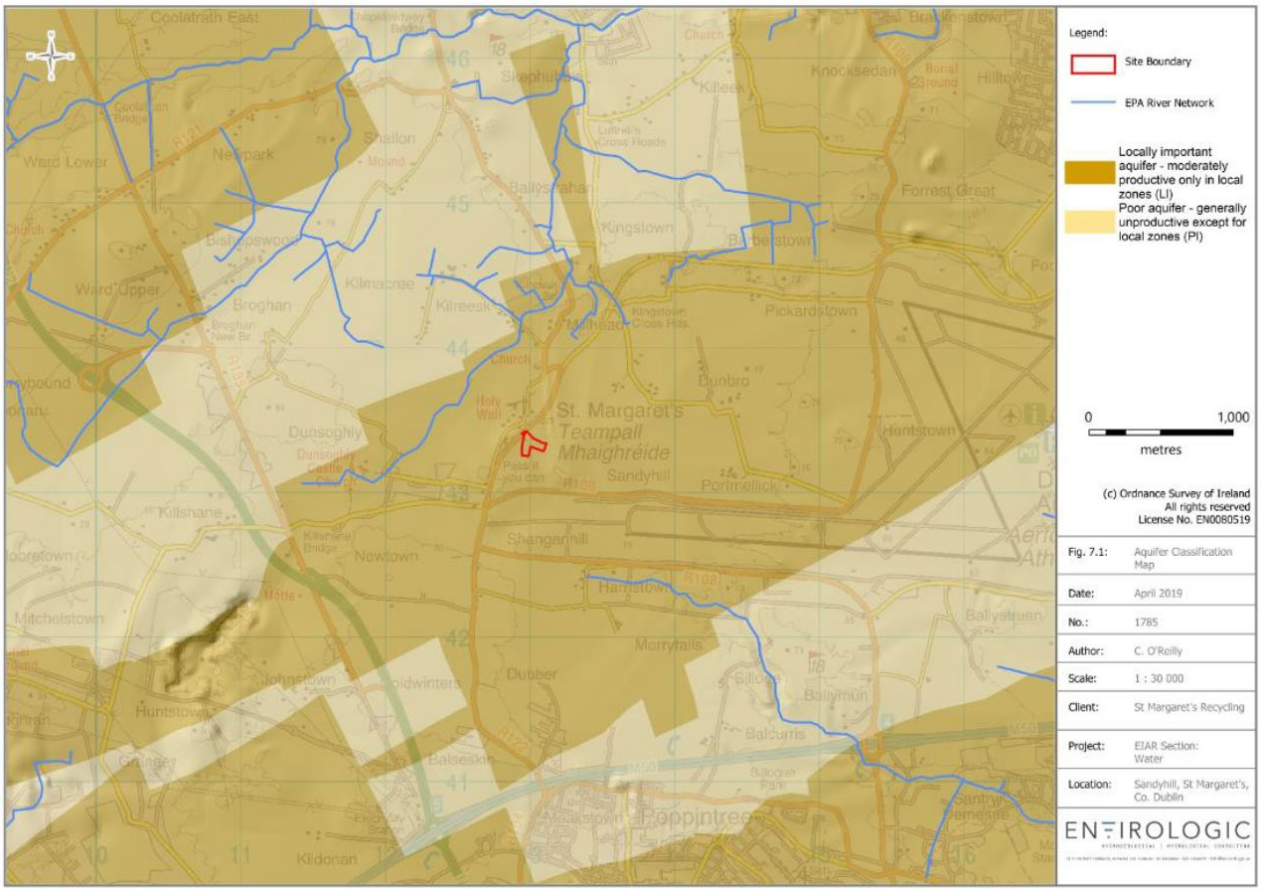

Figure 8 1 Aquifer Classification Map

Vulnerability

The vulnerability categories. and methods for determination, are presented in Groundwater Protection Schemes (1999). The guidelines state that 'as all groundwater is hydrologically connected to the land surface, it is the effectiveness of this connection that determines the relative vulnerability to contamination. Groundwater that readily and quickly receives water (and contaminants) from the land surface is considered to be more vulnerable than groundwater that receives water (and contaminants) more slowly and in lower quantities. The travel time, attenuation capacity and quantity of contaminants are a function of the following natural geological and hydrogeological attributes of any area:

- The subsoils that overlie the groundwater;
- The type of recharge - whether point or diffuse; and
- The thickness of the unsaturated zone through which the contaminant moves.

As shown in Figure 8.2, the GSI has assigned the existing site as having groundwater vulnerability classification of High (H) in the central and eastern part of the site, and Extreme (E) in the western portion. where sheds are currently sited.

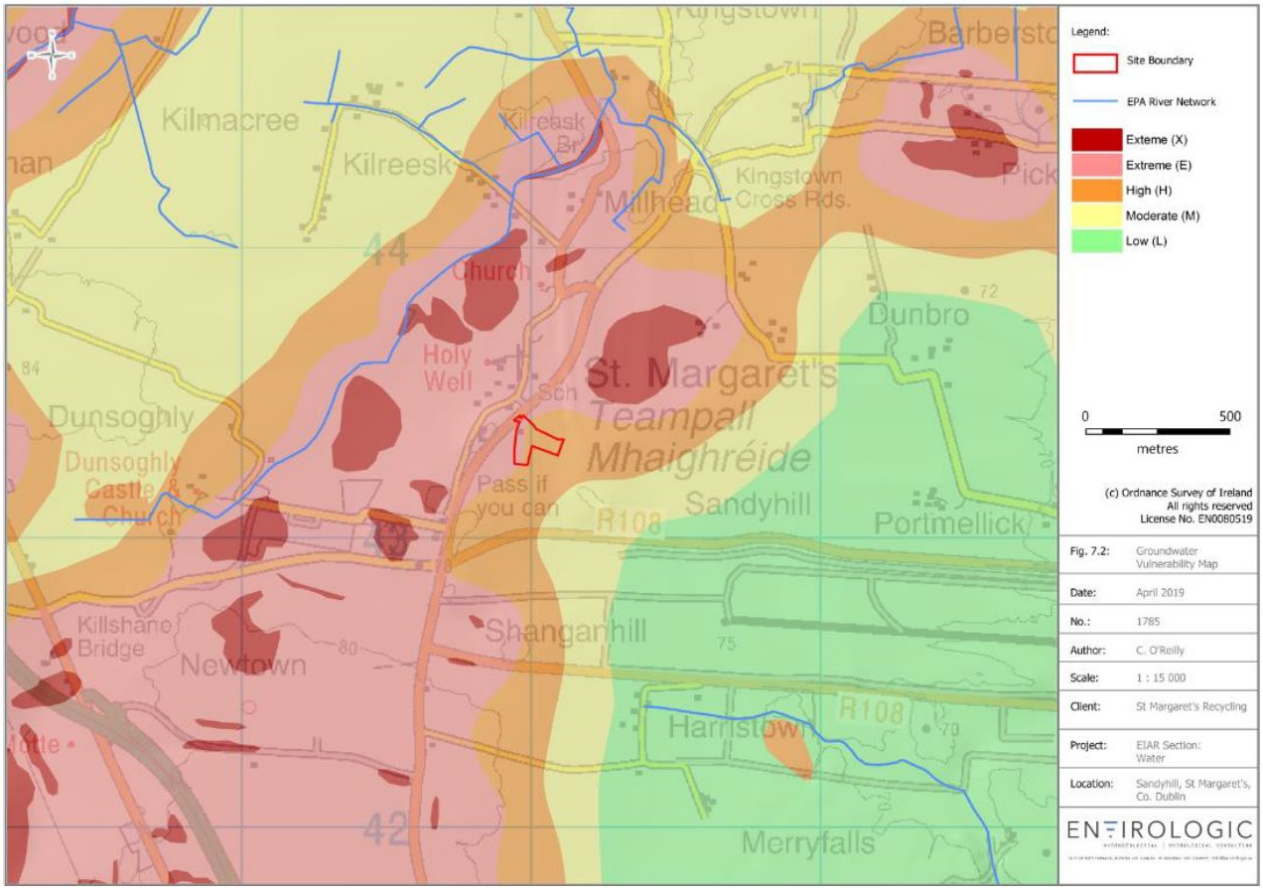

Figure 8 2 Groundwater Vulnerability Map

Surface Water

There is negligible natural surface water catchment upgradient of the site. The site is within the surface water catchment to the Huntstown Stream which flows in a southwest-northeast direction. Treated stormwater leaving the site is connected to the Huntstown Stream via a field drain. The field drain is culverted beneath the R122 and emerges as an open channel 180 m downstream of the site. The field drain outfalls to the Huntstown Stream 500 m downstream of the site. The surface water catchment to the Huntstown River at this point is 4.8 km2 (Figure 8.3).

This Huntstown Stream outfalls to the Ward River approximately 3 km to the north at St Margaret's Golf Club. The Ward subsequently joins the Broadmeadow River 7.5 km northeast, prior to entering the Malahide Estuary.

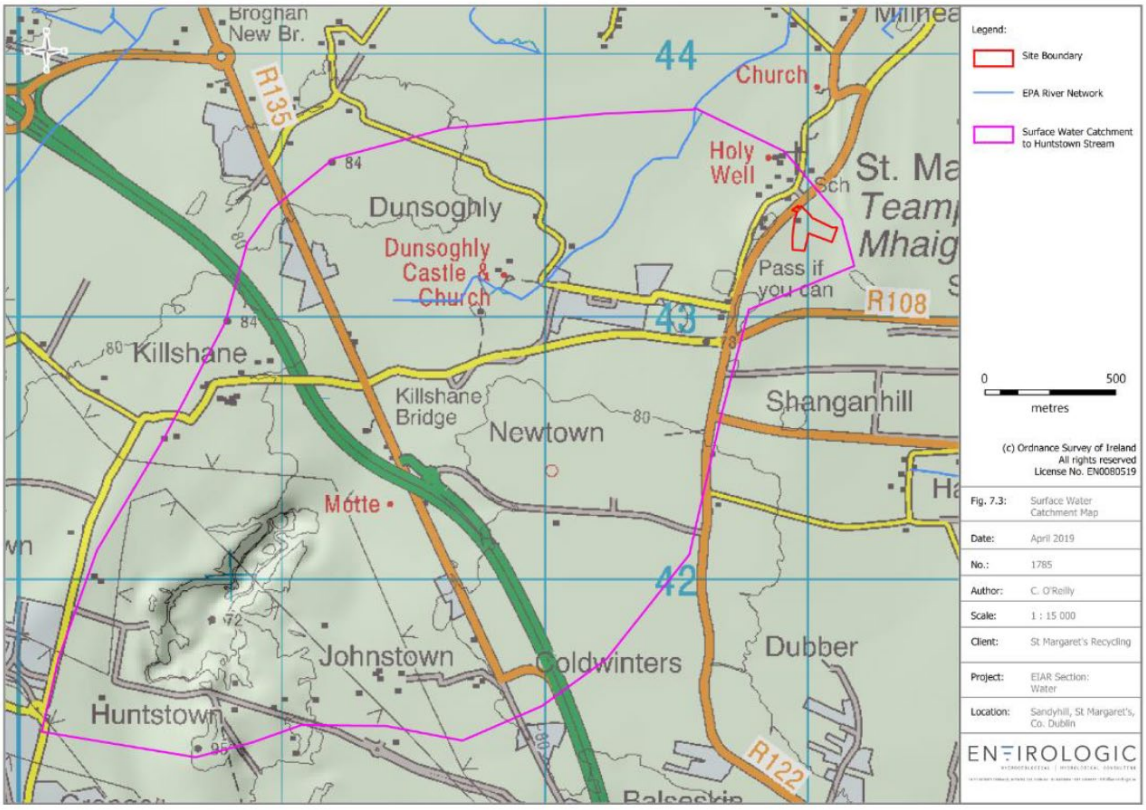

Figure 8 3 Surface Water Catchment

Surface Water Quality

Upgradient and downgradient monitoring points on the Huntstown are indicated at Dunsoughly Castle and Kilreask Bridge, respectively, but no EPA biological or hydrochemical sampling data is collected at these points or elsewhere on the Huntstown Stream.

WFD risk classification for the Huntstown Stream and upper Ward catchment are indicated as being 'under review'. WFD river waterbody status 2010-2015 is shown as 'good'.

Designated Areas

There are no designated areas on the site or in the surrounding area. The closest designated area is the Malahide Estuary SAC (000205) and SPA (004025) located approximately 10 km northeast of the site.

The Appropriate Assessment Screening Report submitted as part of the 2014 planning application (Patel Tonra, SM0105, May 2014) considered the potential surface water pollution pathway from the application site. This report determined, as too did the AA carried out by the Planning Authority, that given the existing surface water treatment systems at the site, combined with the distance between the site and Malahide Estuary SAC, the risk to same is low and there will be no likely effects on Natura 2000 sites.

As the Board in their assessment of the subject development, proposed under F20A/0409, considered there to be inadequate information submitted to come to this conclusion this application includes a rNIS.

This Statement (i.e. rNIS) concludes, that avoidance, design requirements and mitigation measures set out within the rNIS report ensure that any impacts on the conservation objectives of European sites will be avoided during the construction and operation of the subject development such that there would be no adverse effects on these European sites. It has been objectively concluded by ESC Environmental Ltd., following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the proposed development and with the implementation of the mitigation measures, that the subject development did not and **will not** adversely affect (either directly or indirectly) the integrity any European site, either alone or in-combination with other plans or projects, and there is no reasonable scientific doubt in relation to this conclusion.

Flood Risk

A screening of online flood risk data sources is summarised as follows:

- No indicators on historical maps which suggest the site may be at risk of flooding.
- No historical flood events within the vicinity of the site.
- OPW pFRA maps show that the site is not at risk of fluvial or pluvial flooding.
- The site is not covered under the more detailed OPW CFRAM and Fingal FEM FRAM maps.
- The Huntstown Stream, where it passes adjacent to the site, is maintained as part of the Broadmeadow and Ward arterial drainage scheme.

Rating of Importance of Hydrological Attributes

Although there would be a hydrological connection or pathway between the site and the nearby Huntstown Stream, this is considered to be of negligible significance due to the nature of discharge from the site and the mitigation measures already in place to avoid contamination.

8.3 The Subject Development

"Planning permission is sought by St. Margaret's Recycling & Transfer Centre Ltd. at St. Margaret's Metal Recycling, Sandyhill, St. Margaret's, Co. Dublin, under substitute consent provisions, for the

Retention of:

1. Enabling Ancillary Works, including, but not limited to, that subject of permissions under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109, e.g. ancillary and enabling works/infrastructure, comprising amendments

to site access and boundary arrangements including dust mitigation measures, access and gateway, above and below ground surface water drainage, septic tank, fire water storage and retention (105m3), attenuation and storage tanks (206m3), truck and vehicle parking,

2. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility, and authorised facility for the treatment of 'end of life vehicles' (ATF for ELVs). Existing development comprises the weighbridge, offices, recycling and transfer/industrial buildings, hard standing, car parking, plant and machinery, detailed below:

    a. Prefabricated cabins (2no.) - 177sqm. - comprising ancillary offices, staff facilities, control room;

    b. Prefabricated w/c & Steel Container (store) - 29 sqm;

    c. Recycling and transfer/Industrial buildings 1917 sqm;

    d. Weighbridge; and

    e. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.

3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6 ha (permitted under F97A/0109) to 1.75ha of which 1.6ha is associated with waste permit, and additionally lands comprising site access, proprietary wastewater treatment system, installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system.

4. Historic use of 1.6 ha of the site (as per Waste Permit area under WFP-FG-13-0002-03), as a waste transfer recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, during the period 2019 to 2023, where waste throughput at the facility rose from 26,000 to 42,500 tonnes per annum, without the benefit of planning permission, and from 2024 onwards operations comprising waste throughput of 21,900 tonnes per annum.

5. Historic use (i.e. 2009 to 2023) of lands comprising 1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity,

6. Proposed restoration of c.1.1 ha of the above noted compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands,

7. On-going use of the existing metal processing and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the

bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

Separately, but in tandem, the applicant is seeking permission as part of the substitute consent application for a proposed development comprising the on-going/future use of the site and facility to enable annual waste throughput of up to 21,900 tonnes per annum, and subject to a number of additional mitigation measures. This 'permission' element, regarding the future use of the site, is addressed in a separate EIAR and NIS submitted simultaneously.

Potential to Impact

Construction Phase

The only construction which has occurred since 2019 has been the replacement of the hammermill and the portacabins on site, and minor extension to the impermeable concrete area (c.0.1ha). The installation of the hammermill was an upgrade for the existing machinery on site. The hammermill was constructed on the same footprint of the previous machinery and no soil was moved for the construction. The construction of the portacabins was similar, with the current portacabins being installed on the footprint established by the previous portacabins. Due to the same location, there were no earthworks involved in the installation of these buildings. The 0.1ha of new concrete replaced compacted hardcore and resulted inadvertently as the applicant endeavoured to improve the boundary arrangement, replacing stacked steel containers with a concrete wall.

Accidental Spills and Leaks

As with all construction projects there is potential for water (rainfall and/or groundwater) to become contaminated with pollutants associated with construction activity. Contaminated water which arises from construction sites can pose a significant temporary risk to groundwater quality for the duration of the construction if contaminated water is allowed to percolate to the aquifer.

During the construction of the development, there was a risk of accidental pollution incidents from hydrocarbons (ecotoxic) due to accidental spillages from construction plant or onsite storage.

Accidental spillages which are not mitigated may result in localised contamination of soils and groundwater underlying the site should contaminants migrate through the subsoils and impact the underlying groundwater. Groundwater vulnerability at the site is currently classified as extreme, high, and moderate in the south, central portion, and north of the site respectively. No soil stripping occurred which can also further reduce the thickness of subsoil and the natural protection they provide to the underlying aquifer.

Operational Phase

Surface Water Management

In the operational phase of the development, there will be no change from the current surface water management of the facility. All rainfall landing on open yard areas is captured, via a series of gullies, in a subsurface piped network and diverted towards the stormwater treatment system. The drainage network diverts stormwater in a northern direction in line with the site topography, before being diverted in a west/northwest direction towards the outfall points.

The current surface water treatment system serving the site comprises a series of silt traps, a buffer tank with oil decanting unit and two hydrocarbon interceptors, which manages and treats runoff from defined hardstanding areas. This infrastructure is described briefly as follows:

- Runoff from the southern portion of the site, which comprises a hammer mill plant and storage area for processed metals and depolluted vehicles. drains to a silt trap prior to passing through a 10 m3 oil decanting unit. Run-off from the central and northern areas of the site flows through a silt trap, located in the northern portion of the site, and a 206 m3 buffer tank before passing through Interceptor 1 (Klargester Full Retention Interceptor NSFA200), located in close proximity to the weighbridge. Following treatment. treated yard runoff outfalls to a field drain just south of the site entrance.

- Runoff from the 'Reception Yard" in the northwestern area of the site is diverted through Interceptor 2 (Klargester Interceptor NSBD10), also positioned close to the weighbridge. This treated stormwater water also outfalls to the open drain south of the site entrance.

- All roof runoff is currently collected in the existing gutters and downpipes and transferred to three 35 m3 rainwater harvesting tanks located along the western boundary of the site. This water is stored for emergency firefighting needs. Any excess water or overflow is diverted to the open drain that flows south to north along the western boundary.

Foul Water

Foul water on site is directed to an on-site wastewater treatment system as per the current operation of the site. The wastewater treatment system has been designed and installed according to the standards outlined in the Code of Practice 2009 for wastewater treatment. Due to this, there is no potential for impact on hydrology and hydrogeology due to foul water on site.

Water Supply

The water supply is provided via mains, and this is to continue as per the current operation of the site.

8.4 Predicted Impacts

Construction Phase

The details of the construction phase are outlined above. The construction phase only occurs on the footprint of the existing structures, and this is all contained on impermeable surfaces. Any surface water runoff which occurred due to construction needs to pass through oil interceptors and silt traps prior to discharge. Due to this, the potential impacts during the construction phase are considered to be ***momentary, imperceptible*** and ***negative***.

The effect of construction, on the local and regional environment is likely to be ***brief, imperceptible*** *and* ***neutral***. This is due to the potential for accidental spills having an impact on the local and regional soils is minimized by the construction occurring on a fully impermeable surface from which any accidental spills or leaks are directed through silt traps and oil interceptors before being introduced to the environment.

Operational Phase

Direct or indirect Discharges

In the operational phase of the development, nothing will change from the current surface water management of the facility. All rainfall landing on open yard areas is captured, via a series of gullies, in a subsurface piped network and diverted towards the stormwater treatment system. The drainage network diverts stormwater in a northern direction in line with the site topography, before being diverted in a west/northwest direction towards the outfall points.

In the absence of mitigation, the effect on the hydrological environment is likely to be ***short-term, imperceptible*** and ***neutral***. The effect is considered to be 'imperceptible' because there will not be intervention on the hydrological regime on a local or regional scale due to the aforementioned design measures included in the surface water and foul water drainage.

Accidental Spill and Leaks

The development includes the storage and use of fuel oil. Any accidental emissions of oil, petrol or diesel could cause contamination if the emissions enter the water environment unmitigated. However, any accidental discharge will be mitigated through petrol interceptors.

In the event of an accidental leakage of fuel or a spill, this will be intercepted by the drainage infrastructure; drainage from the site passes through petrol interceptor prior to connection to the onsite drainage networks.

In the absence of mitigation, the effect on the hydrological environment is likely to be ***short-term, imperceptible*** and ***neutral***. The effect is considered to be 'imperceptible' because there will not be intervention on the hydrological regime on a local or regional scale due to the aforementioned design measures.

Do Nothing Scenario

This item requires consideration of the effect on the environment as it would be in the future should the proposed works not be carried out. As the application is for retention permission, the do-nothing scenario is not relevant.

8.5 Mitigation and Monitoring Measures

There is no potential for an impact on hydrogeology and hydrology from either the operational phase or the construction phase, and therefore there are no mitigation measures necessary.

8.6 Residual Impacts

Residual impacts refer to the degree to environmental change that will occur after the mitigation measures have taken effect.

As the site has no potential for impact prior to mitigation measures, the residual impacts are assessed to be ***momentary, neutral*** *and* ***negligible*** in both the construction phase and the operational phase.

8.7 Cumulative Impact Assessment

The following considers the cumulative impacts of the subject site and permitted and operating facilities in the surrounding area in relation to Hydrology. This considers the subject site and other surrounding proposed and permitted developments considered in Chapter 4.

As has been identified in the receiving environment section all cumulative developments that are already built and in operation contribute to our characterisation of the baseline environment. As such any further environmental impacts that the subject site may have in addition to these already constructed and operational cumulative developments have been assessed in the preceding sections of this chapter.

The existing facility must be included under an assessment of cumulative impacts, along with any other similar facilities in the area. In terms of protecting groundwater and surface water resources it is considered more appropriate to continue activities at the site by way of increasing the facility's capacity, as opposed to opening a new waste facility / ATF on a greenfield site, to meet the demands of the ELV disposal industry.

Reference was made to the vehicle disposal section of Fingal County Council's website (http://www.fingalcoco.ie/environment/waste-and-recycling/vehicle-disposal/), which outlined that there are only three ATF's in the Fingal Local Authority. The other two facilities are

not located in close proximity to SMR, being approximately 12 km and 10 km to the north of the site, respectively.

Cumulative impacts to the surface water and groundwater environments may occur where activities of a similar nature are taking place within the upgradient and downgradient surface water catchment with respect to the site.

There are several industrial activities in the Huntstown Stream catchment. These include Huntstown Quarry, Bay Lane Quarry, Irish Asphalt, Dublin Aerospace Ltd., and P. Kelly Timber Ltd. Other potentially polluting activities in the catchment may be present but not operate under waste licenses, IPC or be subject to Section 4 discharge licenses. The contribution that the site may have in terms of cumulative impacts to the surface water environment can be monitored directly at the stormwater outfall. All stormwater leaving the site does so via a single outfall which is subject to ongoing monitoring. Additional monitoring can be undertaken upgradient and downgradient of the confluence of the site outfall with the Huntstown Stream if necessary. Measures are present to mitigate against impacts from the site. Infrastructure and monitoring regime at the subject site has been established to allow the effectiveness of these measures to be presented quantitatively to the local authority.

The site is entirely covered in hard standing, and the only groundwater discharge is from the wastewater treatment system. As the wastewater treatment system is designed according to the relevant code of practice, it is considered that the site cannot contribute to any cumulative impacts to the aquifer in terms of quality that may be occurring from other facilities of a similar nature.

Therefore, the potential for a cumulative impact due to the construction or operational phase of the site is ***short-term, imperceptible*** *and* ***neutral***.

8.8 Interactions

Due to the inter-relationship between land, soils, geology, hydrogeology and hydrology, - there is a strong overlap between the assessed impacts and mitigation measures in both chapters.

8.9 References

- Directive 2014/52/Eu of The European Parliament
- Fingal County Council Climate Action Strategy (2019-2024)
- Fingal County Council Climate Action Strategy (2024-2029)
- Environmental Protection Agency (EPA) Advice notes on current practice in the preparation of Environmental Impact Statement (EPA, 2015) and Guidelines on the Information to be contained in Environmental Impact Statements (EPA, 2022).
- Environmental Impact Assessment of Projects, Guidance on the preparation of the Environmental Impact Assessment Report (European Commission, 2017).
- Transport Infrastructure Ireland - Road Drainage and Water Environment (TII, 2015).

- Transport Infrastructure Ireland (previously National Road Authority) - Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes (TII, 2009).
- Water Framework Directive (WFD) - Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy. This relates to the improvement of water quality across Ireland including rivers and groundwater bodies.
- The Planning System and Flood Risk Management, Guidelines for Planning Authorities (Department of the Environment, Heritage and Local Government (DoEHLG) and the Office of Public Works (OPW)).
- Guidelines on protection of fisheries during construction works in and adjacent to waters (Inland Fisheries Ireland, 2016).
- Guidelines for the Crossing of Watercourses during Construction of National Road Schemes, (TII, 2008)
- European Communities Environmental Objectives (Surface Waters); Regulations, 2009 (S.I. No. 272 of 2009 as amended by SI No. 77 of 2019).
- Part IV of the First Schedule of the Planning and Development Act 2000, as amended.
- European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003).
- Environmental Protection Agency 'Towards Setting Guideline Values for the Protection of Groundwater in Ireland Interim Report,' (EPA 2003).
- European Union (Drinking Water) Regulations 2014 (S.I. No. 122/2014).
- European Union (Drinking Water) (Amendment) Regulations (S.I. No. 464 of 2017)
- Environmental Protection Agency (EPA) – website mapping and database information. Envision water quality monitoring data for watercourses in the area;
- The Planning System and Flood Risk Management, Guidelines for Planning Authorities (Department of the Environment, Heritage and Local Government (DoEHLG) and the Office of Public Works (OPW));
- Office of Public Works (OPW) flood mapping data (www.floodmaps.ie)
- DHPLG, 2018. Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment. Department of Housing, Planning and Local Government (August 2018).
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- EPA. 2015. Revised guidelines on the information to be contained in Environmental Impact Statements. Environmental Protection Agency (2015).
- EPA. 2017. Draft Guidelines on the information to be contained in environmental impact assessment reports. Environmental Protection Agency.
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- IFI, 2016. Guidelines on protection of fisheries during construction works in an adjacent to waters. Inland Fisheries Ireland.
- IGI. 2007. Recommended Collection, Presentation and Interpretation of Geological and Hydrogeological Information for Quarry Developments. Institute of Geologists of Ireland.
- IGI. 2013. Guidelines for the preparation of Soils, Geology and Hydrogeology Chapters of Environmental Impact Statements. Institute of Geologists of Ireland.

- McConnell, B., Philcox, M.E., Geraghty, M. 2001. Sheet 13: Geology of Meath. A geological description to accompany the bedrock geology 1:100,000 bedrock series. Geological Survey of Ireland.
- Patel Tonra 2014, EIA Screening Report, St. Margaret's Recycling and Transfer Ltd.
- NRA. 2009. Environmental impact assessment of national road schemes - a practical guide. National Roads Authority.
- Walsh, S. 2012. A summary of climate averages 1981-2010 for Ireland. Climatological Note No. 14, Met Eireann, Dublin

9.0 Air Quality & Climate

9.1 Introduction/Methodology

9.1.1 Introduction

Chapter 9 of this remedial Environmental Impact Assessment Report has been prepared by Martijn Leenheer BSc (Hons) of ESC Environmental LTD and assesses the Air Quality and Climate Impacts associated with the proposed continued use of the existing and permitted waste processing and transfer facility at St. Margaret's, Co. Dublin.

Martijn Leenheer holds a 1st Class BSc (Hons) degree in Environmental Science from Atlantic Technological University (previously IT Sligo) and has 11 years' experience in Ireland in soil remediation, invasive species commercial Wastewater Treatment, Discharge Licences, Waste Permits and Licences has been involved in Risk Assessments, NIS and EIAR reports for various commercial projects. Before moving to Ireland Martijn worked in the Netherlands as an Environmental Field Technician in soil research. He has been an Operations Director of Environmental Services Consultancy for 11 Years and a Founding Director of ESC Environmental LTD since 2021.

This study will identify, describe, and assess the impact of the subject site in terms of air quality during the construction and operational phases of the scheme. Particular attention will be focused on sensitive receptors, such as residential areas adjacent to the site, and local amenities such as schools and shopping centres. Increased traffic volumes associated with the subject site is likely to be the main impact source. The development is located directly northwest of Dublin Airport and is currently accessed via the R122 regional road.

This assessment was prepared in accordance with the EIA Directive 2014/52/EC and having regard for the following guidance:

- Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, May 2022)
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment. Department by the Department of Housing, Planning and Local Government (August 2018 and last updated on 18 December 2019)

This section should be read in conjunction with the site layout plans for the site and project description sections of this rEIAR.

9.1.2 Research Methodology

Existing EPA air quality data has been examined in order to assess the background air quality in the area. It is used to identify the existing pollutant trends in the area and to establish spatial information in order to determine compliance with relevant ambient air legislation.

9.1.3 Criteria for Rating of impacts

In May 2008, the European Commission introduced a revised Directive on ambient air quality and cleaner air for Europe (2008/50/EC), which has been transposed into Irish Legislation through the revised Air Quality Standards Regulations (S.I. 180 of 2011).

The Directive and Regulations specify limit values in ambient air for sulphur dioxide (SO2), lead, benzene, particulate matter (PM10 and PM2.5), carbon monoxide (CO) and nitrogen dioxide (NO). These limits are mainly for the protection of human health and are largely based on review of epidemiological studies on the health impacts of these pollutants. In addition, there are limits that apply to the protection of the wider environment (ecosystems and vegetation). The site does not have emissions which impact these parameters in a significant manner. The main emissions on site are from fugitive dust, and emissions from the small amount of diesel engines used on site. These emissions are small in scale. The dust is monitored regularly, and monitoring has shown that the dust is not transported beyond the mitigation measures on site.

Dust Deposition Guidelines

The concern from a health perspective is focused on particles of dust which are less than 10 microns, and the EU ambient air quality standards outlined in the previous section have set ambient air quality limit values for PM10 and PM2.5. With regard to larger dust particles that can give rise to nuisance dust, there are no statutory guidelines regarding the maximum dust deposition levels that may be generated during the construction and decommissioning phases of a development in Ireland.

With regard to dust deposition, the German TA-Luft standard for dust deposition (non-hazardous dust) sets a maximum permissible emission level for dust deposition of 350 mg/m2/day averaged over a one-year period at any receptors outside the site boundary. The TA-Luft standard has been applied for the purpose of this assessment based on recommendations from the EPA in Ireland in the document titled 'Environmental Management Guidelines - Environmental Management in the Extractive Industry (Non-Scheduled Minerals).' The document recommends that the Bergerhoff limit of 350 mg/m2/day be applied to the site boundary of quarries. This limit value shall be implemented with regard to dust impacts from subject site.

Climate Agreements

Ireland is party to both the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol. The Paris Agreement, which entered into force in 2016, is an important milestone in terms of international climate change agreements and includes an aim of limiting global temperature increases to no more than 2°C above pre-industrial levels with efforts to limit this rise to 1.5°C. The aim is to limit global GHG emissions to 40 gigatonnes as soon as possible whilst acknowledging that peaking of GHG emissions will take longer for

developing countries. Contributions to GHG emissions will be based on Intended Nationally Determined Contributions (INDCs) which will form the foundation for climate action post 2020. Significant progress was also made in the Paris Agreement on elevating adaption onto the same level as action to cut and curb emissions.

In order to meet the commitments under the Paris Agreement, the EU enacted Regulation (EU) 2018/842 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No. 525/2013 (the Regulation). The Regulation aims to deliver, collectively by the EU in the most cost-effective manner possible, reductions in GHG emissions from the Emission Trading Scheme (ETS) and non-ETS sectors amounting to 43% and 30%, respectively, by 2030 compared to 2005. Ireland's obligation under the Regulation is a 30% reduction in non-ETS greenhouse gas emissions by 2030 relative to its 2005 levels.

Following on from the recently published European Climate Law Regulation (EU) 2021/1119, and as part of the EU's "Fit for 55" legislative package where the EU has recently committed to a domestic reduction of net greenhouse gas emissions by at least 55% compared to 1990 levels by 2020, the Effort Sharing Regulation is proposed to be strengthened with increased ambition by the year 2030. The proposal for Ireland is to increase the GHG emission reduction target from 30% to 42% relative to 2005 levels whilst the ETS market will also have more stringent reductions from the currently proposed reduction of 43% by 2030 compared to 2005 to a 61% reduction by 2030 based on annual reductions of 4.2% compared to the previous annual reduction level of 2.2% per year (EU, 2021). In terms of the current operation of the ETS, the European Commission reported that the ETS Carbon Market reported a fall of 9% in emissions in 2019 relative to 2018 levels.

In 2015, the Climate Action and Low Carbon Development Act 2015 (No. 46 of 2015) was enacted (the 2015 Act). The purpose of the Act was to enable Ireland 'to pursue, and achieve, the transition to a low carbon, climate resilient and environmentally sustainable economy by the end of the year 2050' (3. (1) of No. 46 of 2015). This is referred to in the Act as the 'national transition objective.'

The Climate Action Plan (CAP), published in June 2019, outlines the current status across key sectors including Electricity, Transport, Built Environment, Industry and Agriculture and outlines the various broadscale measures required for each sector to achieve ambitious decarbonisation targets. The CAP also details the required governance arrangements for implementation including carbon- proofing of policies, establishment of carbon budgets, a strengthened Climate Change Advisory Council and greater accountability to the Oireachtas. The CAP has set a built environment sector reduction target of 40 - 45% relative to 2030 pre-NDP (National Development Plan) projections.

In June 2020, the Government published the Programme for Government – Our Shared Future. In relation to climate, there is a commitment to an average 7% per annum reduction in overall greenhouse gas emissions from 2021 to 2030 (51% reduction over the decade) with an ultimate aim to achieve net zero emissions by 2050. Policy changes include the acceleration of the electrification of the transport system, including electric bikes, electric vehicles, and electric public transport, alongside a ban on new registrations of petrol and diesel cars from

2030. In addition, there is a policy to ensure an unprecedented model shift in all areas by a reorientation of investment to walking, cycling and public transport.

9.2 The Subject Development

9.2.1 The Subject Development

The subject development is described in full in Chapter 4.0 of this remedial Environmental Impact Assessment Report but in summary consists of the following:

"Permission is sought by St. Margaret's Recycling & Transfer Centre Ltd. at St. Margaret's Metal Recycling, Sandyhill, St. Margaret's, Co. Dublin, under substitute consent provisions, for the

Retention of:

1. Enabling Ancillary Works, including, but not limited to, that subject of permissions under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109, e.g. ancillary and enabling works/infrastructure, comprising amendments to site access and boundary arrangements including dust mitigation measures, access and gateway, above and below ground surface water drainage, septic tank, fire water storage and retention (105m3), attenuation and storage tanks (206m3), truck and vehicle parking,
2. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility, and authorised facility for the treatment of 'end of life vehicles' (ATF for ELVs). Existing development comprises the weighbridge, offices, recycling and transfer/industrial buildings, hard standing, car parking, plant and machinery, detailed below:
    a. Prefabricated cabins (2no.) - 177sqm. - comprising ancillary offices, staff facilities, control room;
    b. Prefabricated w/c & Steel Container (store) - 29 sqm;
    c. Recycling and transfer/Industrial buildings 1917 sqm;
    d. Weighbridge; and
    e. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.
3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6 ha (permitted under F97A/0109) to 1.75ha of which 1.6ha is associated with waste permit, and additionally lands comprising site access, proprietary wastewater treatment system, installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system.
4. Historic use of 1.6 ha of the site (as per Waste Permit area under WFP-FG-13-0002-03), as a waste transfer recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, during the period 2019 to 2023, where waste throughput at the facility rose from 26,000 to 42,500 tonnes per annum, without the benefit of planning

permission, and from 2024 onwards operations comprising waste throughput of 21,900 tonnes per annum.

5. Historic use (i.e. 2009 to 2023) of lands comprising 1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity,
6. Proposed restoration of c.1.1 ha of the above noted compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands,
7. On-going use of the existing metal processing and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

Separately, but in tandem, the applicant is seeking permission as part of the substitute consent application for a proposed development comprising the on-going/future use of the site and facility to enable annual waste throughput of up to 21,900 tonnes per annum and associated proposed mitigation. This 'permission' element is addressed in a separate EIAR and NIS submitted with the application.

9.2.2 Construction Phase

The construction that has taken place since 2019 consists of the replacing of portacabins and the installation of the hammermill. The portacabins replacement was in the same location on an existing concreted area. The hammermill installation consisted of installation of prefabricated parts on existing concrete yard area.

Additionally, the applicant extended the permitted concrete area (from that noted in F13A/0409) at two locations, comprising 0.04ha and 0.05ha - shown for indicative purposes on figure 9.1, and had proposed to replace the existing steel container boundary arrangement to concrete panel and steel post. (Refer to Planning Drawing 22073-R0-01: Site Plan, 1:500)

9.2.3 Operational Phase

During the operational phase, the subject site had an annual throughput of approx. 26,000 to 42,500 tonnes (as noted below).

Year	Turnover (tonnes pa)
2019	33,524
2020	26,233
2021	42,263
2022	42,522

2023	33,695
2024	21,900

It may be worth noting, that the site has operated at an annual tonnage of circa 22,000 tonnes per annum since 1997, with permissible operating tonnage dictated by the various waste licences and thereafter the waste permits (see below)

Year	**Turnover (tonnes pa)**
1997	21,000
2013	22,250
2014	21,900

During the Operational phase, the main source of air quality impact was the result of fugitive dust emissions from site activities.

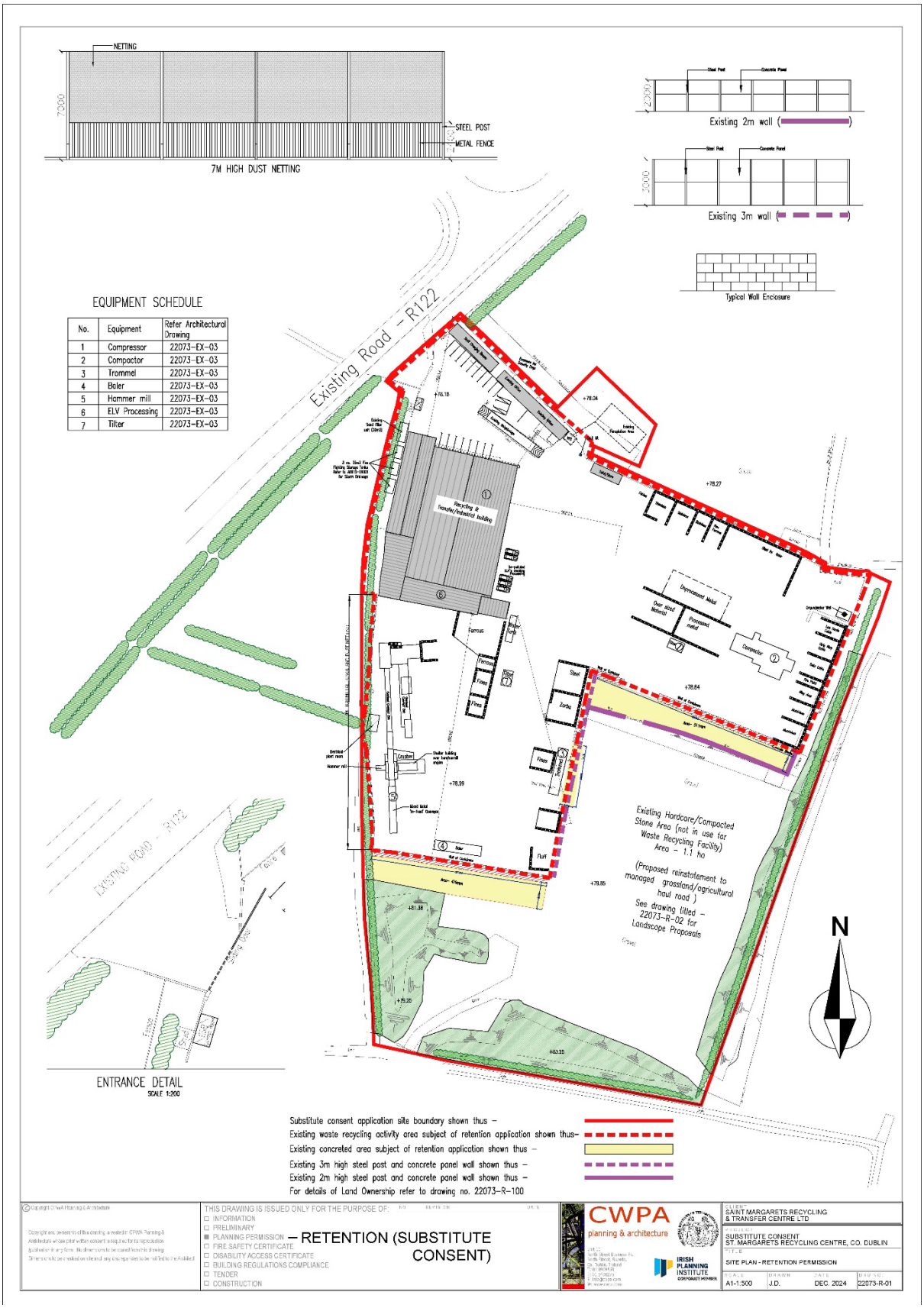
Emissions from site traffic and plant have the potential to impact climate.

The outputs of the facility are exported for reuse in production processes which reduces the need for raw materials to be mined and waste going to landfill. Table 9.2: Proportions of Site traffic

Type	2019		2023	
	no	%	No	%
Car	67	39%	44	37%
LGV	47	27%	34	28%
OGV1	42	24%	18	15%
OGV2	18	10%	24	20%
Total	174	100%	120	100%

Source Traffic and Transport Assessment Waterman Moylan

Figure 9.1 - Areas shaded yellow constructed post August 2019.



9.3 The Receiving Environment

The St. Margaret's site is located to the west of Dublin Airport on the R122 road. The site is bounded by agricultural lands to the north, south and east, the R122 to the west with Dublin Airport further to the southeast. The surrounding area is primarily used for aviation, industrial, storage/distribution and agricultural purposes.

Air quality data available from the Environmental Protection Agency (EPA) monitoring network was assessed. Four air quality zones have been defined for Ireland as follows:

- Zone A - Dublin Conurbation
- Zone B - Cork Conurbation
- Zone C - Other cities and large towns comprising Galway, Limerick, Waterford, Clonmel, Kilkenny, Sligo, Drogheda, Wexford, Athlone, Ennis, Bray, Naas, Carlow, Tralee, Dundalk, Navan, Letterkenny, Celbridge, Newbridge, Mullingar, and Balbriggan.
- Zone D - Rural Ireland i.e. the remainder of the state excluding Zones A, B and C.

The subject site is located within air quality Zone A, the Dublin Conurbation. From the EPA report on ambient air quality in 2017 the most representative monitoring station in terms of the subject site is Swords, County Dublin. The Swords monitoring station does not record all ambient air quality parameters outlined in the Directive on ambient air quality and cleaner air for Europe (2008/50/EC) therefore air quality in the receiving environment is described using the average annual mean value concentrations from all measured monitoring stations in Zone A.

Table 9.2 shows the annual mean value concentrations measured for SO2, PM10, NO2, CO and benzene in Zone A for 2017. The table compares the annual mean measured levels with the limit values defined in the National Air Quality Standards Regulations 2011 (S.I No. 180 of 2011).

Table 9-2 Extract of summary data from EPA Ambient Air Monitoring in 2017

Pollutant	Unit	Annual Mean Concentration in 2017	Annual Limit for Protection of Human Health
Sulphur Dioxide (SO_2)	$\mu g/m^3$	1.7	20
Particulate Matter (PM_{10})	$\mu g/m^3$	12.4	40
Nitrogen Dioxide (NO_2)	$\mu g/m^3$	20.8	40
Carbon Monoxide (CO)	mg/m^3	0.3	10
Benzene	$\mu g/m^3$	0.92	5

In summary, existing baseline levels of SO2, PM10, NO2, CO and benzene based on data from the EPA monitoring network are currently below ambient air quality limit values in Zone A and by extension the levels in the vicinity of the subject site are also considered to be below the limit values.

Ireland met all of its EU Cleaner Air for Europe Directive (CAFE Directive) legal requirements in 2021 and 2022. Ireland was also compliant with EU limits in 2020; however, this was largely due to the reduction in traffic due to Covid-19 restrictions. For this reason, they have not been included in the baseline section.

9.3.1 Climate Baseline

The weather in Ireland is influenced by the Atlantic Ocean, resulting in mild, moist weather dominated by maritime air masses. The prevailing wind direction is from a quadrant centred west-southwest. These are relatively warm winds from the Atlantic and frequently bring rain. Easterly winds are weaker and less frequent and tend to bring cooler weather from the northeast in spring and warmer weather from the southeast in summer. The site of the proposed development close to the east coast would experience a higher frequency of easterly winds than more inland locations or those on the west coast.

The nearest meteorological station to the subject site is the Met Eireann Station in Dublin Airport which lies approximately 1km south of the subject site. The 30-year averages from the station at Dublin Airport are presented in Table 9.3.

Table 9.3: 30-year Average Meteorological Data from Dublin Airport (Annual Values from 1991-2020, source: www.met.ie)

Parameter	30-year Average
Mean Temperature (°C)	9.7
Mean Relative Humidity at 0900UTC (%)	83.5
Mean Daily Sunshine Duration (hours)	4
Mean Annual Total Rainfall (mm)	772.5
Mean Wind Speed (knots)	10.5

The prevailing wind direction for the area is between west and southwest as presented in the Windrose for Dublin Airport Met Station for 1942 to 2014 in Figure 9.1. Northerly winds tend to be very infrequent (less than 5%) with easterly winds marginally more frequent (5-10%). Wind characteristics are typically moderate with relatively infrequent gales (average only 8.2 days with gales per annum). The 30-year period of 1991-2020 (figure 9:2) shows the same trends Northerly winds tend to be very infrequent (less than 6%) with easterly winds marginally more frequent (6-12%). Wind characteristics are typically moderate with relatively infrequent gales (average only 7.8 days with gales per annum)

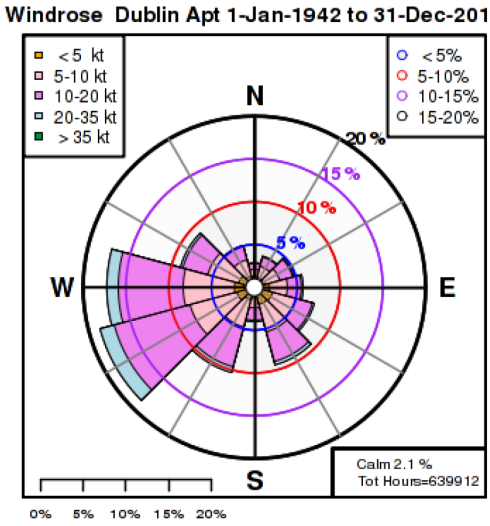


Figure 9.1: Windrose for the Dublin Airport Met Station 1942 to 2014 (source: www.met.ie)

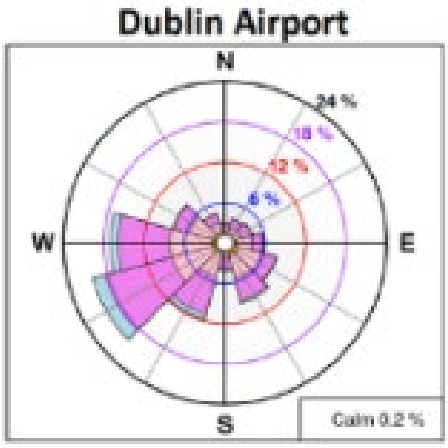


Figure 9.2: Windrose for the Dublin Airport Met Station 1991 to 2020 (source: www.met.ie)

The National Policy Position on climate action and low carbon development was published on the 23rd of April 2014. The policy sets a fundamental national objective to achieve transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050. The policy states that greenhouse gas (GHG) mitigation and adaptation to the impacts of climate change are to be addressed in parallel national strategies - respectively through a series of National Mitigation Plans and a series of National Climate Change Adaptation Frameworks.

The National Policy Position envisages that development of National Mitigation Plans will be guided by a long-term vision of low carbon transition based on the following:

- An aggregate reduction in carbon dioxide (CO,) emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors; and
- In parallel, an approach to carbon neutrality in the agriculture and land-use sector, including forestry, which does not compromise capacity for sustainable food production.

With reference to this project, the aggregate reduction emissions of at least 80% from the residential and transport sectors by 2050 are the relevant policy targets.

Further to the National Policy Position, the Climate Action and Low Carbon Development Act 2015 (No. 46 of 2015) was enacted on the 10th of December 2015. The Climate Act sets out the proposed national objective to transition to a low carbon, climate resilient and environmentally sustainable economy by the end of 2050.

Ireland reported an emission level of 61.55 million tonnes carbon dioxide equivalent (Mt CO2eq). This is 3.6% higher (2.12 Mt CO2eq) than emissions in 2015 and returns greenhouse gas emissions to 2009 levels. When compared to the 1990 baseline, Ireland has increased greenhouse emissions by 9.8% which is well below the 20% reduction target set for Ireland under the EU 2020 strategy.

Transport is currently the second largest contributor of GHG emissions (after agriculture) at 20.5% (which predominantly consists of road transport). Between 1990 and 2016, the transport sector showed the greatest overall sectoral increase of 138.6% and increases are linked to economic prosperity with year-on-year increases observed up to 2007 followed by five years of year-on-year decrease during the economic downturn. The latest EPA projections indicate that under the "With Existing Measures" scenario, transport emissions are projected to increase by 12% over the period 2015 - 2020 to 13.2 Mt CO2eq. Under the "With Additional Measures" scenario emissions are projected to increase by 10% in this period. The latter scenario assumes the target of 8% renewable fuel use in transport is reached, 10,000 electric vehicles are deployed, and further rollout of the Biofuels Obligation Scheme are all in place by 2020.

9.4 Predicted Impacts of The Proposed Development

9.4.1 Do Nothing Scenario

The do-nothing scenario is not relevant for a retention application, in that operations continued during the period of assessment.

9.4.2 Construction Phase

As the development in question is already constructed, and the construction that took place since 2019 was the replacement of portacabins and the installation of the hammermill on the existing concreted yard area, the construction phase of the scheme had potential to generate imperceptible and brief emissions to the atmosphere with dust arising from construction. As construction arising after the lapse of permission was minimal, this potential impact was considered to be negligible and in the context of operations on site and receiving environment imperceptible or indeterminable being so low.

9.4.3 Operational Phase

Air Quality

The potential impact to air quality during the operational phase of the subject site would not have changed from the situation in 2019 except for the installation of the hammermill, outside of the industrial shed, which could have had the potential of dust generation.

Dust is the main emission which could have had a direct impact on the air quality, however monitoring results show that no dust is transmitted past the boundary of the site after the existing mitigation measures and there was no trend to indicate the hammermill had an adverse impact on the dust before mitigation measures. There was no clear correlation between annual throughput and wind-blown dust generation before mitigation.

Climate

Climate change has the potential to alter weather patterns and increase the frequency of rainfall in future years. As a result of this there is the potential for surface water flooding related impacts on site in future years. However, adequate attenuation and drainage are included in the proposal to account for increased rainfall in future years as part of the design.

From a climate perspective the increased tonnage accepted on the site is a positive impact due to the proximity principle. Although the operation of the site relied on diesel engines, the site's waste activity decreases waste being transported to Belfast Port and exported onward to facilities outside of Ireland, similar to St. Margaret's where recycling can take place for the recycling of ELVs. The emissions saved by the transportation of the accepted waste outweighs the emissions of the diesel engines used by the plant on site.

The transfrontier shipment of waste, and the restrictions in place by the NIEA, are likely to have the effect of potential waste rejection by a competent authority where it may be returned back to the country of origin or transported to a different site for recovery or disposal.

Human Health

Traffic related air emissions have the potential to impact human health. Due to change in the permit conditions to limit the waste accepted from the general public the actual volume of traffic to the site reduced while the accepted volume remained the same or increased. Furthermore, the waste accepted at this site was not diverted to alternative sites with a greater distance, reducing traffic emissions further.

While the plant runs on diesel engines, these are relatively small. The emissions from the waste being transported to Belfast would be much more than the emissions from running the plant. Tonnage does not have a direct correlation with the engine emissions from the plant on site as the plant is designed to recover larger amounts of tonnage than accepted on site.

Dust emissions could have adverse effects on human health, but the most reliable recent monitoring results confirm that no windblown dust has been transported outside of the site's boundary indicating that the existing mitigation measures are sufficient.

9.5 Mitigation and Monitoring Measures

9.5.1 Construction Phase

No mitigation measures were necessary for the construction of the 2 concrete slabs, the installation of the hammermill or the replacement of the portacabins as there was negligible or imperceptible potential for impact on climate or air quality during this phase.

9.5.2 Operational Phase

There would be no difference in impact due to plant in the retention of the existing site between pre-2019 and after. The main potential emission from the site is dust. The most recent reliable monitoring results show that there are no exceedances after the existing mitigation measures. Beside the mitigation measures introduced with the installation of the hammermill which consist of misting (at the intake of the hammermill and on the site during dry periods) and dust netting, there were existing mitigation measures such as housekeeping, closed fencing, tree lines and earth banks.

9.6 Residual Impacts

Due to the mitigation measures outlined in Section 9.5, the residual impacts on air quality or climate from the construction will be ***momentary, neutral***, and ***imperceptible***. The residual impacts on air quality for the operational phases of the proposed development will be ***brief, neutral*** and ***imperceptible***, while the impacts on climate will be ***short-term, positive*** and ***imperceptible***.

9.7 Cumulative Impacts

9.7.1 Construction Phase

There were no historic cumulative impacts due to the small scale of the construction phase.

The 2013 permission conditioned the restoration of some 1.1ha of land to 'agricultural use'. To date a restoration plan has not been agreed. The lands, however, have not been used for waste transfer and recycling activities, as per condition 6 of F13A/0409. As part of the proposed landscape and soil/geology mitigation measures and included in this application as an element of permission being sought, it is proposed to create a wildflower/managed grassland field at this location, but not to use same as an active farm/agricultural purposes. The creation of the proposed managed grassland/wildflower meadow involves the importation of topsoil and as

such this level of restoration and cultivation does not have the potential for cumulative impact. This is assessed in the EIAR accompanying the application.

9.7.2 Operational Phase

No facilities have been identified with the potential for cumulative impact with the subject site. As the subject site is an existing site which has been operational at current levels for over 25 years, and in excess of current levels for approx. 4 of those years, and monitoring results show that existing dust mitigation measures are sufficient, there is little potential for cumulative impacts to air quality, which are therefore predicted to be ***neutral*** and ***imperceptible***.

9.8 Interactions

Air quality does not have a significant number of interactions with other topics. The most significant interactions are between population and human health, and air quality. An adverse impact due to air quality in either the construction or operational phase has the potential to cause health and dust nuisance issues.

The mitigation measures that are and have been in place at the subject site ensure that the historic and current impact complies with all ambient air quality legislative limits and therefore the predicted impact is ***short-term, neutral*** and ***imperceptible*** with respect to the construction phase and ***momentary, neutral*** and ***imperceptible*** with respect to the operational phase in terms of human health impacts.

Interactions between air quality and traffic can be significant. The impacts of the proposed development on air quality are assessed by reviewing the change in annual average daily traffic on roads close to the site. Due to the fact that this is an existing operational site and there was no material change in the activity from the pre 2019 use, notwithstanding the increase in tonnage accepted on site, the impact of the interactions between traffic and air quality are considered to be ***short-term, neutral***, and ***imperceptible***.

Dust emissions have the potential to settle on plants causing impacts to local ecology. The mitigation measures on the site ensure that dust generation is minimised and the effect on Air and Climate will be ***short-term, imperceptible*** and ***neutral***.

9.9 References

- UK Environment Agency (2003) IPPC H1 - IPPC Environmental Assessment and Appraisal of BAT
- Technical Instructions on Air Quality Control – TA Luft Dated 24th July 2002
- UK Environment Agency / DEFRA https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit
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- Paine, R & Lew, F. "Results of the Independent Evaluation of ISCST3 and ISC-PRIME" Prepared for the EPRI, ENSR Document No. 2460-026-3527-02 (1997).
- Met Éireann (2022) Met Éireann Website: www.met.ie
- EPA (2023) Air Quality in Ireland 2022
- EPA (2022) Air Quality in Ireland 2021
- EU Council Directive 2008/50/EC
- Air Quality Standards Regulations 2011 S.I. No. 180 of 2011
- *Guidance on the Assessment of Dust from Demolition and Construction,* UK Institute of Air Quality Management (IAQM) (2014)
- A guide to the assessment of air quality on designated conservation sites, UK Institute of Air Quality Management (IAQM) (2020)
- EPA 2021 GHG Emissions Projections Report for 2020 – 2040
- EU's Effort Sharing Decision (Decision No. 406/2009/EC) 2020
- EPA, Met Eireann and Marine Institute (2021) The Status of Ireland's Climate, 2020

10.0 Noise & Vibration

10.1 Introduction/Methodology

10.1.1 Introduction

This chapter of this remedial Environmental Impact Assessment Report (rEIAR) has been prepared by Irwin Carr Consulting. Irwin Carr Consulting Ltd is an environmental consultancy based in Ireland. The company has a proven track record in noise impact assessments throughout the UK and Ireland, with extensive knowledge of the issues in relation to noise from wind energy developments.

The assessment was carried out by Shane Carr is a Director in Irwin Carr Consulting, primarily responsible for environmental noise and noise modelling. He has over 25 years' experience working in both the public and private sectors having previously obtained a BSc (Hons) Degree in Environmental Health and a Post-Graduate Diploma in Acoustics. Shane has been responsible for undertaking and reviewing noise impact assessments on numerous recycling facilities throughout the UK and Ireland. Shane carried out the baseline study.

This chapter assesses the Noise and Vibration Impacts associated with the historic and continuing use of the waste processing and transfer facility at St. Margaret's, Co. Dublin, for tonnages ranging from 25,000 tonnes per annum to 42,500 tonnes for the period 2019 to 2023, and 21,900 tonnes per annum in 2024 onwards.

The development is located directly northwest of Dublin Airport and is currently accessed via the R122 regional road. The main noise source in the vicinity of the site is the operation of Dublin Airport, with consistent aeroplane movements throughout the day.

This study will identify, describe, and assess the impact of the subject site in terms of the noise and vibration environment during the construction and operational phases of the scheme. Particular attention will be focused on sensitive receptors, such as residential areas adjacent to the site, and local amenities such as schools, during both phases of the development.

This assessment was prepared in accordance with the EIA Directive 2014/52/EC and having regard for the following guidance:

- Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, Draft, August 2017);
- Advice Notes for Preparing Environmental Impact Statements (EPA, Draft September 2015);
- Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes (TII, 2014); and

- EPA Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4, January 2016)

This section should be read in conjunction with the site layout plans for the site and project description sections of this application.

10.1.2 Research Methodology

The following information sources have been consulted in relation to the assessment of noise and vibration:

- BS 5228-1 :2009+A1:2014 Noise and Vibration Control on Construction and Open Sites: Part 1 Noise;
- BS 5228-1 :2009+A1:2014 Noise and Vibration Control on Construction and Open Sites: Part 2 Vibration;
- BS6472-1 :2008 Guide to evaluation of human exposure to vibration in buildings. Vibration sources other than blasting;
- BS6472-2:2008 Guide to evaluation of human exposure to vibration in buildings. Blast-induced vibration;
- BS7385-2 1993: Evaluation and measurement for vibration in buildings. Guide to damage levels from ground borne vibration;
- ISO1996-1_2016 Acoustics - Description, measurement and assessment of environmental noise -- Part 1: Basic quantities and assessment procedure;
- Dublin Agglomeration Noise Action Plan 2019-2023'
- British Standard BS 7385: 1993: Evaluation and measurement for vibration in buildings Part 2: Guide to damage levels from ground borne vibration, and;
- British Standard BS 5228: 2009 +A1 2014: Code of practice for noise and vibration control on construction and open sites -- Part 2: Vibration (BS5228-2).

This section describes assessment criteria and methodologies used to assess the Noise and Vibration Impacts for the subject development, including conducting a baseline noise survey in the area and identifying potential noise sensitive receptors (NSRs).

10.1.3 Operational Phase – Vibration Guidance

The Transport Infrastructure Ireland (TII) Guidelines recommend that in order to ensure that there is no potential for vibration damage during construction, vibration from construction activities should not exceed the values as set out in the TII guidance and detailed in Table 10.1.

Table 10: 1 Maximum allowable vibration levels during construction phase

Allowable vibration velocity (peak particle velocity) at the closest part of any sensitive property to the source of vibration, at a frequency of;		
Less than 10Hz	10-50Hz	50 to 100Hz (and above)
8mm/s	12.5mm/s	20mm/s

BS5228:2009 Part 2 Vibration gives recommendations for controlling vibration on construction and open sites. It is considered that the main source of vibration during construction works relates to piling operations, and earth movement which is anticipated for the proposed development.

It is generally accepted that for the majority of people, vibration levels in excess of 0.15 and 0.30mms-1 peak particle velocity are just perceptible. The table below details the distances at which certain activities give rise to a just perceptible level of vibration, these figures are based on historical field measurements.

Table 10: 2 Good Practice Mitigation – Design Measures

Activity	Distance from activity when vibration may just become perceptible (m) metres
Piling	25 - 30
Excavation	10 – 15
Heavy Vehicles (e.g., dump trucks)	5 -10
Hydraulic Breakers	15 - 20

Traffic and operational machinery, such as power tools, forklifts etc., are possible sources of vibration during the operational phase of the development. In the case of nominally continuous sources of vibration such as these, vibration is perceptible at around 0.5 mm/s PPV and may become disturbing or annoying at higher magnitudes. Currently no major sources of vibration exist on the subject site. It would therefore be appropriate to assume that negligible vibration impacts will occur during the operation of the subject site and no further assessment is deemed to be required.

10.1.4 Operational Phase – Noise Guidance

Currently, no universal statutory noise standards apply in Ireland. Although certain limits relating to noise levels may be prescribed for licensed facilities under the Environmental Protection Agency Act, operations at the subject site are not covered under any of the schedules of the act and therefore do not require a licence.

In the absence of statutory limits, it is therefore necessary to reference appropriate best practice guidance and standards in order to determine the impact of the subject site on the noise climate in the surrounding area during the operational phase.

The potential impacts of the operational phase are to be evaluated by comparing the predicted noise levels against the guideline values given below: Noise levels that are acceptable are based on the TII and WHO guidelines.

The main method of assessment compares the predicted noise levels to noise limit levels in documents such as NG4[2] or the World Health Organisation Guidelines (WHO).

In addition, BS 4142:2014 is an assessment methodology which provides guidance in relation to the measurement methodology for establishing the existing background noise levels and identification of the specific noise level.

World Health Organisation (WHO)

The World Health Organisation propose guideline values for the prevention of moderate and serious annoyance in outdoor areas as 50dB LAeq 6 hour and 55dB LAeq(16 hour) respectively although a more appropriate criteria for assessing disturbance or annoyance from noise arising from the site would be related to the significance of changes in noise levels as perceptible to human beings.

Institute of Environmental Management and Assessment

The information in Table 10.3 is taken from the 'Guidelines for Noise Impact Assessment' produced by the Institute of Environmental Management and Assessment (IEMA). This document replaces the draft guidelines published by the Institute of Acoustics (IOA) and IEMA in April 2002 and shows an appropriate impact rating procedure for noise levels attributable to certain operations based on perception of loudness.

It should be noted that the subjective description outlined in Table 10.3 applies to relatively continuous noise only. Irwin Carr would therefore deem the outlined changes as suitable criteria for assessing noise arising from the subject site, from both onsite and road traffic related noise impacts.

Table 10: 3 IEMA Levels

Noise Level	Subjective Reaction	Impact Guidelines for Noise Impact Assessment	Impact Guidelines on the Information to be contained in EIARs (EPA)
0 dB	No change	None	Imperceptible
0.1 to 2.9 dB	Barely perceptible	Minor	Slight
3.0 to 4.9 dB	Noticeable	Moderate	Moderate
5.0 to 9.9 dB	Up to a double or halving of loudness	Substantial	Significant
10 dB +	More than a doubling or halving of loudness	Major	Profound

[2] Guidance Note for Noise: Licence Application, Survey and Assessments in Relation to Scheduled Activities (NG4) Environmental Protection Agency Office of Environmental Enforcement (OEE)

Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)

The Environmental Protection Agency (EPA) has produced a relevant guidance document relating to noise - NG4 - and while the proposed development is not a category which requires a licence from the EPA, the guidance is followed.

Where the EPA or a Local Authority sets conditions relating to noise emissions, these typically entail specific numerical noise limits which are not to be exceeded at Noise Sensitive Locations (NSL). These limits may apply to individual sources of noise on the site itself, at the boundary of the site or at the nearest Noise Sensitive Location (NSL). NG4 defines a NSL as:

> *"...any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or other area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels."*

The noise attributable solely to on-site activities, expressed as a free field value at any NSL, should not generally exceed the values given below.

- Daytime (07:00 to 19:00hrs) – 55dB LAr,T
- Evening (19:00 to 23:00hrs) – 50dB LAr,T
- Night-time (23:00 to 07:00hrs) – 45dB LAeq,T

The following tasks were carried out in order to assess the noise impacts of the subject site on identified NSRs, during the operational phase of the scheme;

- A survey has been conducted to establish baseline noise levels at the nearest noise sensitive receptor surrounding the site. The survey was carried out in accordance with /SO 1996: Acoustics: 'Description and measurement of environmental noise'.
- A detailed assessment of the cumulative predicted noise levels and potential impact upon noise sensitive receptors was carried out with reference to Irish and International best practice guidelines in the assessment of environmental noise.

10.2 The Subject Development

"Permission is sought by St. Margaret's Recycling & Transfer Ltd. at St. Margaret's Recycling & Transfer, Sandyhill, St. Margaret's, Co. Dublin, under substitute consent provisions, for -

Retention of:

1. Enabling Ancillary Works, including, but not limited to, that subject of permissions under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and

F97A/0109, e.g. ancillary and enabling works/infrastructure, comprising amendments to site access and boundary arrangements including dust mitigation measures, access and gateway, above and below ground surface water drainage, septic tank, fire water storage and retention (105m3), attenuation and storage tanks (206m3), truck and vehicle parking,

2. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility, and authorised facility for the treatment of 'end of life vehicles' (ATF for ELVs). Existing development comprises the weighbridge, offices, recycling and transfer/industrial buildings, hard standing, car parking, plant and machinery, detailed below:

    a. Prefabricated cabins (2no.) - 177sqm. - comprising ancillary offices, staff facilities, control room;

    b. Prefabricated w/c & Steel Container (store) - 29 sqm;

    c. Recycling and transfer/Industrial buildings 1917 sqm;

    d. Weighbridge; and

    e. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.

3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6 ha (permitted under F97A/0109) to 1.75ha of which 1.6ha is associated with waste permit, and additionally lands comprising site access, proprietary wastewater treatment system, installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system.

4. Historic use of 1.6 ha of the site (as per Waste Permit area under WFP-FG-13-0002-03), as a waste transfer recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, during the period 2019 to 2023, where waste throughput at the facility ranged from c.26,000 to 42,500 tonnes per annum, without the benefit of planning permission, and from 2024 onwards with operations comprising waste throughput of up to 21,900 tonnes per annum.

5. Laying out and historic use (i.e. 2009 to 2023) of lands comprising c.1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity, and existence as a hardstanding area to date, pending restoration

6. Restoration of c.1.1 ha of the above noted compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands, in compliance with conditions 3 and 6 of F13A/0409.

7. On-going use of the existing metal processing and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

Separately, but in tandem, the applicant is seeking permission as part of the substitute consent application for a proposed development comprising the on-going/future use of the site and facility to enable annual waste throughput of up to 21,900 tonnes per annum. This 'permission' element is addressed in a separate EIAR and NIS submitted with the application.

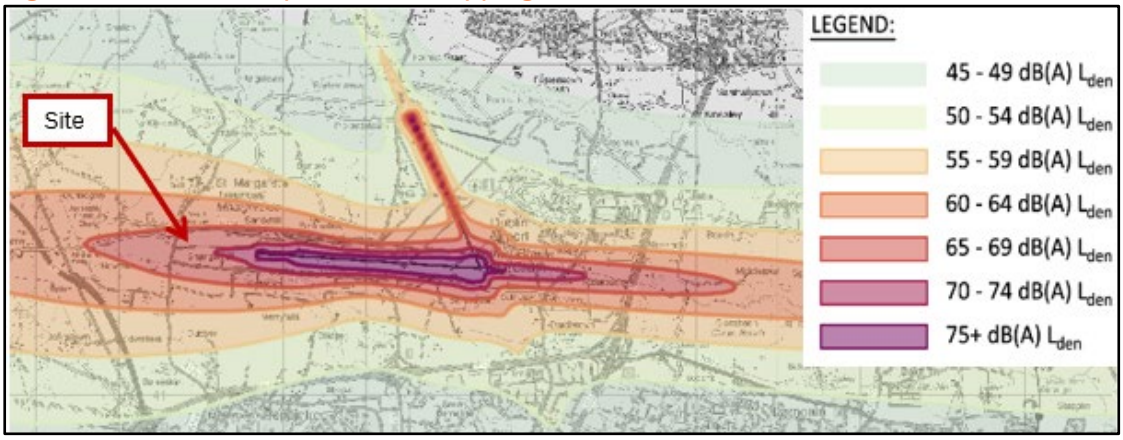
10.3 The Receiving Environment

The St. Margaret's site is located to the west of Dublin Airport on the R122 road.

The subject site, comprising 2.93ha (of which the recycling facility comprises approx..1.8 ha) is bounded by agricultural lands to the north, south and east, the R122 to the west with Dublin Airport further to the southeast. The surrounding area is primarily used for aviation, industrial, storage/distribution and agricultural purposes. The subject site is also served by public transport with regular buses running along the R122 (bus service 40B, 83, 83A).

Figure 10.1 shows the noise mapping for the surrounding area as presented in the Dublin Airport Environmental Noise Action Plan 2021. The St. Margaret's site is located within the 65-69dB Lden contour from the aircraft noise from Dublin Airport and within the zone of 60-65dB Lden contours from road traffic from the M50, N2 and R122 roads. As a consequence, the existing noise climate in the area is dominated by these road traffic and air traffic sources.

Figure 10: 1 Dublin Airport Noise Mapping 2016



10.4 Dates and Times of Noise Surveys

10.4.1 Baseline Noise Survey

In order to assess the surrounding environmental noise levels, a daytime noise survey was carried out and a noise survey was conducted between the 22 and 29 July 2024. During the survey, the day evening and night-time LAeq and LA90 were monitored.

The survey was set up using the following equipment:

- 821 Larson Davis Sound Level Meter
- Acoustic Calibrator

Table 10: 4 Noise Monitoring Location (NML)

Description	Location (ITM)
Noise Monitoring Location 1 (NML 1)	712905, 743436

The acoustic parameters measured included LAeq and LA90. Instrumentation was check calibrated before and after the survey period, as per the requirements of NG4 and ISO19961F [3]

Figures 10.2 below show the results of the noise measurements at NML 1, over the 7-day survey period between 22 and 29 July 2024.

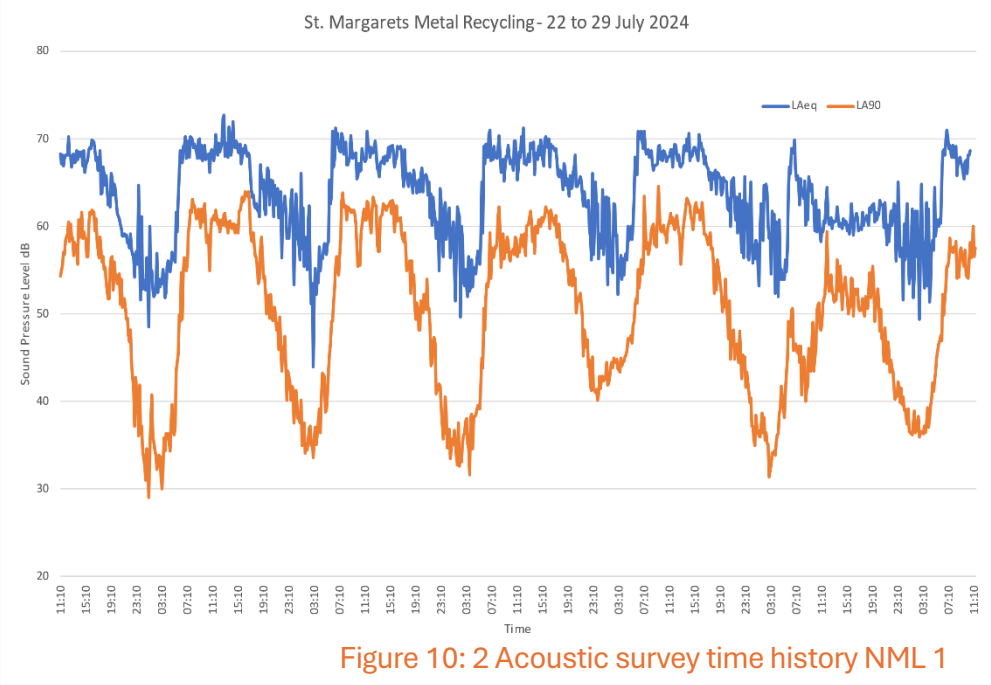


Figure 10: 2 Acoustic survey time history NML 1

[3] International Standard ISO 1996-2: Acoustics – Description, Measurement and Assessment of Environmental Noise, Third Edition 2017

Ambient Sound Levels

For the purposes of the NG4 assessment, the measured daytime and night-time ambient sound levels are presented in Table 10.6 with the background levels in Table 10.7.

Table 10: 5 Measured day, evening and night-time ambient sound levels (LAeq)

Date	NML 1 Noise Level, dB LAeq		
	Daytime Noise Criterion, dB LAr,T (07:00 to 19:00hrs)	Evening Noise Criterion, dB LAr,T (19:00 to 23:00hrs)	Night-time Noise Criterion, dB LAeq,T (23:00 to 07:00hrs)
Monday 19 July	67.6	61.3	61.6
Tuesday 20 July	67.8	63.5	63.0
Wednesday 21 July	68.0	63.8	62.9
Thursday 22 July	67.5	64.3	63.6
Friday 23 July	68.1	63.4	62.6
Saturday 24 July	61.8	61.4	62.4
Sunday 25 July	68.0	-	-

**Denotes less than full measurement period due to the time of installation and collection of the equipment, but is included for completeness*

Table 10: 6 Measured day, evening and night-time background sound levels (LA90)

Date	NML 1 Noise Level, dB LA90		
	Daytime Noise Criterion, dB LAr,T (07:00 to 19:00hrs)	Evening Noise Criterion, dB LAr,T (19:00 to 23:00hrs)	Night-time Noise Criterion, dB LAeq,T (23:00 to 07:00hrs)
Monday 19 July	58.5	52.4	46.0
Tuesday 20 July	59.5	50.5	46.3
Wednesday 21 July	60.7	49.2	46.5
Thursday 22 July	58.2	51.8	48.0
Friday 23 July	60.2	49.6	42.4
Saturday 24 July	51.2	49.5	45.0
Sunday 25 July	56.6	-	-

**Denotes less than full measurement period due to the time of installation and collection of the equipment, but is included for completeness.*

The highest measured levels at NML 1 were:

- Daytime: 68.1dB LAeq and 60.7dB LA90
- Evening: 64.3dB LAeq and 52.4dB LA90
- Night-time: 63.6dB LAeq and 48.0dB LA90

The environmental noise parameters were measured which are defined below.

LAeq is the A-weighted equivalent continuous steady sound level during the measurement period and effectively represents an average ambient noise value.

LA90 is the A-weighted sound level that is exceeded for 90% of the sample period; this parameter is typically used to quantify background noise.

A-weighting is the process by which noise levels are corrected to account for the non-linear frequency response of the human ear. All noise levels are quoted in dB(A) relative to a sound pressure of 20mPa.

Typical ranges of noise levels are presented in Table 10.7 to compare against the baseline noise levels measured

Table 10: 7: Typical noise Levels in the Environment

Sound Levels in decibels dB (A)	Description of Activity
0	Absolute silence
25	Very quiet room
35	Rural nighttime setting with no wind
55	Day time, busy roadway 0.5km away
70	Busy Restaurant
85	Very busy pub. Voice has to be raised to be heard
100	Disco or rock concert
120	Uncomfortably loud, conversation impossible
140	Noise causes pain in ears

Source: Guidance Note for Noise in relation to Scheduled activities, 2nd Edition, EPA 2006.

10.4.2 Baseline Vibration Survey

It has not been considered necessary to undertake baseline vibration monitoring as there is no evidence to suggest that existing receptors are currently affected by appreciable environmental vibration.

10.5 Predicted Impacts

10.5.1 Construction Noise

The site is built and operational, but as this is a retrospective application the construction of the site, when extended, was considered. Using the method outlined in BS5228, a worst case LAeq value at potential NSRs at distances of 30m, 150m, 180m and 220m have been calculated for a range of fixed plant and machinery. The following plant has been presented to give an example of the potential construction noise levels:

- 1 No. Road haulage trucks (22t capacity).
- 1 No. tracked excavators (20t operating weight):
- 1 concrete mixers

The methodology as outlined in BS 5228-1:2009+A1: 2014 was followed for predicting the noise levels in the proposed development. This methodology relates to the method for mobile plant in a defined area. The prediction of the LAeq from mobile plant operating over a small area or on site can be used for other activities when items of mobile plant are operating in close proximity to the point of interest, taking into account the adjustment of the predicted LAeq for standing and idling time of the plant. It is assumed that over a 1-hour period, all mobile plant will be operational for 80% of the time.

The results of these calculations are presented in Table 10.8. For reference, the guidelines on construction noise levels outlined in BS 5228-1:2009+A1: 2014 have been presented in Table 10.7: BS5228 Indicative Noise Level Predictions: Stationary Plant Noise Source Sound Power LWA dB

- 1 x No. Road haulage trucks 102dB
- 1 x No. Tracked Excavators 99dB
- 1 x concrete mixers 108dB

Table 10: 8: Predicted noise levels at Potential Noise Sensitive Receptors

Distance of potential NSR from construction site	Predicted Noise levels at NSR LAeg dB BS5288-1 (2009)	Monday – Friday (07:00 – 19:00)	Saturday (07:00 – 19:00)
65m	63	70	65
100m	59		
150m	56		
180m	54		

The nearest NSR to the site is the Sandyhill House residential property approximately 65m northwest of the site. At such a distance, the results of the indicative construction calculations shows that the resultant LAeq (1 hour) values of using such plant and machinery would be in the region of 63db LAeq and therefore not above the daytime ambient level of 68 dB LAeq.

BS5228-1 (2009) +A1: 2014 specifies that a daytime limit of 70dB LAeq shall apply on weekdays and a daytime limit of 65dB LAeq shall apply on Saturday. The ambient noise levels at the nearest NSR are below the BS5228-1 limits and will be short-term in duration. As the construction phase is deemed to not have a noticeable change on the noise climate at this location. Noise levels at other identified NSRs are all also below the limits set out in BS5228-1 for construction noise.

10.5.1.1 Construction Vibration

Increases in ambient levels of ground borne vibration may occur as a result of the construction phase of the development. Due to the limited size of the construction during the development, the quantity of construction vibration will be low. The exact impact of these vibration impacts cannot be quantified as they are deemed imperceptible.

10.5.2 Operational Phase

10.5.2.1 Operational Noise

This assessment has considered noise impacts associated with the past (unauthorised) use and proposed continued use of the existing waste processing and transfer facility. The historic use, subject of retention, comprised a notable increase in activity, in particular for the years where the tonnage was c.26,000 to 42,500 tonnes per annum.

However, the current tonnage and proposed continued tonnage is as per previously permitted, i.e. 21,900 tonnes, as such, it is not anticipated that there will be any significant changes in the noise levels attributable to the development site, over and above that previously assessed by the Planning Authority as being acceptable. The main focus of the assessment will be for those periods where the activity was temporarily higher than previously permitted. As continued use is sought at 21,900 tonnes per annum and the permanent permission allows only 10,000 tonnes per annum, the impact over and above 10,000 tonnes per annum will be assessed.

The existing site has been used for the recycling of metal and processing of scrap metals.

The main noise sources relate to the operation of the site, with the assigned noise levels being based on similar measurements on the site:

- The operation of a grab removes the material from the delivery vehicles and deposits in the appropriate locations. 94dB SWL was assigned
- Shredder operational on the site 100dB SWL
- Lefort 1,300 Baler operating at 100dB SWL
- HGV delivering material to the site was set as a line source with each vehicle travelling at 10km/hr and the source noise level being 104dB

The site has been modelled to assess worst case operation of the site with all units working simultaneously, this is not expected to happen in practice as it would be normal to allow for a build-up of material prior to processing.

Noise sources include HGV movements from the roadside entrance travelling through the weighbridge and to the turning area as shown in the proposed site layout drawing before exiting the site. The HGV movements have been included with an assumed sound power level of 98 dB(A) (4 movements per hour per entrance at 10km/h). Forklift Truck (FLT) movements have been included with an assumed sound power level of 104 dB(A) (BS5228:2014) travelling from the western façade entrance to each storage area within the yard. The FLT has been included travelling at a speed of 10km/h with a conservative 100% on-time.

The informal route of the HGV's within the site has been amended over the years, as has the locations of the grabs and crusher. At night-time, no operations will take place.

Digital mapping was used to present the site layout and the nearby receptor properties, as shown in Appendix A.

Receptors

Three receptors were identified representing the nearest dwellings in the vicinity of the proposed waste recycling facility. The location of these receptors is presented in Table 10.9 and Appendix A.

Table 10: 9: Noise Sensitive Receptors

Location	Co-ordinates
NSL1	712862, 743470
NSL2	712763, 743383
NSL3	712921, 743557

Predicted Noise Levels

Table 10: 10: Noise Sensitive Receptors

Location	Predicted Noise Levels (dB LAeq)
NSL1	43.7
NSL2	41.8
NSL3	41.6

As detailed in Section 8.2 above, there are a number of steps involved in confirming the assessment under the NG4 guidance, as follows:

- Step 1: Quiet Area Screening of the Development Location

The Proposed Development is within 1km of Dublin Airport and in close proximity to various local and major industry sources.

The Proposed Development is not therefore considered a quiet area.

- Step 2: Baseline Environmental Noise Survey

Noise measurements were carried as detailed in Section 8.3 above.

- Step 3: Screen Areas of Low Background Noise

It can be seen that the daytime, evening and night-time noise levels presented in Table 10.5 and 10.6 are greater than limit levels for the day, evening and night-time periods, therefore the vicinity of the Proposed Development is not considered to be a low background noise area.

- Step 4: Determine Appropriate Noise Criteria

Based on the information in Step 1-3 above the Proposed Development is not a quiet area or area of low background noise level.

The recommended noise for the Proposed Development is defined within the "All other Areas" criteria i.e., 55dB daytime, 50dB evening and 45dB night-time, as shown in Table 10.11 below.

Table 10: 11: Recommended Operational Noise Limit Criteria

Scenario	Daytime Noise Criterion, dB LAr,T (07:00 to 19:00hrs)	Evening Noise Criterion, dB LAr,T (19:00 to 23:00hrs)	Night-time Noise Criterion, dB LAeq,T (23:00 to 07:00hrs)
All other Areas	55dB	50dB	45dB

The maximum predicted daytime noise levels at the nearest receptor locations in the vicinity of the Proposed Development are 44dB, therefore the predicted worst case daytime noise levels from the operation of the Proposed Development will comply with the criteria as set out in NG4 for the day, evening and night-time periods (but it should be noted that the site will only operate during the daytime period.

Furthermore, the maximum predicted noise level at the closest receptor is 11dB lower than the WHO recommended lower external daytime noise level of 55dB LAeq.

10.5.2.2 Operational Vibration

There will be negligible adverse impacts on sensitive receptors as a result of the operational phase of the proposed development.

10.6 Mitigation Measures

10.6.1 Construction Phase

N/A. The bringing to site of topsoil and spreading of the same on 1.1ha, and seeding is considered to be of negligible impact, and is not considered to be a material construction impact, being more akin to agricultural activity.

10.6.2 Operational Phase

The assessment of noise levels arising from operations at the subject site has shown that no mitigation is required for either noise or vibration at the site during the operational phase of the development.

10.7 Residual Impacts

10.7.1 Construction Phase

As above. Not applicable.

10.7.2 Operational Phase

There will be minimal change to the noise and vibration from the operational phase of the facility. Due to this, the residual impacts are deemed to be long-term, insignificant, and neutral.

10.8 Cumulative Impacts

10.8.1 Construction Phase

As above. Not applicable.

10.8.2 Operational Phase

No facilities have been identified with the potential for cumulative impact with the proposed development.

In accordance with the EPA Guidelines the cumulative impacts to noise and vibration are predicted to be long-term, neutral, and imperceptible.

10.3 Statement of Significance

The significance of the potential noise impact of the development during operation and construction has been assessed using the methodology outlined in the Environmental Protection Agency Office of Environmental Enforcement (OEE) Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4) and in BS 4142:2014 + A1:2019 'Method of Rating and Assessing Industrial and Commercial Noise'

Noise levels due to the operation of the Proposed Development have been predicted using the industry best practice, i.e. SoundPLAN noise prediction modelling, and the predicted noise levels have been compared with the relevant noise limits and the significance of the potential impacts of the Development have been assessed by taking into account the noise limits at receptors and the degree to which compliance has been met in accordance with the Guidelines for Noise Impact Assessment (October 2014) produced by the Institute of Environmental Management and Assessment (IEMA).

Noise emissions during operation will be managed accordingly to comply with best practice, legislation and guidelines so that no significant effects occur.

10.4 Interactions

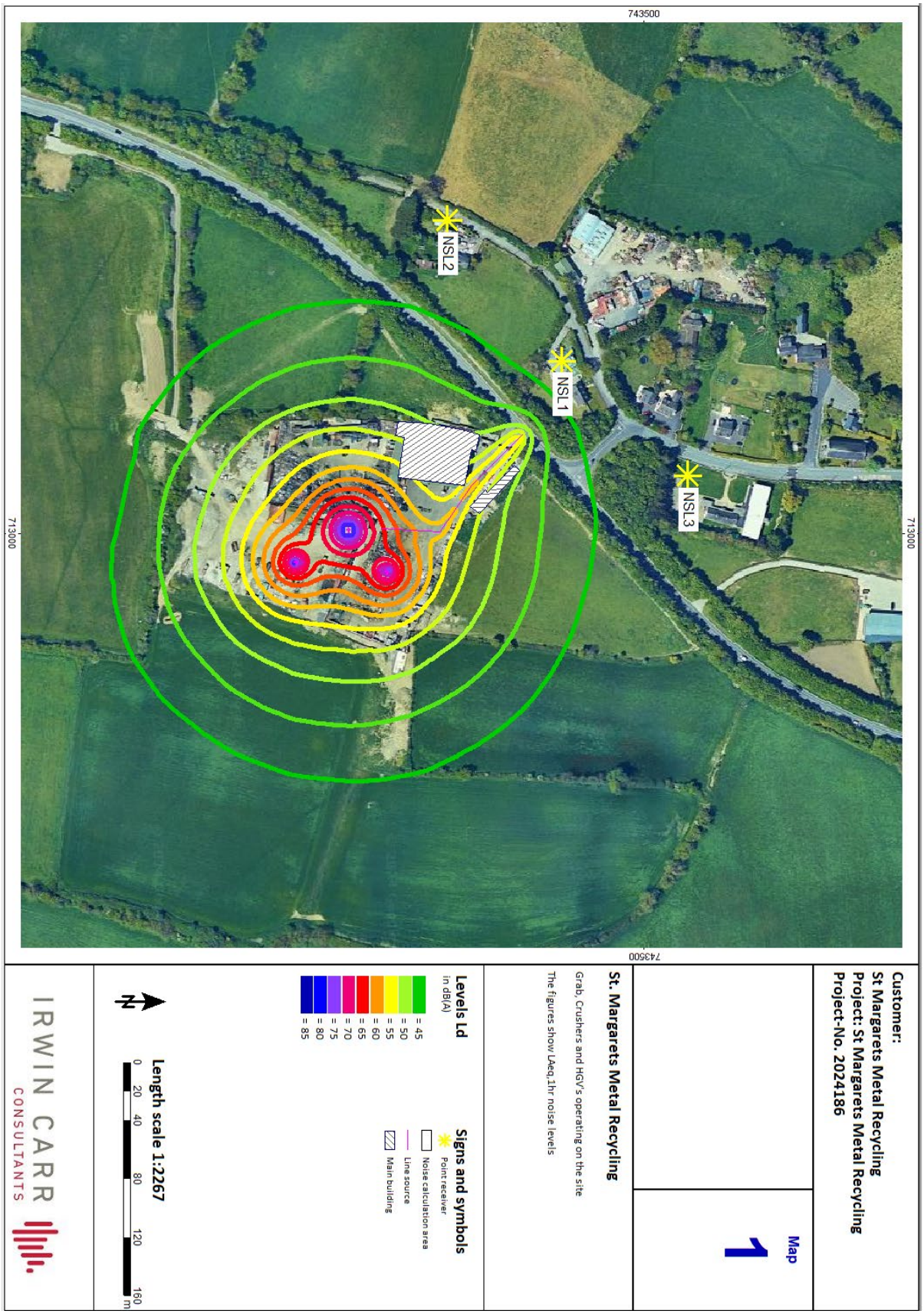
Chapter 12, Material Assets, Traffic and Transport was reviewed in the preparation of this chapter. Where interactions in respect of the stated chapters result in potential cumulative impacts, these have been specified. However, potential impacts and interactions are considered to be neutral short-term and imperceptible to slight.

10.5 References

- EPA Guidelines on Information to be contained in Environmental Impact Statements (2002).
- Draft 'Guidelines for Noise Impact Assessment' produced by the Institute of Acoustics/Institute of Environmental Management and Assessment Working Party.
- British Standard BS 5228 – 1: 2009+A1:2014: Code of practice for noise and vibration control on construction and open sites – Noise.
- Transport Infrastructure Ireland (TII) publication Good Practice Guidelines for the Treatment of Noise and Vibration in National Road Schemes.
- British Standard BS 7385: 1993: Evaluation and measurement for vibration in buildings Part 2: Guide to damage levels from ground borne vibration.
- British Standard BS 5228-2: 2009+A1:2014: Code of practice for noise and vibration control on construction and open sites – Vibration.
- BS 4142:2014: Methods for rating and assessing industrial and commercial sound.
- Environmental Protection Agencies Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4) (January 2016).
- ISO 1996-2:2017 Acoustics - Description, measurement and assessment of environmental noise - Part 2: Determination of environmental noise levels.
- ISO 9613 (1996): Acoustics – Attenuation of sound outdoors – Part 2: General method of calculation.

Appendix A: Site Location

Appendix B: Noise Map



11.0 Landscape and Visual Impact

11.1 Introduction

11.1.1 Introduction

This Landscape and Visual Impact Assessment (LVIA) prepared by Ronan MacDiarmada & Associates Ltd (RMDA) was informed by a desktop study and a survey of the site and receiving environment in July 2024.

Ronan MacDiarmada, B.Agr. Sc. (Land. Hort.) is the director of Ronan MacDiarmada & Associates Ltd and is a graduate of University College Dublin. He is a qualified Landscape Architect and a Corporate Member of the Irish Landscape Institute. He has specialised in Landscape and Visual Assessment (LVIA) and has over twenty years of experience in a range of projects, from large scale strategic design, master planning, commercial and detailed design to LVIA and landscape planning, including Strategic Housing Developments throughout Ireland.

The assessment is in accordance with the methodology prescribed in the Guidelines for Landscape and Visual Impact Assessment, 3rd edition, 2013 (GLVIA) published by the UK Landscape Institute and the Institute for Environmental Management and Assessment.

The report identifies and discusses the impact development of a Recycling and Waste Recovery Centre at R122, St. Margaret's, Co. Dublin. has on the existing landscape of the environment.

The Recycling and Waste Recovery Centre has a history of planning submissions as described previously in this rEIAR, and this LVIA shall deal with the Centre as it currently is in existence. It shall deal with the proposed changes and impact upon the landscape.

This assessment should be read in conjunction with the images that have been taken for this report. RMDA have written an assessment of the viewpoints – LVIA Viewpoints which should also be read in conjunction with this report.

Figure 1: Site Location Map
Source: Googlemaps.ie

Fig 01 Site Outline (existing)

11.1.2 Statement of Competency

RMDA provides specialist landscape and visual services for projects from inception, through site/route selection, environmental impact assessment (EIA) and the planning process, to detailed design and construction. The company specialises in landscape character assessment (LCA) and landscape and visual impact assessment (LVIA) – for a wide variety of projects.

Ronan MacDiarmada is the chapter's main author, and Mark Morris provided oversight and review.

Ronan MacDiarmada, B. Agr. Sc. (Land. Hort.) is the director of Ronan MacDiarmada & Associates Ltd and is a graduate of University College Dublin. He is a qualified Landscape Architect and a Corporate Member of the Irish Landscape Institute. He has specialised in Landscape and Visual Assessment (LVIA) and has over twenty years' experience in a range of projects, from large scale strategic design, master planning and detailed design to LVIA and landscape planning, including Strategic Housing Developments throughout Ireland. Mark Morris , B.Sc. (Landscape Architect) is a graduate Landscape Architect with Ronan MacDiarmada & Associates Ltd and is a graduate of University College Dublin. His role in RMDA is to review and comment on the production of LVIA. Mark is reponsible for a range of types of developments, commercial and detailed design to LVIA and landscape planning, including Large Residential Developments(LRD) throughout Ireland.

Mark Morris , B.Sc. (Landscape Architect) is a graduate Landscape Architect with Ronan MacDiarmada & Associates Ltd and is a graduate of University College Dublin. His role in RMDA is to review and comment on the production of LVIA. Mark is reponsible for a range of types of

developments, commercial and detailed design to LVIA and landscape planning, including Large Residential Developments(LRD) throughout Ireland.

11.2 Methodology Used

Landscape and Visual Assessment Methodology: -

This assessment is based on the following guidelines:

- "Advice Notes on Current Practice in the preparation of Environmental Impact Statements," Environmental Protection Agency (2015)
- "Guidelines on the Information to the Contained in Environmental Impact Statements," Environmental Protection Agency (2002).
- "Draft 2017 EPA Guidelines on Environmental Impact Assessment", Environmental Protection Agency.
- "Advice Notes for Preparing Environmental Impact Statements" Draft (September 2015)
- "Guidelines for Landscape and Visual Assessment," 3rd Ed., Landscape Institute and Institute of Environmental Management and Assessment, 2013.

The following Methodology was used in this assessment:

- A desk top study of the proposed site and its environs, including reviewing aerial photography and ordinance survey documents.
- A site survey was undertaken to determine the character of the landscape and the surrounding area, including site visits during the month of July & August 2024.
- An assessment of the proposed development was conducted by examining the layout plans, elevations, and sections to determine the impacts of the development.
- An evaluation of these impacts was carried out in accordance with the criteria set out in the EPA guidelines.
- A review of statutory planning and other documentation to ascertain the local and wider significance; and visiting the site and surrounding area during July & August 2024 and preparing a photographic record of views and landscape features.

11.2.1 Definition of Landscape

Ireland is a signatory to the European Landscape Convention (ELC). The ELC defines landscape as

> *'An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.'*

This definition is important, as it defines that the landscape is not only a physical and visual amenity but provides for a range of functions: As a cultural resource, the interaction of man and landscape has formed the basis of much of our cultural heritage and values. The rhythms of the

land as it was settled has informed what St. Margaret's is today, the undulating landform has created hills and coastal areas which are a feature of the hinterland. The landscape/townscape provides opportunities for passive and active recreation. It contributes to the sense of place, as over time and place various histories and interactions have formed a sense of place for the local populations. The landscape provides a historic record, it also is a resource for food production, sources of energy and in the natural cycle, oxygen, water as the source for materials for living. In particular the landscape has the ability to renew itself.

The existing site and its environs are overwhelmingly that of a village setting and townscape and this is defined in GLVIA-2013 in the following manner:

"Townscape" refers to areas where the built environment is dominant. Villages, towns, and cities often make important contributions as elements in wider-open landscapes, but townscape means the landscape within the built-up area, including the buildings, the relationships between them, the different types of urban spaces, including green spaces, and the relationship between buildings and open spaces. There are important relationships with historic dimensions of landscape and townscape, since evidence of the way the villages, towns and cities change and develop over time contributes to their current form and character."

11.2.2 Forces for Landscape Change

The earlier applications for development of this site recognised that the Landscape in St. Margaret's, is changing and has granted a permission for a recycling and waste recovery centre. It has changed with the settlement pattern over the last several hundred years. It has progressed as a village. The patterns of settlement have been driven primarily by economic need and the requirement to provide shelter and a food resource. In this frame, it must be accepted that change shall occur, and it requires finding an appropriate balance between economic, social, and environmental forces and values.

In this, the recycling and waste recovery centre takes advantage of the existing landscape associated with this location. The landscape has focused on the management of existing field boundaries with native hedges and trees being retained. This shall encourage the retention of the rural character in St. Margaret's. Although the recycling and waste recovery centre sits within a rural setting, the retention of the existing boundary, hedgerow and trees shall provide a positive impact to the current landscape.

11.2.3 Nature of Impacts

Impact on landscape arising from the development has two distinct but closely related aspects. The first is impact in the form of change to character of the landscape that arises from the retention of the development into the existing context. The second aspect is the visual impact, which depends on the degree and nature of change in the visual environment. It is recognised that the combined impact on character and views will draw responses, the significance of which will be partly informed by an individual's subjective perception of how much the changes matter. However, neither aspect applies to the development as there will be no further impact from what exists on the current site.

The assessment of landscape/townscape and visual impacts include:

- Direct impacts upon specific landscape elements and buildings within and adjacent to the site.
- Effects on the overall pattern of the landscape elements that give rise to the character of the site and its surroundings.
- Impacts upon any special features or interests in or around the site.
- Direct impacts of the scheme upon views in the landscape / townscape.
- Overall impact on landscape character and visual amenity

In determining the Visual Impacts, the following definitions were used to assess the significance of the impacts:

11.2.4 Impact Significance Criteria – Table 1

No Impact:	There are no changes to views in the visual landscape.
Imperceptible Impact:	An impact capable of measurement but without noticeable consequences.
Slight Impact:	An impact which causes noticeable changes in the character of the environment without affecting its sensitivities.
Moderate Impact:	An impact that alters the character of the environment in a manner that is consistent with existing and emerging trends.
Significant Impact:	An impact which, by its character, magnitude, duration, or intensity alters a sensitive aspect of the environment.
Profound Impact:	An impact which obliterates sensitive characteristics.

Additional terms used to describe Quality of visual impact: -

- Neutral Impact: A change which does not affect the quality of the landscape.
- Positive Impact: A change which improves the quality of the environment or landscape.
- Negative Impact: A change which reduces the quality of the environment or landscape.

11.2.5 Terms used to describe the Duration of visual impact: -Table 2

Momentary Effects	Seconds to Minutes.
Brief Effects	Less than a day.
Temporary Effects	Less than a year.
Short-term Effects	Lasting 1 to 7 years.
Medium-term Effects	Lasting 7 to 15 years.
Long-term Effects	Lasting 15 to 60 years.

Permanent	Effects	Lasting over 60 years.
Reversible	Effects	Effects that can be undone.
Frequency of	Effects	Describe how often the effect will occur.

11.3 The Receiving Environment

11.3.1 Description of the Receiving Environment

The site of the proposed development is located in St. Margaret's, Sandyhill on the R122. West of Dublin Airport, North of the M50 motorway and adjacent to the village of St. Margaret's.

Currently the Recycling and Waste Recovery Centre is in use and has a minimal impact upon the surrounding area as the site is concealed from the road by existing roadside screen planting and agricultural fields.

11.3.2 Policy Context of Receiving Environment

Landscape Character: The site is located within the Rolling Hills Character Type area. The Rolling Hills Character Type is categorised as having a modest landscape value.

St Margaret's is a rural village and hence the following policies apply to the development:

Policy SPQHP51 – Protection of Rural Villages
Support and protect Fingal's Rural Villages by ensuring their appropriate sustainable development to preserve the character and viability of villages and support local services.
Objective SPQHO64 – Enterprise in Rural Villages
Promote the provision of suitable, appropriately sized enterprises within rural villages to minimise the need for commuting.

11.3.3 Protected Views

There are no protected views to or from the location of the Centre. The existing site is already part of the local landscape and there is no protected site which the Centre obstructs the viewing of.

11.3.4 Built Heritage

The proposed development of a Recycling and Waste Recovery Centre is located on farmland and there is no structure with any historical significance present on the site. We have referenced Dunsoghly Castle approximately 1km away. It has been referenced in the visual analysis.

11.3.5 Implications of Development Plan Policy

The Plan policy identifies several documents and policies which should be considered as part of this Assessment. In reviewing the impact of the Recycling and Waste Recovery Centre, these documents were consulted, including:

- An Bord Pleanála pre-planning and previous decisions.
- Fingal County Council decisions.
- Fingal County Council Development Plan 2023-2029.

11.3.6 Landscape Character

Rolling Hills Character Type is categorised as having a modest landscape value. It is generally made up of agricultural land, such as the site in St Margaret's. The protected views (R108 (St Margaret's to Naul Road) and R125 (Swords to Ashbourne Road), tree belts and undulating lands also add value to the area.

11.4 Summary of Landscape Characteristics and Values

The site around St Margaret's is generally agricultural in nature, while Dublin airport is a short distance from the site. There are no pre-existing historical sites that obstruct the site in any way, although there is a church and graveyard in the vicinity which is thought to date back to the 12th century. However, with the airport directly adjacent (to the East) and a major route, the M50 (to the South), the rural ambience is misleading as these have a major impact on the surrounding land use, as reflected in the logistic park to the West.

11.4.1 Landscape/Townscape Values

The GLVIA Guidelines sets out the methodology for assigning landscape sensitivity. This is based on combining judgements on landscape value, and landscape susceptibility.

Landscape values are derived from both indications of value as seen in national and local policy, as well as other indications that a landscape or landscape element is valued. The site is zoned Industrial Enterprise Employment.

In addition to formal designations at international, national, and local level, the GLVIA refers to criteria which can help to describe landscape values in landscapes that are not covered by designations. These include the following:

- **Landscape Quality/Condition**: The location of the development is in the townland of Sandyhill village of St. Margaret's. St Margaret's is a small village that is still rural in outlook, however the city of Dublin, Finglas to the south and the Airport to the east provide quite an urban edge to the locality.

- **Cultural Heritage/Conservation value:** The proposed development is located in St. Margaret's Village which has been noted.

- **Aesthetic/Scenic Quality**: The site is rural in the immediate area, however as noted the influence of the Airport has created commercial interests.

- **Perceptual aspects:** A landscape may be valued for its perceptual qualities, such as wildness or tranquillity. Although the proposal is beside a road

- **Public Accessibility and Recreation Value:** The site is in private ownership and not publicly accessible. However, it may be easily viewed from the road. The recreation value of the site is high as the scenic views and proximity to the coastal walkways provide valuable amenity for the residents.

11.4.2 Conservation Values

The conservation values indicate those aspects of the receiving environment which are sensitive and could be negatively impacted by the proposed development. These values form the potential landscape/townscape and visual constraints to the proposed development.

The buildings on the proposed site are not on the Record of Protected Structures.

The site does not impact upon the conservation areas or any other protected structures, buildings in the proximity.

St. Margaret's has retained the inherent landscape and environmental qualities of the surrounding landscape, with the hedgerows and grasslands/field system around the site remaining intact.

The proposed Recycling and Waste Recovery Centre does not affect the conservation values of the site, with the closest conservation sites being St Margaret's Cemetery (460.19m away), Millhead Windmill (731.16m away) and Dunsoghly Castle (1.1km away). These cannot be seen from the recycling centre.

11.4.3 Enhancement Values

The enhancement values reflect change that is occurring in the landscape and its inherent robustness. These include:

- The retention of existing hedgerows and trees.
- The return of hardstanding to grassland, in keeping with the surrounding Agricultural landscape. This is subject to an application for permission, as part of this application, and is assessed further in the accompanying EIAR.

11.5 Characteristics of the Proposed Development

The site will remain unchanged to what exists already. This means that there will be no detrimental influence on the local landscape. The site, as is, does not visually impact upon the surrounding landscape, with the only part of the site that is visible from the road being the entrance to the site.

The development is described as:

"Permission is sought by St. Margaret's Recycling & Transfer Centre Ltd. at St. Margaret's Metal Recycling, Sandyhill, St. Margaret's, Co. Dublin, under substitute consent provisions, for the

Retention of:

1. Enabling Ancillary Works, including, but not limited to, that subject of permissions under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109, e.g. ancillary and enabling works/infrastructure, comprising amendments to site access and boundary arrangements including dust mitigation measures, access and gateway, above and below ground surface water drainage, septic tank, fire water storage and retention (105m3), attenuation and storage tanks (206m3), truck and vehicle parking,
2. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility, and authorised facility for the treatment of 'end of life vehicles' (ATF for ELVs). Existing development comprises the weighbridge, offices, recycling and transfer/industrial buildings, hard standing, car parking, plant and machinery, detailed below:
    a. Prefabricated cabins (2no.) - 177sqm. - comprising ancillary offices, staff facilities, control room;
    b. Prefabricated w/c & Steel Container (store) - 29 sqm;
    c. Recycling and transfer/Industrial buildings 1917 sqm;
    d. Weighbridge; and
    e. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.
3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6 ha (permitted under F97A/0109) to 1.75ha of which 1.6ha is associated with waste permit, and additionally lands comprising site access, proprietary wastewater

treatment system, installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system.

4. Historic use of 1.6 ha of the site (as per Waste Permit area under WFP-FG-13-0002-03), as a waste transfer recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, during the period 2019 to 2023, where waste throughput at the facility rose from 26,000 to 42,500 tonnes per annum, without the benefit of planning permission, and from 2024 onwards operations comprising waste throughput of 21,900 tonnes per annum.

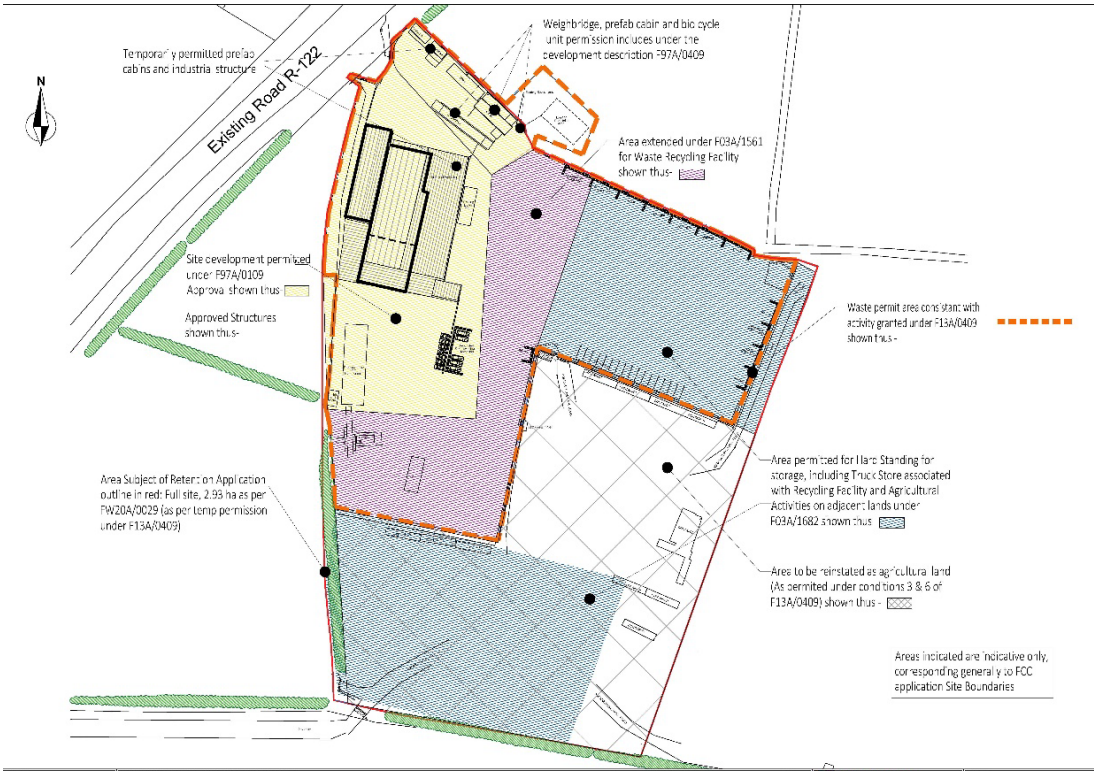
5. Historic use (i.e. 2009 to 2023) of lands comprising 1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity,

6. Restoration of c.1.1 ha of the above noted compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands, in compliance with conditions 3 and 6 of F13A/0409. These lands were included in an enlarged site area, comprising 2.93 ha under F13A/0409 and F20A/0409.

7. On-going use of the existing metal processing and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

Separately, but in tandem, the applicant is seeking permission as part of the substitute consent application for a proposed development comprising the on-going/future use of the site and facility to enable annual waste throughput of up to 21,900 tonnes per annum.

Fig 02. Planning History - Drawing for indicative purposes (Refer to DWG 22073-R-03)



11.6 Analysis of Impacts and Mitigation Measures

11.6.1 Likely Significant Impacts and Associated Mitigation Measures

The existing Recycling and Waste Recovery Centre has elements that have already been granted permission. This proposal has retained the existing hedgerows and trees as mitigation associated with this retention submission. The sheds and offices are sufficiently distanced and are pitched at a height level that does not impact upon other buildings in terms of overlooking or overbearance as there are no other buildings adjacent to the subject site.

11.6.2 Potential Visual Impact

The existing development is a Recycling and Waste Recovery Centre, which has sheds and outbuildings that have already been granted permission.

The scale of the sheds is in keeping with the surrounding landscape and have been granted permission.

The landscape proposals are principally to retain existing hedgerows and trees and will be retained intact, with a management scheme to keep them in good health as per the landscape plan accompanying the Application.

The sheds and offices cannot be seen from many surrounding areas and are only visible on the R122 and from the entrance. The retention of the Centre, which does not overbear on the neighbouring St Margaret's village, will be slight in the short term and imperceptible to no impact in the long term.

11.6.3 Visual Impacts due to introduction of new structures & Buildings

The retention of the Centre will not impact negatively upon the surrounding area.

There will be no new structures or buildings.

11.6.4 Visual Impacts due to access road

There is no new visual impact due to the site entrance remaining the same as it is now.

11.6.5 Visual impacts due to telecommunications/power lines

On this site, the development is served from existing services, telecommunications, and power lines. The services on site are underground.

11.6.6 Visual Impact of lighting

The lighting of the development shall be limited and shall form part of the existing scheme. It shall be typical of a similar Recycling Centre type.

11.6.7 Visual Impact of Landscaping Proposals

Landscaping proposals consist of the retention of entire field system boundaries, hedgerows, and trees.

The landscape proposals include for the retention of agricultural field boundaries, with the inherent biodiversity of a range of pollinator plants and trees. The flowering of these plants enables bees to flourish but also increase the texture and colour in the landscape.

The landscape proposals also provide for augmentation of the existing hedgerows, which shall be beneficial in the retention and management of the proposal into the landscape. It shall retain the biodiversity development of the site and aid with the sustainable preservation of existing flora and fauna.

11.7 Avoidance Remedial and Mitigation Measures

11.7.1 Construction Phase

There shall be a minor construction phase, however much of this is in existence and the construction phase shall deal mainly with making good and enhancement of features, fences, wastewater etc. The development will have little or no impact – visually unobtrusive, the office

units to the front are in existence and shall be retained. They are required for the efficient workings of the centre. They are also located at the entrance alongside existing sheds.

11.7.2 Operational Phase - mitigation.

The mitigation measures include measures that were taken during the design stage, which have evolved throughout the design process, including the retention and management of existing hedgerows and trees.

11.7.3 Waste handling areas

The bin storage and associated waste areas will be accommodated within organised storage areas in the designated areas which shall be screened from view and are as per the original grant of permission.

1.7.4 Do Nothing Impact

Should the proposal not proceed, the Recycling Centre would remain, including yard and buildings. Essentially the structure of the site will remain the same. However, the retention submission wishes to make good any impacts and reduce the amount of yard space and also a number of containers that shall be removed. The return of hardstanding to grassland would be welcome and would be necessary as part of the overall development and retention of the elements. If nothing was done, then the opportunity for this grassland would be a missed opportunity.

11.8 Landscape / townscape Impact Assessment Criteria

The following criteria are considered, when assessing the potential impacts on the townscape resulting from a proposed development,

- Landscape/townscape character, value, and sensitivity.
- Magnitude of likely impacts.
- Significance of landscape effects.

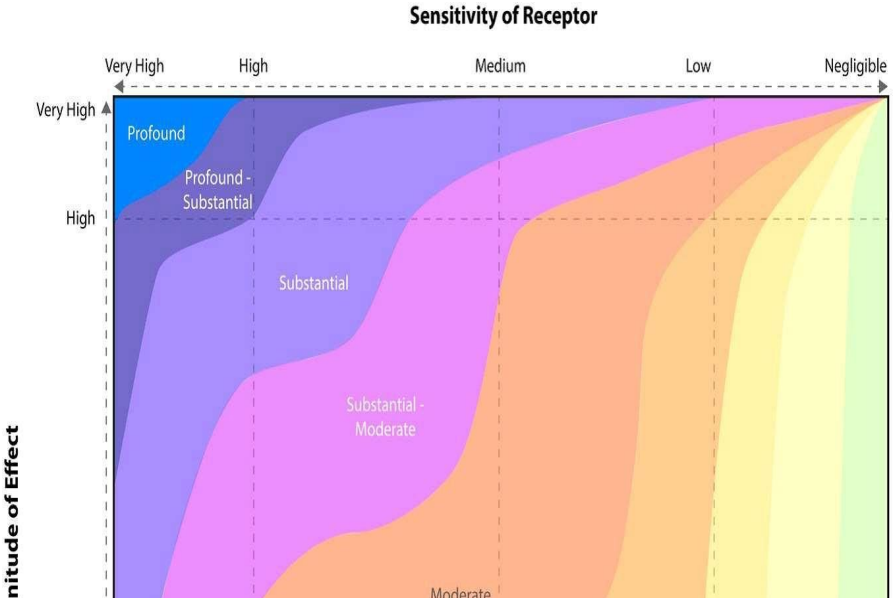
The sensitivity of the townscape to change is the degree to which a particular setting can accommodate changes or new elements without unacceptable detrimental effects to its essential characteristics. Landscape/townscape Value and Sensitivity is classified using the following criteria set out in Table 3 below.

The Recycling Centre development on the current site location would be determined as a medium to high sensitivity value. The retention submission seeks to regularise the yard area, removal of containers and improve the general layout.

Table 3: Landscape/Townscape Value and Sensitivity

Sensitivity	Description
Very High	Areas where the landscape character exhibits a very low capacity for change in the form of development. Examples of which are high value townscapes, protected at an international or national level (e.g., World Heritage Site), where the principal management objectives are likely to be protection of the existing character.
High	Areas where the landscape character exhibits a low capacity for change in the form of development. Examples of which are high value townscapes, protected at a national or regional level, where the principal management objectives are likely to be considered conservation of the existing character.
Medium	Areas where the landscape character exhibits some capacity and scope for development. Examples of which are townscapes, which have a designation of protection at a county level or at non-designated local level where there is evidence of local value and use.
Low	Areas where the landscape character exhibits a higher capacity for change from development. Typically, this would include lower value, non-designated townscapes that may also have some elements or features of recognisable quality, where management objectives include, enhancement, repair, and restoration.
Negligible	Areas of landscape character that include derelict sites and degradation where there would be a reasonable capacity to embrace change or the capacity to include the development proposals. Management objectives in such areas could be focused on change, creation of townscape improvements and/or restoration.

Impact Significance Matrix – Table 4.



Impact Significance Matrix – Table 4.

Magnitude	Typical Criteria for Landscape Receptors
High	Major removal or addition of landscape features or removal of localised but unusual or distinctive landscape features and/or addition of new conspicuous features and elements which may alter the character of the landscape (with uncharacteristic features being negative and characteristic features being positive). Physical loss of landscape features that are not replaceable or are replaceable only in the long term.
Medium	Moderate removal or addition of landscape features and/or addition of new noticeable features and elements which would be clearly visible but would not alter the overall character of the landscape (with uncharacteristic features being negative and characteristic features being positive). Physical loss of landscape features that are replaceable in the medium term.
Low	Minor removal or addition of landscape features and/or addition of new discrete features and elements which would be perceptible within but would not alter the overall character of the landscape (with uncharacteristic features being negative and characteristic features being positive). Physical loss of landscape features that are readily replaceable in the short term.
Negligible	Barely perceptible removal or addition of landscape features would occur, and the development would be barely perceptible in visual/ character terms.

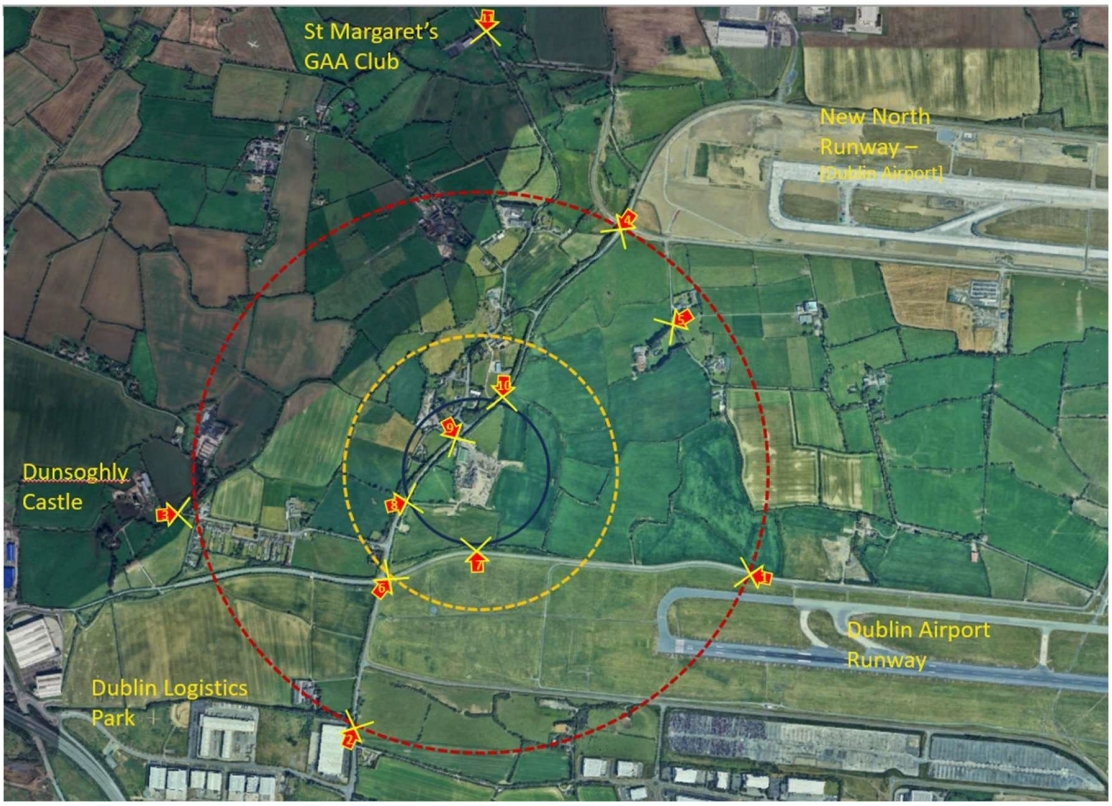


Fig. 3. – Visual Receptors – Development Visual receptors 1 - 11

Total 11. These were used for the Receptor points.

11.9 Visual Selector Interaction

A collection of 11 no. images have been prepared surrounding the site to fully illustrate the physical and visual nature of the proposed development. Please note the proposed photo location points (receptors) were prepared by RMDA in conjunction with CWPA from publicly accessible viewpoints around the location of the subject site.

11.9.1 Sensitivity – Susceptibility of Receptors.

A visual receptor is a human user of the landscape. The practice has adopted the principle that the sensitivity for each type of visual receptor is inherent to the nature of the activity they are undertaking rather than the view itself.

In accordance with the Institute of Environmental Management and Assessment ("IEMA") Guidelines for Landscape and Visual Assessment (3rd edition 2013) visual receptors most susceptible to changes in views and visual amenity are:

- Residents at home.
- People, whether residents or visitors, who are engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focussed on the landscape and on views.

- Visitors to heritage assets, or to other attractions, where views of the surroundings are an important contributor to the experience.
- Communities where views contribute to the landscape setting enjoyed by residents in the area.
- Travellers on road rail or other transport routes where such travel involves recognised scenic routes and awareness of views is likely to be heightened.

Visual receptors that are less susceptible to changes in views and visual amenity include.

- People engaged in outdoor sport or recreation, which does not involve or depend upon appreciation of views of the landscape.
- People at their place of work whose attention may be focussed on their work or activity, not their surroundings and where the setting is not important to the quality of working life.

11.9.2 Visual Receptors

A collection of 11 no. visual receptors have been prepared surrounding the site to fully illustrate the physical and visual nature of the proposed development. Please note the proposed photomontage photo location points were prepared by RMDA and CWPA from publicly accessible viewpoints around the location of the subject site.

Table 5: Visual Receptor Sensitivity

Sensitivity	Typical Criteria for Visual Receptors
High	Users of residential properties, public rights of way, named viewpoints and scenic roads or railways. Users of cultural heritage features including World Heritage Sites, Registered Parks and Gardens, Scheduled Monuments, Listed Buildings and Conservation Areas where they are known to be tourist destinations or places used by local communities.
Medium	Users of public rights of way (urban or industrial areas) play areas, sporting and outdoor active recreational facilities and rural roads.
Low	Users of office and employment areas, industrial areas and the main road and rail network.

11.9.3 Visual Impact Assessment Viewpoints

We have noted images from various receptor points as per the aerial plan (Fig.4), enclosed in the accompanying landscape receptor views. They have been prepared to illustrate the impacts, if any, with respect to the proposed development along associated roads, R112 & R108, St. Margaret's, Town and the surrounding landscape.

The images selected, while incorporating the proposed development, sought to provide context in terms of building form, vegetation, and landform. Therefore, the images have the unit sitting into the landscape to give an understanding of the sensitivities of the town and landscape.

Table 6 – List of Receptor Points.

View	Description
1	Above Dublin Airport Runway – Looking West on Road R108.
2	Alongside the Dublin Logistics Park, on the R122, Looking North Northeast. Nothing may be viewed of the Recycling Centre
3	Directly beside the Gate to Dunsoghly Castle – and Newtown Cottages to the east. Looking East.
4	Junction/Crossroads of the R108, L3132 and Kilreesk Road, west of the New North Runway at Dublin Airport. Looking Southwest.
5	Dunbro Lane – Looking down a Farmyard Driveway (Southwest) to the location of the Recycling Centre.
6	Roundabout – junction of the R108 & the R122 – Looking Northeast.
7	On the R108, Shanganhill, Northwest of the Dublin Airport Runway – Looking Due North
8	View looking Northeast along R122
9	At Entrance to St Margaret's Recycling Centre – Looking East
10	On R122 – Looking South.
11	Entrance to St Margaret's GAA Club Looking South

View 1	
Existing View	Above Dublin Airport Runway – Looking West on Road R108. Waste Recycling Centre not visible.
Proposed View	 Building cannot be seen, hidden from view by landform and vegetation.
Impact – Construction Stage	Imperceptible
Impact – Operational Stage	Imperceptible
Landscape & Townscape Sensitivity	Low-Medium
Visual Receptor Sensitivity	Low
Magnitude of Change for Landscape Receptors	Medium
Significance of Effects	None - No Impact
Duration	Not Applicable - No Impact

View 2	
Existing View	Alongside the Dublin Logistics Park, on the R122, Looking North Northeast. Nothing may be viewed of the Recycling Centre
Proposed View	 The proposed building cannot be seen and is hidden by existing vegetation and landform
Impact – Construction Stage	None - No Impact
Impact – Operational Stage	None - No Impact
Landscape & Townscape Sensitivity	Low-Medium
Visual Receptor Sensitivity	Low
Magnitude of Change for Landscape Receptors	Medium
Significance of Effects	None
Duration	None

View 3	
Existing View	Directly beside Gate (East of) to Dunsoghly Castle – and Newtown Cottages to the east. Looking East, nothing may be seen of the Recycling centre at this position.
Proposed View	 The proposed Recycling Centre / building cannot be seen, the red outline of the building is screened by landform, buildings, and the vegetation
Impact – Construction Stage	None - Imperceptible
Impact – Operational Stage	Imperceptible
Landscape & Townscape Sensitivity	Very High
Visual Receptor Sensitivity	High
Magnitude of Change for Landscape Receptors	High
Significance of Effects	No Impact
Duration	None - No Impact

View 4	
Existing View	Junction/Crossroads of the R108, L3132 and Kilreesk Road, west of the New North Runway at Dublin Airport. Looking Southwest – Nothing may be viewed from this location
Proposed View	 Crossroads/Junction
Impact – Construction Stage	No Impact - Imperceptible
Impact – Operational Stage	No Impact - Imperceptible
Landscape & Townscape Sensitivity	Low.
Visual Receptor Sensitivity	Low
Magnitude of Change for Landscape Receptors	Low
Significance of Effects	No impact
Duration	None - No Impact

View 5	
Existing View	Dunbro Lane – Looking down a Farmyard Driveway (Southwest) to the location of the Recycling Centre. No visual line to the recycling centre
Proposed View	 The Entrance to the Farmyard – Recycling Centre screened by Mature trees and Farmyard Buildings.
Impact – Construction Stage	No Impact - Imperceptible
Impact – Operational Stage	No Impact - Imperceptible
Landscape & Townscape Sensitivity	Low-Medium
Visual Receptor Sensitivity	Medium
Magnitude of Change for Landscape Receptors	Medium
Significance of Effects	No Impact
Duration	No Impact

View 6	
Existing View	Roundabout – junction of the R108 & the R122 – Looking Northeast
Proposed View	 Recycling Centre screened by Hedges & Vegetation.
Impact – Construction Stage	Imperceptible
Impact – Operational Stage	Imperceptible
Landscape & Townscape Sensitivity	Low
Visual Receptor Sensitivity	Low
Magnitude of Change for Landscape Receptors	Medium
Significance of Effects	No impact
Duration	No impact

View 7	
Existing View	On the R108, Shanganhill, Northwest of the Dublin Airport Runway – Looking Due North.
Proposed View	 No View of the Recycling Centre.
Impact – Construction Stage	Imperceptible
Impact – Operational Stage	Imperceptible – Slight
Landscape & Townscape Sensitivity	Low
Visual Receptor Sensitivity	Low
Magnitude of Change for Landscape Receptors	Medium
Significance of Effects	No Impact
Duration	No Impact

View 8	
Existing View	View looking Northeast along R122
Proposed View	 The development cannot be seen from this view
Impact – Construction Stage	Imperceptible - Imperceptible
Impact – Operational Stage	Negligible
Landscape & Townscape Sensitivity	Low
Visual Receptor Sensitivity	Low-Medium
Magnitude of Change for Landscape Receptors	Medium
Significance of Effects	Negligible – Cannot see the Recycling Centre
Duration	No Impact

View 9	
Existing View	At Entrance to St Margarets Recycling Centre – Looking East
Proposed View	 The building and Recycling Centre are visible at the main entrance of the subject site.
Impact – Construction Stage	Slight
Impact – Operational Stage	Slight
Landscape & Townscape Sensitivity	Low-Medium
Visual Receptor Sensitivity	Low
Magnitude of Change for Landscape Receptors	Low
Significance of Effects	Slight – Moderate,
Duration	The proposed sheds and buildings are in existence. The offices are required for the efficient running of the centre. Temporary

View 10	
Existing View	On R122 – Looking South.
Proposed View	 The Recycling Centre cannot be seen from this location
Impact – Construction Stage	No Impact – Imperceptible
Impact – Operational Stage	No Impact - Imperceptible
Landscape & Townscape Sensitivity	Low-Medium
Visual Receptor Sensitivity	Low
Magnitude of Change for Landscape Receptors	Negligible
Significance of Effects	No impact
Duration	Not applicable – none

View 11	
Existing View	Entrance to St Margarets GAA Club Looking South
Proposed View	 The Recycling Centre is not visible from this location. It is too far, approximately 1556m to the south.
Impact – Construction Stage	Imperceptible
Impact – Operational Stage	No impact - Imperceptible
Landscape & Townscape Sensitivity	Medium
Visual Receptor Sensitivity	Medium
Magnitude of Change for Landscape Receptors	Medium
Significance of Effects	No impact
Duration	No Impact

11.10 Monitoring

An overall design team shall be appointed to oversee any works connected with the retention submission.

In this, a Landscape Architect shall be appointed as part of the overall team. They shall consult with other project members in relation to the development of the proposal.

The landscape architect shall overview management of the field system, including hedges and trees, liaise with resident engineer, project team and contractor. The landscape architect shall also inspect the trees; however, most of the monitoring works shall be during and post-civil construction stage. The landscape architect shall review and instruct on details of soft planting, trees and hedges if required.

During the operational stage, the landscape Architect shall review the state of all planting, trees and hardscape works. The landscape architect shall review for period of 18 months, from practical completion of each stage the standard and quality of the materials and workmanship. A final certificate of completion shall be issued by the landscape architect in respect of this.

11.11 Interactions & Cumulative Effects

Inter-relationships are the interaction/interrelations between the impacts and proposed mitigation for one discipline with another associated discipline.

11.11.1 Archaeology Architecture Cultural Heritage

The development of the Centre has given due consideration to the existing habitats and development of the area. The development took account of the impact on the archaeological, architectural, and cultural heritage impacts.

11.11.2 Material Assets & Land – Property

The retention submission is a welcome intervention. It shall regularise the outstanding planning items, yet it retains, and will maintain, the field system with hedges and trees.

11.11.3 Biodiversity

The current scheme has a natural landscape plan which provides for existing native trees and hedges to be retained. The Centre shall benefit from the proposed landscape proposals and management. Therefore, the existing biodiversity in the hedgerows and trees shall be retained.

11.11.4 Population & Human Health

The visual impacts will arise for residents located close to or adjoining the site boundary, during construction, however the Centre shall not add to the impact as the programme shall take into consideration the Centre as part of the overall scheme.

The Centre shall benefit from the construction management plan that shall be implemented. Specific mitigation measures include retention of existing hedgerows and trees.

During the Operational phase, the landscape & visual impacts will only be visible from the R122.

The impacts of the retention of the Centre shall be positive for the area as it reinforces the existing agricultural boundaries – retain the rural ambience of the area.

11.11.5 Difficulties Encountered in Compiling

There were no difficulties encountered on visiting the development area, during the daytime period.

11.12 Conclusion

We have taken the visual images, assessed them and the policy documents relating to St. Margaret's Recycling Centre, along with the planning history. Principally, our interpretation is that the facility is a required resource for the island, providing a much-needed resource.

The Recycling Centre, by its nature (yard and sheds), reflects the original typology of a farmyard and therefore respects the existing rural ambience of the surrounding landscape. The retention submission maximises the positive contribution made to the landscape through the retained biodiversity of the hedgerow and trees.

11.13 Executive Summary

The retention submission of the Recycling Centre along the R122 is a welcome improvement in development terms, the Recycling Centre takes advantage of the granted building and public realm and is in keeping with the character of the location, with retention of existing field boundaries of hedgerows and trees.

The proposed development shall integrate with the surrounding landscape. This development shall be an addition to the existing urban fabric of St. Margaret's, and shall, as a business, provide employment.

Despite this the development shall 'not interfere with the character of highly sensitive areas or with a view or prospect of special amenity value.'

The development shall provide a coherent ordering of buildings and external spaces and present a positive visual impact upon landscape and shall retain the existing field structure. The Recycling Centre reflects the original agricultural yard and shed, albeit with a different function.

We would concur with the Planning report that 'the proposed development if permitted would not result in a significant impact from any of the protected or surrounding view points.

It is our belief that the proposed Recycling Centre is a welcome addition to the fabric of St Margaret's, with no visual impact upon the surrounding landscape.

Therefore, the impact upon the nature of the surrounding landscape shall be positive in the long term, improving the visual aspect of the entrance to St. Margaret's, and acting as an important commercial centre for the area. The additional hardstanding shall be removed and returned to grassland, this and the retention of the existing hedgerows make this development seamless in the existing agricultural typology of the locality. The screening and retention of hedgerows makes the biodiversity and habitat sustainable in the long run and is therefore a positive long-term addition to the area.

11.13 References

- Fingal County Council Development Plan 2023 - 2029
- Advice Notes on Current Practice in the preparation of Environmental Impact Statements (1995)
- Guidelines on the Information to the Contained in Environmental Impact Statements (2002).
- Revised Guidelines on the information to be contained in Environmental Impact Statements Draft (September 2015)
- Guidelines On the Information to Be Contained in Environmental Impact Assessment Reports Draft (August 2017)
- Landscape Institute and Institute of Environmental Management & Assessment (2013). Guidelines for Landscape and Visual Impact Assessment.
- Planning and Development, Act 2000, as amended.
- EPA EIAR Guidelines (August 2017)
- Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs) - Technical Guidance Note 1/20 (10 Jan 2020) – Landscape Institute

12.0 Material Assets

12.1 Introduction/Methodology

The prescribed environmental factor of Material Assets is described in the 2022 EPA Guidelines as including built services and infrastructure. This chapter is written on behalf of CWPA by Rachel Kenny. Rachel Kenny is a senior planning consultant with CWPA, Planning & Architecture consultancy, and has 30 years' experience as a planner in public and private sector organisations, including Fingal, Meath, and Louth County Council and An Bord Pleanála (as Director of Planning). She holds a degree in Civil Engineering (be (Civil) (Hons) and Masters in Regional and Urban Planning (MRUP), both from University College Dublin. She is a fellow and corporate member of the Irish Planning Institute. She has experience in both forward planning and development management, and specialises in, inter alia, Strategic Infrastructure Development, and large scale EIAR projects.

The related topics of water (supply and wastewater) and roads and traffic are separately addressed in other chapters of this EIAR, principally:

- Chapter 8 Water & Hydrology
- Chapter 13 Traffic & Transportation
- Chapter 14 Waste Management

This chapter covers the proposals for built services (except traffic) – comprising energy demand and supply (electrical and gas) and water services.

12.2 The Subject Development

"Permission is sought by St. Margaret's Recycling & Transfer Centre Ltd. at St. Margaret's Metal Recycling, Sandyhill, St. Margaret's, Co. Dublin, under substitute consent provisions, for the

Retention of:

1. Enabling Ancillary Works, including, but not limited to, that subject of permissions under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109, e.g. ancillary and enabling works/infrastructure, comprising amendments to site access and boundary arrangements including dust mitigation measures, access and gateway, above and below ground surface water drainage, septic tank, fire water storage and retention (105m3), attenuation and storage tanks (206m3), truck and vehicle parking,

2. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility, and authorised facility for the

treatment of 'end of life vehicles' (ATF for ELVs). Existing development comprises the weighbridge, offices, recycling and transfer/industrial buildings, hard standing, car parking, plant and machinery, detailed below:

a. Prefabricated cabins (2no.) - 177sqm. - comprising ancillary offices, staff facilities, control room;

b. Prefabricated w/c & Steel Container (store) - 29 sqm;

c. Recycling and transfer/Industrial buildings 1917 sqm;

d. Weighbridge; and

e. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.

3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6 ha (permitted under F97A/0109) to 1.75ha of which 1.6ha is associated with waste permit, and additionally lands comprising site access, proprietary wastewater treatment system, installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system.

4. Historic use of 1.6 ha of the site (as per Waste Permit area under WFP-FG-13-0002-03), as a waste transfer recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, during the period 2019 to 2023, where waste throughput at the facility rose from 26,000 to 42,500 tonnes per annum, without the benefit of planning permission, and from 2024 onwards operations comprising waste throughput of 21,900 tonnes per annum.

5. Historic use (i.e. 2009 to 2023) of lands comprising 1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity,

6. Restoration of c.1.1 ha of the above noted compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands, in compliance with conditions 3 and 6 of F13A/0409.

7. On-going use of the existing metal processing and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

Separately, but in tandem, the applicant is seeking permission as part of the substitute consent application for a proposed development comprising the on-going/future use of the site and

facility to enable annual waste throughput of up to 21,900 tonnes per annum. This 'permission' element is addressed in a separate EIAR and NIS submitted with the application.

12.3 The Receiving Environment

The immediate environs of the facility are primarily industrial in nature and surrounded by agricultural land. Due to this the following assessment has been carried out with respect to the material assets of the site and environs only.

12.4 Energy Demand

Electrical Supply

The existing facility has solar panels installed on the roof of the main shed. Currently 53% of the electrical consumption is being powered by solar power, with the rest being provided from the national grid. Due to the use of solar power on the site, 30 metric tons of CO2 equivalent is saved annually compared to standard electricity from the national grid. The granting of permanent planning permission makes improvements in terms of energy generation viable as the site can improve infrastructure with the view to the longer term.

Diesel Engines

Hammermill and Shredder powered by Diesel engines/generators.

12.5 Water

Potable Water

Water sourced from the local mains water network is utilised for wash water and drinking water. Groundwater sourced from PW1 is used for on-site toilets.

Foul Water

Welfare facilities (canteen and toilets) are sited in the northwestern corner of the site. Domestic wastewater from these sources is transferred to an existing on-site septic tank. Treated effluent from the wastewater treatment system is discharged to ground via an existing percolation area, approximately 120m2. The percolation area was designed, with installation supervised and certified by EnviroPro Ltd in 2013.

Firewater Retention

Above and below ground surface water drainage, including fire water storage and retention (105m3), as well as attenuation and storage tanks (206m3) has been provided on site, and to date has proven sufficient to meet the needs of the site and operations.

12.6 Vehicle Fuel Usage

The construction phase associated with the retention element of the application is limited, however diesel was used in excavators and other construction machinery on site, during the construction of c.0.1ha of concrete area, and will be used during the topsoiling and planting of c.1.1 ha of land to be returned to agricultural use.

During the operation phase diesel has been and will continue to be used by forklifts or similar machinery transporting de-polluted vehicles within the site. Electricity has and will continue to be used on-site for lighting, power tools, etc., a portion of which can be obtained from renewable sources on site.

If permanent planning is granted for the site, there is an intention over time, for all vehicles on site to be powered by electricity to decrease the CO2 emissions from the site. This electricity would be supplemented by solar power generated on site.

12.7 Predicted Impacts

It is considered that there is sufficient capacity within the utility supplies to the site to accommodate the ongoing operation of the facility. Therefore, the material assets are not anticipated to be impacted by the development.

The overall predicted impact of the existing and ongoing operation of the facility can be classed as long-term and negligible with respect to material assets.

Construction Phase

There would have been a slight increase in fossil fuel usage during any construction phase of the development. Due to the small amount of construction machinery used, it is predicted that the impact would have been short-term and negligible.

There is predicted to have been no change in the usage of electricity or water during the construction phase.

Operational Phase

When the permanent planning permission is granted some positive significant changes to the material assets will be planned as St Margaret's Recycling and Transfer Station Ltd will invest in more electric driven plant and sustainable energy generation as promoted in the Fingal Development Plan 2023-2029:

Policy IUP33 – Renewable Energy - Continue to develop and implement climate action and energy related initiatives in Fingal and continue to support the recording and monitoring of renewable energy potential in Fingal in partnership with other stakeholders including the East Midlands Regional Assembly EMRA, the Dublin Energy Agency (Codema) and the Climate Action Regional Office (CARO).

The predicted impacts will be ***long term, positive*** *and* ***moderate***.

Do-Nothing Scenario

In that this application relates to retention, the alternative "do nothing" does not apply, in that the "do nothing," i.e. "do nothing development" did not occur.

However, in looking at a scenario where the applicant allowed the temporary permission to expire and the existing recycling centre to be discontinued, this would have resulted in the closure of an essential piece of waste infrastructure for Fingal, a reduction in waste recycled within the Fingal Area and indeed job losses for the local community.

This would be contrary to the following policies and objectives set out in the Fingal Development Plan 2023 – 2029 (which also pertained to the 2017-2023 Plan):

- Policy IUP22 – Transition From A Waste Economy Towards A Green Circular Economy: "Support the principles of transition from a waste economy towards a green circular economy and implement good waste management and best practices to enable Fingal to become self-sufficient in terms of resource and waste management and to enhance employment and increase the value recovery and recirculation of resources, in accordance with the Whole-of-Government Circular Economy Strategy 2022."
- Objective IUO29 – Sustainable Waste Recovery And Disposal: "Provide for, promote and facilitate high quality sustainable waste recovery and disposal infrastructure/technology in keeping with the EU waste hierarchy, national legislation and regional waste management policy to adequately cater for Fingal's growing population."
- Policy IUP24 – Recycling / Re-Use: "Promote and encourage the establishment of re-use, recycling and repair activities to prevent and minimise waste generation and disposal, in accordance with the Eastern Midlands Region Waste Management Plan 2015–2021 (or any subsequent plan)."

- Policy IUP33 – Renewable Energy - Continue to develop and implement climate action and energy related initiatives in Fingal and continue to support the recording and monitoring of renewable energy potential in Fingal in partnership with other stakeholders including the East Midlands Regional Assembly EMRA, the Dublin Energy Agency (Codema) and the Climate Action Regional Office (CARO).
- Policy IUP10 – Water Conservation and SuDS - Promote the inclusion of water conservation and SuDS measures in all developments, to reduce the level of surface water run-off, improve water quality and contribute to adaptation to climate change through natural solutions.

12.8 Mitigation and Monitoring Measures

Construction Phase

There are no mitigation measures necessary for material assets during the construction phase.

Operational Phase

When the permanent planning permission is granted some significant changes to the material assets, St Margaret's Waste Recycling and Transfer Centre Ltd will be in a position to invest in more electric driven plant and sustainable energy generation, as this is part of their ongoing ESG strategy. The predicted impacts will be ***long term, positive*** *and* ***moderate.***

12.9 Residual Impacts

Construction Phase

There is predicted to have been no residual effects on the material assets during the construction phase.

Operational Phase

There is predicted to been and will continue to be no residual effects on the material assets during the operational phase.

12.10 Cumulative Impact

There will be no cumulative impacts on the material assets with other developments.

12.11 References

- Environmental Protection Agency (EPA) Advice notes on current practice in the preparation of Environmental Impact Statement (EPA, 2015)
- Guidelines on the Information to be contained in Environmental Impact Statements (EPA, 2022).
- Environmental Impact Assessment of Projects, Guidance on the preparation of the Environmental Impact Assessment Report (European Commission, 2017

13.0 Traffic & Transportation

13.1 Introduction/Methodology

13.1.1 Introduction

This chapter of the Remedial Environmental Impact Assessment Report (rEIAR) provides an assessment of the impact that the existing development / use subject of retention, in combination with the existing and permitted development on the subject site at St Margaret's Metal Recycling at Sandyhill, St Margarets, Co Dublin, has had and would have, if permitted on the traffic and transportation infrastructure and network in the surrounding area.

This chapter sets out the existing receiving environment in terms of road conditions, traffic activity and transportation accessibility. It also describes the existing and permitted development in terms of operational traffic impact on the receiving environment.

This chapter was completed by Brian McCann, BE, MSc (Eng), DIC, CEng, FIEI, MIStructE, MConsEI. Brian McCann, BE, MSc (Eng), DIC, CEng, FIEI, MIStructE, MConsEI. Brian has in excess of 40 years' experience of transportation planning and assessment. Brian joined Waterman Moylan in 2005, where he has headed up the firm's traffic and transportation division and has played a leading role in the provision of traffic and transportation consultancy services for the firm. He works on a wide range of projects, including industrial and commercial development and has been responsible for all of the necessary engineering assessments and reports to secure planning permission, including Traffic Statements, Travel Plans and other technical reports required to accompany the planning applications.

A full description of the development can be found in Chapter 3: Description of Development of this rEIAR.

A Traffic & Transport Assessment (TTA) was prepared by Waterman Moylan in August 2024. The TTA presents survey data for the existing traffic conditions in 2019 and 2023 together with the ongoing transport demand that was generated by the development. The traffic generated during both the morning and evening peak times was also assessed. An assessment of the percentage impact of traffic on local junctions, and accessibility of the site by sustainable modes including walking, cycling and public transport is included. The TTA also addresses the existing capacity on the public transport network.

13.1.2 Methodology

This chapter of the rEIAR assesses the historic use of the subject site during the period from 2019 to 2023. The methodology for the preparation of this chapter included: -

(a) Desktop review of the documentation provided by the project design team.
(b) Visits to the site and surrounding area including survey of existing transportation facilities and observation of traffic movements.
(c) Review of public transport services, routes, and timetables.
(d) Review of proposals for transportation improvements by Transport Infrastructure Ireland (TII), National Transport Authority (NTA) and Fingal County Council (FCC).
(e) Review of trips to and from the development for different annual waste throughputs
(f) Review of public transport, both existing and proposed.
(g) Assessment of the transportation impacts of the development.
(h) Assessment of the mitigation and monitoring measures in place.

13.1.3 Standards

The Preliminary Traffic & Transport Assessment (PTTA) has been prepared in accordance with Section 14.17.4 Traffic and Transport Assessment of the Fingal County Development Plan 2023- 2029.

It has also been prepared in compliance with the requirements of the TII Traffic and Transport Assessment Guidelines and the UK's Institution of Highways and Transportation Guidelines.

13.1.4 Thresholds

Thresholds for transport assessments are set out in Table 2.1 of the TII Traffic and Transport Assessment Guidelines (2014).

Where traffic to and from a development does not exceed 10% of the traffic flow on the adjoining road, a transport assessment is not required.

This threshold reduces to 5% of the traffic flow on the adjoining road where congestion exists, or the location is sensitive.

13.1.5 Project Timescale

In compliance with the requirements of the Transport Assessment Guidelines (2014) which requires junction impact assessment at base year, year of opening, year of opening plus 5 years, and year of opening plus 15 years, the years for assessment have been expanded to incorporate the impact of differing waste throughputs in previous and future years.

The following timetable has been adopted for the transportation assessment of the subject development:

- 1997 Parent Planning Permission (Waste throughput of 21,000 tonnes)
- 2013 Planning Permission (Waste throughput of 22,250 tonnes)

- 2019 Base Year (Waste throughput of 33,524 tonnes)
- 2020 Outbreak of Covid-19 (Waste throughput of 26,233 tonnes)
- 2022 Lifting of Covid–19 Restrictions (Waste throughput of 42,522 tonnes)
- 2023 Opening Year - 1 (Waste throughput of 33,695 tonnes)
- 2024 Opening Year (Waste throughput of 21,900 tonnes)

- *2029 Design Year (Opening Year + 5) (Waste throughput of 21,900 tonnes)*
- *2039 Future Year (Opening Year + 15) (Waste throughput of 21,900 tonnes) (n/a for Retention)*

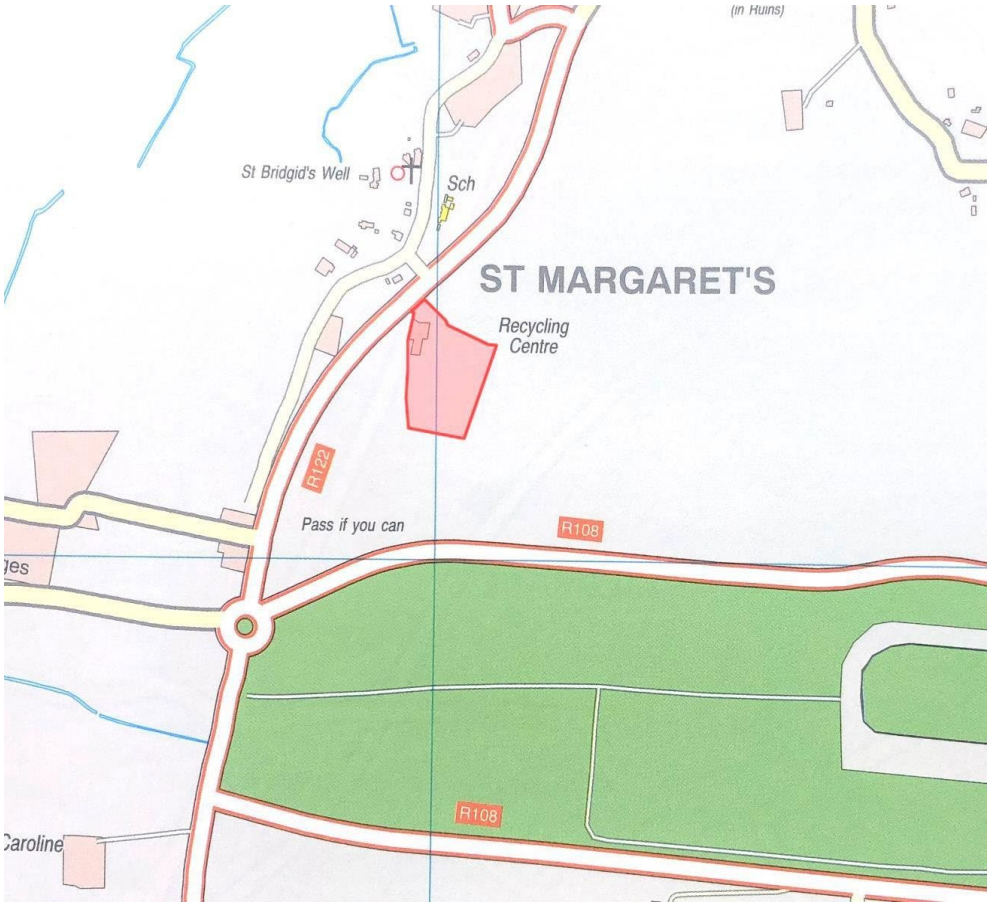
Traffic surveys were carried out at the site access in 2019 and again in 2023. The project timetable has been used in the assessment of the impact that the existing development / use subject of retention, in combination with the existing and permitted development on the subject site has had and would have, if permitted at its current intensity, on the traffic and transportation infrastructure and network in the surrounding area

13.2 Receiving Environment

13.2.1 Site Location

The site occupied by St Margaret's Metal Recycling is located on the R122 to the south of St Margaret's at Sandyhill, St Margaret's, Co Dublin as shown in Figure 13.1.

Figure 13.1 Location Map



13.2.2 Local Road Network

The R122 is a Regional Route linking Finglas to the south with Balbriggan to the north via St Margaret's, Naul and Oldtown.

It is a two-lane road with a carriageway width of 7.5 metres. In the area of the subject site, the alignment is relatively flat with a gentle horizontal curvature. See Figure 13.2.

Centreline road markings are dashed white lines in need of renewal with dashed yellow lines delineating the edges of the carriageway.

Grass verges are provided on both sides with a footpath for pedestrians along the west side. There are no cycle facilities on the R122.

Public lighting is provided from lamp standards along the west side.

The posted speed limit on the R122 in the area of the subject site is 80 kph.

Figure 13.2: R122 looking south near the entrance to the subject site.

13.2.3 Traffic Conditions

A classified traffic survey on the R122 St Margaret's Road at the entrance to the subject site was carried out by Traffinomics Ltd on Wednesday 3rd April 2019 some 2.5 weeks before Easter which fell on 21st April 2019. The survey covered the 12-hour period between 07.00 and 19.00. The survey confirmed the AM and PM Peak Hours to be 08:00 – 09:00 and 17:00 – 18:00.

The 12-hour traffic flow recorded on the R122 was 6,468 vehicles northbound at the subject site and 7,551 vehicles southbound. The HGV content recorded was 11% northbound and 10% southbound. The total flows for the R122 included 55 buses travelling northbound and 68 buses travelling southbound.

The 2019 survey recorded a total of 178 arrivals to the recycling centre and 170 departures during the 12-hour survey period. These were almost equally divided between cars, LGV and HGV.

A second traffic survey was carried out by IDASO on Wednesday 18th October 2023 some two weeks before the Halloween school break. The survey covered the 24-hour period between 00.00 and 00.00. The survey confirmed the AM and PM Peak Hours to be 08:00 – 09:00 and 17:00 – 18:00.

The 12-hour traffic flow recorded on the R122 was 12,950 vehicles at the subject site with 5,893 vehicles travelling northbound and 7,057 vehicles travelling southbound. The HGV content recorded was 10% northbound (606 vehicles) and 9% southbound (632 vehicles). The total flows for the R122 included 66 PSV travelling northbound and 97 PSV travelling southbound (97 vehicles).

The 2023 survey recorded a total of 115 arrivals to the recycling centre and 121 departures during the 12-hour survey period. There were only 3 arrivals and 0 departures outside the 07.00 – 19.00 period.

A comparison between the results of the 2019 and 2023 surveys revealed that all of the surveyed traffic movements fell between the pre-Covid survey in 2019 and the post-Covid survey in 2023.

Traffic conditions on the R122 St Margaret's Road at the access to the subject site are generally free flowing save for occasional short duration incidents or accidents.

13.2.4 Site Access

Access to the site is from the R122 via a 9.0-metre-wide gateway on the east side of the R122 set back some 25.0 metres from the edge of the carriageway. See Figure 13.3.

To the north (right), the sightline exceeds the required standard of 160 metres for a Regional Road with a posted speed limit of 80 kph. However, the existing 60 metre sightline to the south (left) can fall below standard as a result of the maturing growth along the western boundary.

Figure 13.3: Site Access from R122 St Margaret's Road

13.2.5 Public Transport Facilities

Bus services in the area of the development are a combination of long-established services operated by Dublin Bus and new services to be provided under the auspices of Bus Connects.

R122 St Margaret's Road
Dublin Bus Route 40b links Parnell Street with Toberburr along St Margaret's Road. There are 6 services in each direction each day on this route.

There are no bus stops on the R122. The existing bus stops in St Margaret's Village are located at a walking distance of 3 minutes (290 metres) from the subject site.

St Margaret's Village
Route 196 operated by TFI Local Link links Swords Pavilion to St Margaret's Village.
The service operates 15 times per day in both directions between 07.00 and 20.00.

The present terminus of Local Link Route 196 is in St Margaret's Village at a walking distance of 3 minutes (290 metres) from the subject site.

Junction R122 and R108

Dublin Bus Route 83: Kimmage – Harristown operates along the R122 and R108 between the City Centre and Harristown at a frequency of 12 minutes in both directions.
The junction of the R122 / R108 to the south of the subject site is located at a walking distance of 12 minutes (950 metres) from the subject site.

Bus Connects

Proposals by Bus Connects for the Finglas area envisage the following routes serving the subject site as illustrated in Figure 13.4: -

- City Bound Route 24: Dublin Airport – Merrion Square
- Local Route L89: Finglas - Swords

It is expected that these services could be altered and / or extended as the surrounding area develops.

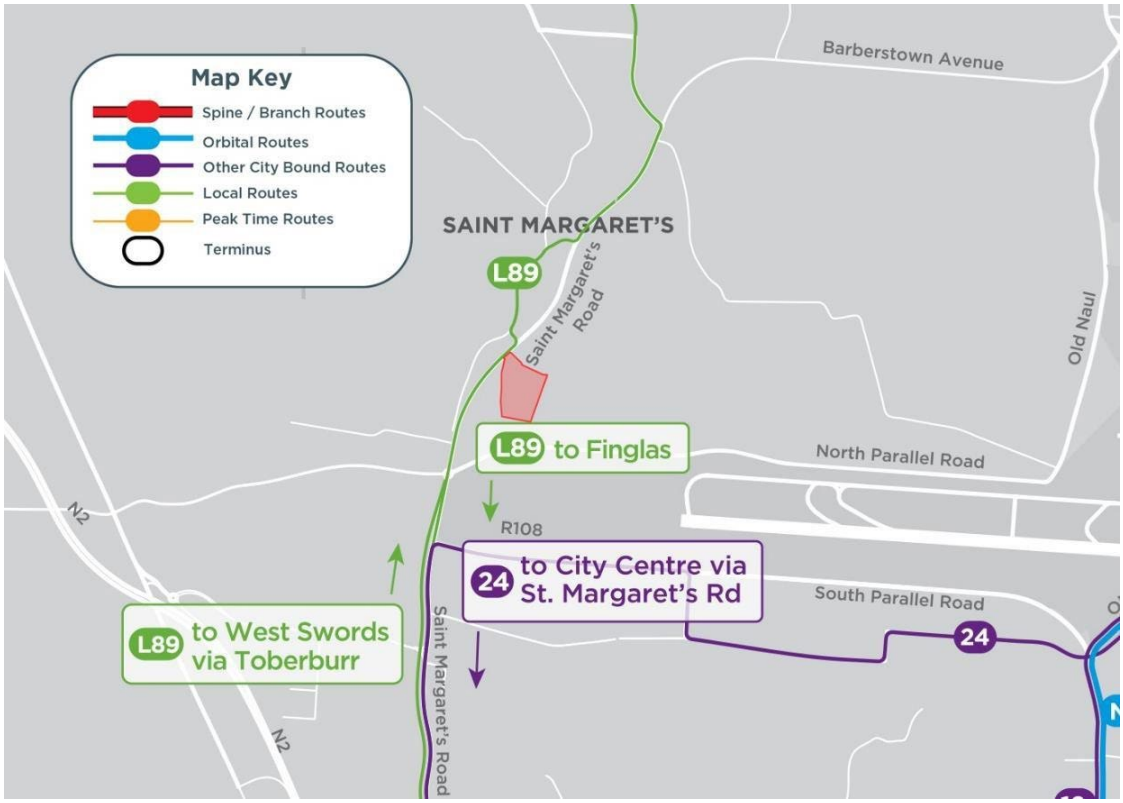


Figure 13.4: Extract from Bus Connects Map for Finglas Area

13.3 Characteristics of the Development

13.3.1 Description of Existing Development

"Permission is sought by St. Margaret's Recycling & Transfer Ltd. at St. Margaret's Recycling & Transfer, Sandyhill, St. Margaret's, Co. Dublin, under substitute consent provisions, for -

Retention of:

1. Enabling Ancillary Works, including, but not limited to, that subject to permissions under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109, including amendments to site access and gateway, boundary arrangements, dust mitigation measures, installation of an impermeable concrete surface over c.1.75 ha, above and below ground surface water drainage, septic tank, fire water storage and retention tanks (105m3), surface water attenuation and storage tanks (206m3), truck and vehicle parking,
2. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility, and authorised facility for the treatment of 'end of life vehicles' (ATF for ELVs). Existing development comprises the weighbridge, offices, recycling and transfer/industrial buildings, hard standing, car parking, plant and machinery, detailed below:
    a. Prefabricated cabins (2no.) - 177sqm. - comprising ancillary offices, staff facilities, control room;
    b. Prefabricated w/c & Steel Container (store) - 29 sqm;
    c. Recycling and transfer/Industrial buildings of 1917 sqm;
    d. Weighbridge; and
    e. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.
3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6 ha (permitted under F97A/0109) to 1.75ha of which 1.6ha is associated with waste permit with additional lands comprising site access, proprietary wastewater treatment system, installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system.
4. Historic use of 1.6 ha of the site (as per Waste Permit area under WFP-FG-13-0002-03), as a waste transfer recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, during the period 2019 to 2023, where waste throughput at the facility

ranged from c.26,000 to 42,500 tonnes per annum, without the benefit of planning permission, and from 2024 onwards with operations comprising waste throughput of up to 21,900 tonnes per annum.

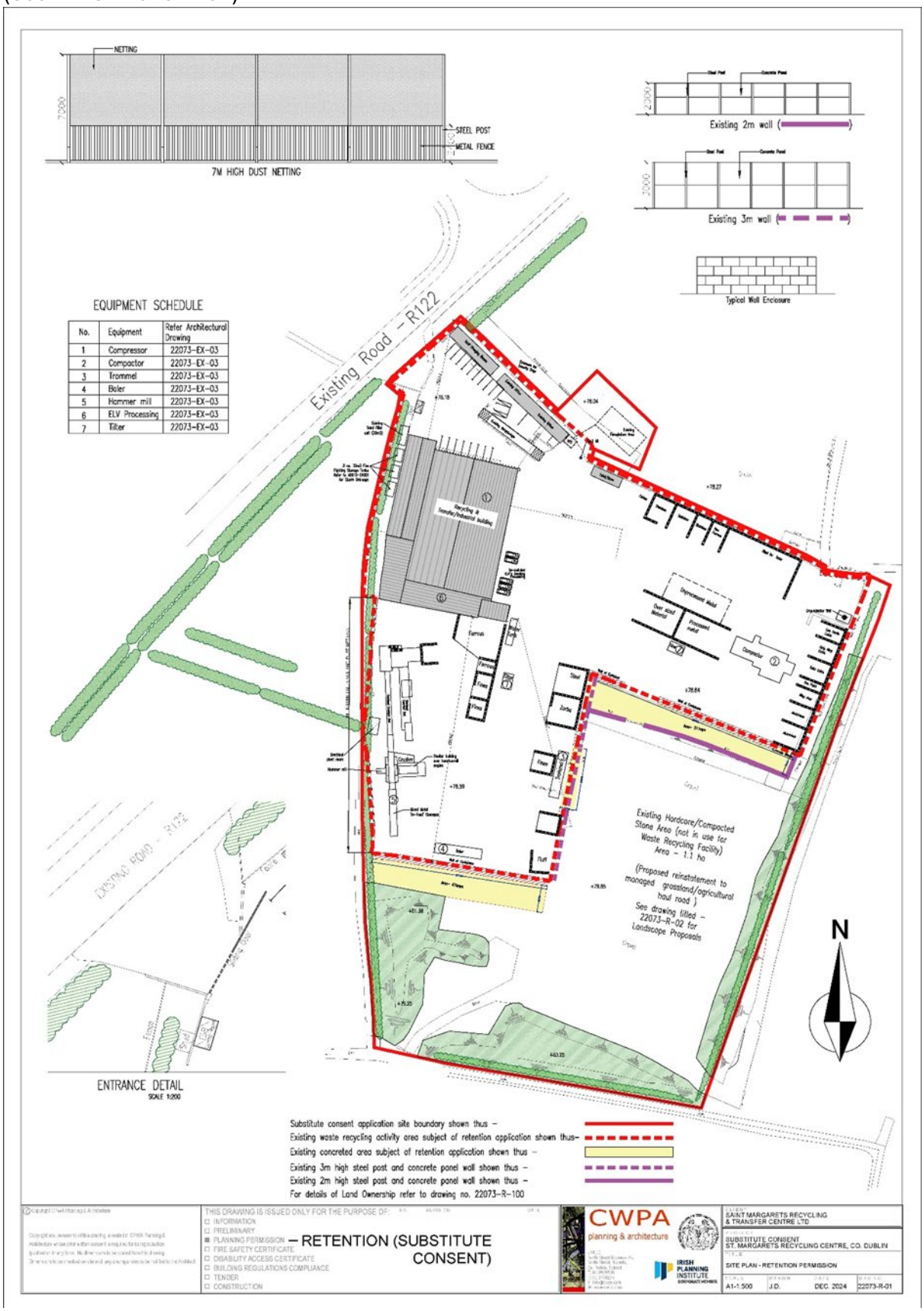
5. Laying out and historic use (i.e. 2009 to 2023) of lands comprising c.1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity, and existence as a hardstanding area to date, pending restoration.

6. Proposed restoration of c.1.1 ha of the above compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands, in compliance.

7. On-going use of the existing metal processing and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

Separately, but in tandem, the applicant is seeking permission as part of the substitute consent application for a proposed development comprising the on-going/future use of the site and facility to enable annual waste throughput of up to 21,900 tonnes per annum. This 'permission' element is addressed in a separate EIAR and NIS submitted with the application.

Figure 13.5 below (Indicative) - Existing site layout (as per Retention)
(See DWG 22073-R-01)



13.3.2 Site Access

Access to the site is from the R122 through a 9.0-metre-wide gateway on the east side of the R122 set back some 25.0 metres from the edge of the carriageway. See Figure 13.3.

The existing sightlines at the access to the subject site from St Margaret's Road at a setback of 3.0metres are 60 metres to the left (south) and in excess of 160 metres to the right (north).

The sightline to the left (south) from 60 metres to 160 metres is being increased by cutting back the existing boundary hedge to a point 3m from the roadside edge. Sightline visibility is maintained by ongoing maintenance of the existing hedgerow.

13.3.3 Car Parking

Based on the standards in the County Development Plan, the car parking for the subject site is a maximum of 45 spaces calculated as follows: -

•	Offices	177 sqm x 1 spaces per 40sqm	5 spaces
•	Industrial buildings	1,950 sqm x 1 spaces per 50sqm	40 spaces
		Total	45 spaces

However, as the offices comprise staff facilities and are operated in tandem with the Industrial building there is a significant overlap of parking requirements. Additionally, the above exceeds staff on site and visitors to site. The existing car parking provision at the subject site is 20 spaces as shown in Figure 13.5 and on the drawings accompanying the planning application.

13.3.4 Truck Parking

The existing truck parking at the subject site is located on the concrete hard standing as shown in Figure 13.5 and on the drawings accompanying the planning application.

13.3.5 Cycle Parking

Based on the standards in the County Development Plan, the cycle parking for the subject site is a total of 56 spaces comprising 45 long stay spaces for staff and 11 short stay spaces for visitors.

The staff travel survey in 2022 recorded that none of the max.30 staff travelled by bicycle.

13.4 Existing and Predicted Impacts

13.4.1 Construction Phase

There are no existing or predicted impacts arising from the construction stage which has been completed.

13.4.2 Operational Phase 2019 Surveyed Traffic Flows

The traffic movements for the access junction to the subject site during the AM Peak Hour 8 – 9 and the PM Peak Hour 5 – 6 as surveyed in April 2019 are set out in Figure 13.6.

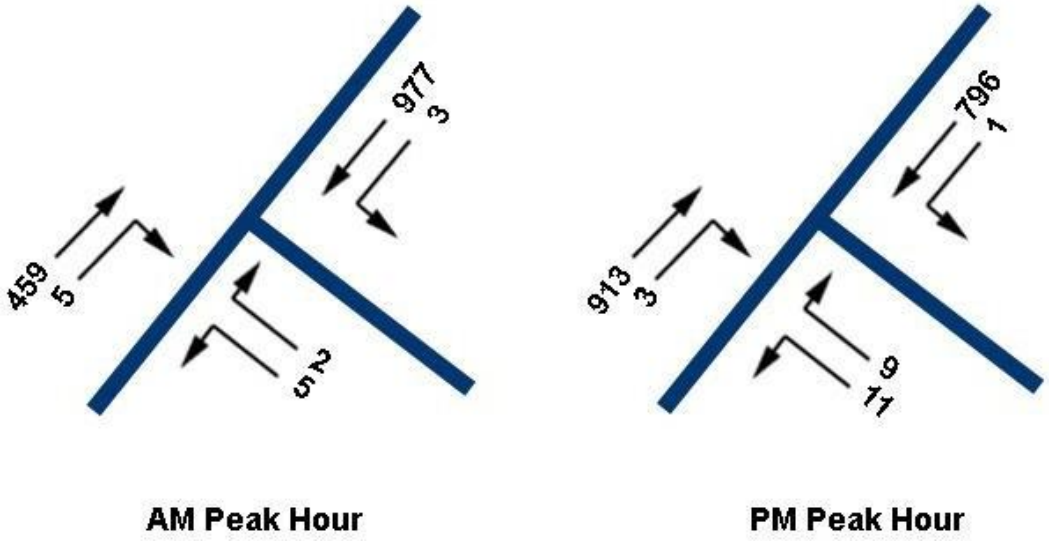


Figure 13.6: Surveyed Traffic Movements 2019

Trip Generation and Assignment

The surveyed traffic movements in Figure 13.6 are those generated by a waste turnover of 25,000 tonnes per annum in 2019. They include 8 arrivals and 7 departures during the AM Peak Hour 8 – 9 and 4 arrivals and 20 departures during the PM Peak Hour 5 – 6.

Modelling Background

The existing access to the subject site from St Margarets Road was assessed using the computer program PICADY which is a software for modelling priority-controlled junctions. This programme utilises junction's geometry and traffic flows input by the user to determine Ratio of Flow to Capacity (RFC) and queue length for each link on the junction. Typically, a junction is said to be working satisfactorily when the RFC of each arm does not exceed 90% / 0.9. Acceptable RFC values are considered to be in the range of 0.8 to 1.0 with higher values indicating restrained movements.

The site access was modelled as a priority junction in its existing configuration. The HGV proportion was taken at 11% on the major road (R122) and 40% on the minor road (site access).

Results of Traffic Modelling 2019

The results of the junction assessment confirmed that the access from the R122 to the subject site operated satisfactorily and within capacity in 2019 for a waste throughput of 25,000 tonnes per annum.

13.4.3 Operational Phase 2023

Surveyed Traffic Flows

The traffic movements for the access junction to the subject site during the AM Peak Hour 8 – 9 and the PM Peak Hour 5 – 6 as surveyed in October 2023 are set out in Figure 13.7.

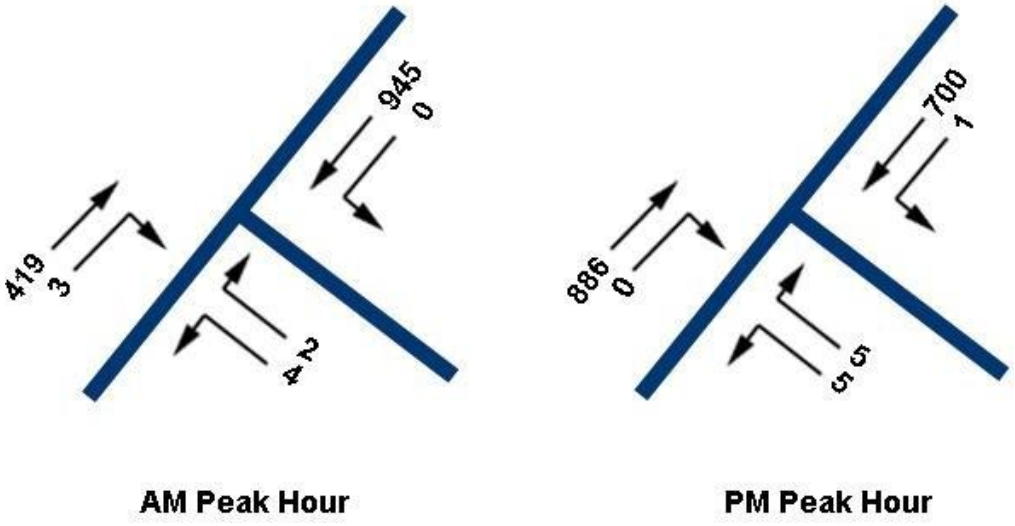


Figure 13.7: Surveyed Traffic Movements 2023

Trip Generation and Assignment

The surveyed traffic movements in Figure 13.7 are those generated by a waste turnover of 33,696 tonnes per annum in 2023. They include 3 arrivals and 6 departures during the AM Peak Hour 8 – 9 and 1 arrivals and 10 departures during the PM Peak Hour 5 – 6.

Modelling Background

The existing access to the subject site from St Margarets Road was assessed using the computer program PICADY which is a software for modelling priority-controlled junctions. This programme utilises the junction's geometry and traffic flows input by the user to determine Ratio of Flow to Capacity (RFC) and queue length for each link on the junction. Typically, a junction is said to be working satisfactorily when the RFC of each arm does not exceed 90% / 0.9. Acceptable RFC values are considered to be in the range of 0.8 to 1.0 with higher values indicating restrained movements.

The site access was modelled as a priority junction in its existing configuration. The HGV proportion was taken at 11% on the major road (R122) and 40% on the minor road (site access).

Results of Traffic Modelling 2023

The results of the junction assessment confirmed that the access from the R122 to the subject site operated satisfactorily and within capacity in 2023 for a waste throughput of 33,696 tonnes per annum.

13.4.4 Operational Phase 2029 and 2039

Base Traffic Flows

The base traffic flows for the Design Year 2029 and Future Year 2039 were obtained by factoring up the 2023 surveyed traffic flows using factors from the TII Publication – Project Appraisal Guidelines for National Roads Unit 5.3 – Travel Demand Projections (May 2021).

The projected base flows for the R122 at the access junction to the subject site during the period 7am – 7 pm are 14,011 vehicles in 2029 and 16,395 vehicles in 2039.

Development Traffic

Based on an ongoing waste throughput of 21,900 tonnes per annum from 2024, the traffic generated by the subject development in the Design Year 2029 and the Future Year 2039 will be less than the 118 arrivals and 121 departures generated in 2023 when the waste turnover was 33,695 tonnes per annum).

Traffic Impact

As the traffic generated by the subject development will continue to be significantly less than the 10% threshold set out in the Transport Assessment Guidelines published by TII in 2014, no further traffic assessment is required.

13.4.5 Transportation Impact

Roads

The extent of traffic impact from the development was determined by checking whether the total traffic generated by the subject development during the 12-hour period between 7am and 7pm exceeded 10% of the traffic flow on the adjoining road during the same period.

The traffic generated by the St Margarets Recycling & Transfer Centre varied from 186 vehicles per day for a waste throughput of 25,000 tonnes per annum in 2019 to 121 vehicles per day for a waste throughput of 33,696 tonnes per annum in 2023.

Externally, the traffic flow on the R122 over a period of 12 hours reduced from 14,019 vehicles in 2019 to 12,950 vehicles in 2023. The generated traffic was therefore equivalent to some 1 - 2% of the flow on the adjoining road.

As the traffic generated by the subject development was significantly less than the 10% threshold set out in the Transport Assessment Guidelines published by TII in 2014, no further traffic assessment is required.

This is borne out by the results of the discretionary PICADY junction assessment described in Sections 13.4.2 and 13.4.3.

Road Junctions

The results of the junction assessment confirmed that the access from the R122 to the subject site operated satisfactorily and within capacity for a waste throughput of 25,000 tonnes per annum in 2019 and 33,696 tonnes per annum in 2023.

Public Transport – Passenger Demand

Based on a staff of 18 -22 persons in 2019 and up to 29 persons in 2023 persons together with a modal split for public transport of 20%, the peak demand from the development for travel by bus was up to 6 passengers during the AM Peak.

Based on the location of the development, it is assumed that 50% of these passengers travelled from Finglas and 50% from St Margaret's.

Bus Capacity

Based on a review of the fleet of double deck buses operated by Dublin Bus in the area of the development, the average capacity of each bus including standing passengers was found to be 87 passengers per bus.

Demand v Capacity

The demand of 3 passengers per hour in each direction during the AM Peak Hour is significantly within the existing capacity of up to 400 passengers per hour provided by the current timetable for Dublin Bus Routes 40b, 83 and 196.

13.4.6 Summary

The conclusion of the Traffic and Transport Assessment was that the access junction from the R122 to the subject site operated satisfactorily and within capacity with a waste turnover of 25,000 tonnes per annum in 2019 and a waste turnover of 33, 696 tonnes per annum in 2023.

The TTA also concluded that the access junction from the R122 would continue to operate satisfactorily through the Design Year of 2029 to the Future Year of 2039 with a waste turnover of 21,900 tonnes per annum.

The public transport demand will be predominantly within the existing capacity of the bus services in the area of the subject site.

The impact of the subject development on the surrounding transportation network during recent years has been positive due to the mitigation measures implemented by the applicants of eliminating individual / smaller vehicles arriving at the site, and focussing on larger commercial waste collectors, thereby reducing vehicle numbers to / from the site, and improving efficiency and recycling capabilities on site.

As a result of these mitigation measures, there has been a 33% reduction in the number of vehicles accessing the site between 2019 and 2023. This reduction has significantly reduced the Ratio of Flow to Capacity for the access junction notwithstanding the normal increases in traffic flow on the R122.

13.5 Mitigation and Monitoring Measures

13.5.1 Construction Phase

No mitigation and monitoring measures are proposed for the construction phase which has been completed.

13.5.2 Operational Phase

The mitigation measures in place at the St Margaret's Metal Recycling are based on an ongoing transfer of incoming waste from a combination of private cars, vans and trucks to trucks operated by the larger licensed waste collection companies and trade / construction companies resulting in an ongoing reduction in the number of vehicle accessing the site each day.

Other ongoing mitigation and monitoring measures during the Operational Phase include:

(a) Monitoring of truck numbers and weights of incoming waste loads.
(b) Ongoing maintenance of the sightline to the south of the access onto the R122.

Due to the mitigation measures outlined above, the residual impact of the development during the operational stage is moderate, positive and long term for the duration of the operation of the St Margaret's Metal Recycling.

As a consequence, no further mitigation measures are required over and above those already in place.

13.6 Residual Impacts

13.6.1 Construction Phase

The applicants are not aware of any residual impacts on traffic and transportation arising from the construction phase.

13.6.2 Operational Phase

During the Operational Stage, there has been a decrease in the use of the surrounding road network by vehicles accessing the development.

The residual impact for operational traffic is likely to have a positive, long term moderate impact which will improve safety at the site access.

There is also enhanced safety for vehicle movements existing the site onto the R122 St Margaret's Road arising from the ongoing maintenance of the sightline to the south.

13.7 Cumulative Impact

For the purpose of cumulative impact, the Traffic and Transport Assessment Guidelines, issued by TII in May 2014 require that 'Traffic and Transport Assessment should consider all committed developments within the vicinity of the site. This includes sites which have previously been granted planning permission, but which are yet to become operational as well as any planning applications that have been submitted but have yet to be determined.'

No other significant construction projects have been identified in the area of the subject site which has or could result in a significant cumulative impact on Traffic and Transportation either during the construction or operational phases.

However, measures currently being considered by NTA, TII and Fingal County Council for the intensification of public transport services and cycle facilities in the surrounding area are likely to have a cumulative long term significant impact.

13.8 Monitoring & Reinstatement

13.8.1 Construction Phase

Construction of the development has been completed and all monitoring / reinstatement measures have been addressed.

13.8.2 Operational Phase

During the Operational Phase, the applicants monitor the operation of the access from the R122 on an ongoing basis and with a view to advising Fingal County Council in relation to any operational or safety issues noted.

No reinstatement is proposed during the Operational Stage other than the ongoing maintenance of roads, footpaths, buildings, and services.

13.9 References

The following documents were reviewed by Waterman Moylan during the preparation of this chapter of the Preliminary TTA and Remedial EIAR: -

- Fingal County Development Plan 2023 – 2029.
- Greater Dublin Area Transport Strategy 2022 – 2042, NTA
- Traffic and Transport Assessment Guidelines, TII, May 2014
- Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated, and compact grade separated junctions), TII, May 2023.
- Project Appraisal Guidelines for National Roads Unit 5.3 – Travel Demand Projections, TII, May 2021.

The extent to which these various documents have been consulted is set out in the Traffic and Transport Assessment and in earlier sections of this chapter.

14.0 Waste Management

14.1 Introduction/Methodology

14.1.1 Methodology

The assessment of the impacts of the proposed development, arising from the consumption of resources and the generation of waste materials, was carried out taking into account the methodology specified in relevant guidance documents, along with an extensive document review to assist in identifying current and future requirements for waste management; including national and regional waste policy, waste strategies, management plans, legislative requirements and relevant reports.

This section of the application was written by Martijn Leenheer. Martijn holds a 1st Class BSc (Hons) degree in Environmental Science from Atlantic Technological University (previously IT Sligo) and has 11 years' experience in Ireland in soil remediation, invasive species commercial Wastewater Treatment, Discharge Licences, Waste Permits and Licences has been involved in Risk Assessments, NIS and EIAR reports for various commercial projects. Before moving to Ireland Martijn worked in the Netherlands as an Environmental Field Technician in soil research. He has been an Operations Director of Environmental Services Consultancy for 11 Years and a Founding Director of ESC Environmental LTD since 2021.

This Chapter is based on the proposed development, as described in Chapter 4 (Description of the Proposed Development), and considers the following aspects:

- Legislative context;
- Construction phase (including site preparation, demolition, excavation, and construction); and
- Operational phase.

A desktop study was carried out which included the following:

- Review of applicable policy and legislation which creates the legal framework for resource and waste management in Ireland;
- Description of the typical waste materials that will be generated during the Construction and Operational phases; and
- Identification of mitigation measures to prevent waste generation and promote management of waste in accordance with the waste hierarchy.

14.1.2 Legislation and Guidance

Waste management in Ireland is subject to EU, national and regional waste legislation and control, which defines how waste materials must be managed, transported and treated. The overarching EU legislation is the Waste Framework Directive (2008/98/EC) which is transposed into national legislation in Ireland. The cornerstone of Irish waste legislation is the Waste Management Act 1996 (as amended). European and national waste management policy is based on the concept of 'waste hierarchy,' which sets out an order of preference for managing waste (prevention > preparing for reuse > recycling > recovery > disposal) (Figure 14.1).

Figure 14 1 Waste Hierarchy (Source: European Commission)

EU and Irish National waste policy also aims to contribute to the circular economy by extracting high- quality resources from waste as much as possible. Circular Economy (CE) is a sustainable alternative to the traditional linear (take-make-dispose) economic model, reducing waste to a minimum by reusing, repairing, refurbishing and recycling existing materials and products. (Figure 14.2).

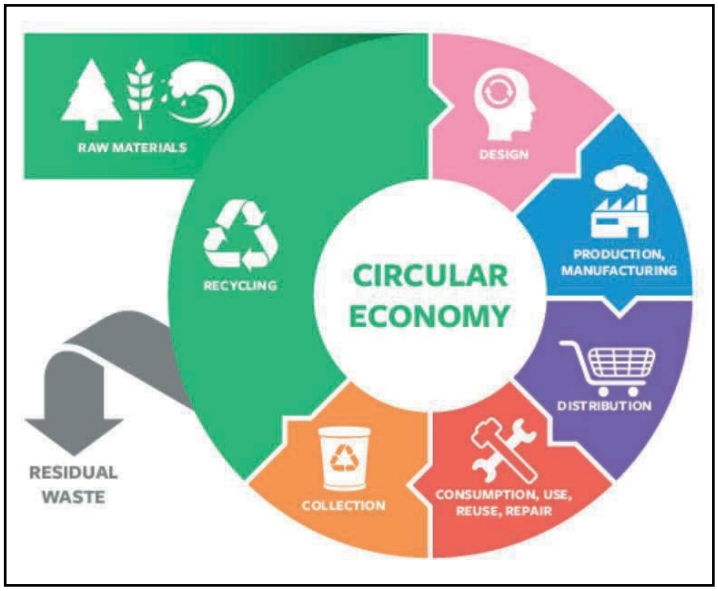


Figure 14 2 Circular Economy (Source: Repak)

The Irish Government issues policy documents which outline measures to improve waste management practices in Ireland and help the country to achieve EU targets in respect of recycling and disposal of waste. The most recent policy document, Waste Action Plan for a Circular Economy – Waste Management Policy in Ireland, was published in 2020 and shifts focus away from waste disposal and moves it back up the production chain. The move away from targeting national waste targets is due to the Irish and international waste context changing in the years since the launch of the previous waste management plan, A Resource Opportunity, in 2015.

One of the first actions to be taken from the WAPCE was the development of the Whole of Government Circular Economy Strategy 2022-2023 'Living More, using Less' (2021) to set a course for Ireland to transition across all sectors and at all levels of Government toward circularity and was issued in December 2021.

The Circular Economy and Miscellaneous Provisions Act 2022 was signed into law in July 2022. The Act underpins Ireland's shift from a "take-make-waste" linear model to a more sustainable pattern of production and consumption, which retains the value of resources in our economy for as long as possible and that will significantly reduce our greenhouse gas emissions. The Act defines Circular Economy for the first time in Irish law, incentivises the use of recycled and reusable alternatives to wasteful, single-use disposable packaging, introduces a mandatory segregation and incentivised charging regime for commercial waste, streamlines the national processes for End-of-Waste and By-Products decisions.

The strategy for the management of waste from the construction phase is in line with the requirements of the EPA's 'Best Practice Guidelines for the Preparation of Resource and Waste Management Plans for Construction & Demolition Projects' (2021). The guidance documents, Best Practice Guidelines for the Preparation of Waste Management Plans for Construction and Demolition Projects and Construction and Demolition Waste Management: A Handbook for Contractors and Site Managers (FÁS & Construction Industry Federation, 2002), were also consulted in the preparation of this assessment.

There are currently no Irish guidelines on the assessment of operational waste generation, and guidance is taken from industry guidelines, plans and reports including the Eastern Midlands Region (EMR) Waste Management Plan 2015 – 2021, BS 5906:2005 Waste Management in Buildings – Code of Practice, the Meath County Council (Storage, Presentation and Segregation of Household and Commercial Waste) Bye-Laws (2018), the EPA National Waste Database Reports 1998 – 2018 and the EPA National Waste Statistics Web Resource Terminology.

Note that the terminology used herein is consistent with the definitions set out in Article 3 of the Waste Framework Directive. Key terms are defined as follows:

Waste - Any substance or object which the holder discards or intends or is required to discard.

Prevention - Measures taken before a substance, material or product has become waste, which reduce:

- the quantity of waste, including through the re-use of products or the extension of the life span of products;
- the adverse impacts of the generated waste on the environment and human health; or
- the content of harmful substances in materials and products.

Reuse - Any operation by which products or components that are not waste are used again for the same purpose for which they were conceived.

Preparing for Reuse - Checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they can be re-used without any other pre-processing.

Treatment - Recovery or disposal operations, including preparation prior to recovery or disposal.

Recovery - Any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy. Annex II of the Waste Framework Directive sets out a non-exhaustive list of recovery operations.

Recycling - Any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.

Disposal - Any operation which is not recovery even where the operation has as a secondary consequence the reclamation of substances or energy. Annex I of the Waste Framework Directive sets out a non-exhaustive list of disposal operations.

14.1.2.1 Fingal Development Plan 2017-2023

Relevant policies from the previous Development Plan, which was in place during the period 2019 to 2023, during which time the development was 'unauthorised', and the substitute consent application relates are listed below:

Strategic Policy (section 1.6)

> *18. Secure the timely provision of infrastructure essential to the sustainable development of the County, in particular in areas of resource and waste management, energy supply, renewable energy generation and Information and Communications Technology (ICT)*
>
> *22. Minimise the County's contribution to climate change, and adapt to the effects of climate change, with particular reference to the areas of land use, energy, transport, water resources, flooding, waste management and biodiversity, and maximising the provision of green infrastructure including the provision of trees and soft landscaping solutions*

Objective RF93

> *Encourage the recycling of construction and demolition waste to reduce the need for extraction.*

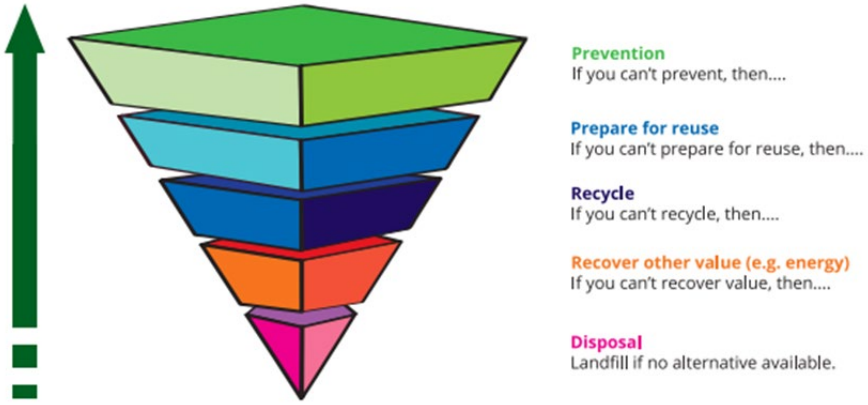


Figure 14.3: Waste Hierarchy

Fingal County Plan relies on and incorporates the Eastern Midlands Region Waste Management Plan, 2015-2021, as follows –

> *"The Eastern Midlands Region Waste Management Plan 2015 -2021 was adopted in May 2015. The overall vision of the Regional Waste Management Plan is to rethink the approach taken towards managing waste and that waste should be seen as a valuable material resource. The Plan also supports a move towards achieving a circular economy which is essential if the region is to make better use of resources and become more resource efficient. In the global economy, the demand and competition for finite and sometimes scarce resources will continue to increase, and pressure on*

resources is causing greater environmental degradation and fragility. Making better uses of these resources, reducing the leakage of materials from our economies, will deliver benefits economically and environmentally. The move to a circular economy replacing outdated industrial take-make-consume and dispose models, is essential to deliver the resource efficiency ambition of the Europe 2020 Strategy.

The Plan contains three targets:

- 1% reduction per annum in the quantity of household waste generated per capita over the period of the Plan.
- Achieve a recycling rate of 50% of Managed Municipal Waste by 2020.
- Reduce to 0% the direct disposal of unprocessed residual municipal waste to landfill (from 2016 onwards) in favour of higher value pre-treatment processes and indigenous recovery practices.

Source: Eastern Midlands Region Waste Management Plan 2015-2021

Objective WM01
Facilitate the sustainable expansion of existing Authorised Treatment Facilities for end-of-life vehicles complying with European Union (End of Life Vehicles) Regulations 2014, other relevant legislation and the Eastern Midlands Regional Waste Management Plan 2015-2021.

Objective WM04
Facilitate the transition from a waste management economy to a green circular economy to enhance employment and increase the value recovery and recirculation of resources.

Furthermore, the Plan states that -

"*The Council will promote an increase in the amount of waste reused and recycled consistent with the Eastern Midlands Region Waste Management Plan 2015-2021 and the waste hierarchy. Re-use, preparing for re-use and repair activities can contribute to the community and local economy. Re-use of materials is key to preventing them from becoming waste. Objective WM07 Promote the increased re-use of waste in accordance with the Eastern Midlands Region Waste Management Plan 2015 -2021 (or any subsequent plan). Objective WM08 Promote and encourage the establishment of re-use, preparing for re-use and repair activities in accordance with the Eastern Midlands Region Waste Management Plan 2015 -2021 (or any subsequent plan)*"

"*The EC (Waste Directive) Regulations 2011, sets a 70% target for the re-use, recycling and recovery of man-made C&D waste in Ireland by 2020. Objective WM18 Ensure that construction and demolition Waste Management Plans meet the relevant recycling / recovery targets for such waste in accordance with the national legislation and regional waste management policy.*"

"*In recent years there has been a move away from the disposal of waste to landfill. In Fingal, Balleally landfill has closed for the acceptance of waste with soil being accepted*

for restoration / capping purposes only. Dunsink landfill has been closed since the late 1990's".

14.1.2.2 Fingal Development Plan 2023-2029

The Relevant parts of the Fingal Development Plan 2023-2029 in regard to Waste Management are listed below:

> ***Policy CAP10*** *– Climate Mitigation Actions in the Built Environment Promote low carbon development within the County which will seek to reduce carbon dioxide emissions, and which will meet the highest feasible environmental standards during construction and occupation. New development should generally demonstrate/provide for:*
> *f. Minimising the generation of site and construction waste and maximising reuse or recycling;*
>
> ***Policy IUP22*** *– Transition from a Waste Economy Towards a Green Circular Economy*
> *Support the principles of transition from a waste economy towards a green circular economy and implement good waste management and best practices to enable Fingal to become self-sufficient in terms of resource and waste management and to enhance employment and increase the value recovery and recirculation of resources, in accordance with the Whole-of-Government Circular Economy Strategy 2022.*
>
> ***Policy IUP24*** *– Recycling / Re-Use*
> *Promote and encourage the establishment of re-use, recycling and repair activities to prevent and minimise waste generation and disposal, in accordance with the Eastern Midlands Region Waste Management Plan 2015–2021 (or any subsequent plan).*
>
> **Objective IUO29** – Sustainable Waste Recovery And Disposal
> *Provide for, promote, and facilitate high quality sustainable waste recovery and disposal infrastructure/technology in keeping with the EU waste hierarchy, national legislation and regional waste management policy to adequately cater for Fingal's growing population.*

14.2 The Subject Development

The subject development is described in full in Chapter 4.0 of this remedial Environmental Impact Assessment Report but in summary consists of the following:

"Permission is sought by St. Margaret's Recycling & Transfer Ltd. at St. Margaret's Recycling & Transfer, Sandyhill, St. Margaret's, Co. Dublin, under substitute consent provisions, for -

Retention of:

1. Enabling Ancillary Works, including, but not limited to, that subject of permissions under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109, including amendments to site access and gateway, boundary arrangements, dust mitigation measures, installation of an impermeable concrete surface over c.1.75 ha, above and below ground surface water drainage, septic tank, fire water storage and retention tanks (105m3), surface water attenuation and storage tanks (206m3), truck and vehicle parking,
2. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility, and authorised facility for the treatment of 'end of life vehicles' (ATF for ELVs). Existing development comprises the weighbridge, offices, recycling and transfer/industrial buildings, hard standing, car parking, plant and machinery, detailed below:
    a. Prefabricated cabins (2no.) - 177sqm. - comprising ancillary offices, staff facilities, control room;
    b. Prefabricated w/c & Steel Container (store) - 29 sqm;
    c. Recycling and transfer/Industrial buildings of 1917 sqm;
    d. Weighbridge; and
    e. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.
3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6 ha (permitted under F97A/0109) to 1.75ha of which 1.6ha is associated with waste permit with additional lands comprising site access, proprietary wastewater treatment system, installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system.
4. Historic use of 1.6 ha of the site (as per Waste Permit area under WFP-FG-13-0002-03), as a waste transfer recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, during the period 2019 to 2023, where waste throughput at the facility ranged from c.26,000 to 42,500 tonnes per annum, without the benefit of planning permission, and from 2024 onwards with operations comprising waste throughput of up to 21,900 tonnes per annum.
5. Laying out and historic use (i.e. 2009 to 2023) of lands comprising c.1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity, and existence as a hardstanding area to date, pending restoration

6. Restoration of c.1.1 ha of the above noted compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands, is proposed.

7. On-going use of the existing metal processing and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

Separately, but in tandem, the applicant is seeking permission as part of the substitute consent application for a proposed development comprising the on-going/future use of the site and facility to enable annual waste throughput of up to 21,900 tonnes per annum. This 'permission' element is addressed in a separate EIAR and NIS submitted with the application.

14.2.2 Construction Phase

The construction that has taken place since 2019 consists of the replacing of portacabins and the installation of the hammermill. The prefabricated cabins replacement was in the same location on an existing concreted area. The hammermill installation consisted of installation of prefabricated parts on existing concrete yard area. The construction of the additional concrete slabs had no effect on waste management due to the small nature of this construction.

14.2.3 Operational Phase

There has been a waste facility since 1997 on this site. During the operational phase relating to this application, the subject site had an annual throughput of 26,000 to 42,500 tonnes, and from 2024 has an annual tonnage of 21,900 tonnes per annum. This tonnage is consistent with the tonnage from 1997 to 2018. The plant before 2019 and after 2019 were the same with the exception of the hammermill which was added to the waste process in 2020.

The installed hammermill ensures for better quality of product resulting in higher reuse rate of recovered material.

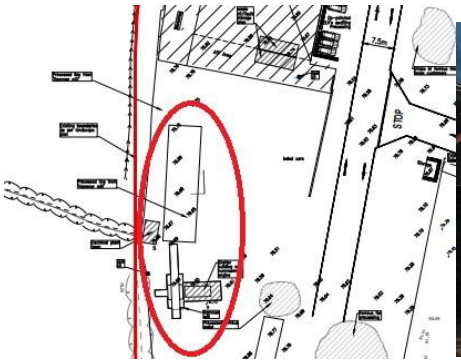
The hammermill essentially makes mixed metals into smaller fragments which are then sorted into Ferrous and Non-Ferrous metals. The hammermill and the sorting line contribute to a significantly increased recovery and recycling rate as the end product is a properly sorted waste. There are two residual wastes which are dirt/fines (classed as one as it is the same EWC code) and fluff. The fluff still contains metal and is exported for further treatment and recovery. The other outputs are essentially a product that will be recycled.

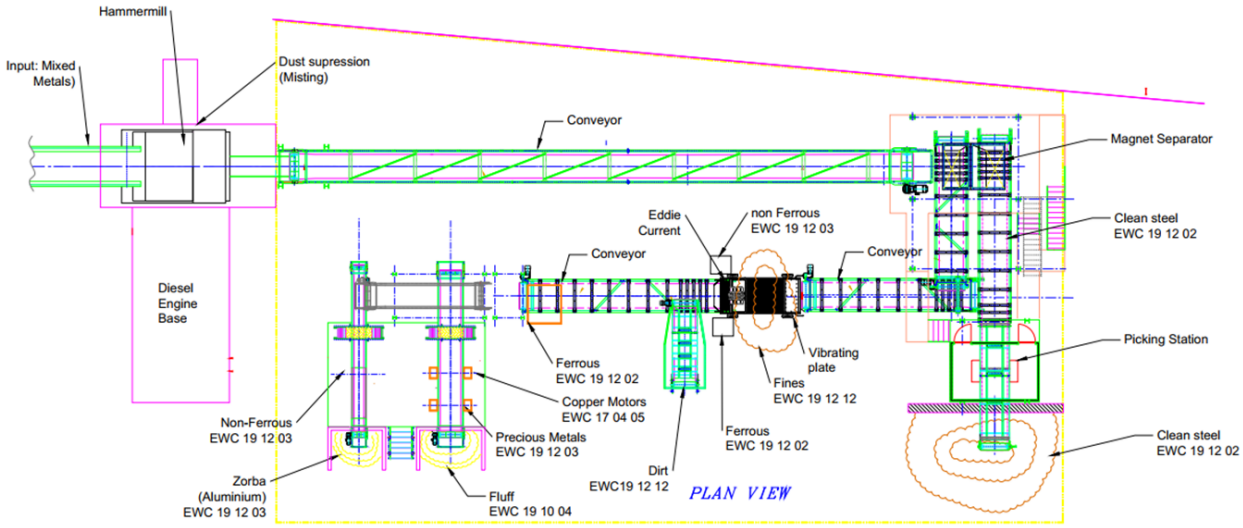
14.2.4 Processes

Hammermill

The hammermill makes metal into small fractions which is transported via a conveyor belt to a sorting machine consisting of conveyor belts, vibrating plate, magnets, an eddy current and a manned sorting area.

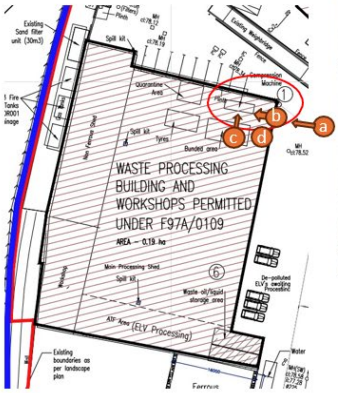
It is driven by a diesel engine and does not have a stack or scrubbers.

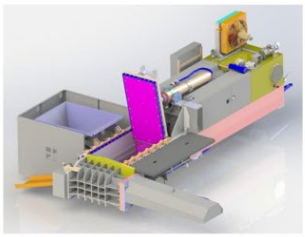




Compact Press/Small Scrap Baling Press

This small press is used for pressing and baling of a single waste product such as swarf or coffee pods, to facilitate greater compaction for transportation and reuse elsewhere. (Typically, in use 4 days per week, with hours of operation during those days as required/subject to demand.)

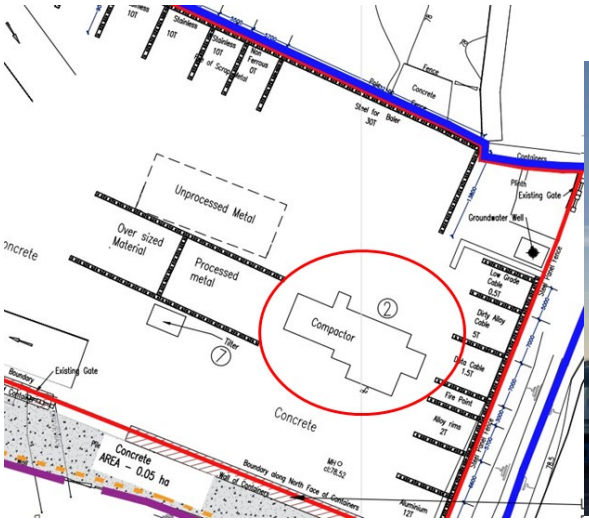




LION 44-100 55KW BALER PRESS

Compactor – Press/Shear

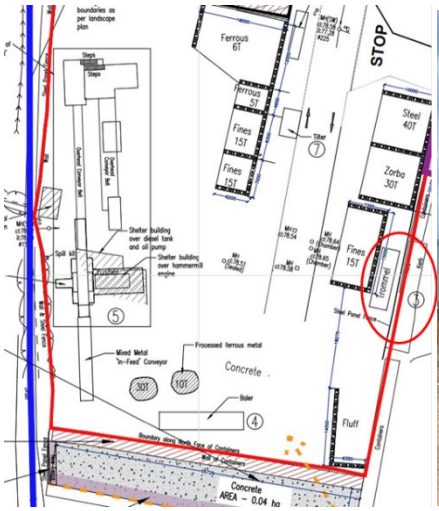
Processes metal – shearing and baling/compacting of larger metal waste material, which is returned to economy for reuse elsewhere. (Typically, in use 2 to 3 days per week, with hours of operation during those days as required/subject to demand/material arriving to site.)



Trommel

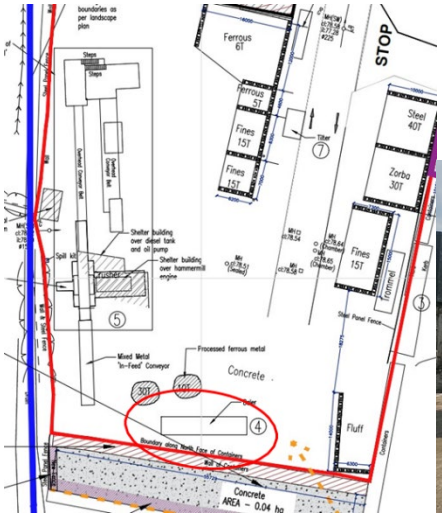
The trommel is a rotating screen which separates the metal from dirt. The clean metal is removed from the fraction at the end of the trommel with a magnet.

(Typically, in use once every two weeks, with hours of operation during that day as required/subject to demand.)



Baler

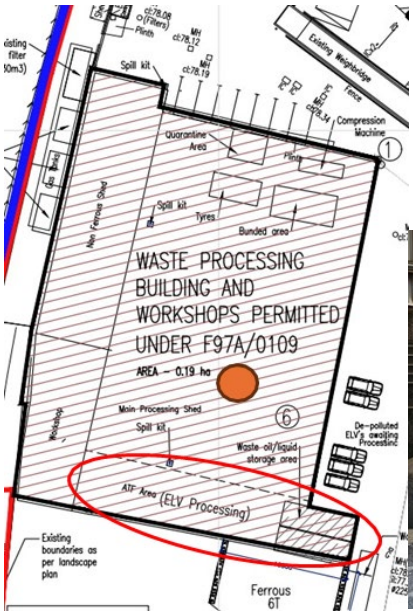
The Baler is used to compact metal waste for transportation. These units can produce dense bales at a high rate. The densification of the bale is adjustable. (Typically, in use 3 to 5 days per week, with hours of operation during those days as required/subject to demand/material arriving to site.)



ELV line processing – depollution bay

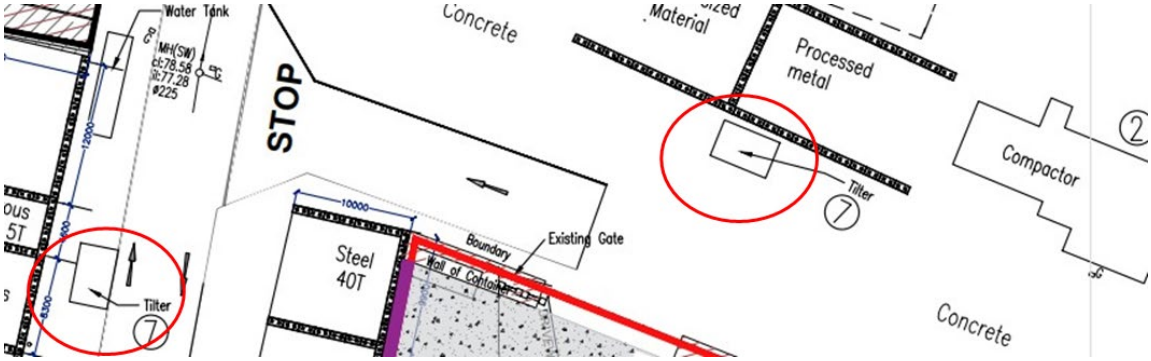
This is a state-of-the-art (End-of-Life Vehicle) ELV depollution line where all liquids from the vehicles are suctioned out and pumped directly in separated holding tanks within a bunded area. Once depolluted, the cars are dismantled further, and the metal could undergo further processing on site.

This facility is one of only three authorised facilities in Fingal and provides an essential service within the county.



Tilters

Within the site there are 2 no. Tilters. This plant holds and tilts containers as required to facilitate optimal loading, prior to placement on to trucks. Hours of operation, as required, to facilitate transport of recycled material off site.



14.3 The Receiving Environment

In terms of waste management, the receiving environment is largely defined by Fingal County Council as the local authority responsible for setting and administering waste management activities in the area. This is governed by the requirements set out in the Eastern Midlands Region Waste Management Plan 2015 – 2021, which sets out the following targets for waste management in the region:

- A 1% reduction per annum in the quantity of household waste generated per capita over the period of the plan;
- Achieve a recycling rate of 55% of managed municipal waste by 2025; and
- Reduce to 0% the direct disposal of unprocessed residual municipal waste to landfill (from 2016 onwards) in favour of higher value pre-treatment processes and Indigenous recovery practices.

The Plan sets out the strategic targets for waste management in the region and sets a specific target for C&D waste of "70% preparing for reuse, recycling and other recovery of construction and demolition waste" (excluding natural soils and stones and hazardous wastes) to be achieved by 2020.

Ireland achieved 84 per cent material recovery of such waste in 2019, and therefore surpassed the 2020 target and is currently surpassing the 2025 target. The National Waste Statistics update published by the EPA in November 2021 identifies that Ireland's current against "Preparing for reuse and recycling of 50% by weight of household derived paper, metal, plastic & glass (includes metal and plastic estimates from household WEEE)" was met for 2020 at 51% however they are currently not in line with the 2025 target (55%).

The Fingal County Development Plan 2017 – 2023 (2017) and the Fingal County Development plan 2023-2029 set out objectives for the FCC area which reflect those set out in the regional waste management plan.

Both the Development Plan and the Eastern Midlands Region Waste Management Plan 2015-2021 recognise that the European Union (End of Life Vehicles) Regulations 2014 help facilitate the achievement of a rate of reuse and recovery of a minimum of 95% by an average weight per vehicle and year and the reuse and recycling of a minimum of 85% by an average weight per vehicle and year from January 2015.

St Margaret's Recycling has the infrastructure to allow the East Midlands to achieve these targets and C&D waste collectors and other ELV waste facilities depend on St Margarete's to achieve these targets.

14.4 Predicted Impacts

14.4.1 Construction Phase

The construction phase only included the replacement of portacabins and plant on the same footprint and the replaced material was sold for reuse hence no waste was produced during this phase The addition of the two concrete slabs did not result in the need for any waste management due to the small nature of the works.

14.4.2 Operational Phase

The site is a functioning waste facility which contributes to the reaching of recovery targets as presented in 14.3 Receiving Environment. Many waste facilities within the catchment area rely on St Margaret's for further recovery of their waste and diversion of waste to landfill. St Margaret's also contributes to the aims of The Circular Economy and Miscellaneous Provisions Act 2022 by providing a high-quality product that is used for recycling. The outputs of the facility are exported for reuse in production processes which reduces the need for raw materials to be mined and waste going to landfill.

The effect on the local and regional environment is likely to be **long-term, positive and significant.**

14.4.3 Do nothing Scenario

In the extent that this is an application for retention, 'do nothing' did not occur. Therefore, the extent that this should be or could be considered in the context of the rEIAR is limited.

While one could consider 'do nothing' as ceasing the development, i.e. ceasing operations, this was not considered to be a realistic scenario given that the investment in the existing infrastructure, and contracts with third parties in place, and that a waste licence was in place. The loss of this waste facility to the industry was and is considered to be negative, significant and long-term.

14.5 Mitigation Measures

14.5.1 Construction Phase

In this case there were no mitigation measures necessary for the construction phase in regard to waste management, as no waste was produced.

14.5.2 Operational Phase

The site is an existing waste facility that has a high recovery rate and is contributing to the aims set in the Circular Economy and Miscellaneous Provisions Act 2022 and waste hierarchy and reaching EU recycling and recovering targets. The site could be viewed as a mitigation measure for reducing waste on a regional level. The waste management of the accepted waste is currently dealt with under the existing Waste Facility Permit (WFP-FG-13-0002-03). With the increase of annual throughput, the amount of residual waste was increased. These wastes have EWC codes 19 10 04 (fluff-light fraction and dust other than those mentioned in 19 10 03) and 19 12 12 (wastes (including mixtures of materials) from mechanical treatment of wastes

other than those mentioned in 19 12 11). The 19 10 04 - fluff-light fraction from the hammer mill will be sent off-site for further recovery and 19 12 12 wastes will be returned to the source site.

All existing plant, infrastructure and accepted tonnage should therefore be viewed as a mitigation measure for the recovery and reuse of waste.

14.6 Residual Impacts

14.6.1 Construction Phase

As no waste was produced during construction the effects are **momentary, imperceptible and neutral**.

14.6.2 Operational Phase

During the operational phase the site was beneficial in both local and national respects as the operation of the site contributes to the reaching of waste recovery targets. A high rate of reuse, recycling and recovery was achieved, the impact of the operational phase on the environment will be **long-term, slight** and **positive.**

14.7 Cumulative Impacts

14.7.1 Construction Phase

As there was no waste produced during the construction phase, there were no cumulative effects.

14.7.2 Operational Phase

The cumulative with other facilities in the area would be that a higher recovery/recycle rate was achieved as St Margaret's has a high recovery rate with a high-quality end product ready for reuse. The annual throughput of 26,000 to 42,500 tonnes would prevent waste from being transported further away from the source sites and out of the state as is currently the case. The carbon footprint would be reduced as the proximity principle would be adhered to. Therefore, the cumulative impact of the operational phase on the environment will be **long-term, significant** and **positive**.

The Fingal Development Plan 2023-2029 Policy IUP22 – Transition from a Waste Economy Towards a Green Circular Economy states:

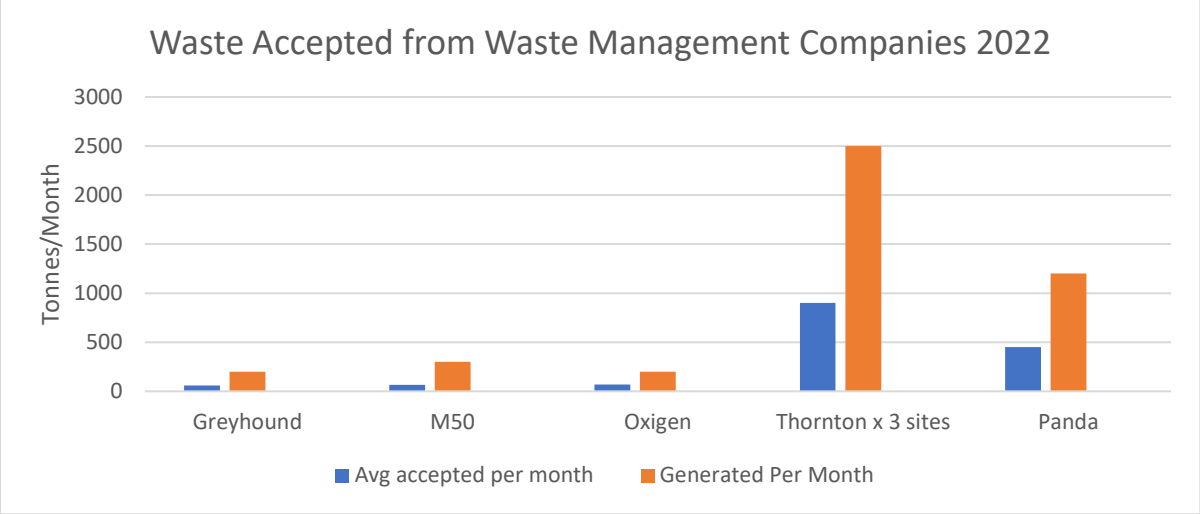
> *Support the principles of transition from a waste economy towards a green circular economy and implement good waste management and best practices to enable Fingal to become self-sufficient in terms of resource and waste management and to enhance*

employment and increase the value recovery and recirculation of resources, in accordance with the Whole-of-Government Circular Economy Strategy 2022.

14.8 Interactions

14.8.1 Traffic & Transport

In 2022 St Margaret's took in on average 1,545 tonnes per month from the 4,400 tonnes produced by their clients. On average the transportation emits 57 grams CO2/tonne/km (International Council on Clean Transportation website 2023). An HGV will load 20 tonnes and the distance to the nearest waste facility with the capability to recover this type of waste is in Belfast at c.145km distance.



The most conservative calculations for the CO2 emissions from transport alone are:

4400 tonnes/month	–	1545 tonnes/month	=	2855 tonnes/month
2855 tonnes/month	/	20 tonnes/load	=	142.75 HGV loads/month
57 grams CO2 /tonne/km	x	20 tonnes/load	=	165.3kg CO2/load
142.75 HGV loads/month	x	165.3kg CO2/load	=	23,596.6 kg CO2/month
23,596.6 kg CO2/month	x	12 months	=	283,159.2 kg CO2/annum

Some loads are transported to facilities in Limerick and Cork which would almost double the distance and CO2 emissions. A typical tree can absorb around 21 kilograms of carbon dioxide (CO2) per year; however this figure is only achieved when the tree is fully grown. In order to offset the most conservative transport emissions 13,483.8 trees would need to be planted.

14.9 References

- Environmental Protection Agency (EPA) Advice notes on current practice in the preparation of Environmental Impact Statement (EPA, 2015)
- Guidelines on the Information to be contained in Environmental Impact Statements (EPA, 2022).
- Environmental Impact Assessment of Projects, Guidance on the preparation of the Environmental Impact Assessment Report (European Commission, 2017)
- Environmental Protection Agency's (EPA) document 'Best Practice Guidelines for the Preparation of Resource and Waste Management Plans for Construction & Demolition Projects' (2021)
- Environmental Protection Agency's (EPA) document 'Best Practice Guidelines for the Preparation of Waste Management Plans for Construction and Demolition Projects' National Construction and Demolition Waste Council (NCDWC) (2006)
- BS 5906:2005 Waste Management in Buildings – Code of Practice
- EPA National Waste Database Reports 1998 – 2018
- EPA National Waste Statistics Web Resource
- Waste Management Act 1996, as amended
- Litter Pollution Act 1997
- EMR Waste Management Plan 2015 – 2021
- Meath Council Development Plan 2017 – 2023.
- Eastern Midlands Region Waste Management Plan 2015 – 2021
- Waste Action Plan for a Circular Economy – Waste Management Policy in Ireland, (2020)
- Sustainable Urban Housing: Design Standards for New Apartments, (2020), Department of Housing, Planning and Local Government
- Transport for Ireland (TFI): www.transportforireland.ie

15.0 Archaeology & Cultural Heritage

15.1 Introduction

This archaeological impact assessment was undertaken for the St Margaret's Recycling Centre, St Margaret's, Sandyhill, Co. Dublin (ITM 712936, 743315, Figure 13.1) by CWPA in 2024. The desk-based study and field survey for this assessment was undertaken in May 2024 and has been prepared by Rachel Kenny and Francis Whelan on behalf of CWPA.

Rachel Kenny is a senior planning consultant with CWPA, Planning & Architecture consultancy, and has 30 years' experience as a planner in public and private sector organisations, including Fingal, Meath, and Louth County Council and An Bord Pleanála (as Director of Planning). She holds a degree in Civil Engineering (be (Civil) (Hons) and Masters in Regional and Urban Planning (MRUP), both from University College Dublin. She is a fellow and corporate member of the Irish Planning Institute. She has experience in both forward planning and development management, and specialises in, inter alia, Strategic Infrastructure Development, and large scale EIAR projects.

Francis Whelan is a member of the Royal Institute of Architects Ireland and is Director of Architecture with CWPA. Fran was a founding member of Whelan Corcoran Smith Architects and was Managing Director of WCA Architects since its formation in 2011. Fran has wide experience in residential, commercial, educational and healthcare design and in recent years he has focused on the specialist design of nursing homes, care for the elderly and dementia care. Fran was President of Fingal Chamber of Commerce in 2007 and 2008.

The archaeological impact assessment aims to identify and describe known and potential archaeological and cultural heritage constraints within the site and offer recommendations for the mitigation of such impacts.

15.1.1 Subject Development

"Permission is sought by St. Margaret's Recycling & Transfer Ltd. at St. Margaret's Recycling & Transfer, Sandyhill, St. Margaret's, Co. Dublin, under substitute consent provisions, for -

Retention of:

1. Enabling Ancillary Works, including, but not limited to, that subject of permissions under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109, including amendments to site access and gateway, boundary arrangements, dust mitigation measures, installation of an impermeable concrete surface over c.1.75 ha, above and below ground surface water drainage, septic tank, fire water storage and retention tanks (105m3), surface water attenuation and storage tanks (206m3), truck and vehicle parking.

2. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility, and authorised facility for the treatment of 'end of life vehicles' (ATF for ELVs). Existing development comprises the weighbridge, offices, recycling and transfer/industrial buildings, hard standing, car parking, plant and machinery, detailed below:

    a. Prefabricated cabins (2no.) - 177sqm. - comprising ancillary offices, staff facilities, control room;

    b. Prefabricated w/c & Steel Container (store) - 29 sqm;

    c. Recycling and transfer/Industrial buildings of 1917 sqm;

    d. Weighbridge; and

    e. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.

3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6 ha (permitted under F97A/0109) to 1.75ha of which 1.6ha is associated with waste permit with additional lands comprising site access, proprietary wastewater treatment system, installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system.

4. Historic use of 1.6 ha of the site (as per Waste Permit area under WFP-FG-13-0002-03), as a waste transfer recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, during the period 2019 to 2023, where waste throughput at the facility ranged from c.26,000 to 42,500 tonnes per annum, without the benefit of planning permission, and from 2024 onwards with operations comprising waste throughput of up to 21,900 tonnes per annum.

5. Laying out and historic use (i.e. 2009 to 2023) of lands comprising c.1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity, and existence as a hardstanding area to date, pending restoration

6. Proposed restoration of c.1.1 ha of the above noted compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands.

7. On-going use of the existing metal processing and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicle.

Separately, but in tandem, the applicant is seeking permission as part of the substitute consent application for a proposed development comprising the on-going/future use of the site and facility to enable annual waste throughput of up to 21,900 tonnes per annum. This 'permission' element is addressed in a separate EIAR and NIS submitted with the application.

15.2 Site Description

This site is in north county Dublin, to the southwest of the Townland Sandyhill (Sandyhill Townland, St. Margaret's Parish, Coolock Barony, Co. Dublin, ITM 712936, 743315, Figure 13.1). It shares a border with St Margaret's townland on the west and Shanganhill to the south. The surrounding landscape is under crop.

The site is entered from the north-west corner at the R122 (New Road). It has been previously developed and is largely covered with a concrete slab. A series of temporary offices are situated at the entrance along the northern boundary and large shed/workshop areas located along the western boundary. The remainder of the area contains stockpiles of recycling materials. The surrounding area is predominantly arable land with a cluster of domestic houses along the R122 Road and St Margaret's c.0.5km village to the north-west.

15.3 Methodology

The following sources were consulted in the preparation of this report:

- Record of Monuments and Places (RMP)/ Sites and Monuments Record
- Aerial photography
- Historical maps
- Documentary research
- Relevant on-line databases (e.g. Excavation Bulletin; NRA Archaeological
- Database)

15.4 Archaeological Background

15.4.1 Brief Archaeological & Historical Background

Records compiled with the Down Survey of the mid-1660's details the towns and landowners of the parish of St. Margaret's including the Barnewall and Plunkett families and state that the land is of arable and pasture fields with no 'unproductive land'. A 'good castle' is mentioned in Dunsoghly while an 'old castle' is listed for all the rest, including St. Margaret's. Lewis' topographical dictionary of 1830 goes into great detail about Dunsoghly Castle which lies c. 0.3km north of the subject area. "The church is in ruins. Over the door of a small adjoining

chapel is a Latin inscription purporting that it was built by Sir John Plunkett, formerly chief justice of the king's bench in Ireland. In the R. C. divisions, the parish also forms part of the union or district of Finglas and has a neat chapel in the village, in which is also a national school. About a mile distant are the ruins of Dunsoghly castle, consisting of a tower, still roofed, and the remains of a large hall, or dining room, and kitchens: the tower is vaulted at the bottom, and it had three stories; the floors of the two upper stories have fallen in, but the room of the principal floor is in tolerable repair: the view from the top is very extensive. The ancient family of Plunkett originally owned this property, which now belongs to Mrs. Cavenagh, who inherits it through her grandfather. Adjoining the ruins are the remains of a private chapel, over the doorway of which is a tablet of freestone, exhibiting the emblems of the crucifixion, in high relief, with the letters and date i. P. M. o. 6. s. 1573, at the bottom. Mr. B. Shew, on planting an elevated spot in his grounds, a few years since, discovered a great quantity of human bones, supposed to be some of those who fell in the various skirmishes which at different periods have taken place in this district. Near the chapel is a tepid well, or bath, dedicated to St. Bridget, said to contain lime, muriate of soda, nitrate of kali and sulphur, but the last in only a small proportion."

15.4.2 Record of Monuments & Places

The Record of Monuments and Places (RMP) is a statutory inventory of archaeological sites protected under the National Monuments Acts 1930-2004 (Section 12, 1994 Act), compiled and maintained by the Archaeological Survey of Ireland (ASI). The inventory concentrates on pre-1700 AD sites and is based on a previous inventory known as the Sites and Monuments Record (SMR) which does not have legal protection or status (see www.archaeology.ie). There are no recorded monuments located within the application area. There are a number in the immediate area, listed below in Table 15.1.

SMR No	Class	Townland	ITM	Distance to Site
DU014-002001	Church	ST MARGARETS'S	712966, 743901	c. 500m North
DU014-002002	Graveyard	ST MARGARETS'S	712966, 743913	c. 500m North
DU014-002003	Chapel	ST MARGARETS'S	712971, 743889	c. 500m North
DU014- 003----	Ritual Site – holy well	ST MARGARETS'S	712768, 743648	c. 300m NW
DU014- 004----	Building	ST MARGARETS'S	712832, 743627	c. 300m NW
DU014- 099----	Ringfort - unclassified	SHANGANHILL	712747, 743085	c. 200m SW
DU014- 108----	Enclosure	SANDYHILL	713241, 743742	c. 450m NE
DU014- 109----	Enclosure	SANDYHILL	713336, 743441	c. 250m East

Table 15.1: Archaeological sites within 0.5km of the proposed development

15.4.3 Cartographic Sources

Analysis of historic mapping can show human impact on landscape over a prolonged period. Large collections of historical maps (pre- and early Ordnance Survey maps as well as estate or private maps) are held at the Glucksman Map Library, Trinity College, and other sources (UCD Library, Ordnance Survey Ireland, local libraries and published material). The development of the site and its vicinity recorded through nineteenth and twentieth century cartography are described in Table 15.2 below. No potential archaeological features were recorded within the subject site.

15.4.4 Aerial Photography

Aerial photography (or other forms of remote sensing) may reveal certain archaeological features or sites (earthworks, crop marks, soil marks) that for many reasons may not be appreciated at ground level. Online orthostatic photographs of the site were examined (Ordnance Survey Ireland 1995, 2000 & 2005; Google/Bing Maps 2018/9). **No potential archaeological features were recorded within the subject site.**

Map	Date	Description
Taylor and Skinner, Road Maps of Ireland	1777	(Map 40, Dublin to Slane). This map depicts the n/s roadway which passes by an area called 'Pass if you can' and carries on through to St Margaret's Village. This road runs to the west of the site.
Chapman and Hall, Dublin Environs	1837	This map also notes the n/s road running from Dublin to Slane. St Margaret's Village is depicted in more detail with more structures and a church marked along the roadside.
Historic 6 inch	1844	This map is the first detailed one of the subject sites. The Western Boundary of the site comprises the townland boundary between St Margaret's and Sandyhill. The southern boundary of the site comprises the townland boundary between Sandyhill and Shanganhill townlands. The site itself is marked as an irregular rectangular shaped field with no structures on it.
Historic 25 inch	1935-8	The subject site and surrounding landscape remain relatively unchanged. There is a small rectangular building located in the NW corner of the field.

Table 15.2: Cartographic sources relating to the site.

Aerial Photograph	Date	Description
OSI	1995	Black and white photograph. This photo depicts the field as under crop. There is a building located in the NW corner of the field. The entrance to the field appears to run from the NW corner towards the winding Dublin-Slane Road to the west. The E/W Airport runway is located 200m south of the subject area.

OSI	2000	A new road (R122), bypassing St Margaret's village, has been constructed since the previous Aerial photograph. It is located between the subject site and the original winding Dublin – Slane Road. It bisected the two fields to the west of the subject site. The area in question has been partially developed with a large shed in the NW corner and an entrance leading to the new road (R122). There is also a car park running south from the structure, along the St Margaret's and Sandyhill townland boundary. The remainder of the subject area is under crop.
OSI	2005	The area of utilised land within the subject area has expanded south and eastward along the north of the field
OSI	2005-12	The area of utilised land within the subject area has expanded yet further to the SE corner along the southern field and townland boundary between Shanganhill and Sandyhill townlands. The utilised land within the development area now fills the whole development area.
Google Earth	2019	The entire subject area is utilised to store various piles of recycling and rows of cars and shipping containers with dirt track roadways between them.
Apple Maps	2024	The entire subject area is utilised to store various piles of recycling and rows of cars and shipping containers.

Table 15.3: Aerial Photographs

15.4.5 Previous Archaeological Excavations

There were no previous archaeological excavations within the subject site and only four excavations were noted as having taken place in the surrounding townlands.

Excavation No.	RMP	OS Ref	Location	Ex. Bulletin Ref.	Author
99E0028	N/A	E711927m, N741825m	Newtown Link Road, St Margaret's, Dublin	1999:269	Claire Walsh
A second phase of monitoring of topsoil-stripping was undertaken from 10 to 12 March1999. The area to be stripped lay outside and to the north of the area that had previously been studied archaeologically for the construction of the new road. The area had to be stripped to allow the laying of a drainage pipe leading from the road north to the stream that flows north-eastwards just east of Connaberry Motte and for the construction of a paddock. As this area lay outside the study area and was close to Connaberry Motte and Dunsoghly Castle, the topsoil was removed using a toothless grading bucket. A series of cultivation furrows was uncovered. They were aligned roughly north south and were regularly spaced, 3m apart. They varied from less than 55m wide and from 20mm or less to 60mm wide. They were only visible where they cut into subsoil and did not survive in the north-west side of the stripped area, owing to the stony nature of the underlying subsoil there. The furrows were filled with grey, loamy silt, and no finds were retrieved					

from any of them. However, several shards of medieval pottery (North Leinster cooking wares and wheel-thrown Dublin wares) were uncovered from the topsoil that overlaid them. The furrows are the remains of ridge-and-furrow cultivation, which is probably of medieval date. The proximity of the site to both the Connaberry Motte and to Dunsoghly Castle means that the cultivation system could have been used by the occupants of either site.					
18E0729	DU014-123	E713983m N742125m	Merryfalls Unit, Dublin 9, Dublin	2018:305	Muireann Ní Cheallacháin, IAC
Nothing of archaeological significance was uncovered during the course of the works.					
05E0058	N/A		St Margaret's Road, Finglas, Dublin	2005:486	Kara Ward
Nothing of archaeological significance was uncovered during the course of the works.					

Table 15.4: Previous archaeological investigations in the wider area

15.4.6 Architectural Heritage

The National Inventory of Architectural Heritage (NIAH) was established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999. Its purpose is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. It is intended to provide a basis for recommendations of the Minister of Culture, Heritage and the Gaeltacht (DCHG) to Local Authorities for the inclusion of particular structures in Records of Protected Structures (RPS).

Local Authorities have a statutory responsibility to safeguard architectural heritage in accordance with Part IV of the Planning and Development Act 2000. Under S.51 (1), a Council must compile a Record of Protected Structures (RPS), which lists all structures which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. The protection, unless otherwise stated, includes the exterior and interior of the structure, lands lying within its curtilage (boundary), other structures and their interiors within the curtilage, plus all fixtures and fittings which form part of the interior or exterior of any of these structures. Buildings can be added to, or deleted from the RPS at any time, though generally this occurs when the development plan is being reviewed. The details of nearby protected structures are shown below in Table 15.5.

There are no Protected Structures within the site. The closest protected structures to the site are situated in St. Margaret's village and comprise St Bridget's Well (0624), the RC church (0625) and the CofI church and graveyard (0626).

RPS	NIAH Reg	Address	Description	Date	Distance from Site
		Saint	Remains of medieval parish church and of chantry chapel within	1700 -	600m to

626	11348001	Margaret's, Fingal	enclosed graveyard that contains historic grave markers including 18th century mausoleum of the Morgan family.	1740	NW
624		Saint Margaret's, Fingal		Well enclosed in 16C. Current structure is much later.	300m NW
625		Saint Margaret's, Fingal	19th century catholic church	19C	200m NW
	11342008	Killreesk Bridge, Fingal	Double-arch rubble stone road bridge over river, c.1750, with concrete capping to parapet.	1700 - 1800	c.800m to NW

Table 15.5: Recorded Structures from NIAH in vicinity of proposed development

15.4.7 Topographical Files

The National Museum of Ireland Topographical Files is the national archive of all known antiquities recorded by the National Museum listed by county and townland/ street. These files relate primarily to artefacts but also include references to monuments and contain a unique archive of records of previous archaeological excavations. The Museum files present an accurate catalogue of objects reported to that institution from 1928. Five townlands Sandyhill, St. Margaret's, Shanganhill, Harristown and Millhead were researched. Only one townland, Harristown, produced 14 stray archaeological finds. There were no finds from the other townlands.

Townland	Museum No.	Find	Circumstances of Discovery
Harristown	1975:277	Ceramic Inkwell	Found in a field during ploughing
Harristown	1975:276	Clay Pipe	Found in a field during ploughing
Harristown	1975:275.1	Glass bottle	Found in a field during ploughing
Harristown	1975:275.2	Glass bottle	Found in a field during ploughing
Harristown	1975:275.3	Glass bottle	Found in a field during ploughing
Harristown	1975:275.4	Glass bottle	Found in a field during ploughing
Harristown	1975:225.1	Ceramic Object	Found in a field during ploughing
Harristown	1975:225.2	Ceramic Plate	Found in a field during ploughing
Harristown	1975:225.3	Pottery	Found in a field during ploughing
Harristown	1975:225.4	Pottery	Found in a field during ploughing
Harristown	1975:225.5	Pottery	Found in a field during ploughing
Harristown	1975:225.6	Pottery	Found in a field during ploughing
Harristown	1975:225.7	Pottery	Found in a field during ploughing
Harristown	1975:225.8	Pottery	Found in a field during ploughing

Table 15.6: Stray archaeological finds in the vicinity of the subject area

15.4.8 Toponyms

Research into a site or area's place name (or toponym) can provide information relating to an area's heritage or previous land use. Many townland names were anglicised by the time the Ordnance Survey (OS) began in the 1830s and when townland names were standardised in the Townland Index (1851).

The Place name of 'Sandyhill' townland appears to have come from the local geography. The ordinance Survey archive files recorded a lease, dated 16th Feb 1696 which stated:

"...the lands of St Margaret's and Harristowne in the County of Dublin aforesaid called and known by the names following, Knavin's Farm, Part of Trassey's Farm and about 20 acres of Sandhills. "

There is a 'Sand pit' recorded to the north of the townland on the 1844 OS map which supports the theory that the name originates from the sandy soil.

Details were taken from www.logainm.ie .

15.4.9 Site Visit

The site was visited by CWPA Ltd on 29 May 2024 in dry, sunny conditions.

The site is entered from the north-west corner at the R122 (New Road). It has been previously developed and is largely covered with a concrete slab. A series of temporary offices are situated at the entrance along the northern boundary and large shed/workshop areas located along the western boundary. The remainder of the area contains stockpiles of recycling materials. The extent of development on the site has lessened the possibility for survival of sub-surface archaeological features.

15.5 Existing and Predicted Impacts

A desk-based study and field survey was carried out on a site located 4km due west of Dublin Airport on the R122 (ITM 712936, 743315). The site covers an area of c. 1.63 hectares on the southern side of St. Margaret's village, actively used as a waste recycling and recovery centre and a further 1.1 ha used as hard standing, previously for storage of surplus vehicles, plant and machinery. This Archaeological Impact Assessment report sought to identify and describe known and potential archaeological or cultural heritage constraints within and/or immediately adjacent to the site. The following factors were identified in the course of desktop study:

- The site is moderate in scale occupying an area of roughly 1.75 Ha in impermeable concrete and c.1.1 in compacted hardcore.
- There are no recorded monuments situated within the site boundaries, there are 8 sites within 500m of the site boundaries.

- No potential archaeological features were recorded in aerial photos of the subject site.
- Examination of the cartographic sources indicates no archaeological features.
- There were no previous archaeological excavations within the subject site and only four excavations were noted as having taken place in the surrounding townlands.
- The site visit shows that the site has been extensively disturbed and little of the original ground profile remains.

These factors indicate that, prior to any groundworks taking place; this site had moderate potential (based on the site's size) for the survival of buried archaeological remains. However, the extent of development on the site has lessened the possibility for survival of subsurface archaeological features.

There are no physical works proposed, and no physical works took place on undisturbed lands since 2019.

15.6 Predicted Impact

As no works took place during the relevant period (being that not previously assessed), the potential impact is considered to be imperceptible, neutral and short-term.

Operations, irrelevant of tonnage, have no impact on architectural heritage or archaeology.

15.7 Mitigation Measures

Given that no impacts were or are predicted, no mitigation or monitoring measures were or are proposed.

15.8 Residual Impacts

Given that no impacts were or are predicted, no mitigation or monitoring measures were or are proposed.

15.9 Recommendations

It is not proposed to further disturb the grounds comprising compacted hard core, carried out prior to the applicant taking over operations, and instead it is proposed to topsoil and seed this area.

Were the Board to condition otherwise and recommend there to be a requirement to remove the hardstanding, it is recommended that any such groundworks at this site be subject to archaeological monitoring by a suitably qualified archaeologist. As the statutory body responsible for the protection of Ireland's archaeological and cultural heritage resource, the Department of Culture, Heritage and the Gaeltacht (DCHG) may issue alternative or additional recommendations, and the applicant would adhere to such conditions.

15.9 References

- Gilbert, J.T. (ed) 1884, The Chartularies of St. Mary's Abbey, Dublin, 2vols, London.
- Joyce, Weston St. John, 1921, The Neighbourhood of Dublin, 2nd ed, Dublin.
- Otway-Ruthven, A.J. 1961 The Medieval Church lands of County Dublin, in J.A.
- Smyth, W.J. 1992, Social and Cultural Topographies, in F.H.A. Aalen & K. Whelan (eds) Dublin City and County from Prehistory to Present. Dublin.
- Watt et. al (eds). Medieval Studies presented to Aubrey Gwymn, Dublin.

15.9.1 Web References

- Online Excavations bulletin https://excavations.ie [accessed 10th May 2024]
- Aerial Photography https://webapps.geohive.ie/mapviewer/index.html [accessed 10th May 2024]
- Online Archaeological Survey of Ireland https://www.archaeology.ie [accessed 12th May 2024]
- Architectural Heritage https://www.buildingsofireland.ie/ [accessed 12th May 2024]
- Fingal Co. Co. Development Plan [accessed 10th May 2024]

16.0 Accident & Disaster Risks

16.1 Introduction/ Methodology

In this remedial EIAR assessment, consideration is given to both the importance of an attribute and the magnitude of the potential environmental impacts of the proposed activities on that attribute. The principal attributes (and impacts) to be assessed include the following:

- Potential hazard arising from risk of major accident.
- Localised flooding (potential increase or reduction) and floodplains including benefiting lands and drainage districts (if any)
- Loss of containment of fuel/chemical materials

This section of the rEIAR was prepared by Martijn Leenheer. Martijn Leenheer holds a 1st Class BSc (Hons) degree in Environmental Science from Atlantic Technological University (previously IT Sligo) and has 11 years' experience in Ireland in soil remediation, invasive species commercial Wastewater Treatment, Discharge Licences, Waste Permits and Licences has been involved in Risk Assessments, NIS and EIAR reports for various commercial projects. Before moving to Ireland Martijn worked in the Netherlands as an Environmental Field Technician in soil research. He has been an Operations Director of Environmental Services Consultancy for 11 Years and a Founding Director of ESC Environmental LTD since 2021.

Sources of Information

The collection of baseline regional data was undertaken by reviewing the following sources:

- Office of Public Works (OPW) flood mapping data (www.floodmaps.ie).

Site specific data was derived from the following sources:

- Various site plans and drawings (ref. accompanying planning document set)
- Records of past events

16.2 The Subject Development

"Permission is sought by St. Margaret's Recycling & Transfer Ltd. at St. Margaret's Recycling & Transfer, Sandyhill, St. Margaret's, Co. Dublin, under substitute consent provisions, for -

Retention of:

1. Enabling Ancillary Works, including, but not limited to, that subject to permission under Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109, including amendments to site access and gateway, boundary arrangements, dust mitigation measures, installation of an impermeable concrete surface over c.1.75 ha, above and below ground surface water drainage, septic tank, fire water storage and retention tanks (105m3), surface water attenuation and storage tanks (206m3), truck and vehicle parking,
2. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility, and authorised facility for the treatment of 'end of life vehicles' (ATF for ELVs). Existing development comprises the weighbridge, offices, recycling and transfer/industrial buildings, hard standing, car parking, plant and machinery, detailed below:
    a. Prefabricated cabins (2no.) - 177sqm. - comprising ancillary offices, staff facilities, control room;
    b. Prefabricated w/c & Steel Container (store) - 29 sqm;
    c. Recycling and transfer/Industrial buildings of 1917 sqm;
    d. Weighbridge; and
    e. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.
3. The enlargement of the site for waste trans and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6 ha (permitted under F97A/0109) to 1.75ha of which 1.6ha is associated with waste permit with additional lands comprising site access, proprietary wastewater treatment system, installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system.
4. Historic use of 1.6 ha of the site (as per Waste Permit area under WFP-FG-13-0002-03), as a waste transfer recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, during the period 2019 to 2023, where waste throughput at the facility ranged from c.26,000 to 42,500 tonnes per annum, without the benefit of planning permission, and from 2024 onwards with operations comprising waste throughput of up to 21,900 tonnes per annum.

5. Laying out and historic use (i.e. 2009 to 2023) of lands comprising c.1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity, and existence as a hardstanding area to date, pending restoration

6. Restoration of c.1.1 ha of the above noted compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands.

7. On-going use of the existing metal processing and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

Separately, but in tandem, the applicant is seeking permission as part of the substitute consent application for a proposed development comprising the on-going/future use of the site and facility to enable annual waste throughput of up to 21,900 tonnes per annum. This 'permission' element is addressed in a separate EIAR and NIS submitted with the application.

16.3 The Receiving Environment

The subject lands are located at Sandyhill, St. Margaret's, on the east side of the R122 (Finglas - Balbriggan Regional Road), on a site located directly south of the main settlement known as St. Margaret's. To the south are lands that support the main southern runway to Dublin Airport with the M50 located further south of the subject site. The surrounding area comprises primarily greenfield agricultural lands with clusters of housing and commercial developments located along the R 122 road both to the north and south of the application site.

The subject lands comprise an existing waste transfer and recycling centre that has been in existence since 1997 (albeit in different ownership) on circa 1.6 ha of lands. The site functions as a waste recovery and recycling facility including Authorised Treatment Facility (ATF) for end-of-life vehicles (ELVs), which is permitted to accept waste metals, C & D waste material and batteries.

The site comprises, concrete hardstanding entrance laneway and public parking area in the northwestern corner; hardstanding for the storage of cars awaiting depollution, covered waste processing shed, site offices, welfare facilities and a weighbridge at the entrance and secure perimeter fencing.

The active waste recycling site sits within a larger 2.93 ha site, with the residual 1.1ha no longer in use associated with the waste recycling activities since so conditioned in 2014. The 1.1ha comprises compacted hard core and had been used on an ad hoc and sporadic basis for the

storage of unused/surplus plant, empty skips and trucks from 2014 to 2023. It is no longer in use for this purpose. It is ultimately proposed to reinstate this field to managed grassland/wildflower meadow with agricultural haul roads, however, for the purposes of this retention application and remedial EIAR it is assessed as compacted hardcore, but as was the case, no active use.

16.4 Existing and Predicted Impacts

16.4.1 Water Bodies and Flood Risk

There is no risk of flooding affecting the site from fluvial or coastal sources since the site lies within Flood Zone C (i.e. where the probability of flooding from rivers is less than 0.1% or 1 in 1000). This takes full account of historical flood risk data and of standard allowances to take account of climate change effects. St Margaret's has a drainage system on site and improves the surface water drainage on site, minimizing the possibilities of flooding on site.

16.4.2 Seismic Activity

Much of the Earth's surface is covered by unconsolidated sediments which can be especially prone to instability. Water often plays a key role in lubricating the slope failure. Instability is often significantly increased by man's activities in building houses, roads, drainage and agricultural changes. Landslides, mud flows, bog bursts (in Ireland) and debris flows are a result.

In general, Ireland suffers few landslides. Landslides are more common in unconsolidated material than in bedrock, and where the sea constantly erodes the material at the base of a cliff landslides and falls lead to recession of the cliffs. Landslides have also occurred in Ireland in recent years in upland peat areas due to disturbance of peat associated with construction activities.

There are no active volcanoes in Ireland.

In Ireland, seismic activity is recorded by the Irish National Seismic Network. The Geophysics Section of the School of Cosmic Physics, Dublin Institute for Advanced Studies (DIAS) has been recording seismic events in Ireland since 1978. The station configuration has varied over the years. However, currently there are five permanent broadband seismic recording stations in Ireland including IWEX on Carrickbyrne Hill, Co. Wexford, running from 01/01/2011 and operated by DIAS. The seismic data from the stations comes into DIAS in real-time and are studied for local and regional events.

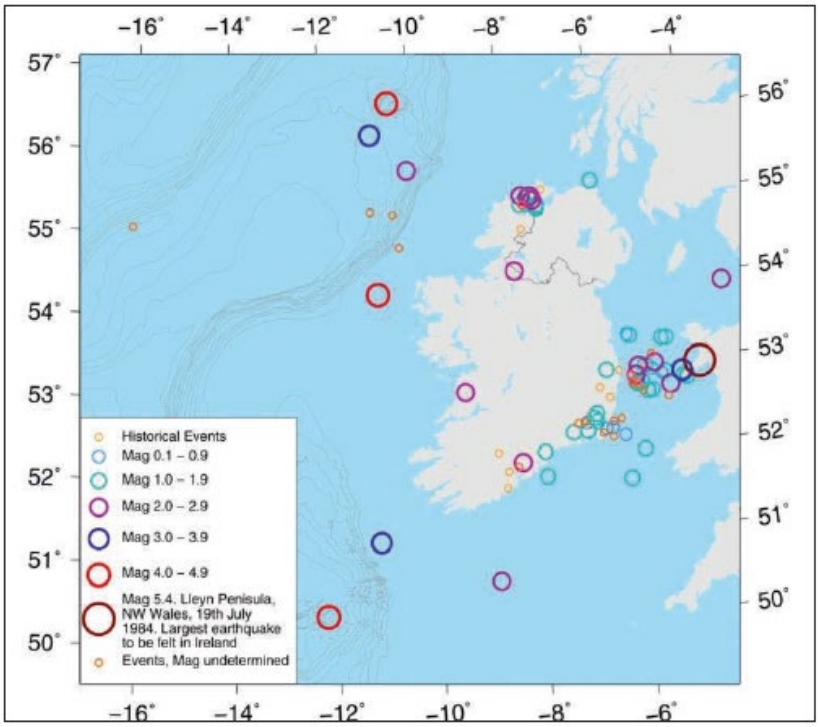


Figure 16.1: Seismic Activity in and around Ireland

16.4.3 Outer Public Safety Zone (PSZ)

St. Margaret's Recycling is located within the Outer Public Safety Zone (PSZ) of Dublin Airport. The ERM Public Safety Report 2005 states that the principal purpose of the outer PSZ is to minimise the possibility of a multiple fatality accident. The purpose of PSZ is to protect the public on the ground from the small but real possibility that an aircraft might crash in a populated area. Essentially, a PSZ is used to prevent inappropriate use of land where the risks to the public are greatest.

According to the report from ERM (2005), the likelihood of an accident in the outer safety zones is less than in the inner zones, and future development will be permitted, subject to a number of restrictions. The existing waste processing and transfer facility is located within the outer public safety zone. The ERM report seeks to limit any further developments within outer PSZs, but to allow certain exemptions such as airport related development and existing developments to remain. Section 6.2.3 of the ERM report also notes that exceptions to permitted development in the Outer PSZ include 'Extensions to Existing Developments.' In this regard Table 6.1 indicates that working premises in the outer Public Safety Zone are permitted at a density of less than 110 persons per half hectare. In this regard the proposed development provides for c.25 persons (noting the overall site area of 1.63 hectares) within the overall waste processing and transfer facility and thus is in accordance with the provisions of the ERM Public Safety Report.

In terms of major accidents and disasters, there is potential such an incident could occur within the St. Margaret's Recycling & Transfer Centre facility given the location of the lands adjoining Dublin Airport. However, these lands are not significantly populated noting that the nature of the site is for the processing of recyclable waste material. Therefore, the vulnerability of the

project to the risk of a major accident and disaster is considered to be low. This is reinforced by the ERM guidelines which note the development's location within the Outer Safety Zones and that the main buildings and offices with c. 20-25 workers are in accordance with permitted developments. The potential for a major accident is considered extremely unlikely with a risk rating of 1 in one million per year applying to the Outer Public Safety zone. Therefore, the potential risk posed by a major accident and or disaster have been considered based on a low vulnerability of such a risk and the overall risk is considered to be low.

16.4.4 Fire Risk

St Margaret's Recycling holds combustible materials on site, and therefore there is a potential risk of fire or explosion occurring, causing health and safety risk to workers, contamination of surface waters and reduction in air quality. A fire on the St Margaret's site also has the potential to be detrimental to the airport in terms of smoke. The site has a detailed fire strategy and risk assessment report prepared to deal with any potential fire emergencies that can occur on site. (enclosed separately).

16.5 Mitigation and Monitoring Measures

16.5.1 Water Bodies and Flood Risk

As stated in Section 16.4, there is limited potential for an impact on the site from flood risk. The proposed change in operation of the site includes an improvement of the surface water drainage on site and increasing the stormwater attenuation availability which will minimise the flooding potential significantly.

16.5.2 Seismic Activity

There is no risk of seismic activity on site and therefore no mitigation measures or monitoring is necessary.

16.5.3 Fire risk

St Margaret's has a detailed fire strategy and risk assessment report prepared to ensure the proper measures to prevent any major impacts from a fire.

The primary objectives of the Fire Strategy & Risk Assessment Report will include the following:

I. To arrange the premises so that the likelihood of a fire occurring is minimised;
II. To arrange the premises so that the likelihood of a fire spreading is minimised;
III. To provide the necessary training for employees to enable them to identify the type of fire and to select the appropriate fire-fighting equipment therefor;
IV. To provide the necessary training for employees to enable them to control a fire utilising the appropriate fire-fighting equipment to hand;
V. To aim to have any fire extinguished within four hours.

Ongoing and regular reviews of the site layout and associated issues and identifying potential problems and remedying same. The most up to date Fire Prevention Plan has been submitted to Fingal County Council as part of the ongoing monitoring and review of the waste permit on site. From 2019 to 2024, there have been no changes to the existing facility which include an increase in the stormwater attenuation for the site. The total area of fire water storage and retention tanks (105m3), with separate additional surface water attenuation and storage tanks (206m3). Although there was a recorded fire event on site in 2018, this was brought under control with no loss of life, injury or damage to property.

16.6 Residual Impact

16.6.1 Water Bodies and Flood Risk

Due to the limited potential for flooding on site, the residual impact from the changes in the existing facility are considered to be long-term, neutral and negligible in both the construction and operational phase.

16.6.2 Seismic Activity

As there is no potential for seismic effects, the residual impact on the site from seismic activity is considered to be long-term, neutral and negligible in both the construction and operational phase.

16.6.3 Fire risk

The facility operated in line with the relevant fire safety plan associated with the current licence during the relevant period, and therefore due to this, i.e. after the mitigation measures the residual impact from the site is considered to be ***long-term, positive*** and ***moderate***.

16.7 References

- Environmental Protection Agency (EPA) Advice notes on current practice in the preparation of Environmental Impact Statement (EPA, 2015)
- Guidelines on the Information to be contained in Environmental Impact Statements (EPA, 2022).
- Environmental Impact Assessment of Projects, Guidance on the preparation of the Environmental Impact Assessment Report (European Commission, 2017
- Reducing Risks Protecting People (UK HSE, 2001)
- Office of Public Works (OPW) flood mapping data (www.floodmaps.ie)
- Major Accident Prevention Policy for Unilin Limited, Navan, Co. Meath
- environmental risk assessment methodology recommended by the Chemical and Downstream Oil Industries Forum (CDOIF, 2017)
- Geophysics Section, Dublin Institute

17.0 Interactions & Cumulative Effects

17.1 Introduction

The matrix incorporated in Table 17.1 below, inter-relates Chapters 5.0 to 16.0 of the Environmental Impact Assessment Report to the various impacts referred to in the relevant Environmental Impact Assessment Regulations.

The interactions and cumulative effects of the facility have been assessed and written by Joe Corr and Rachel Kenny on behalf of CWPA.

Joe Corr was the founder and Managing Director of Corr & Associates Spatial Planning and is now Managing Director of Planning with CWPA Planning and Architecture consultants. He holds a MSc. in Spatial Planning which was obtained from Technological University Dublin and a Diploma in Legal Studies obtained from the Honourable Kings Inns. Joe is also a former President of the Irish Planning Institute (2018 – 2020). Throughout his career, Joe has worked on large scale strategic infrastructure projects including the Poolbeg GSE, Huntstown Power Station and Dublin Port Tunnel.

Rachel Kenny is a senior planning consultant with CWPA, Planning and Architecture consultancy, and has 30 years' experience as a planner in public and private sector organisations, including Fingal, Meath, and Louth County Council and An Bord Pleanála (as Director of Planning). She holds a degree in Civil Engineering (be (Civil) (Hons) and Masters in Regional and Urban Planning (MRUP), both from University College Dublin. She is a fellow and corporate member of the Irish Planning Institute. She has experience in both forward planning and development management, and specialises in, inter alia, Strategic Infrastructure Development, and large scale EIAR projects.

17.2 Interactions

Listed below are the interactions between the various significant environmental impacts generated by the proposed development:

Table 17.1 Interactions identified in the EIAR

No	Heading	Pop & Human Health	Biodiversity	Land, Soils Geology	Water	Air & Climate	Noise	Landscape	Mat Assets	Traffic & Transport	Waste	Archaeology
5	Pop & Human Health	✓		✓		✓	✓	✓	✓	✓	✓	
6	Biodiversity			✓	✓			✓				
7	Land, Soils Geology	✓	✓		✓			✓				
8	Water		✓						✓			
9	Air & Climate	✓	✓							✓		
10	Noise	✓								✓		
11	Landscape	✓	✓									

12	Mat Assets											
13	Traffic	✓				✓	✓					
14	Waste								✓	✓		
15	Archaeology											

17.3 Population & Human Health / Population & Human Health

The population and human health content of this application will impact on the existing environment in terms of the provision of services, facilities and employment. Chapter 5 of this EIAR found that the impact on Population and Human Health as a result of the development will be positive or neutral in the general area of the proposed development. The continued use of the waste transfer and recycling facility at the facility to accept up to 21,900 tonnes per annum with minor infrastructural works as part of the planning application will help maintain current employment in the area.

17.4 Population & Human Health / Land, Soil & Geology

For the purposes of this rEIAR, as the development in question is already constructed, we are satisfied that no material or significant discharges to the ground arose other than those previously considered and permitted will take place.

The attribute is considered to be of only low importance, and generally positive and of benefit from a visual amenity perspective. However, this positive impact is not considered to be permanent, in that the area is zoned for development (i.e. DA zoning) and will not remain in grassland or agricultural use indefinitely, as it is the Vision for this zoning that the lands would be developed for aviation related activities. This, however, will be the subject of a future application and not within the immediate tor short-term time frame.

Additionally, there are no direct discharges to ground from the current or proposed operations on site. Chemical pollution (e.g. hydrocarbon spillages as a result of operational activities) has the potential to occur at the site. However, as the entire footprint of the site has been capped with hardstanding for the purposes of site operations and storing of de-polluted vehicles, there will be no resultant impacts to the underlying geological environment as a result of the continued operation and minor infrastructure works.

17.5 Population & Human Health / Air Quality & Climate

As the development in question is already constructed, dust emissions are unlikely to arise as a result of construction activity. While retention for these works is sought, the works were for the most part previously permitted, and associated impacts previously assessed and deemed not to be significant. Minor works that took place since 2019 did not result in dust or vibration that would be considered anything other than imperceptible, neutral and short-term/brief.
In order to ensure that any dust nuisance is minimised during ongoing operation, a series of mitigation measures have been set out in Chapter 9.

No project specific mitigation measures have been identified but emissions of pollutants from site traffic can be controlled by either controlling the number of road users or by controlling the flow of traffic. For the majority of vehicle-generated pollutants, emissions rise as speed drops, although the opposite is true at very high speeds (i.e. speeds greater than 120 km/hr). Emissions also tend to be higher under stop-start conditions when compared with steady speed driving. The free flow of traffic into and out of the site and limiting the idling time of vehicles and plant will allow for the generation of lower concentrations. In light of the above, emissions arising as a result of any traffic associated with the proposed development is unlikely to impact on air quality standards.

17.6 Population & Human Health / Noise & Vibration

Construction activity that has taken place was on a relatively small scale. Nevertheless, minor short-term vibration impacts may have occurred during the construction phase as a result of the use of heavy plant and machinery; but these impacts will be unlikely to propagate beyond the construction site boundary.

It is not anticipated that there will be any significant changes in the ongoing operational noise levels attributable to the development site and the operational vibration will have negligible adverse impacts on sensitive receptors as a result of the operational phase of the proposed development.

17.7 Population & Human Health / Landscape & Visual Effect

The subject lands are characterised as having 'Low Lying Landscape Character Type' and 'Low Lying Agriculture Landscape Character Area.' Chapter 11 indicates that there will be no visual effects arising from the proposed development within the wider study area.

The introduction of the subject development has not modified the landscape character locally or outside of the development site. The potential direct and indirect effects on landscape character at the site location and within the wider area will be of negligible neutral significance.

The proposed development integrates into the existing landscape and due to its location and screening effects of the existing vegetation the significance of visual effects ranges from none to negligible adverse for viewpoints close to the site entrance.

17.8 Population & Human Health / Traffic & Transportation

The traffic impacts and the level of traffic generated at the R122 by the use of the waste transfer and recycling facility have been calculated and are considered relatively low. As a result, it is deemed that no mitigation measures are required.

No specific monitoring proposals are considered necessary during the operation of this development other than normal monitoring undertaken by Fingal County Council.

17.9 Biodiversity / Land, Soils & Geology

It has been seen that the application site is not within, or adjacent to, any area that has been designated for nature conservation at a national or international level.

There are no examples of habitats listed on Annex I of the Habitats Directive or records of rare or protected plants. There are no alien invasive species. There will be no effects to biodiversity as a result of the proposed development.

17.10 Biodiversity / Water & Hydrology

During the construction and operational phases hydrocarbon and silt interceptors have been and will be serviced and maintained on a regular basis by an independent licensed contractor to ensure that there is no impact on aquatic flora and fauna. Good site management practices will also ensure that pollution to existing watercourses does not occur during the construction and operation phases. No negative effects to biodiversity are predicted to occur due to the continuation of use of these lands.

17.11 Biodiversity / Landscape and Visual Impact

The existing flora on the site is limited and not of any general merit. The body of the site is entirely composed of buildings and artificial surfaces. The proposed development will remain integrated into the existing landscape and due to its location and screening effects of the existing vegetation will continue to make an overall positive contribution.

17.12 Land Soils & Geology / Water & Hydrology

The implementation of topsoiling and seeding of c.1.ha of lands, is considered to be a direct and positive impact. This attribute is considered to be of only low importance. The impact is not considered to be permanent, in that a portion of land is zoned and may ultimately be development, the impact of which would be assessed at this time, and not anticipated to be within the life of this Plan period.

17.13 Air Quality & Climate / Traffic & Transportation

The development will give rise to direct emissions from onsite and offsite vehicles and also indirect emissions relating to the energy demand of the onsite site buildings, power tools and electrical equipment.

However, as the site is currently operational and there are no proposed changes to the permitted activities at the site, it is anticipated that there will be no significant change in terms of air quality as a result of the site's continued operation. No project specific mitigation measures have been identified but emissions of pollutants from site traffic can be controlled by either controlling the number of road users or by controlling the flow of traffic.

For the majority of vehicle-generated pollutants, emissions rise as speed drops, although the opposite is true at very high speeds (i.e. speeds greater than 120 km/hr). Emissions also tend to be higher under stop-start conditions when compared with steady speed driving. The free flow of traffic into and out of the site and limiting the idling time of vehicles and plant will allow for the generation of lower concentrations. No monitoring is deemed necessary due to the negligible impact of the development on air quality.

17.14 Air Quality & Climate / Air Quality & Climate

As the development in question is already constructed, the construction phase assessment is minimal/negligible. While small in scale, the construction phase of the scheme had the potential to generate a number of short-term emissions to the atmosphere. No monitoring is deemed necessary due to the negligible impact of the development on air quality.

17.15 Noise & Vibration / Population & Human Health

The potential sources of environmental noise during the construction phase of the proposed development would have primarily arisen from increased traffic on the surrounding road network (from construction workers and delivery of plant and materials) and actual on-site works where heavy plant and earth moving machinery may be required.

The assessment considered noise impacts associated with the proposed continued use of the existing waste processing and transfer facility. As such, with no changes to the permitted activities, it is not anticipated that there will be any significant changes in the noise levels attributable to the development site.

17.16 Noise & Vibration / Traffic & Transportation

The potential sources of environmental noise during the construction phase of the proposed development would have primarily arisen from increased traffic on the surrounding road network (from construction workers and delivery of plant and materials) and actual on-site works where heavy plant and earth moving machinery may be required. Overall, the noise climate in the area was dominated by road traffic noise from the R122 and M50, and aircraft landing and taking off from the airport.

17.17 Air Quality & Climate / Biodiversity

The development will have no effect on climatic conditions that would be sufficient to affect animal populations on or in the vicinity of the site.

17.18 Traffic & Transportation / Biodiversity

While traffic associated with the construction and operation stages may have disrupted fauna, impacts are unlikely to be significant.

17.19 Traffic & Transportation / Air Quality & Climate

During the operational phase a scheme of this nature has the potential to generate greenhouse gases through vehicular traffic into and out of the site as well as from the site operations, plant and machinery, space heating and energy use within the site buildings. Transport emissions, including greenhouse gases, from light and heavy-duty vehicles are continually being reduced through EU and national initiatives. As such, transport mitigation of GHG emissions are primarily delivered by EU legislation to ensure an ongoing reduction in emissions per car. Other national initiatives to reduce emissions include fiscal measures to promote the use of electric vehicles and the biofuels obligation scheme. No monitoring is deemed necessary due to the insignificant impact of the development on climate.

17.20 Waste Management / Traffic & Transportation

In 2022 St Margaret's took in on average 1,545 tonnes per month from the 4,400 tonnes produced by their clients. On average the transportation emits 57 grams CO2/tonne/km (International Council on Clean Transportation website 2023). An HGV will load 20 tonnes and the distance to the nearest waste facility with the capability to recover this type of waste is in Belfast at c.145km distance.

The assessment considered the traffic impacts associated with the use to date and the proposed continued use of the existing waste processing and transfer facility. With no changes to the permitted activities, it is not anticipated that there will be any significant changes in the emissions levels attributable to the development site.

17.21 Residual Impacts and Cumulative Impacts

Residual impacts can be defined as the final impacts that occur after proposed mitigation measures have taken effect. Many of the findings of the rEIAR have been incorporated into previous permission and the design of the development as previously granted. This has contributed to the reduction or amelioration of potential impacts. Where residual impacts

arise, they are detailed in the relevant chapters and further mitigation measures detailed where necessary, including in the EIAR associated with the future use of the site.

Cumulative impacts are defined as: "The addition of many small impacts to create one larger, more significant, impact" (EPA 2002). Cumulatively, these impacts may be significant if they occur close together in terms of location and time. The cumulative impact of the proposed development is categorised as neutral and moderate.

17.22 Environmental Commitments and Mitigation Measures

Mitigation measures to be adopted during the construction and operational phases of the subject development are detailed within each chapter. These measures should be implemented through planning conditions imposed by An Bord Pleanála.

Mitigation measures will be managed by the developer/ landowners thereafter.

17.23 Summary

Environmental interactions occur between the topics of population, human health, air quality, noise and vibration, soils and land, hydrology and traffic and transport, however, as these interactions are generally historic and have occurred over approximately 30 years, and have over that time been assessed and permitted on a temporary basis by Fingal County Council. Since the lapse of the last permission in 2019 there has been relatively minimal construction associated with the subject development, and the impacts regarding this construction can generally be considered to be imperceptible, neutral and short-term. The operational phase, which relates to waste recycling at an annual tonnage ranging from 21,900 to 45,000 tonnes (post lapse of permission in 2019), and while increases in tonnage result in some increase in traffic and visitors to the site, and use of plant and machinery (with associated increase in noise and vibration, and dust) these impacts within this location, being in such close proximity to Dublin Airport and various logistics parks, has resulted in the potential or predicted impacts being imperceptible and short-term, even where negative. The development currently operates at 21,900 tonnes per annum in line with the Waste Licence, where management and monitoring ensure environmental impacts are minimised, and no significant adverse impact arises. That the development has been in operation for almost three decades and subject to EPA waste permit and FCC waste licences, and various planning permissions, and that no adverse environmental impacts have arisen such as would warrant the site's closure is in addition to the findings of the rEIAR testament to the site and areas ability to absorb the development. The most critical interaction and impact is the long-term positive impact associated with waste management, and the facility's role in meeting the Council and Country's Waste Reduction targets as close to source as possible. The development is predicted on that basis to result in an overall net positive, long-term, moderate impact.

The EIAR has identified potential for interactions between a range of factors identified in Table 17.1. These interactions require the implementation of suitable mitigation measures to ameliorate the impact of the development on the environment. This EIAR has found that subject

to the full implementation of the various mitigation measures specified by the EIAR team, the development will have no significant negative impact on the environment.

Overall Impact on the Environment

The remedial Environmental Impact Assessment Report has assessed the characteristics of the proposal for significant environmental impacts. Each topic was examined and the resultant environmental impact, if any, noted and mitigation or reductive measures have been put in place. Accordingly, the proposed development will result in no significant negative impacts on the environment. It has also identified potential for interactions between a range of factors identified in Table 17.1. These interactions require the implementation of suitable mitigation measures to ameliorate the impact of the development on the environment. This rEIAR has found that subject to the full implementation of the various mitigation measures specified by the rEIAR team, the development will have no significant negative impact on the environment.

The subject development, in terms of physical works comprises various environmental improvement measures that have been implemented on a phased basis over the last 25 years, ultimately resulting in a positive, long-term, slight to moderate impact, where these works include improvements to access arrangements, site surfaces, oil interceptors, new waste water treatment system, installation of solar panels, SUDs and fire water access and retention, etc. Other works including mitigation measures regarding dust suppression, improved boundary treatment, etc. which have resulted in slight, positive and long-term benefits. The buildings on the site are only visible at the site access, and appear not unlike agricultural structures and therefore do not materially alter the landscape character. The site has since prior to 1995 comprised the industrial buildings, being former agricultural buildings. Their impact is considered to be imperceptible, neutral and long term.

The on-going use of the existing facility as a waste recycling and transfer centre is a more sustainable option than development of a greenfield site, or transporting the county's waste to Northern Ireland. In respect of metal waste, c.70 to 80% would be required to be transported to northern Ireland if the Centre were not to accept it, as there is no other centre that can cater and process the metal waste as per St Margarets. The proposed development, comprising the on-going use of the centre, is considered to be a long-term, positive, moderate impact.

18.0 Appendices

Appendix 1 Planning History
Appendix 2 Fire Prevention Report
Appendix 3 Wastewater Treatment Plant Suitability Report
Appendix 4 Traffic & Transportation Assessment
Appendix 5 Remedial EIAR Non-technical summary
Appendix 6 Schedule of Drawings (List)

APPENDIX 1

Table A.1 Planning History

Planning Reference	Development Description	Decision	Comment
F97A/0109	Retention of existing use with extension and alteration of existing buildings, alterations and widening of existing entrance and septic tank to Waste Recycling and Transfer Depot	Grant (10,000 tonnes; 0.6ha)	Operated by Greenstar. Waste Licence EPA (EPA Licence No. 134-1). granted for 60,000 tonnes per annum. Operated at 21 to 22,000 tonnes per annum from 1998, on an enlarged site.
F03A/1561	The permanent retention of 5 no. existing prefabricated single storey buildings, comprising: office accommodation, canteens, toilets, and weighbridge control room. Permanent retention is also sought for existing security fencing to the boundary and skip storage area to the south of the site. All on an enlarged site from previously granted permission	Decision Grant Permission & Grant Retention (for 3 years)	**Expired in Sept 2007** No condition re. tonnage; Conditioned to return to 1997 permitted boundary. Never complied with & No enforcement. EPA waste licence (No. 134-1). Prefabs to be removed and site restored to Jan 1995 condition on or before Sept. 2007.
F03A/1682	The retention of an existing stone road serving the existing agricultural entrance located on the St. Margarets Road, stone area for use as agricultural storage, hard standing for use as parking of trucks ancillary to waste transfer depot on adjoining site.	Decision Grant Permission & Grant Retention	To be used for agriculture only.
F05A/0233	Development of a concrete batching plant, bunded fuel oil tank, 3 no. 6m x 3m aggregate storage bays, water recycling unit and all other associated works.	Refuse	

F10A/0177	Retention permission for onsite prefabricated buildings comprising weighbridge control room, office, canteen and toilets, retention of existing 1500 sq.m. skip storage area to the south of the existing process building, change of use of existing 6458 sq.m. agricultural storage area to the south of the site as granted under F03A/1682 to storage area for construction demolition waste, retention of 10172 sq.m. area to the east of the site for processing of construction demolition and other inert non-hazardous waste, retention of existing boundary treatments and planning permission for bulking and transfer of green garden waste within the facility.	Grant Retention & Permission (for a period of 3 years)	**Expired Dec 2013.** At the time of assessment, the proposed development was considered to be **non-conforming "having regard to the established nature of the recycling facility at this location <u>together with</u> the planning permissions detailed in the report."** At this time, i.e. in 2009, tonnage exceeded 27,000 tonnes and permission granted limited tonnage to 25,000 tonnes.
F11A/0272	Change of use of existing green waste storage building as granted under planning ref: F10A/0177, to a de-pollution/recovery building for end of life vehicles and permission to store end of life vehicles on 325 sq.m. of existing concrete hard standing which will be associated with a new authorised treatment facility within the existing recycling facility (Waste Facility Permit WFP-FG-11-00012-01).	Refuse	

F11A/0443	For the establishment of an authorised treatment facility for the de-pollution/recovery of end-of-life vehicles (ELVs) at an existing and established waste recycling facility (Planning ref. F97A/0109; Waste Facility Permit WFT-FG-11-00012-01). A change of use of the existing green waste storage building as granted under planning ref: F10A/0177 to carry out ELV de-pollution activities within this building. Modifications to the external facade of the existing storage building on site to facilitate the internal storage of all ELVs delivered to the facility pending de-pollution and an external metal crusher/baler is proposed along the northern boundary of the site, with the crushed bales stored on an adjacent mobile flatbed trailer (on concrete hardstanding), site works.	Grant – 3 years	**Expired June 2015** **Related to ATF for ELV's** The car dismantling use had existed on site previously, however, legislation required that ELVs be specifically called out as a 'waste intake'
F13A/0409	5-year permission for the continuation of use of a facility for the bulking, transfer and recycling of metals, construction & Demolition waste, bulky/skip waste, batteries, Waste Electrical and Electronic Equipment (WEEE), other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles. Permission is also being sought for a new 5-bay metal-clad portal frame storage building, with external finish to match existing adjacent storage building and associated site works. the new building (447.95m^2) will be used for the storage & shredding of wood/timber products and bulky/skip waste segregation. the site is an established waste facility and operates under Waste Facility Permit WFP-FG-10-00012-02; the following planning permissions apply: F11A/0443, F10A/0177, F03A/1682, F03A/1561	Grant - 5 years	**Expired August 2019** At the time permission was granted activities on site were unauthorised, but non-conforming.

FW19A/0135	Planning permission is sought (i) the permanent continuation of use of the existing and permitted waste processing and transfer facility at St. Margaret's which is currently operated under and in accordance with temporary planning permission Reg. Ref. F13A/0409 and permanent planning permissions Reg. Ref. F03A/1682 and Reg. Ref. F97A/0109; (ii) an increase in waste throughput at the facility (to accept up to 49,500 tonnes per annum); (iii) continued use of the existing buildings on site associated with the daily operations of the facility; (iv) proposed stormwater attenuation storage tanks and associated stormwater treatment infrastructure; (v) and all ancillary site development works necessary to facilitate the development erected under and in accordance with Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109. This application is accompanied by An Environmental Impact Assessment Report (EIAR).	Withdrawn	
FW20A/0029 / ABP-310169-21	Retention planning permission is sought for the permanent continuation of use of the existing waste processing and transfer facility for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end of life vehicles, accepting up to 24,900 tonnes of waste per annum. Retention permission is also sought for the continued use of the existing buildings on site associated with the daily operations of the facility including processing shed, offices, plant room, shelter buildings etc.,	Refused on appeal	Granted by PA, refused on appeal.

	existing site services, boundary treatments and all ancillary site development works necessary to facilitate the development erected under and in accordance with Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109. Planning permission is sought for new proposed stormwater attenuation storage tanks and associated stormwater treatment infrastructure to serve the existing development with permission also sought to restore part of the lands to agricultural use.		

APPENDIX 2

FIRE PREVENTION PLAN

for the

RECYCLING CENTRE

at

ST. MARGARET'S RECYCLING & TRANSFER CENTRE LTD,

SANDYHILL,

ST. MARGARET'S,

CO. DUBLIN.

WFP-FG-0002-03.

DATA PAGE.	
Client:	*St. Margaret's Recycling & Transfer Centre Ltd.*
Address:	*Sandyhill, St. Margaret's, Co. Dublin*.
Date of Assessment:	*25th May 2023 & 20th December 2023 & June 2024.*
Assessor:	*Thomas P. English, Chartered Engineer.*
Responsible Person(s):	*Brian McDonnell, Managing Director – 086 2654884.*
Use of Premises:	*Waste Recycling & Transfer Centre.*
Number of Floors:	*Lofty single storey production building with several levels of open mesh access platforms. Single storey portacabins.*
Construction:	*The main building is constructed and roofed with PVC coated metal sheeting on a steel portal frame. Ground floor is of concrete and upper levels and stairs thereto are of open mesh steel.*
Maximum No. of Employees & Visitors:	*There are approx. 30 employees and usually less than 5 visitors / members of the public on the premises at any time. Similarly with vehicle drivers.*

CONTENTS.

STATEMENT BY THE CHIEF EXECUTIVE OFFICER (C.E.O.).

Notwithstanding the specific requirements of legislation, St. Margaret's Recycling & Transfer Centre Ltd recognises the need to ensure proper and effective fire safety precautions are implemented about the premises, to ensure that the potential threat of fire is minimised in so far as is reasonably practicable.

St. Margaret's Recycling & Transfer Centre Ltd has a commitment to continually monitor fire safety precautions throughout the premises under its control in order to ensure compliance with the *Fire Services Acts 1981 & 2003* and all prevailing statutory fire safety legislation, including the requirements of *Technical Guidance Document B – Fire Safety (2006) (Reprint 2020).* This commitment undertakes to ensure the priority of life over that of property at all times.

The aim of the Fire Prevention Plan is to detail the structure of the organisation and the management of fire safety within the premises with all procedures for dealing with fire related incidents can be found enclosed within this document.

It is vital to the effectiveness of the Fire Prevention Plan that the document is available to all operators / staff, that they know and understand its contents and are aware of their own role in ensuring a fire safe environment.

A copy of the Fire Prevention Plan document will be held in the Document File of St. Margaret's Recycling & Transfer Centre Ltd (which is available and accessible to all employees on Bright HR), and further soft and hard copies will be kept in the Main Office on site for reference purposes for all staff members and contractors requiring same and in particular detailing their roles in the event of a fire occurrence within the operations of St. Margaret's Recycling & Transfer Centre Ltd.

All new operators / staff joining St. Margaret's Recycling & Transfer Centre Ltd will be made aware of the existence and location of the Fire Prevention Plan document(s) at the mandatory staff induction.

The scope of the Fire Prevention Plan document is to ensure that, if possible, outbreaks of fire do not occur on these premises and that, if they do, they are rapidly detected, effectively contained and quickly extinguished.

The Fire Prevention Plan is designed to give guidance on fire safety and fire prevention matters to the Person(s)-In-Control, the Board of Directors, the Line / Department Management and operators / staff and should be a ready source of reference / information at all staff levels.

Signed: _____ ***Date:*** **/ / .**

Brian McDonnell.
Chief Executive Officer.

1. INTRODUCTION.

1.1. This document presents the Fire Prevention Plan for the premises known as ***St. Margaret's Recycling & Transfer Centre Ltd, Sandyhill, St. Margaret's, Co. Dublin.***

1.2. The Fire Prevention Plan has been prepared in accordance with and using the plan template included in the guidance provided by the U.K. Environment Agency Guidance – *Fire Prevention Plans: Environmental Permits* (2021).

1.3. The Fire Prevention Plan addresses the entire premises including the buildings, the yards and all areas where combustible materials are handled and stored. It is designed to meet the following 3 key objectives:

(i) Minimise the likelihood of a fire happening;

(ii) Aim for a fire to be extinguished within 4 hours;

(iii) Minimise the spread of fire within the site and neighbouring sites.

Minimising the likelihood of a fire happening is the highest priority to prevent environmental harm.

1.4. The Fire Prevention Plan has been developed on the basis of the drawings {*Appendix I – Site Layout Plan*} and other design information and considerations detailed in *Appendix II – Roads for Permit Review.*

1.5. It is vital to the effectiveness of the Fire Prevention Plan that the document is available to all operators / staff, that they are trained in and understand its contents and are aware of their own role in ensuring a fire safe environment.

1.6. A copy of the Fire Prevention Plan document will be held in the Document File of St. Margaret's Recycling & Transfer Centre Ltd (which will be available and accessible to all employees on Bright HR), and further soft and hard copies will be kept in the Main Office on site for reference purposes for all staff members and contractors requiring same, and in particular detailing their roles in the event of a fire occurrence within the operations of St. Margaret's Recycling & Transfer Centre Ltd.

1.7. All new operators / staff joining St. Margaret's Recycling & Transfer Centre Ltd will be made aware of the existence and location of the Fire Prevention Plan document(s) at the mandatory staff induction and will be given relevant guidance / training thereon.

1.8. Management is responsible for ensuring that fire prevention procedures are established and enforced, that fire suppression systems and extinguishers are inspected regularly and maintained and that employees are trained to use fire extinguishers for incipient fires whilst all employees are trained in relation to evacuation routes and procedures.

1.9. Management is responsible for monitoring the use of combustible materials, training employees in the safe storage, use and handling thereof and for ensuring that the storage areas for combustible materials are properly maintained as described in this document.

1.10. All operators and staff are responsible for following the requirements of this Fire Prevention Plan for the safe storage, use and handling of flammable and combustible materials.

2. DESCRIPTION OF THE PREMISES – LOCATION & LAYOUT.

2.0. Premises Location & Description.

2.1. The premises are located at Sandyhill, St. Margaret's, Co. Dublin adjoining St. Margaret's by-pass, R122. Dublin Airport is to the east with the southern run-way to the south east. Dublin Airport lands extend to within 240m of the south of the subject site. Lands bounding to the north, south and west are currently in agricultural use. Those to the north and east are within the ownership of the applicant. The premises has been in operation here since 1997.

2.2. The site is located close to the village of St. Margaret's, which is located across the regional road (R122). The R108 is located to the south.

2.3. The site is currently occupied as a Recycling & Transfer Centre, the main activity of which is the metal recycling and de-polluting of End-Of-Life Vehicles (E.L.V.) where they are brought to site, sorted, stored, processed, broken up and prepared for transfer to the next stage of the recycling process. Metals involved are both ferrous and non-ferrous.

Google Earth View of St. Margaret's Recycling & Transfer Centre.

The site until recently also provided a metal skip and battery collection service as well as a tipping point (for a wide range of customers to promote recycling and reduce the occurrence of illegal fly tipping). This service is no longer available.

2.4. The site area is given as 2.93ha (5.9acres).

2.5. The facility comprises of the following:

- ***(i)*** Concrete hardstanding entrance laneway and public parking area in the north-western corner;
- ***(ii)*** Concrete hardstanding area for storage of cars awaiting de-pollution (per Standard Operating Procedure Doc. Ref. P7.0.C / DEPOL) and storage of parts;
- ***(iii)*** Large covered waste processing shed including de-pollution area in the western portion of the site;
- ***(iv)*** Site offices, welfare facilities and a weighbridge located in close proximity to the entrance along the northern boundary of the site;
- ***(v)*** Concrete hardstanding area for storage of de-pollution cars;
- ***(vi)*** Secure perimeter fencing about the site.

2.6. The layout and operational aspects of the facility is as follows:

- ***(i)*** The main processing buildings and structures are predominantly located to the north and north-west and clustered around the site entrance. This includes a large extended shed to the south of the entrance referred to as the Main Processing Shed and a number of portacabins, welfare facilities and site offices located to the northern site boundary. A septic tank and percolation area are located to the rear of these portacabin units. A weigh-bridge is positioned immediately south of the portacabins for th weighing oi incoming and outgoing vehicles.

- ***(ii)*** Compartmentalised storage areas / bunkers are located to the northern and eastern boundary of the premises. These contain materials such as stainless steel, aluminium, wheel alloys, cables and non- ferrous materials. The majority of the operations and storage / sorting of materials takes place in the open, centrally within the premises, and to the east and south of the Main Processing Shed.

- ***(iii)*** The area to the south contains an electrical plant room, and is shown as accommodating baled cars, de-polluted end-of-life vehicles awaiting processing and ferrous materials for processing and post-processing. The hammer mill and a movable grab (used for feeding materials for processing) are also located in the south end of the premises.

- ***(iv)*** To the east of the premises is a gated area which is separated from the main site by concrete panels and containers. This is intended to be restored to agricultural use in due course and has a separate and independent access via a driveway and entrance to the R122, 95m north of the junction of the R122 and the L7231 Newtown Cottages access road.

2.7. Metal recycling and de-polluting end-of-life vehicles are the main activities at the facility. Metals are both ferrous & non-ferrous. There is no public access to the facility except for the delivery of end-of-live vehicles by their owners.

2.8. The Waste Facility Permit on these premises is regulated to take in 21,900 tonnes per annum. The layout drawing in *Appendix 8* enclosed (*Drawing No. 1522-DR02 Rev. 04*) shows the infrastructure and designated storage areas of the premises.

Table 1 below provides the applicable approximate volumetric capacity limits.

The site is separated into 3 x zones for purposes of surface water management as per layout drawing No. 1522-DR01 Rev. 03. The table below is an approximation of volumetric capacity per zones (Zone A – South, Zone B – North-West, Zone C – North-East).

WASTE.	***CAPACITY (m^3).***	***WASTE.***	***CAPACITY (m^3).***
ZONE A {South}.		***ZONE B {North-West}.***	
Ferrous for Processing.	***1500.***	***Storage Bays (x 2).***	***135.***
Processed Ferrous Metals.	***1500.***	***Intake of Ferrous from Trade Customers.***	***480.***
Baled E.L.V.'s.	***350.***	***Main Processing Shed.***	***350.***
De-Polluted E.L.V.'s.	***2000.***	***Smaller Non-Ferrous Shed.***	***150.***
ZONE C {North-East}.		***Combustible Waste.***	***Capacity (m^3).***
Storage Bays (x 10).	***675.***	***Non- De-polluted E.L.V.'s.***	***1000 (max. 132m^3 Stockpile).***
Processed Steel.	***3000.***	***Fragmentizer Waste.***	***1000 (max. 132m^3 Stockpile).***
		Paper, Tyres, Plastic.	***132.***

2.9. Primary Combustible Materials.

(a) The types of materials on-site that could be considered combustible are primarily:

- ***(i)*** Paper / cardboard;
- ***(ii)*** Plastics;
- ***(iii)*** Rags;
- ***(iv)*** Scrap metals (contaminated or mixed with other waste such as oils or plastics) (refer to Standard Operating Procedure *Doc. Ref. P5.2.K / OILFUEL*);
- ***(v)*** De-polluted and un-depolluted E.L.V.'s;
- ***(vi)*** Rubber (natural or synthetic including whole tyres, baled tyres, tyre shred/ crumb / fibre);
- ***(vii)*** Fragmentizer waste (including waste from the processing of E.L.V.'s, plastics and metal wastes);
- ***(viii)*** Waste oil (petrol, diesel, hydraulic, transmission and engine oils);
- ***(ix)*** Batteries;
- ***(x)*** Hydraulic, Transmission and Engine Oils;
- ***(xi)*** Diesel.

(b) Engine Oil*:*

The first activity as part of the de-pollution process is the draining and removal of any residual engine oils. Other activities are conducted in parallel, but the engine oil removal can typically take 20 minutes to reach the point where no further draining is visible.

Engine oil is usually gravity drained by removing the drain plug at the bottom of the sump and collecting the oil for a minimum of 20 minutes or until such time as no visible further draining of oil is witnessed. The oil is collected in a suitable container which has a minimum volume of 10 litres.

(c) Transmission Oils:

Transmission oils, i.e. manual or automatic gearbox and rear differential oils, are allowed to gravity drain for a minimum of 10 minutes or until such time as no visible further draining of the oil is witnessed. Transmission oil is collected in a suitable container which has a minimum volume of 5 litres. Gearboxes without drain plugs may be gravity drained by suitable drilling or piercing.

Power steering oils are extracted from both the reservoir and the connecting hose. For the reservoir, similar equipment as the brake fluid (see below) should be used. For the hose, fluid can be removed by either cutting at the lowest point and allowing gravity drainage or piercing and sucking out the fluid.

(d) Hydraulic Oils:

Hydraulic oils, i.e. brake and clutch fluid where applicable, is removed using equipment which uses suction and / or pressure on both the reservoir, brake pipes and cylinders. Drainage time is usually approx. 10 minutes until no visible fluid left in the reservoir and there is no visible further drainage following removal of the suction equipment.

(e) Coolant:

Coolant is gravity drained by removing the bottom hose from the radiator for a minimum of 10 minutes or until such time as no visible further draining of oil is witnessed. Coolant is collected in a suitable container which has a minimum volume of 10 litres.

(f) Screen Washing Fluid:

Screen washing fluid is sucked from the bottom of the reservoir. In E.L.V.'s with bent filler pipes, it is usually preferable to drain from below. No visible amount of fluid should be left in the reservoir(s).

(g) Fuel Tank (except L.P.G.):

Batteries are always removed before the fuel tank is de-polluted to prevent the possibility of electrical discharge igniting the fuel. Batteries have usually been removed by others prior to the E.L.V. coming onto the premises.

To achieve a high level of de-pollution, a hole should be pierced or drilled into the lowest point of the fuel tank and suction used to remove any residual fuel. No vapours should be released using this method.

Piercing or drilling should be done with a suitable non-sparking material and pneumatically powered with an earthing connection made between the vehicle and the extraction equipment. Commercial equipment should meet these requirements.

If a saddle-shaped fuel tank is fitted to the E.L.V., it may be appropriate to pierce or drill two low points so all the fuel can be extracted.

(h) Suspension System:

Suspension systems usually consist of shock absorbers, gas shock absorbers or sealed suspension systems.

Shock absorbers should have the fluid / oil removed from both the inner and outer cylinders without removing the shock absorber from the E.L.V.

Gas shock absorbers should have the gas removed. The equipment required therefor should be confirmed for suitability with the Manufacturer of the equipment, and any other additional safety requirements specified should be followed.

Sealed suspension systems should be drained using appropriate equipment as per Manufacturer's Instructions.

In each situation, no further visible draining of fluids should occur after the procedures above.

(i) Catalyst:

Catalysts can be removed safely with the use of the correct cutting equipment by cutting the exhaust pipe, both in front of and behind the catalyst unit. This may also be done more for financial benefits rather than de-pollution activities.

(j) Air Conditioning Refrigerant:

Air conditioning refrigerants are removed using specialist equipment and separate collection cylinders for both of the refrigerant gases in use i.e. R12 (a CFC) and R134a (a HFC). The equipment must be securely attached to the air conditioning valve to remove all the fluid whilst transferring it to the appropriate cylinder.

Fluorinated gases (F-gases) require operatives to be formally trained and in possession of a duly accredited certificate of competence.

(k) L.P.G. Tank:

As with electric or hybrid vehicles, no L.P.G. vehicles are accepted at the facility for de-polluting.

(l) Switches Containing Mercury:

Switches which are identified as containing mercury should be removed during the de-pollution procedure.

(m) Other Hazardous Items:

Older E.L.V.'s may contain asbestos containing materials (A.C.M.) in brake pad linings which must be removed if present. Procedures used to remove asbestos containing materials (A.C.M.) should follow the applicable health and safety guidelines for asbestos containing materials (A.C.M.).

In the event of fire, asbestos is indestructible and will be released into the surrounding air creating additional environmental and health & safety problems.

(n) Removal or Deployment of Air Bags:

Potentially explosive materials such as those contained in air bags and seat belt pre-tensioners should either be removed or set off / deployed in situ (which is the the recommended option).

Only appropriately trained personnel, using appropriate equipment, should carry out airbag removal or deployment.

Where deployment is the chosen option, it should be conducted in a secure non-hazardous area. No person should be within 10m during deployment. Once deployed the explosive content is neutralised.

(o) Post De-pollution:

After de-pollution activities, all gravity drained holes should be plugged, either with their own drain plug or a suitable plastic bung, to prevent any residual leakage. Once an E.L.V. is fully de-polluted it should be stored on a hardstanding or impermeable surface.

Maximum pile sizes should be in accordance with the following table:

Material.	*Maximum Height (m).*	*Maximum Length / Width (m)*	*Maximum Volume (m^3).*	*Maximum Area (m^2).*	*Maximum Separation (m).*
Rubber (incl. Tyres).	*5.*	*20.*	*450.*	*235.*	*6.*
Frag Waste from De-polluted E.L.V.	*5.*	*20.*	*450.*	*235.*	*6.*

(p) Rubber:

The rubber (natural or synthetic) on the premises including whole tyre, baled tyre, tyre shred, crumb and fibre is currently being phased out in the near future as the intention is that these materials will be removed for recycling by others prior to the end-of-life vehicles arriving here.

(q) Frag Waste:

The frag waste here includes waste from processing E.L.V.'s and plastics and metal wastes from materials recovery facilities.

NOTE: There are no Persistent Organic Pollutants (P.O.P's) or W.E.E.E. on these premises.

NOTE: Gas cylinders and aerosols are not accepted on site.
{In case of entry into site the items will be quarantined and removed from site by the producer without delay}.

2.10. The plant and equipment in use on the premises and their function are listed in the following table:

Description.	***No. Off:***	***Function.***
Weighbridge.	***1.***	***Evaluate / Weigh Loads in & out.***
Telehandler.	***1.***	***Loading / Unloading / Moving / Sorting.***
360° Excavator.	***5.***	***Loading / Unloading / Moving / Sorting.***
Baler.	***1.***	***Baling of Metal for Export.***
Pre-Shredder.	***1.***	***Segregate Waste prior to Shredder.***
Shredder.	***1.***	***Reduce Size of Mixed Waste.***
Forklift Trucks.	***5.***	***Loading / Unloading / Moving / Sorting.***
H.G.V.'s.	***7.***	***Movement of Waste to / from the Site.***

NOTE: This Fire Prevention Plan is of the view there are in effect no non-combustible materials on site as all materials are potentially combustible. However, each one will have varying auto-ignition temperatures so their reaction to fire may be delayed but also may, given sufficient time, ignite.

2.11. Security.

There is a manned reception area at the front during opening hours where all persons accessing the premises must call into. There is a management presence on the premises at all times during opening hours.

There is a manned security (P.S.A. licensed) presence on the premises outside of opening hours.

(i) Method used to record & manage storage times.

The premises logs all incoming wastes to record the dates and relevant information. These records are kept within the Main Office along with remaining storage capacity within the bays, details of pick-ups, etc. to ensure that the site does not stockpile combustible materials for prolonged periods of time.

(ii) Stock Rotation Policy.

Stock rotation involves the ongoing use of material handlers to either remove the waste to disposal for further treatment or to continuously rotate the stock to ensure no waste remains in storage for more than a week.

(iii) Monitor & Control Temperature.

Visual inspections of the stockpiles are carried out supplemented by means of the use of multiple CCTV units (31 units in total at present) located about the premises.

There is an ongoing exercise to upgrade 16 of the existing appropriately located CCTV units to Hikvision Bi-Thermal CCTV cameras in coming months.

(iv) Manage Waste Stockpiles.

The equipment and resources utilised in the operation at the site expedite the treatment and export of the wastes, whether segregated or prepared for onward treatment, for disposal within days of delivery, usually within one week.

(v) Storing Waste Materials in their Target Form.

End-Of-Life Vehicles in the designated storage bays of the de-pollution area are stored and assigned, as per material specifications.

(vi) Maximum Stockpile Sizes.

The site Waste Facility Permit is regulated to take in 21,900 tons per annum. See table showing stockpile limitations and separations in *Section 2.8* above and *Appendix IV - Current Stockpile Storage In Tonnage {As At 4/5/2024}* and storage bay dimensions in *Appendix II.*

2.13. Site Plans & Maps.

This Fire Prevention Plan includes a Site Layout Plan {shown in *Appendix I*), Site Layou*t {as at 13/5/2024} {shown in Appendix II} and Roads Layout for Permit Review {shown in Appendix III}.*

This is a scale to size copy of the overall Site Layout Plan {which is drawn to A1 scale size}. The A1 scale layout plan should be utilised for all references to drawings. A copy thereof will be maintained on site. The A1 sized drawings show the following details:

(i) The layout of the buildings on the premises;
(ii) Any areas where hazardous, combustible or flammable materials are stored on the premises (i.e. process areas, chemical storage, stacks of combustible wastes, oil / fuel tanks, etc.);
(iii) The location of all permanent ignition sources on the premises and their relative position to any storage of combustible and flammable waste;
{Best practice suggests a minimum gap of at least 6m};
(iv) Any areas where combustible waste or combustible non-waste materials are being treated or stored;
(v) All relevant separation distances between buildings, storage, stacks, etc.;
(vi) Any areas where combustible liquid wastes are being stored;
(vii) Any areas where de-pollution of E.L.V.'s take place;
(viii) Any areas where crushing, shredding, baling of metals or E.L.V.'s take place;
(ix) The main access routes for fire engines and any alternative access routes;
(x) The location of any access points around the perimeter of the premises to assist fire-fighting;
(xi) The location of hydrants, water supply sources and bulk water storage / supplies;
(xii) Areas of natural and unmade ground;
(xiii) The location of drainage runs, pollution control features (i.e. drain closure valves, etc.) and fire water containment systems (i.e. bunded or kerbed areas, etc.);
{These details are also on a separate drainage plan for the premises, a copy of which is maintained on site};
(xiv) Location of storage areas with stack / pile dimensions and fire wall details (where applicable);
{This includes details of wastes stored in a building, bunker or containers, with indicative pile layouts and geographically representative};
(xv) The specification, construction and dimension of all Fire Walls and Bays that offer a thermal barrier, plus the actual fire rating thereof;

(xvi) The location of the designated quarantine area and the volume of waste that it can hold;
(xvii) The location of fixed plant / machinery and where mobile plant is stored / parked when not in immediate use;
(xviii) The location of emergency spill kits;
(xix) The location of quarantine areas;
(xx) The location of fire-fighting points (See *Appendix XII*);
(xxi) The location of Sensitive Receptors (See *Appendix XI*);
(xxii) The location of anything site specific that may need to be added from time to time from experience.

3.0. SENSITIVE RECEPTORS.

Sensitive receptors may include:

(i) Schools, hospitals, nursing and care homes, residential areas, workplaces;

(ii) Protected habitats, watercourses, groundwater, boreholes, wells and springs supplying water for human consumption;

(iii) Roads, railways, bus stations, pylons (on or immediately adjacent to the site only), utilities, airports, etc.

See attached Sensitive Receptor Plan (*Appendix XIV* below).

NOTE: The facility is located between the junction of the R122 and R108 regional roads, in close proximity to Dublin Airport and its runway. St, Margaret's National School is about 200 metres northwest from the facility boundary and St. Margaret's church is about 250 metres northwest from the facility boundary.

There are a number of one-off houses to the west of the R122. The site is approximately 500 metres from the Huntstown River and the site drainage outfall has connectivity therewith overseen by the Fingal County Council. There is a groundwater well serving the site, PW1.

4.0. FIRE PREVENTION OBJECTIVES.

4.1. Objectives:

The Fire Prevention Plan can be defined as a "coherent and purposeful arrangement of the fire protection and fire prevention measures which are, and will be, developed in order to attain specified fire safety objectives" which are as follows:

- ***(i)*** The prevention, or at least the minimisation, of a fire occurring in the first instance;
- ***(ii)*** The minimisation of the potential for the spread of fire within the premises and to neighbouring premises;
- ***(iii)*** The implementation, development and maintenance of appropriate measures to ensure that any fire on the premises is controlled within 4 hours;
- ***(iv)*** The implementation and maintenance of measures to ensure that adequate sources of water for fire –fighting purposes are available when required;
- ***(v)*** The provision of appropriate training to all staff which is sufficient to enable them fulfil their role as an Emergency Incident Manager in a fire or similar emergency;
- ***(vi)*** The provision of such information, methodologies and techniques necessary to carry out an appropriate risk assessment of any situation in order to manage it successfully by means of team building, the assignment of tasks and the enabling of good decision making.

4.2. Access to the Fire Prevention Plan.

The designated Fire Safety Manager will ensure all of the following parties have access to the Fire Prevention Plan at all times and have read and understood the Plan:

- ***(i)*** All members of staff – both permanent and part-time;
- ***(ii)*** All third party contractors coming onto the premises for specific purposes;
- ***(iii)*** Emergency / Fire Services Personnel / Officers.

4.3. Duties & Responsibilities of the Fire Safety Manager:

The Fire Safety Manager of St. Margaret's Recycling & Transfer Centre Ltd is responsible for the implementation and development of the Fire Prevention Plan. This will involve reviewing the Fire Prevention Plan on an annual basis and amend when required due to changes to legislation, best Practices, E.P.A. / Fingal Co. Co. requirements, etc. or when changes occur to the operations or activities of St. Margaret's Recycling & Transfer Centre Ltd.

4.4. Management of the Fire Prevention Plan.

The Fire Prevention Plan will be uploaded to the Document File of St. Margaret's Recycling & Transfer Centre Ltd (which is available and accessible to all employees on Bright HR), and a soft and hard copy will be kept in the Main Office on site for reference purposes for all staff members and contractors requiring same and in particular detailing their roles in the event of a fire occurrence.

Effective implementation of the Fire Prevention Plan will require support from all employees. This Fire Prevention Plan will be made available to all new employees at induction

4.5. Testing the Fire Prevention Plan & Staff Training.

Testing of the Fire Prevention Plan will be ongoing and elements thereof will be checked e.g. fire- fighting equipment to be checked daily, water fire-fighting equipment (i.e. hoses, hydrants, etc.) where possible, operated at least weekly, etc., all overseen by the Fire Safety Manager and undertaken by the Fire Warden for the particular area.

Recording of the weekly inspections will be on the Record Sheet in Appendix VIII.

All members of staff will attend annual fire-fighting training which will include training on Risk Assessments.

4.6. Achievement of the Objectives of the Fire Prevention Plan:

The objectives detailed above in this Fire Prevention Plan will be achieved by means of a combination of the following measures:

(i) The design and layout of buildings;
(ii) The management of any areas where hazardous and flammable materials are stored on site;
{*Note: This includes the management, location and segregation of quantities of gas cylinders, process areas, chemicals / substances / materials, piles of combustible wastes, oil and fuel tanks, etc.);*
(iii) The identification of all permanent ignition sources on the site and ensuring that they are a minimum of 6m away from where any combustible and / or flammable waste is being treated or stored;
(v) The identification and management of separation distances between storage areas;
(vi) The identification and management of areas where combustible liquid wastes is stored;
(vii) The identification and management of areas where de-pollution of E.L.V.'s takes place;
(viii) The identification and management of areas where crushing, shredding, baling of metals or E.L.V.'s take place;
(ix) The provision and maintenance of unobstructed access routes for fire engines;
(x) The provision and maintenance of access points around the site perimeter to assist fire-fighting operations;
(xi) The provision and maintenance of hydrants and adequate supplies of water supplies for fire-fighting purposes;

(xii) The identification and management of areas of natural and / or unmade ground;
(xiii) The provision and maintenance of drainage runs, pollution control features (i.e. drain closure valves, etc.), and fire water containment systems (i.e. bunded or kerbed areas);
(xiv) The provision and maintenance of storage areas with pile dimensions and fire walls (where applicable); *{Note: This includes wastes stored in a building, bunker or containers*}.
(xv) The appropriate location of fixed plant and the management of areas where mobile plant is parked when not in immediate use;
(xvi) The provision and appropriate location of spill kits about the site and the training of staff in the correct use thereof;
(xvii) The provision and maintenance of appropriate quarantine areas;
(xviii) The development of any additional site-specific measures that may need to added from time to time; and
(xix) The use of Permit-To-Work formats and procedures when required for all Hot Works and other potentially hazardous practices.

The Permits-To-Work will either:

(i) have a specific condition requiring you to take appropriate measures to prevent fires on site and minimise the risk of pollution from them, including but not limited to those measures in an approved Fire Prevention Plan, or
(ii) require you to maintain a Fire Prevention Plan as part of the written management system which identifies and minimises the risks of pollution from the operations.

4.7. Use of the Fire Prevention Plan.

The Fire Prevention Plan forms part of the Management System for St. Margaret's Recycling & Transfer Centre Ltd. It is a stand-alone document within the overall Management System and both the Management and the operators / staff can easily refer to it.

In the event of an incident, the Emergency / Fire Services should be provided with a copy of the Fire Prevention Plan, if it is safe and practical to do so.

All operators / staff and external contractors working on the premises must be aware of and understand the contents of the Fire Prevention Plan so that they know what they must do in particular circumstances to initially prevent a fire happening and what to do if one actually does break out. These details should be provided to the employees of the relevant contractors at Induction on arrival on the premises and prior to commencing work. Formal records of this training must be maintained and the training should be refreshed every quarter for all contractors on site for long periods.

The operators / staff for St. Margaret's Recycling & Transfer Centre Ltd must receive appropriate and regular training in relation to the contents and use of the Fire Prevention Plan, as detailed in *Appendix IV*

Regular exercises (at least one per year) should be held to test how well the Fire Prevention Plan works. These exercises will include (but not be limited to what operators / staff need to do to prevent a fire occurring) what they are expected to do during a fire if one breaks out and any other site specific information as may arise from the exercises or from best practice knowledge.

The exercises will be designed to fully test the Fire Prevention Plan, in addition to regular straightforward fire evacuation drills. Where considered necessary, external support will be introduced to review and oversee the Fire Prevention Plan exercises.

4.8. Review of the Fire Prevention Plan.

The Fire Prevention Plan will be formally reviewed at least once annually, usually following the completion of the test exercises therefor or where necessary if there is any reason to suspect it no longer meets the objectives of the referred guidance or there is a fire (actual or near miss), there is a change in some or all of the activities on the premises or there is a sizeable new residential development or school constructed nearby, etc. All revisions made should be formally recorded and operators / staff notified formally thereof.

Following revision of the Fire Prevention Plan, the revised version thereof should be advised to the operators / staff and other relevant shareholders and updated copies thereof should be added to the relevant copy locations as specified in *Section 4.6*. *above*

5.0. FIRE PREVENTION PLAN – IMPLEMENTATION.

5.1. Activities at the Premises.

The site is currently occupied as a Recycling & Transfer Centre the main activity of which is the metal recycling and de-polluting of End-Of-Life Vehicles (E.L.V.) where they are brought to site, sorted, stored, processed, broken up and prepared for transfer to the next stage of the recycling process. Metals involved are both ferrous and non-ferrous. A number of machines were in use, including two grab / handlers and a hammer-mill.

The general fire prevention techniques available for use here, as applicable, are as follows:

(i) Keep storage, working areas and offices free of trash and clutter, i.e. maintain good housekeeping standards throughout the premises;

(ii) Ensure that all passageways / corridors utilised as emergency evacuation routes are kept clear and unobstructed at all times, i.e. no materials are to be placed or stored in or across any such circulation routes;

(iii) All emergency evacuation exit / doors are maintained secured but unlocked when the premises or a portion thereof the building is occupied;

(iv) The propping open of fire rated door sets or of emergency evacuations doors is strictly prohibited never be propped open;

(v) Scheduled and random inspections of fire extinguishers (i.e. the location, accessibility and condition thereof) and the emergency evacuation routes is carried out by the E.H.S. Manager, with formal records thereof maintained;

(vi) Operators and staff will be trained on fire safety matters {i.e. Fire Safety Awareness, Safe Use of Fire Extinguishers and Hose-Reels, Fire Warden / Marshall training, etc.} to a regular schedule, with training records thereon retained in the Main Office for review by authorised persons on request;

(vii) Do not store combustible materials of any kind in electrical, mechanical / plant or communication equipment rooms;

(viii) Regular maintenance is carried out as part of an ongoing Preventative Maintenance Programme (PPM) for all mechanical, mobile and production equipment and formal records thereof are maintained on file;

(ix) Follow proper storage and handling procedures as directed by the product manufacturers;

(x) Do not re-fuel gasoline / diesel-powered equipment while it is hot;

(xi) Ensure that open flames are not permitted in any setting, except for supervised training drills or maintenance by third party contractors under appropriate Hot Work Permit-To-Work systems;

(xii) Identify all potential heat sources and ensure that the areas about are maintained free and clear of materials with ample space around any heat source; and

(xiii) Instruct external third party competent Fire Safety Consultants to carry out regular reviews of fire safety conditions and procedures on site.

5.2. Manage Common Causes of Fire.

Common sources of ignition include smoking materials, electrical faults, cooking, arson, hot processes, naked flames as a result of Hot Works (cutting, welding, brazing, etc.), spontaneous combustion, etc.

(i) Arson:

The key pillars of arson prevention are the presence of robust perimeter protection (2.5m high metal security fencing), CCTV (at present approximately 31 units distributed about the premises) and security measures, including the presence of P.S.A. Licenced security personnel on site outside of opening hours.

The main site entrance from the public roadway is locked at night and the site is patrolled by security guard dogs under the control of the security operative. Day time access is controlled to the main site via barriers which are lifted when access has been granted, with further access to the offices controlled by swipe / mag-lock doors.

Access for small loads is at Customer Reception which is supervised during opening hours. All buildings are secured at night prior to the dogs being released. The site is also monitored by CCTV units at all time, with notifications of activity to the central monitoring station and to the directors' / key persons' mobile phones.

5.3. Plant & Equipment.

(i) The Facilities Manager will be responsible for maintaining equipment to prevent or control potential sources of ignition or fires therefrom as well as the proper mandated testing and maintenance thereof. All plant and equipment is serviced and maintained as part of the ongoing Planned Preventative Maintenance (PPM) programme and formal records thereof are maintained on file.

(ii) Details of the available fire suppression systems and manual fire-fighting equipment are detailed in *Appendix X* {Fire Inspection / Drill / Evacuation Document} and *Appendix XIII* {Fire-Fighting Points}.

(iii) The maintenance and inspection of all fire extinguisher and suppression systems under annual contract, and of the associated records, is the responsibility of the Facilities Manager.

(iv) A copy of the annual and weekly confirmation certification for each item of plant and equipment, and all in-house inspections by the E.H.S. Manager, muse be kept with the Fire Register files for review by authorised persons on request.

(v) The plant and equipment in use on the premises and their function are listed in the table in *Section 2.10* earlier in this document

(vi) Only trained competent (and ticketed, if necessary) personnel are permitted to use / operate / drive any plant or equipment at any time.

(vii) Appropriate fire extinguishers are installed in each item of mobile plant / vehicles;

(viii) When not in immediate operation, all mobile plant must be parked well away from any combustible waste.

(ix) The following table details the plant & equipment used on site during the site waste operations.
{*Note that only trained / competent, and where necessary ticketed, personnel are permitted to use / operate or drive the plant or equipment at any time}.*

Description of Plant / Equipment.	***Number of:***	***Function of Plant / Equipment.***
Weighbridge.	***1.***	***Evaluate & weigh loads in and out.***
Telehandler.	***1.***	***Loading / Unloading / Moving / Sorting.***

360° Excavators.	***5.***	***Loading / Unloading / Moving / Sorting.***
Baler.	***1.***	***Baling of Metal for Export.***
Pre-Shredder.	***1.***	***Segregate Waste prior to Shredder.***
Shredder.	***1.***	***Reduce Size of Mixed Waste.***
Forklift Trucks.	***5.***	***Loading / Unloading / Moving / Sorting.***
H.G.V.'s.	***7.***	***Movement of Waste to / from the Premises.***

5.4. Electrical Faults {including damaged or exposed Electrical Cables}.

(i) Any new or replaced elements of the existing electrical installation will be designed, installed and certified by a Registered Electrical Contractor (R.E.C.) in accordance with the requirements of *I.S.10101: 2020 – National Rules for Electrical Installations,* with at least Ingress Protection (IP65) Level 6 Solids Objects (Dust), Level 5 Protection against Water.

(ii) Appropriate confirmation certification will be available for all new installation work and a copy thereof will be retained in thee Fire Register files.

(iii) The original / existing electrical installations about the premises were installed to the requirements of the previous version of the National Rules for Electrical Installations. Periodic inspections and testing of the various electrical installations must be carried out by a Registered Electrical Contractor (R.E.C.), with follow-up Periodic Inspection Reports (P.I.R.) issued at least every three years. Annual reports on any inspections and testing should also be provided as required, as well as the required certification detailed in *I.S.10101: 2020 – National Rules for Electrical Installations*.

The following basic measures are also essential to minimise the risk of fire as a result of any faulty electrical equipment:

(i) Do not overload electrical outlets at any time;
(ii) Maintain free and clear access to all electrical panels and do not store materials (whether combustible or non-combustible) within at least 1m thereof;
(iii) All cupboards / enclosures about electrical panels along emergency evacuation routes should have a 60minute fire resistance rating;
(iv) All electrical cabinets should be vacuumed to a regular schedule to prevent the accumulation of dust, etc. therein;
(v) All portable electrical equipment should be checked and tested as part of a Portable Appliance Testing (P.A.T.) programmes at least on an annual basis for electrical safety of users, including a visual examination of any frayed or damaged cables, etc. {Formal records thereof will be retained in the Fire Register files};
(vi) The use of extension cords / leads should be prohibited other than for temporary use following a formal Risk Assessment of the specific requirements of the situation; connections, etc.;
(vii) Small electrical items / coffee makers shall not be placed on combustible surfaces (plastic or cloth mats, wooden counte-rtops, etc.) and all should be regularly P.A.T. tested to a specific schedule.

5.5. Discarded Smoking Materials.

Smoking is strictly prohibited throughout the premises at all times and clear signage to this effect has been erected about the premises.

5.6. Cooking.

There is no cooking on the premises at any time.

5.7. Hot Works.

(i) Standard Operating Procedures are in place in regard to Hot Works anywhere on the premises. The relevant contractor carrying out any such works will liaise in detail with the E.H.S. Manager prior to the commencement of works and produce a suitable agreed R.A.M.S. / Method Statement on the works including full details of the fire safety measures governing all such hot works. The contents thereof must be approved by the E.H.S. Manager prior to the commencement of any work on the premises.

(ii) A formal Hot Works Permit-To-Work must be completed and issued by the relevant contractor, and approved by the E.H.S. Manager of St. Margaret's Recycling & Transfer Centre Ltd, prior to every such work and the parameters thereof must be fully and closely followed at all times. The Hot Works Permit-To-Work will specific the applicable safety measures to be applied at

all times, including requirements for the wearing of suitable PPE, the carrying out of a fire watch during and after the works and at the end of the working day, the presence and availability of suitable fire extinguishers, etc.

(iii) Clear signage has been erected about the premises warning of the hazards of any type of Hot Works.

(iv) No flammable substances will be allowed in or near any areas where any cutting or welding operations are likely to occur.

5.8. Industrial Heaters.

There are no industrial heaters on the premises at present and unlikely to be.

5.9. Hot Exhausts.

(i) Random visual inspections / fire watches of all plant and equipment, including mobile plant / vehicles, are to be carried out during the day and during the final inspection at the end of each day prior to the closure of the premises by the relevant Line Manager and / or the E.H.S. Manager.

(ii) All plant and equipment is regularly serviced and maintained and the condition (physical and operational) of the exhaust thereon are checked and reviewed.

5.10. Ignition Sources.

(i) Potential ignition sources include naked flames from Hot Works, electrical faults, hot surfaces / processes, arson, spontaneous combustion, etc. The issues associated with each of these are dealt with in the appropriate section below.

(ii) In the event that there are any ignition sources in place (whether from naked flames, space heaters, furnaces, incinerators, other sources of ignition), they must always be located at least 6m away from all combustible and flammable waste / materials. This will be checked on an ongoing basis as part of the daily and end-of-day fire watch inspections.

5.11. Batteries.

(i) Batteries for disposal / recycling are stored in a designated storage area under cover which is fitted with a suitable automatic fire suppression system. Protocols in respect to storage include consideration of Manufacturer's Recommendations and Instructions. In addition, any damaged batteries are stored separately away from the undamaged ones.

(ii) Batteries have been removed for all End-Of-Live Vehicles (E.L.V.) prior to arriving at these premises.

(iii) Batteries for disposal / recycling are removed off premises to a regular schedule.

(iv) Separate arrangements will be put in place to store lithium batteries and Li-ion batteries from electric vehicles in a separate location from other batteries so that they cannot come into contact with any liquids or be damaged.

Should the requirement arise for any reason and, if damaged, lithium and Li-ion batteries will be stored in a waterproof container filled with sand or similar inert material and well away from any buildings or other combustible materials.

5.12. Leaks & Spillages.

(i) The end-of-live vehicles are checked on arrival to ascertain if there are any fuels or combustible liquids / oils therein. If identified the particular materials are drained to suitable containers for onward recycling, as detailed above in Section 2.9..

(ii) In the event of any leaks or spillages, the area is designed to contain such spillage which is immediately cleaned up to prevent transfer / trailing thereof by mobile vehicles or persons about the premises.

(iii) Mobile vehicles on the premises are serviced to a regular schedule. In the event of any leakage of combustible liquids noted the vehicle is removed from operation and parked in a designated quarantine area until the leak is repaired without undue delay.

(iv) All oily rags used for wipe-down and clean up purposes are placed in a covered metal container and disposed of properly and regularly, which also reduces any risk of spontaneous combustion arising therefrom.

(v) Smaller quantities of flammable and combustible liquids are stored in suitable approved storage containers and cabinets and larger quantities in suitable bunded container tanks.

5.13. Build-up of loose Combustible Waste, Dust & Fluff.

(i) Accumulations of loose combustible waste, dust & fluff will be swept up and removed on an ongoing basis. Daily visual inspections of the relevant areas will be carried out and, if not already noted by the operator, appropriate instructions for clean-up will be given thereto.

(ii) Good housekeeping standards are essential and critical to the efficient operation of these premises.

5.14. Reactions between Wastes.

(i) There are no recorded chemical or biological reactions in materials processed on these premises and no expectation of same.

(ii) In the event that there may be a reaction between any waste materials on these premises a quarantine area therefor will be set up.

5.15. Waste Acceptance & Deposited Hot Loads.

(i) No hot loads or loads with elevated temperatures are accepted at these premises.

(ii) When loads arrive, they are checked to ensure that the contents thereof are within the acceptance parameters of these premises, including inspecting for signs of heating (e.g. steam or smoke emissions, batteries (and in particular lithium-ion batteries), oils or other contaminants or rags soaked in oils or chemicals. If any such situation is noted the load is not accepted and is turned away.

5.16. Hot & Dry Weather.

(i) The storage piles are constantly sprayed with a water mist as a dust reduction measure which has the additional effect of preventing a rise in temperature. Storage times are also minimised to enable fresh materials to come through the premises.

(ii) Ongoing efforts are being made to ensure that there are little or no reflective surfaces about the premises.

(iii) In the event of the materials resting for extra-long periods on the premises, a rotation policy will be applied, the frequency of which will be determined by temperature monitoring, the size and height of the stockpile, the materials therein and whether there is any risk of spontaneous combustion conditions developing.

5.17. Prevent Spontaneous Combustion (Self-Combustion).

(i) Some materials can spontaneously combust, or self-combust, under certain conditions. Spontaneous Combustion **(s**elf-combustion) occurs when a material which can self-heat generates heat at a faster rate than it can be lost to the environment. The temperature continues to rise until the auto-ignition temperature is reached and the material then self-combusts or spontaneously ignites.

(ii) Where there is any risk of spontaneous combustion conditions developing, a rotation policy for the stockpiles and continuous temperature monitoring will be applied, the frequency of which will be determined by the temperature monitoring, the size and height of the stockpile and the materials therein.

Where there is a potential risk of spontaneous combustion (self-combustion), the regular rotation policy will ensure that the waste remains cold and that any localised warming is dissipated quickly.

(iii) To help prevent spontaneous or self-combustion, a maximum storage time for all materials on the premises is detailed to control and monitor this potential hazard.

(iv) The storage of all waste on the premises is recorded from arrival to departure and where necessary temperature monitoring is utilised in addition to good and regular stock rotation, which depends on the materials and the temperature conditions.

(v) All stock on the premises longer than a week is rotated, whether it requires to be or not. It is quite seldom that any specific materials are retained on the premises for more than 3 – 4 weeks at most (whether as a result of market conditions, strikes or seasonal variations) whether combustible or non-combustible wastes.

(vi) The usual policy here is that materials come and go on the principle of 'first in, first out'.

(vii) During planned and un-planned shutdowns of the premises, it is policy that all materials on the premises will be rotated on a weekly basis with temperature monitoring using a calibrated probe (with formal records of the result retained).

(viii) The heat generated in the materials from shredding, chipping or producing crumb is allowed dissipate naturally before the materials are placed in stacks / piles for storage.

(ix) Alarm triggers in relation to temperature and possible spontaneous (self-) combustion will include temperature, rates of temperature change over time, visual signs of heating, etc. The operators / staff will be advised and trained in what to look for and advised to raise any queries of concern in this regard without undue delays.

5.18. Waste Bale Storage.

(i) Baling here basically consists of baling of the E.L.V. metal for export or tyres with the stacks thereof being for short-term storage and to await collection thereof once or twice a week at least.

(ii) All E.L.V.'s are fully de-polluted before being baled.

(iii) Measures to enable storage of materials in baled form includes managing the stacks, rotating the materials therein regularly, minimise the stack sizes and height, store the materials in their largest form to minimise the risk of spontaneous / self-combustion and to limit the scale of any fire that may break out.

(iv) Treating waste to reduce particle size can increase the risk of fire due to spontaneous / self-combustion. Therefore to reduce the risk of spontaneous / self-combustion, store the waste material in its largest form for as long as practicably possible before treating and moving it off premises.

(v) For all waste piles, the maximum height allowed is 4m.

(vi) When measuring height, you must use the longest measurement between the base of the pile and the top. This is to allow for any uneven ground beneath the waste. For all waste piles, the maximum length or width allowed (whichever is the longest) is 20m.

(vii) If the waste piles contain a mixture of combustible wastes, the maximum limits based on the type of waste that makes up most of a mixed pile must be evaluated.

(viii) If storing waste within a building, the design, access and layout of a building needs to be carefully considered so a fire can be extinguished easily and quickly by the Emergency / Fire Services.

The majority of bulk waste at these premises is in the open. The applicable maximum stockpile sizes are as follows:

MAXIMUM PILE SIZES.			
WASTE TYPE.	***Loose & more than 150mm.***	***30mm to 150mm or baled.***	***Less than 30mm.***
Tyres & Rubber.	***450m^3.***	***300m^3.***	***300m^3.***
Wood.	***750m^3.***	***450m^3.***	***300m^3.***

Compost & Green Waste (excluding during the Active Composting Process).	***750m³.***	***450m³.***	***450m³.***
R.D.F. & S.R.F.	***450m³.***	***450m³.***	***450m³.***
Plastics.	***750m³.***	***450m³.***	***300m³.***
Paper & Cardboard.	***750m³.***	***750m³.***	***450m³.***
Textiles.	***750m³.***	***750m³.***	***400m³.***
W.E.E.E. containing Plastics, including Fridges, Computers & Televisions.	***450m³.***	***450m³.***	***450m³.***
Metals other than W.E.E.E. (including crushed E.L.V.'s, which are classed as 'Baled' Waste for the Purpose of this table - for whole E.L.V.'s see the Section 'Whole End-Of-Life Vehicles'.	***750m³.***	***450m³.***	***450m³.***
Fragmentizer Fluff.	***450m³.***	***450m³.***	***450m³.***

(ix) Whole E.L.V.'s, when stacked, must comply with the following conditions i.e.

- each vehicle must be accessible from at least one side (to allow active fire-fighting and so unburnt vehicles can be accessed and moved to prevent the fire spreading);
- any row must be limited to a depth of 2 vehicles and no more than 3 vehicles high (whether on racking or free-standing, so the stack can remain stable during a fire); and
- a separation distance of 6m must be maintained between rows / blocks of vehicles.

The quantities of stacked whole E.L.V.'S are minimal at these premises at any time.

(x) If waste is stored in containers that can be moved, the maximum pile size requirements do not apply. Each container must be accessible from at least one side so a fire can be extinguished.
{*Examples of these types of containers include skips, roll-on roll-off skips, or shipping containers}.*

If there is a fire in a container, it must be possible to move the other containers away as soon as is reasonably practicable to prevent the fire spreading. There will be only a small number of containers on these premises at any time.

(xi) The two main methods to prevent a fire from spreading are:

- the maintenance of *Minimum Separation Distances* between stacks / piles / adjacent buildings / other combustible or flammable materials (usually a minimum of 6m) {to minimise the risk of fire spread between and to assist in enabling the Emergency / Fire Services to gain clear access to all sides for fire-fighting purposes}; or
- the erection of *Fire Walls & Bays* {which can resist fire (both radiative heat and flaming) and provide a fire resistance period of at least 120 minutes to allow wastes to be isolated and to enable a fire to be extinguished within 4 hours and thereby enable a reduction in separation distances}.

Sketches in *Appendix 1 (Pages 97 - 100*) of the Waste Industry Safety & Health Forum Guidance - *Waste 28 - Reducing Fire Risk at Waste Management Sites* - can be utilised as necessary to select and confirm the appropriate separation distances required.

(xii) A quarantine area is a designated area to place fire affected waste to ensure that it is fully extinguished or to move unburnt wastes into to isolate and prevent them catching fire.

The designated quarantine area is within the boundary of the site for which the permit has been granted and should be large enough to hold at least 50% of the volume of the largest pile / stack, row or block of E.L.V.'s or containers on the premises and have a separation distance of at least 6m around the quarantined waste (which can be reduced if concrete bunkers / walls are used). ***The current quarantine area is signposted within the large open sided building and adjacent to the tyre and battery storage.***

5.19. **External Fire Spread:**

(i) The office accommodation is within 3m of the Western elevation and there are no un-protected openings.

(ii) The main building and the hammer mill are located on the Southern elevation within 3m of the boundary fence and once again there are no unprotected openings.

The dust accumulation from the hammer mill does collect on the nearby fencing / foliage and this requires regular attention and wash-down as part of the management control therefor.

Consideration is currently being given to water spray projection along this elevation.

(iii) Stockpiles will not be stored on the boundary line and appropriate separation distances are applied.

(iv) Where concrete walls / barriers are utilised, the fire resistance rating thereof is at least 90minutes with much of it being 120minutes fire resistance rating.

(v) The boundary line of the premises is appropriately managed to control any possibility of foliage spreading into the neighbouring fields.

(vi) Containment of fire water run-off is achieved via bunds and storage lagoons.

5.20. **Firewater Retention.**

Containment of fire water run-off is achieved via bunds and storage lagoons.

5.21. **Detecting Fires.**

(i) The primary means of fire detection during working hours is a combination of operator / staff awareness and the use of the CCTV units (with visual flame detection and / or spark, infrared and ultraviolet detection incorporated) which can detect significant thermal increases in stacks / piles (especially outside of working hours) and buildings and alert the remote alarm monitoring centre (A.M.C.).

(ii) There is also automatic smoke and heat detection and suppression systems installed within the various buildings about the premises, which will activate a fire alarm with the remote alarm monitoring centre (A.M.C.) and activate an early response thereto.

(iii) The confirmation Certificates for the Design, Installation, Commissioning and Servicing / Testing of the various automatic fire detection and alarm systems on the premises have been provided by the competent third party installers in accordance with the requirements of the relevant Irish Standard {*I.S. 3218: 2013 + Amendment No. 1: 2019*} therefor. A copy of these certificates are retained in the Fire Register files for review by authorised persons on request.

(iv) A similar situation applies for the installed automatic fire suppression system. A copy of the confirmation Certificates for the Design, Installation, Commissioning and Servicing / Testing therefor are retained in the Fire Register files for review by authorised persons on request.

(v) All automatic fire detection and alarm systems and automatic fire suppression systems are serviced and maintained on a quarterly basis by competent third party contractors and a Certificate of Servicing / Testing for each system is issued thereafter for each system, a copy of which is retained in the Fire Register files for review by authorised persons on request.

6.0. FIRE-FIGHTING TECHNIQUES.

(i) Access & Facilities for the Emergency / Fire Services:

Basis of compliance is *Section 5, T.G.D. B (2006) (Reprint 2020*), Technical Guidance Note *TGN7.01 – Reducing Fire Risk at Sites Storing Combustible Materials* and Guidance Note: *Fire Safety at Non-Hazardous Waste Transfer Stations*.

St. Margaret's Recycling & Transfer Centre Ltd has a Standard Operating Procedure (S.O.P.) in place in respect to the actions required in the event of fire, which utilises trained personnel using fire-fighting equipment provided i.e. hand-held extinguishers and hose reels fed from the various hydrants about the premises.

The strategy is simply to control and delay the fire until the local Emergency / Fire Services arrive and take control of the situation.

(ii) For Emergency / Fire Service operations to be successful, they must be able to access the site and fight the fire from as many avenues as possible. Therefore an alternative access has been identified to the south eastern elevation which will greatly enhance fire service intervention.

(iii) There must be enough water available for fire-fighting purposes so as to manage a reasonable worst case scenario. This could a combination of water in storage tanks or lagoons on site and / or access to hydrants or a mains water supply.

The minimum reserves of water required for 4 hours operation for fire-fighting purposes have been determined by means of a Fire Safety Assessment as 960,000 litres.

If measures such as creating a fire break are in place, the fire-fighting water requirements for a 300 m^3 pile of combustible material is at least 2,000 litres / minute for a minimum of 3 hours, which equates to a water supply of 360 000litres in total and which may be reduced further if an automatic infill or re-circulation system is present.

If storing E.L.V.'s, the requirement will be 1800 litres of water to extinguish each vehicle.

(iv) The current reserves of fire-fighting water reportedly consist of the following:

> 4 industrial sized water storage tanks, each with a reported capacity of 32,000 litres and 2 mobile water storage tanks with reported capacities of 10,000 and 20,000 litres respectively. This gives a combined water storage availability of 158,000 litres which, if maintained to the reported capacities, equates to 44% of the required total of 360,000 litres. Therefore, on a pro rata basis, stack sizes should not exceed 44% of 300m^3 i.e.132m^3.

It is proposed to augment the static supply with a hydrant supply to be provided by Irish Water from a local water supply. This will increase the capacity necessary to achieve the necessary reserve capacity.

The provision of hydrants therefor is in accordance with the requirements of *Sub-Section 5.1.7 - Diagram 30 of T.G.D. B (2006) (Reprint 2020)*, and. *B.S. 750: 2012 - Specification for Underground Fire Hydrants & Surface Box Frames & Covers* {recently updated to *B.S. 750:2023 - Underground Fire Hydrants. Surface Box Frames & Covers*}.

(v) It is noted the current above ground static supply does not meet the standard for the provision of static water supply as yet. As stated above it is intended to rectify this at the earliest date in conjunction with Irish Water.

(vi) Additional measures to assist fire-fighting operations include the management of stacks in accordance with the requirements of *TGN7 / 01 Section 8* and the spacing between stockpiles in accordance with the requirements of *Figure 1, Table's 1 & 2* of *TGN7 / 01*.

In addition, the robust segregation of stockpiles, protection from wind and improved definition of applicable spacing are all measures being implemented to provide increased prevention of fire spread between the stockpiles.

The increase in stock rotation periods of fragmentiser waste will also assist in reducing and minimising the applicable fire load.

(vii) Stockpiles are no longer stored against buildings and fire-walls are used to enclose the fragmentiser.

7.0. EMERGENCY INCIDENT MANAGEMENT / CONTINGENCY PLANNING.

7.1. Assessment of Situation / Major Emergency Planning.

The decision to declare a Major Emergency Incident will be taken by the Fire Officer / Incident Commander who will take charge on arrival to the site and who will carry out an assessment having liaised with the Managing Director / Fire Safety Manager.

7.2. Major Incident.

One of the first actions to be taken, after calling the Emergency / Fire Services, will be to notify neighbouring properties.

7.3. Fire Safety Manager.

The Fire Safety Manager is the person who finds themselves in charge of an emergency in any premises which, in an emergency, is a very delicate, dynamic place and time controlled space. Their immediate actions and those of other team members will be vital to the outcome of the emergency. This will usually be the Managing Director who lives within 1km of the premises.

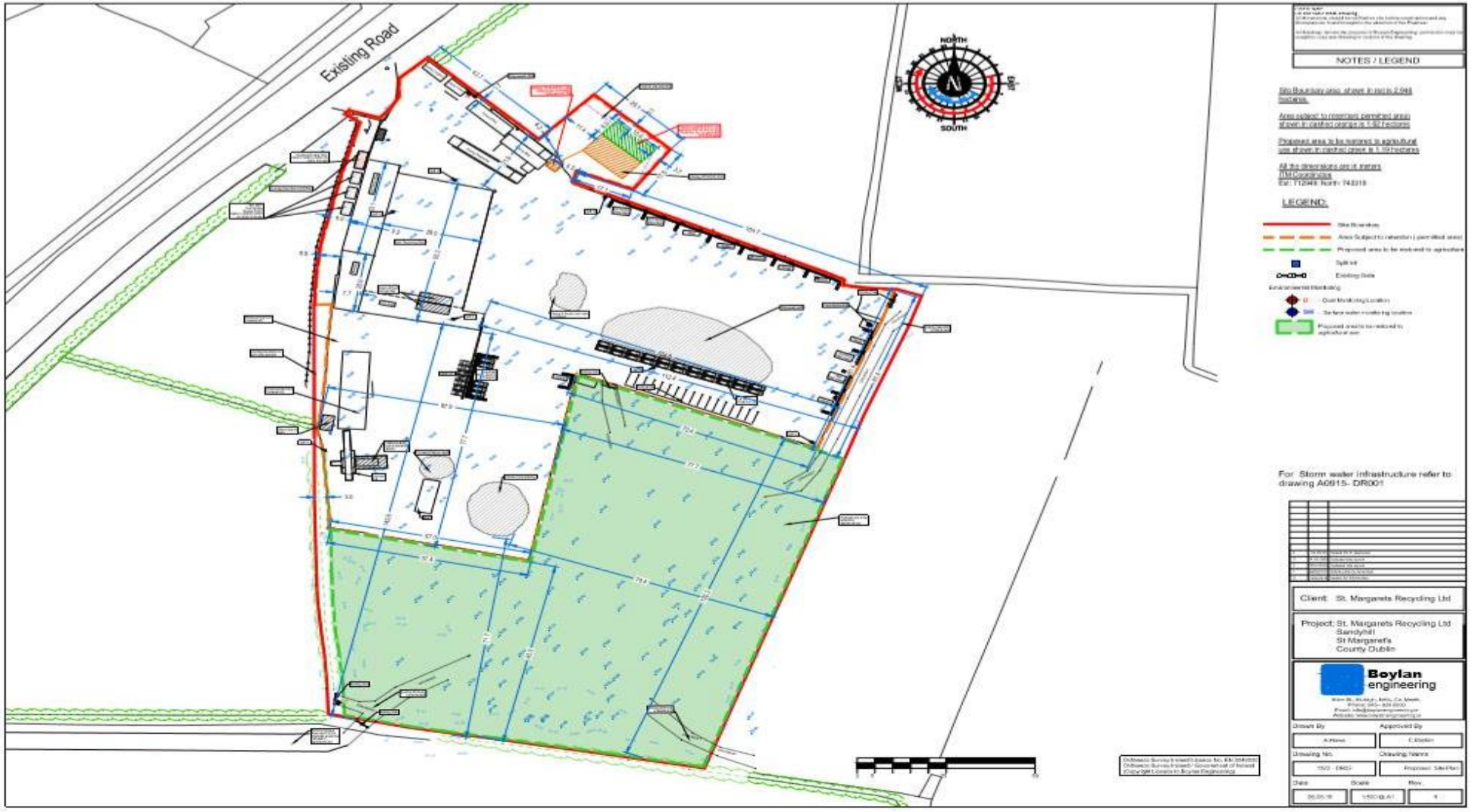
Based on existing Fire Safety Strategies, the Person-In-Charge will be the Emergency Incident Manager (E.I.M.) who will find themselves in charge of a disparate team who have come together in this unique once in a lifetime event. The E.I.M. has to assume all the emergency team members have received adequate training, have a good knowledge of the building / premises and of Emergency Incident Protocols.

The knowledge of the Fire Safety Manager has to be superior and their leadership qualities and management skills have to be excellent in an emergency situation. These attributes do not arrive overnight but are honed over time with previous experiences and training. Fire is usually a once in a lifetime event and is not a normal day-to-day activity. The training of staff is to provide them with the necessary tools and to prepare them for that once in a lifetime event for which we prepare but may never happen.

The Fire Safety Manager's primary duty is to ensure that all persons are removed to safety as soon as practicable, and to brief the Emergency / Fire Services Incident Commander on this / her arrival on site. On arrival the Incident Commander takes over and manages the emergency situation.

After fire has been extinguished and the Emergency / Fire Services have vacated the site, it will be necessary to clean up and decontaminate the site to make it operational again.

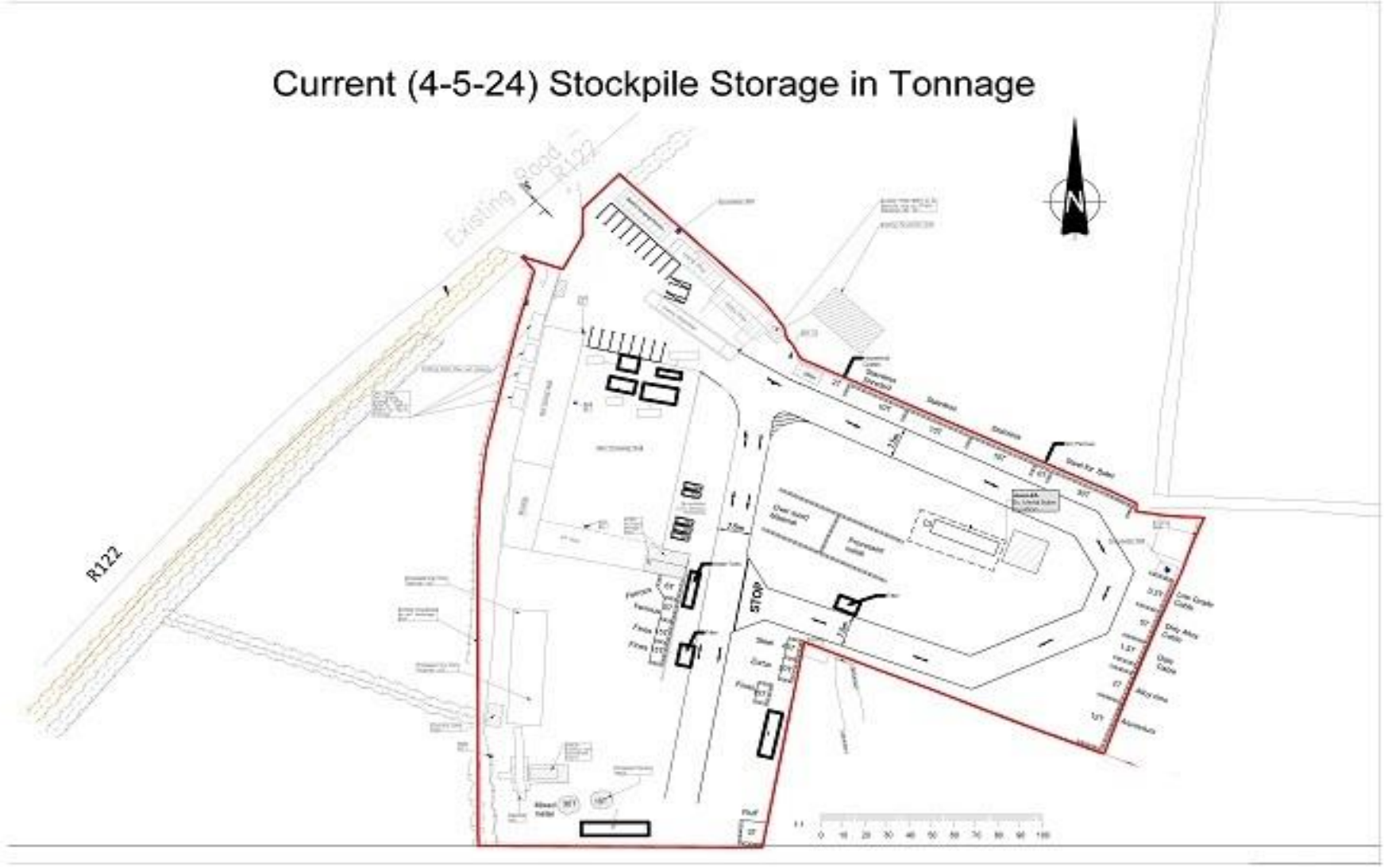
APPENDIX I: SITE LAYOUT PLAN.



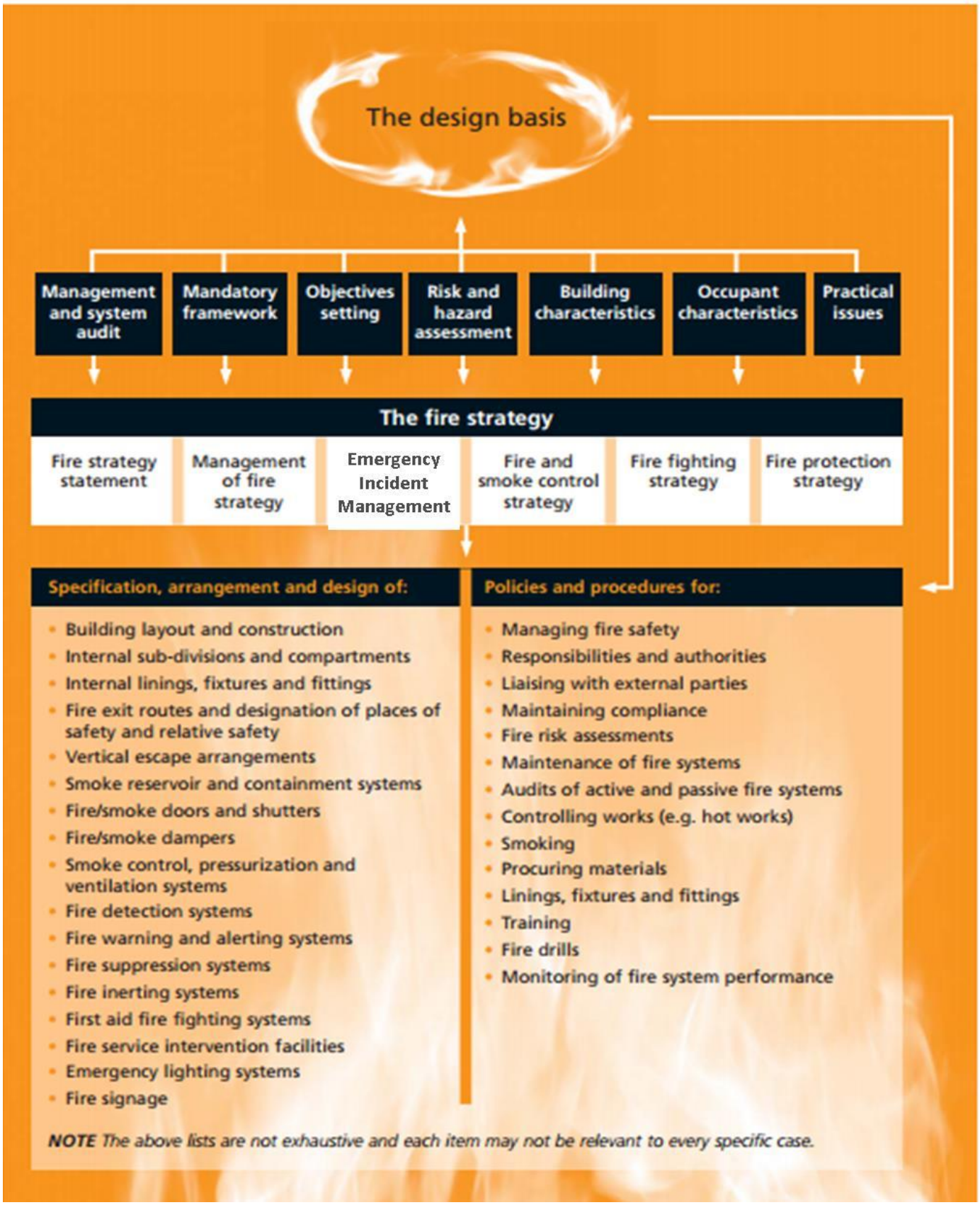
APPENDIX II: ***SITE LAYOUT {as at 13/5/2024}.***

APPENDIX III: ***ROADS LAYOUT FOR PERMIT REVIEW.***

APPENDIX IV: ***CURRENT STOCKPILE STORAGE IN TONNAGE {as at 4/5/2024}.***



APPENDIX V: DESIGN BASIS FOR THE FIRE PREVENTION PLAN.



APPENDIX VI: STAFF TRAINING PLANS.

It is the policy of St Margaret's Recycling & Transfer Centre Ltd to provide new staff members with the earliest possible fire safety information prior to commencing their duties. This will be achieved at induction.

Induction training takes two forms viz. Orientation Training and Induction Training.

No new staff member will commence their duties without receiving Orientation Training, which will be provided by a member of the Fire Safety Management Committee. Orientation is based on the buddy system, in the event of an emergency; the new staff member will be assigned to a regular more experienced and competent staff member.

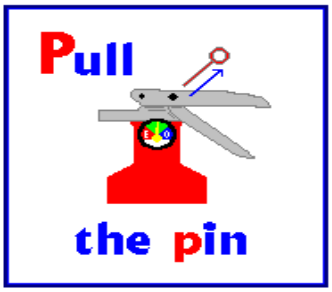
During the Orientation Training, the following information, in addition to the usual HR and safety range of information, will be delivered:

- ***(i)*** The layout of the facility will be given and a tour thereof indicating all of the emergency evacuation routes, location of fire-fighting and emergency equipment, etc.;
- ***(ii)*** The emergency signals for the facility will be explained and demonstrated.
- ***(iii)*** The required actions to be taken in the event of a fire or emergency;
- ***(iv)*** Instructions on how and when to raise the alarm and what to look out for during ongoing operations;
- ***(v)*** Details of the Person(s)-In-Charge;
- ***(vi)*** Details of the Fire Prevention Plan, including the method of access to a copy thereof as and when required.

Induction fire safety training will be provided once per month. It is a condition of employment that all members of staff attend the course and completes the training assessment. Induction training will cover all of the fire safety aspects necessary for new staff members to function effectively in the event of an emergency.

In addition all staff members will receive formal training on Fire Safety Awareness, the Safe Use of Fire Extinguishers & Fire-Fighting Equipment and Fire Warden / Fire Marshal training.

APPENDIX VII: P.A.S.S. METHOD FOR THE SAFE USE OF A FIRE EXTINGUISHER.



Pull the pin. This will allow you to squeeze the handle in order to discharge the extinguisher.

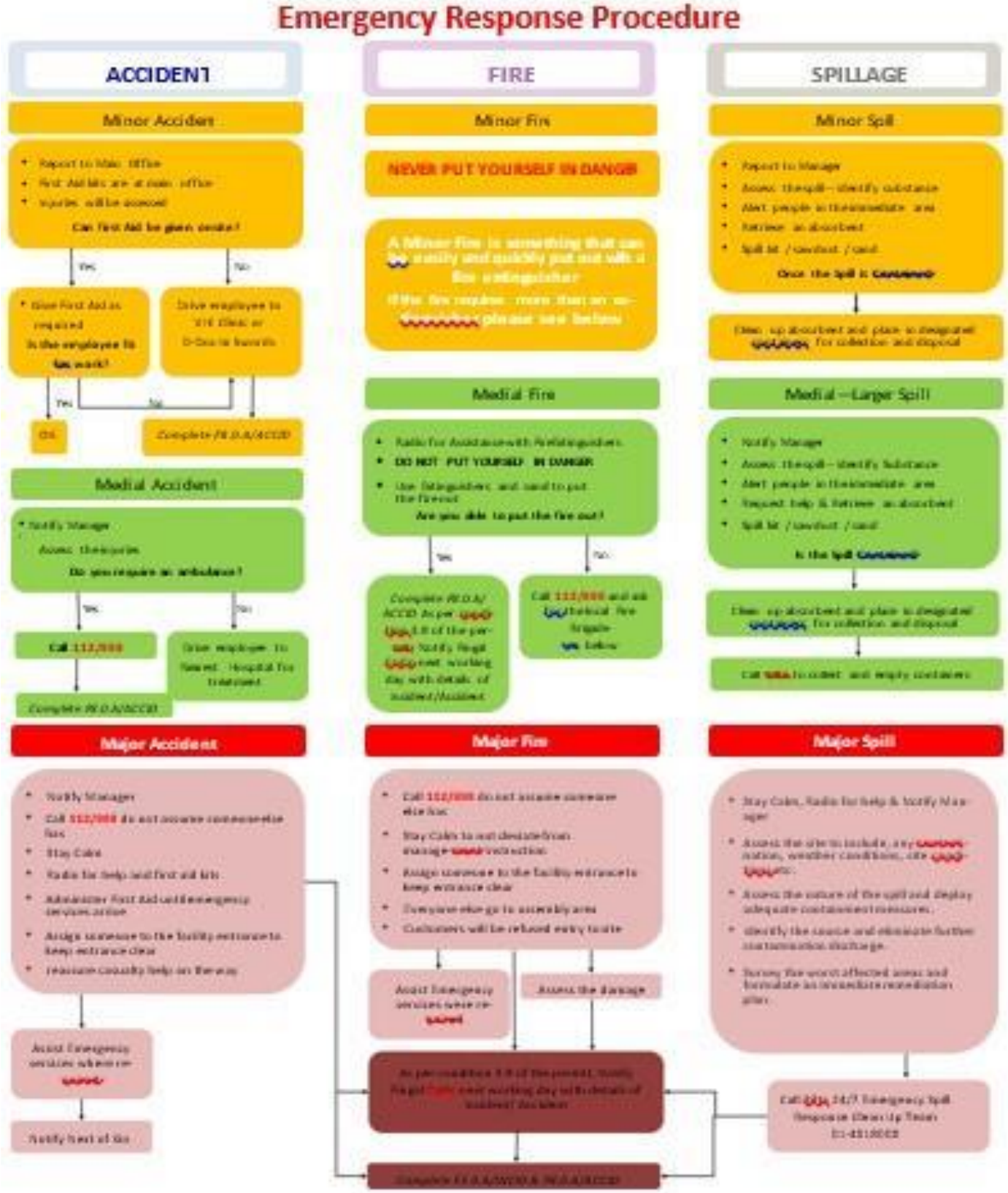
Aim at the base of the fire. Aiming at the middle will do no good as the agent will pass through the flames.

Squeeze the handle. This will release the pressurized extinguishing agent.

Sweep from side to side. Cover the entire area that is on fire. Continue until fire is extinguished. Keep an eye on the area for re-igniting.

APPENDIX VIII: EMERGENCY RESPONSE PROCEDURE {E.R.P.}.

DOCUMENT REF: P&O.F/ERP	St. Margarets Metal Recycling	St. Margaret's Recycling & Transfer Centre Ltd
DOCUMENT TITLE: Emergency Response Procedure		Seatbill, St. Margarets, Co. Dublin, K67 EW7



APPENDIX IX: **FIRE EMERGENCY PLAN – GENERAL.**

NEVER PUT YOURSELF IN DANGER

FIRE PLAN

NEVER PUT YOURSELF IN DANGER

A Minor Fire is something that can be easily and quickly put out with a fire extinguisher If the fire requires more than an extinguisher please see below

ON DISCOVERING A SMALL / SMOULDERING FIRE

- Fight with local extinguishers and sand if possible. Notify the site Agent immediately
- If unable to extinguish – Call 112/999 on nearest available phone and give clear instructions
- Evacuate the area and buildings and proceed to the assembly point (facility entrance) – Radio all staff to assembly point and sound the alarm
- Do not put yourself in danger and Do Not Deviate from management instruction

SITE MANAGEMENT

On being informed of a fire the Site Agent or his representative must:

- Call the emergency services on 112/999 do not assume someone else has done so and ensure evacuation of the buildings and site
- Fire Warden shall isolate surface water valve to prevent contamination
- Proceed to the assembly point (facility entrance) and await the Fire Brigade
- Ensure facility entrance is clear from traffic and weighbridge gate is open

PERSON TO TAKE CHARGE

- Mr. Brian McDonnell 086 265 4884
- Outside Normal working hours: As Above

REMEMBER! Dial **112 / 999,**

Ask for Fire Services and give instructions

ST. MARGARETS RECYCLING & TRANSFER CENTRE LTD

ST. MARGARET'S ROAD, R122, K67 EW73

NOTE: Take EXTRA care when using power tools (i.e., [illegible] / welders)

Take time to look at your surroundings before starting a power tool, if you think there is a material close buy which could be flammable then DO NOT start your power tool and remove the material from the area in which you are working

APPENDIX X: EVACUATION PROCEDURES – Managers / Operatives / Staff.

A.	***MANAGERS:***
IF YOU DISCOVER AN EMERGENCY FIRE or SERIOUS ACCIDENT:	
1.	***Managers should immediately implement the Emergency Response Plan (E.R.P.).***
2.	***Contact the Emergency Services / Fire Brigade on 112 or 999. Do not assume someone else has unless you are otherwise advised.***
3.	***Get all staff to evacuate immediately to the designated Assembly Area (by the front facility entrance).***
4.	***Advise any waiting vehicles on the weighbridge to clear the weighbridge to leave access for emergency vehicles, if necessary.***
5.	***Bring the Visitor Book, the Fire Inspection / Drill / Evacuation Document and the Emergency Response Plan (E.R.P.) with you. Do not bring anything else.***
6.	***Go to the designated Assembly Area yourself.***
7.	***Nominate one person to manage traffic out of the site and keep the exits and road into the premises clear and unobstructed.***
8.	***Complete the Role Call at the designated Assembly Point to ensure all the staff and visitors are present and safe.***
9.	***Do not permit anyone to return to the buildings or the site until the ALL CLEAR is given by the Emergency Services Coordinator or the Management.***
DO NOT PANIC OR DEVIATE FROM THESE INSTRUCTIONS.	

B.	OPERATIVES / STAFF:
IF YOU DISCOVER AN EMERGENCY FIRE or SERIOUS ACCIDENT:	
1.	*Contact the Emergency Services / Fire Brigade on 112 or 999. Do not assume someone else has unless you are otherwise advised.*
2.	*Warn anyone else in your sight to evacuate immediately to the designated Assembly Area (by the front facility entrance).*
3.	*Warn the drivers / operators of any lorries / vehicles on site to switch off their engine and walk to the designated Assembly Area (by the front facility entrance).*
4.	*Do not go to the designated Assembly Area in your lorry / vehicle as this will cause congestion and possible further unnecessary risk. Switch off your engine and walk to the Assembly Area without delay.*
5.	*Bring the Visitor Book, the Fire Inspection / Drill / Evacuation Document and the Emergency Response Plan (E.R.P.) with you. Do not bring anything else.*
6.	*Follow the instructions given to you by the Manager-In-Charge and do not leave the Assembly Area until you have been instructed to do so by either the Manager-In-Charge or the Emergency / Fire Services Coordinator.*
7.	*Always ensure that you have informed the Manager-In-Charge that you are leaving or relocating to another location.*
DO NOT PANIC OR DEVIATE FROM THESE INSTRUCTIONS.	

APPENDIX XI: WEEKLY INSPECTION RECORD.

MONTH:		*WEEK No.*	*1.*	*2.*	*3.*	*4.*	*WEATHER:*	*Hot.*	*Dry.*	*Wet.*	*Calm.*	*Windy.*	*Bad.*

MAIN ENTRANCE:			
Entrance clear of debris / rubbish / fly tipping, etc.?		*Main electric gate working properly?*	
Facility signs at entrance all intact & correct?		*Is the barrier operational?*	
It the weighbridge & weighbridge clock working?		*Is the yard lighting working properly?*	
Do any nearby trees / hedging need to be cut?		*Is the interceptor working correctly?*	
OFFICES:			
Is the automatic fire detection & alarm system operating correctly?		*Are both combination door locks working properly?*	
Are the panic / emergency buttons in order?		*Is the intruder alarm working properly?*	
Are the computers & software working?		*Are the CCTV units fully operational?*	
Are the canteen / tea room appliances in order?		*Are all toilets fully functional?*	
Is the heating in operational order?		*Is all internal lighting working?*	
NON-FERROUS SHED:			
Are all scales in working order?		*Is (are) the printer(s) in working order?*	
Are fire extinguishers in place & operational?		*Are the floor areas clear & tidy?*	
Are all non-ferrous materials in tonne bags?		*Are the CCTV units (2off) in working order?*	
MAIN PRODUCTION SHED:			
Are all batteries stored in a wrapped pallet or in a bunded box?		*Does a shipment need to be organised (e.g. for pallet removal, etc.)?*	
Are all tyres stacked in a safe manner?		*Do tyres need to be collected for removal?*	
Are fire extinguishers in place & operational?		*Are the floor areas clear & tidy?*	

DE-POLLUTION AREA:			
Are the floor areas clear & tidy?		***Are all hoses inside bunds?***	
Are fire extinguishers in place & operational?		***Do any of the tanks need to be emptied?***	
BACK YARD:			
Are there any major cracks or fissures visible?		***Are fire extinguishers in place & operational?***	
Is the Kobelo unit operating correctly & well?		***Are the 2 x Sennebogen units operating correctly & well?***	
Is the LeFort baler unit operating correctly & well?		***Are the ground areas clear & tidy?***	
FRONT YARD:			
Are fire extinguishers in place & operational?		***Is the external fencing intact?***	
Do any of the non-ferrous bays need to be emptied?		***Are the dog pens secure?***	
Are the ground areas clear & tidy?			

COMMENTS:	
1.	
2.	
3.	
4.	
5.	
6.	

APPENDIX XII: FIRE INSPECTION / DRILL / EVACUATION DOCUMENT.

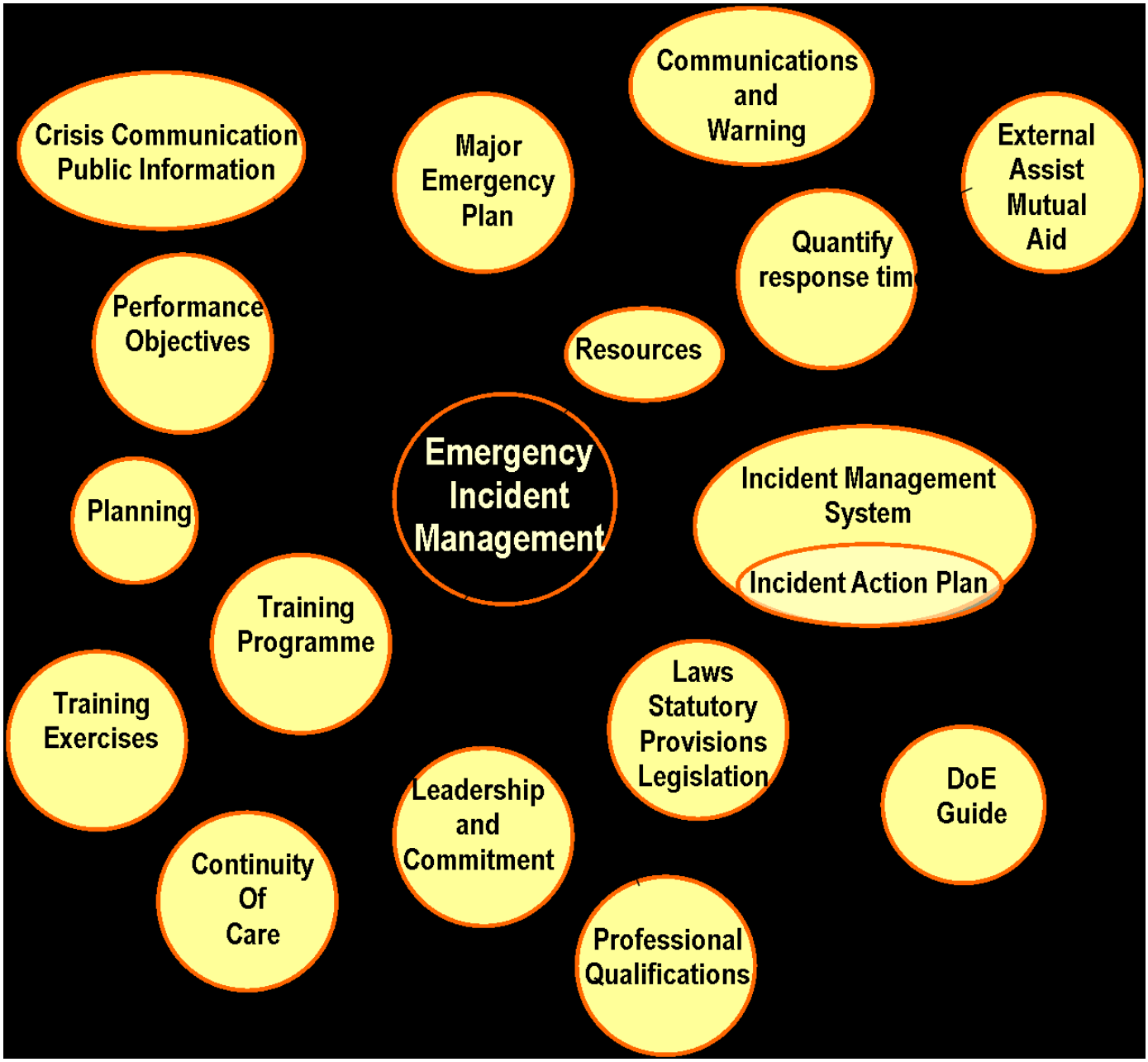
St. Margarets Metal Recycling

Employee	Main Work Area	Nearest Fire Point to your work Area	Are the Extinguishers sealed	Are they accessable? YES / NO.	Fire Drill Roll Call. Absent.	Present.
Brian McDonnell.	Office / Yard.	**ALL.**			☐	☐
Daryna Sobol.	Office.	**1, 2.**			☐	☐
Raluca Serban.	Office.	**1, 2.**			☐	☐
Gemma Rock.	Office.	**1, 2.**			☐	☐
Mary Hayden.	Office.	**1, 2.**			☐	☐
Caroline Kinahan.	Office.	**1, 2.**			☐	☐
Alan Reilly.	Office / Yard.	**ALL.**			☐	☐
Niall Farrell.	Machine Operator / Back Yard.	**8, 15.**			☐	☐
Viktor Dorzds.	Non-Ferrous Shed / Open Shed / Yard.	**4, 5, 6, 7, 9.**			☐	☐
JJ Harris.	Machine Operator / Back Yard.	**8, 9, 15.**			☐	☐
Adrian Martinas.	De-Pollution.	**8, 9, 14.**			☐	☐
Vasyl Semeshchuk.	De-Pollution.	**8, 9, 14.**			☐	☐
Janis Stasis.	Non-Ferrous Shed / Open Shed.	**4, 5, 6, 7.**			☐	☐

Artem Sliusar.	Open Shed.	**4, 6, 7, 10.**			☐	☐
Nasari Kuksin.	Open Shed.	**4, 6, 7, 10.**			☐	☐
Valentyn Kutsenko.	Open Shed.	**4, 6, 7, 10.**			☐	☐
Oleksandre Lazarenko.	Open Shed.	**4, 6, 7, 10.**			☐	☐
Vasyl Semeshchuk.	Open Shed.	**4, 6, 7, 10.**			☐	☐
Fredir Nehaliuk.	Open Shed.	**4, 6, 7, 10.**			☐	☐
Le Duc Duy.	Open Shed.	**4, 6, 7, 10.**			☐	☐
Sean Bruton.	Driver.	**ALL.**			☐	☐
James McDonnell,	Driver.	**ALL.**			☐	☐
Eddie O Connell,	Driver.	**ALL.**			☐	☐
Tom Ryan,	Driver.	**All.**			☐	☐
Fire Drill: ☐	**Fire Evacuation:** ☐	**Fire Fighting Equipment Drill:** ☐			***Date :***	***Signature***

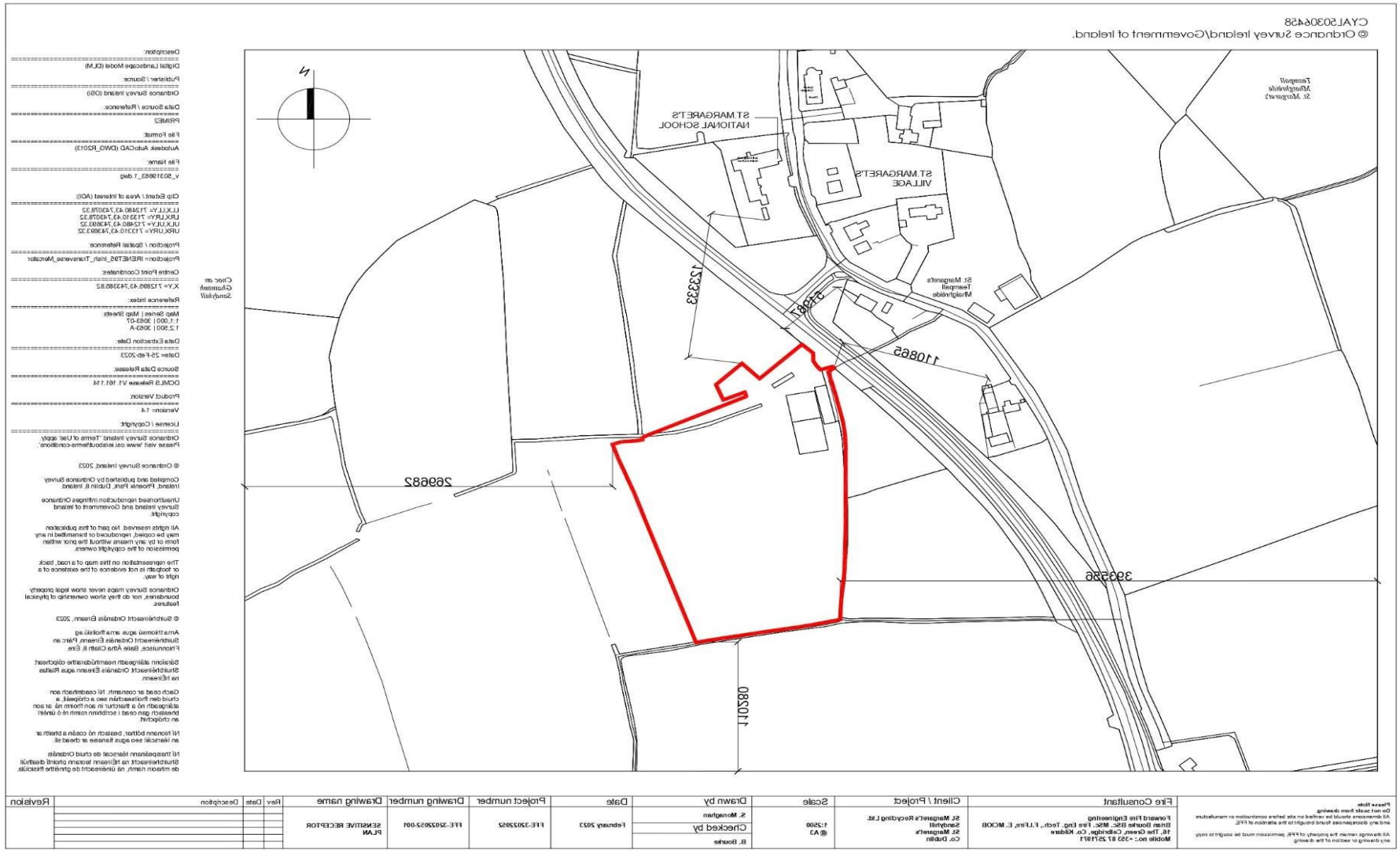
RECORD of FIRE DRILL.				**No.**	
TIME of FIRE DRILL:			***DATE of FIRE DRILL:***		
NATURE of ALARM ACTIVATION:	***Fire Alarm - Actual.***		***Accidental Activation.***		
	Emergency Activation.		***Planned Fire Activation / Drill.***		
NATURE of EVACUATION:	***Fire Drill.***		***Bomb Threat.***		
	Fire Ignition.		***Telephone Threat***		
	Postal Threat.		***Uncontrolled Gas Release.***		
OBSERVATIONS:	**1.**				

APPENDIX XIII: EMERGENCY INCIDENT MANAGEMENT – OVERVIEW.




Immediate Actions
Leadership
Emergency Incident Manager
Assign and Prioritise Tasks
Take Ownership and control of situation
Initiate Emergency Protoco[s and SOPs
Incident Assessment
Available Resources

APPENDIX XIV: **SENSITIVE RECEPTOR PLAN.**

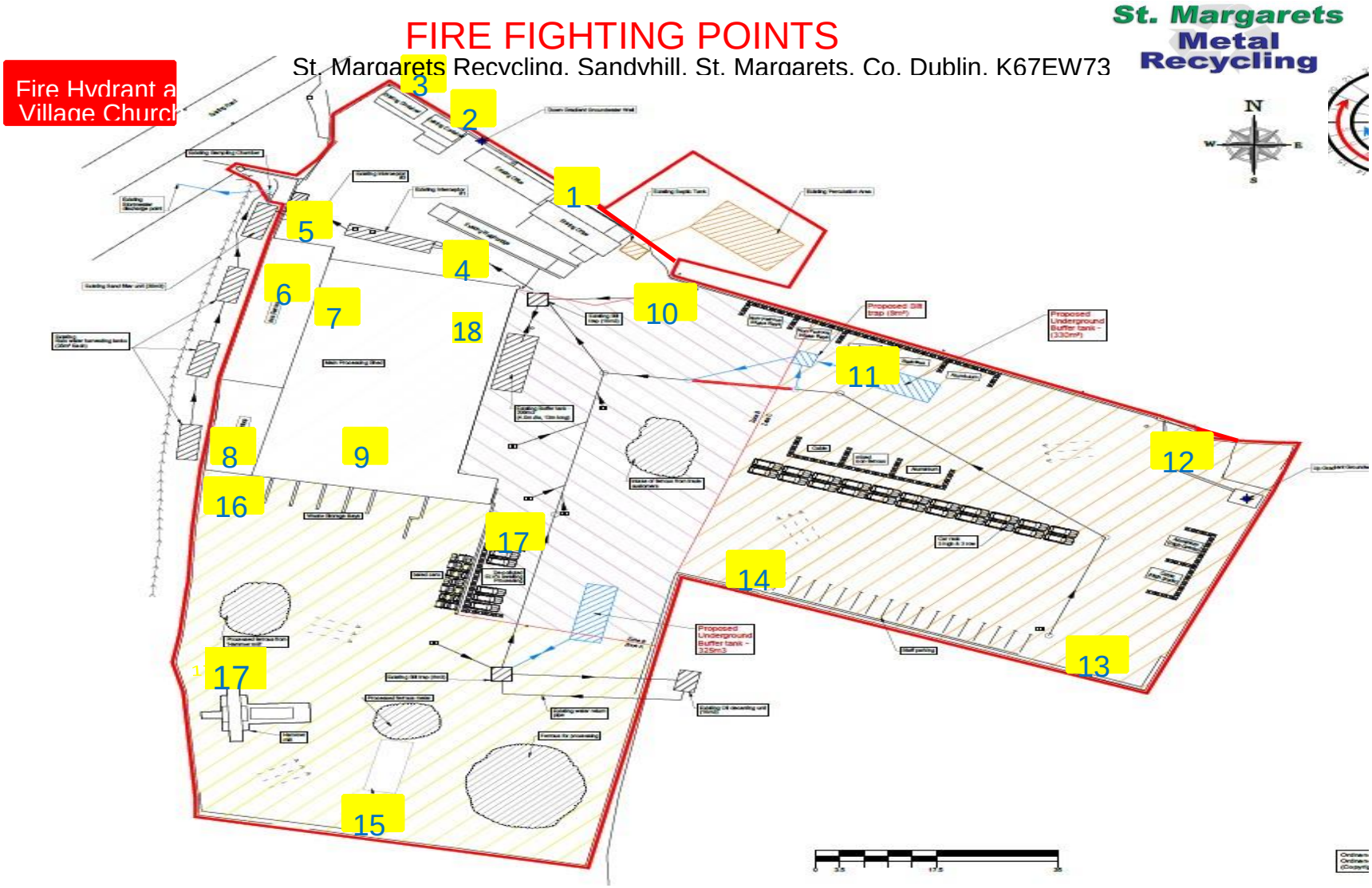


APPENDIX XV: **FIRE FIGHTING POINTS.**

No.	Area.	No. of Extinguishers.	No.	Area.	No. of Extinguishers.
1.	Main Office.	9.	11.	Between Non-Ferrous Bays.	2.
2.	Drying Room.	2.	12.	Beside Dog Pens.	2.
3.	Canteen.	2.	13.	Staff Parking Top Corner.	2 + 1 x 50kg.
4.	Side of Weighbridge.	2 + 1 x 50kg.	14.	Staff Parking.	2.
5.	Front of Non-Ferrous Shed.	2.	15.	Behind Baler.	2.
6.	Inside Non-Ferrous Shed.	2 + 1 x 50kg.	16.	Outside Workshop.	2.
7.	Inside Open Shed back to back with Point 6.	2 + 1 x 50kg.	17.	Hammermill.	13 + 1 x 50kg.
8.	Workshop.	2 + 1 x 50kg.	18.	Lithium Battery Blanket & Fire Extinguisher.	1 + 1.
9.	De-Pollution Area.	4 + 1 x 50kg.	19.	Mobile Water Tanker.	1.
10.	Beside Toilets.	2.			

FIRE FIGHTING POINTS

St. Margarets Recycling, Sandyhill, St. Margarets, Co. Dublin, K67EW73



APPENDIX XVI: EMISSION PLAN – 2021.

APPENDIX XVII: HEAVY MOBILE PLANT & VEHICLES – GUIDANCE.

Most waste management sites use heavy mobile plant, such as loading shovels, grabs and telescopic handlers. This plant can lead a hard life and is inevitably ion direct contact with waste, much of which may be combustible. Other vehicles, such as visiting lorries, may also pose a risk.

Mobile plant can pose ignition risks to the wastes they come in contact with:

(i) Hot exhausts can ignite wastes trapped near them. Plant operators must be informed and instructed of this risk and ensure that all wastes are cleared from around exhausts and other hot parts of the plant / machines at the end of each shift.

(ii) Appropriate fire extinguishers must be fitted in each item of mobile plant and operators must be provided with appropriate training in the safe use of same.

(iii) It is advisable to install automatic fire extinguishing equipment under the bonnet of each plant engine and in other high-risk areas.
{Note that this may be a requirement of your Insurers and you should formally check with same}.

(iv) Ensure that all mobile plant is serviced and maintained well to a strict schedule, with close attention given to the electrical systems (which are often a source of fire ignition), with formal records thereof retained on file for review by authorised persons on request.
{Note that the schedule of maintenance suggested by the Manufacturers / Suppliers may not be sufficient in waste management conditions / use and consideration should be given to whether more frequent maintenance / servicing is required}.

(v) Mobile plant / equipment should be parked well away from waste stacks, waste left in reception / receiving areas or any other places where waste may be present.
{Ideally the mobile plant / equipment should be parked in a sterile / protected area e.g. in an empty block / building / bunker, behind a fire compartment wall, in the open well away from any waste materials , etc.}.

(vi) Mobile plant / equipment shovels, blades, etc. may produce sparks when being scraped along a concrete or metal floor / surface / wall. Operators must be made aware of this and be instructed to maintain awareness thereof at all times.
{For high-risk areas and materials, consideration should be given to utilising specialist coatings for the mobile plant / equipment shovels, blades, etc. to limit the generation of sparks from these sources}.

(vii) If the condition of the concrete in reception, storage and other areas is poor to the extent that the metal reinforcing bars or similar are exposed, then the risk of metal-on-metal contact and the production of higher energy sparks may well increase. It is essential therefor that the condition of the concrete surfaces are checked and assessed to a regular schedule and that operators are instructed to report same at all times.

(viii) The timely maintenance and repair of damaged concrete surfaces will assisting in mitigating any risks from this source.

(ix) If practical and possible, utilise non-flammable hydraulic oils. This is likely to be easier and as efficient for new plant / machines and more difficult for older types. Check the situation out with the Manufacturer / Supplier as appropriate. Record findings formally.

APPENDIX XVIII: ***HAMMER MILL STANDARD OPERATING PROCEDURE - Draft.***

DOCUMENT REF.:	***PS.2.1 / HAM.***	***St. Margaret's Recycling & Transfer Centre Ltd, Sandyhill, St. Margaret's, Co. Dublin.***
DOCUMENT TITLE:	***Hammer Mill Operating Procedure.***	

1.0. Purpose:

This document describes the Standard Operating Procedure (S.O.P.) that will provide employees with a set of guidelines that have been developed to mitigate hazards associated with this work task, as identified through the work-place hazard identification process.

2.0. Scope.

This document covers the Standard Operating Practices during the use of the Hammer Mill, which is used to separate / breakdown materials prior to export.

3.0. Responsibility.

The Managing Director ultimately has overall responsibility the Standard Operating Procedures are followed safely and that the maintenance and service schedule of equipment is adhered to.

4.0. Procedure.

4.1 On site we use an American Pulveriser Hammer Mill to separate waste materials of scrap and aluminium. The following instructions must be followed to ensure the safe use of the machine:

- ***(i)*** The Hammer Mill must not be operated solo. At least two employees must be present when in use;
- ***(ii)*** Keep fingers and arms away from the hopper;
- ***(iii)*** Ensure valves are completely closed and any protection devices are secured;
- ***(iv)*** Carefully feed bundles of material into the hopper and feed only at the rate that the Hammer Mill can process material;
- ***(v)*** Follow proper procedures and use the right equipment, including safety glasses, heavy duty gloves and protective foot-wear;
- ***(vi)*** Ensure safety measures, such as caps or guards, are securely installed;
- ***(vii)*** On completion of use, turn off the motor, clean work areas, allow the motor to cool down and monitor.

4.2. Scrap materials are selected after appropriate segregation and separation of materials that have been accepted to site.

4.3. The Hammer Mill itself is fixed on a flat concrete pad.

4.4. Material containing EWC 17 04 05 (iron and steel) and EWC 17 04 07 (mixed metal) is placed onto a conveyor using an excavator grab before being top fed through an in-line crusher into a fine in-feed hopper.

4.5. Material is given shredder treatment through the spider and end disc cap crusher and swing hammers.

4.6. Lighter fractions are separated through gyrating assembly screener line and passes out onto a stockpile which is diverted to a designated area for recovery / disposal off site.

4.7. Appropriate operator supervision through operational panels and visual checks on materials passing through the in-line conveyor system.

4.8. The unit shall be serviced through a preventative maintenance programme (PPM) in accordance with Manufacturer's Instructions.

4.9. Where unplanned maintenance is required, enclosures on housing, covers and guarding shall be replaced for safety and prevention of diffuse emissions of noise, dust and spilled material.

4.10. Processed metals such as Shredded 211 / Meatballs (17 04 05 EWC), Ali TT (17 040 07) is then stored in designated areas awaiting export from the site.

4.11. Lighter fractions discharged from the process is further processed using a trammel to remove fines and remainder residue (19 10 04). The light fraction residue is then stored in designated areas awaiting export from site for disposal. Appropriate stockpile thresholds for fire safety shall be observed on stockpile volume.

Author:	***Caroline Kinahan.***	***Version:***	***002.***	***Date:***	***4th February 2021.***	***WFP – FG – 13 – 0002 – 03.***

APPENDIX XIX: REFERENCES / STATUTORY INSTRUMENTS / LEGISLATION.

A: BUILDING REGULATIONS 1997 – 2021:

(i) The buildings are subject to the provisions of the Building Regulations 1997 – 2021 and the Fire Services Acts 1981 & 2003.

(ii) For fire safety, the functional requirements of the Building Regulations, as espoused in *Technical Guidance Document B – Fire Safety (2006) (Reprint 2020),* are set out under the following headings, which will be expanded on when submitting Fire Safety Certificate submissions:

Requirement B1 - ***Means of Warning & Escape.***
Requirement B2 - ***Internal Fire Spread (Linings).***
Requirement B3 - ***Internal Fire Spread (Structure).***
Requirement B4 - ***External Fire Spread.***
Requirement B5 - ***Access & Facilities for the Fire Service.***

(iii) The original Fire Safety Certificate for the premises was issued in March 1998 {*Register Reference No. FSC / 076 / 98}*.

(iv) Guidance on compliance with the requirements of Part B of the Building Regulations is presented in *Technical Guidance Document B – Fire Safety (2006) (Reprint 2020),*which applies to applications under Part B Building Regulations.

B: FIRE SERVICES ACTS 1981 & 2003:

(i) The are the primary pieces of fire safety legislation in Ireland. Responsibility for compliance with fire safety in any premises rests with the "Responsible Person".

(ii) In a Waste Recycling and Transfer facility, the duties and responsibilities of the Responsible Person lies with the operators and the Management Team for the Centre and has been delegated from the Managing Director thereto. At any particular time, the "Responsible Person(s)' will be the person(s) who has (have) control of part or all of the premises.

(iii) Where building work and fire protection measures comply with the requirements of *Technical Guidance Document B – Fire Safety (2006) (Reprint 2020)* as prima facie evidence of compliance with the Building Regulations, additional physical measures should not normally be required under the fire safety exercise unless high-hazard materials or processes are introduced to the premises *(which will not be the case here).*

(iv) The *Fire Services Acts 1981 & 2003* places specific duties on the "Responsible Person" such as carrying out a Fire Risk Assessment of the premises, providing first-aid fire-fighting equipment, training up employees in relation to Fire Safety Awareness, Safe Use of Fire Extinguishers and appropriate training for Fire Wardens and Fire Marshals.

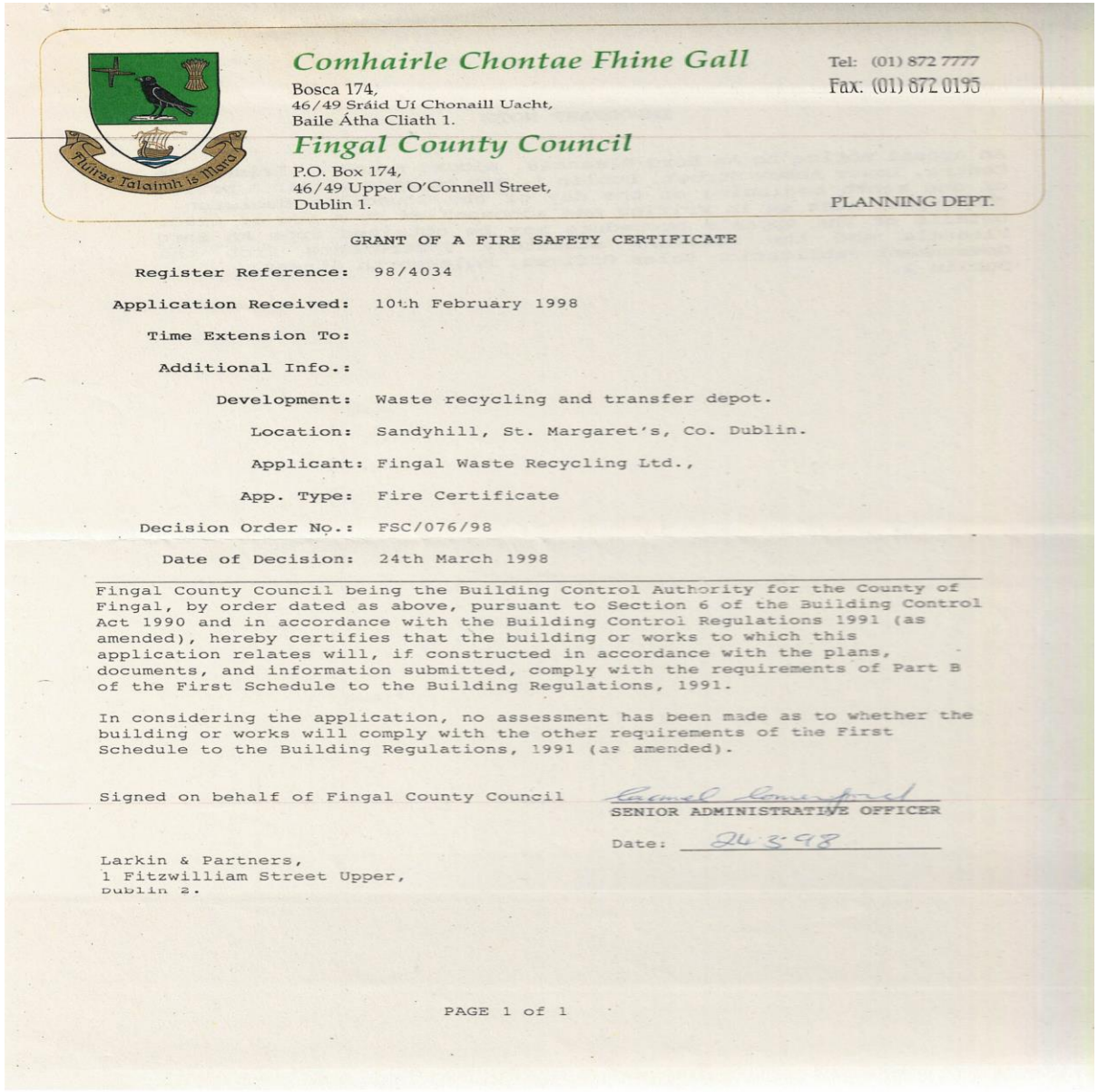
C: OTHER RELEVANT STATUTORY INSTRUMENTS / LEGISLATION.

(i) The Building Control Acts / Regulations 1990 – 2014.
(ii) Safety, Health & Welfare at Work Act 2005.

D: INFORMATIVE REFERENCES.

(i) Technical Guidance Document J (T.G.D. J) **-** Heat Producing Appliances;
(ii) B.S. 558: 2004 - Part 12 - Managing Fire Safety;
(iii) C.I.B. Report – Publication 269: 2001 - Rational Fire Safety Engineering Approach to Fire Resistance of Buildings – W014: Fire;
(iv) I.S. 3218: 2013 + Amendment No. 1: 2019 - Fire Detection & Fire Alarm Systems for Buildings – System Design, Installation, Commissioning, Servicing & Maintenance;
(v) I.S. 3217: 2013 + Amendment No. 1:2017 - Emergency Lighting;
{Note updated to I.S. 3217: 2023 – Emergency Lighting}.
(vi) I.S. 291:2015 + Amendment No. 1: 2022 - Selection, Com missioning, Installation, Inspection & Maintenance of Portable Fire Extinguishers;
(vii) WASTE 28 (Waste Industry Safety & Healthy Forum – W.I.S.H.) - Reducing Fire Risk at Waste Management Sites (Issued in March 2020).
(viii) Fire Safety Guide for Building Owners and Operators (2023) - DoHLG.
(ix) Fire Safety at Non-Hazardous Waste Transfer Stations – Guidance Note (2013) – E.P.A.
(x) Risk Assessment –Generic - Non-Hazardous Waste Recycling-SR2022-No5-EPA.
(xi) Technical Guidance note (TGN 7.01) - Reducing Risks at Sites storing Combustible Materials (March 2015, Vers. 2-Withdrawn 2016) - Environment Agency;
(xii) I.S.10101: 2020 – National Rules for Electrical Installations.
(xii) European Union (End-of-Life Vehicles) Regulations 2014.

APPENDIX XX: ORIGINAL GRANT OF FIRE SAFETY CERTIFICATE – Copy.



Comhairle Chontae Fhine Gall
Bosca 174,
46/49 Sráid Uí Chonaill Uacht,
Baile Átha Cliath 1.
Fingal County Council
P.O. Box 174,
46/49 Upper O'Connell Street,
Dublin 1.

Tel: (01) 872 7777
Fax. (01) 872 0195

PLANNING DEPT.

GRANT OF A FIRE SAFETY CERTIFICATE

Register Reference: 98/4034

Application Received: 10th February 1998

Time Extension To:

Additional Info.:

Development: Waste recycling and transfer depot.

Location: Sandyhill, St. Margaret's, Co. Dublin.

Applicant: Fingal Waste Recycling Ltd.,

App. Type: Fire Certificate

Decision Order No.: FSC/076/98

Date of Decision: 24th March 1998

Fingal County Council being the Building Control Authority for the County of Fingal, by order dated as above, pursuant to Section 6 of the Building Control Act 1990 and in accordance with the Building Control Regulations 1991 (as amended), hereby certifies that the building or works to which this application relates will, if constructed in accordance with the plans, documents, and information submitted, comply with the requirements of Part B of the First Schedule to the Building Regulations, 1991.

In considering the application, no assessment has been made as to whether the building or works will comply with the other requirements of the First Schedule to the Building Regulations, 1991 (as amended).

Signed on behalf of Fingal County Council

SENIOR ADMINISTRATIVE OFFICER

Date: 24.3.98

Larkin & Partners,
1 Fitzwilliam Street Upper,
Dublin 2.

PAGE 1 of 1

APPENDIX XXI: ***FIRE PROTECTION / SUPPRESSION SYSTEMS – PLANS, DESCRIPTIONS, LOCATIONS, etc.***

(a) AUTOMATIC FIRE DETECTION & ALARM SYSTEM – PRODUCTION BUILDINGS & YARD:

1 x 2 Zone Fire Alarm Control Panel 4 x Manual Call Points.
10 x Smoke Detectors c/w 2 x Sounder Devices.
3 x Visual Sounder Beacons.

The automatic fire detection & alarm system has reportedly been installed to the requirements of *I.S. 3218: 2013 + Amendment No. 1: 2019 – Fire Detection & Fire Alarm Systems for Buildings – System Design, Installation, Commissioning, Servicing & Maintenance.*

The permanent production buildings have a manual alarm system only because of the openness of the areas.

(b) AUTOMATIC FIRE DETECTION & ALARM SYSTEM – OFFICES / PORTACABINS / T.A.U.'S:

1 x 2 Zone Fire Alarm Control Panel 2 x Sounder Devices.
7 x Smoke Detectors c/w 1 x Sounder Devices.

(c) FIRE EXTINGUISHERS / FIREFIGHTING EQUIPMENT:

61 off – Multiple Size / Type Handheld.

Note: As a Place of Work it should be possible to provide an alarm – audible and visual - throughout the site. The hammer-mill area has a particularly high background sound level when operational. Specialist advice should be sought in relation to the noise levels, the associated health & safety implications thereof and to ensure the alarm can be raised and heard in all areas thereof.

Plans are well advanced in relation to installing Heat Detection C.C.T.V. throughout the site.

Fire-fighting water storage arrangements consist of 4 x 32000litre industrial metal tanks, with automatic feed off the public mains and from wells on site. There is also a mobile tractor unit with 2600litre capacity with rain / cannon water gun capabilities constantly available for deployment. There are also two mobile water storage tanks with reported capacities of 10,000 and 20,000 litres respectively available for deployment.

1 x Specialist Lithium Fire blanket.

APPENDIX 2

APPENDIX 3

ESC Environmental Ltd

Wastewater Treatment System
Inspection Report

St Margarets Recycling and Transfer Centre
Sandyhill
St.Margarets
Co. Dublin

ESC Environmental Ltd

Company Register Number: 687386

W: www.escenvironmental.ie
E: info@ escenvironmental.ie

Tobernania Ballintogher
County Sligo
P: 071 913 4001
M: 086 308 0356

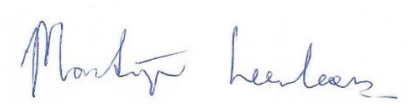
Project Ref : **St Margarets Recycling and Transfer Centre**

Report status: **WwTS Inspection Report**

Address: **Sandyhill, St.Margarets, Co. Dublin.**

Date: 25th November 2024

Prepared by:



Martijn Leenheer BSc (Hons)

Environmental Scientist

Site Assessor

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Introduction

ESC Environmental were engaged to inspect the Wastewater Treatment System (WwTS) at St Margarets Recycling and Transfer Centre to ascertain if the system is functioning efficiently.

Installed System

The tank is an O'Reilly Oakstown 8p.e aeration plant. The 8p.e has a significant spare capacity for future expansion of the facility if so required. We attach herewith drawings and data for this unit. The polishing filter infiltration area which was installed in 2011 and was designed for 15 staff.

Observations

Tank seemed in working order with no evidence of overloading of system. Some floatation of solid/grease material in primary chamber indicating that baffle system is working. Although the general advice is to desludge a septic tank system annually the limited amount of sludge built up which is not warranting a desludging at the time of inspection. The infiltration area showed no ponding and the pump and aeration were working.

Proposed Upgrade

As the proposed staff be 25 x 40 litres/per day the total daily loading will be 1000litres*.

To achieve the p.e. equivalent: 1000litres / 150 which gives 6.7p.e rounded off to 7.

Therefore, the O'Reilly Oakstown BAF P8 treatment unit is sufficient for a possible higher loading.

The Site Characterisation Report of Hydrocare states the T values of 49.42 and table 10.1 in the 2021 EPA Code of Practice gives $30m^2$/PE for this infiltration rate for option 1. Therefore, the required soil polishing filter total area would be 7PE x $30m^2$ = $210m^2$

*Calculations according to the EPA (1999) Waste Water Treatment Manuals Treatment Systems for Small Communities, Business, Leisure Centres And Hotels

APPENDIX 3

APPENDIX 4

Traffic & Transport Assessment (TTA)

Proposed Development at St Margarets Metal Recycling, Sandyhill, St Margarets, Co Dublin.

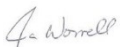
December 2024

Waterman Moylan Consulting Engineers Limited
Block S, Eastpoint Business Park, Alfie Byrne Road, Dublin D03 H3F4
www.waterman-moylan.ie

Client Name:	St Margaret's Recycling & Transfer Centre Ltd
Document Reference:	23-072r.201
Project Number:	23-072

Quality Assurance – Approval Status

This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015)

Issue	Date	Prepared by	Checked by	Approved by
1	04 December 2024	B McCann	I Worrell	

Comments

Disclaimer

This report has been prepared by Waterman Moylan, with all reasonable skill, care and diligence within the terms of the Contract with the Client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the Client.

We disclaim any responsibility to the Client and others in respect of any matters outside the scope of the above.

This report is confidential to the Client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

Content

Figures

Tables

1. Introduction

1.1 Introduction

This Traffic and Transport Assessment (TTA) has been prepared by Waterman Moylan on behalf of St Margaret's Recycling & Transfer Centre Ltd to accompany a planning application to Fingal County Council for a proposed development at St Margarets Metal Recycling, Sandyhill, St Margarets, Co Dublin.

1.2 Location and Description

The site for the subject development is located on the R122 to the southeast of St Margarets Village and to the west of Dublin Airport in the administrative area of Fingal County Council.

The site extends to 1.75 ha (4.37 acres) and is relatively flat. The site is occupied by an operational metal recycling and transfer centre.

Access to the site is from the R122 via a 9.0 metre wide gateway on the east side of the R122 set back some 25.0 metres from the edge of the carriageway.

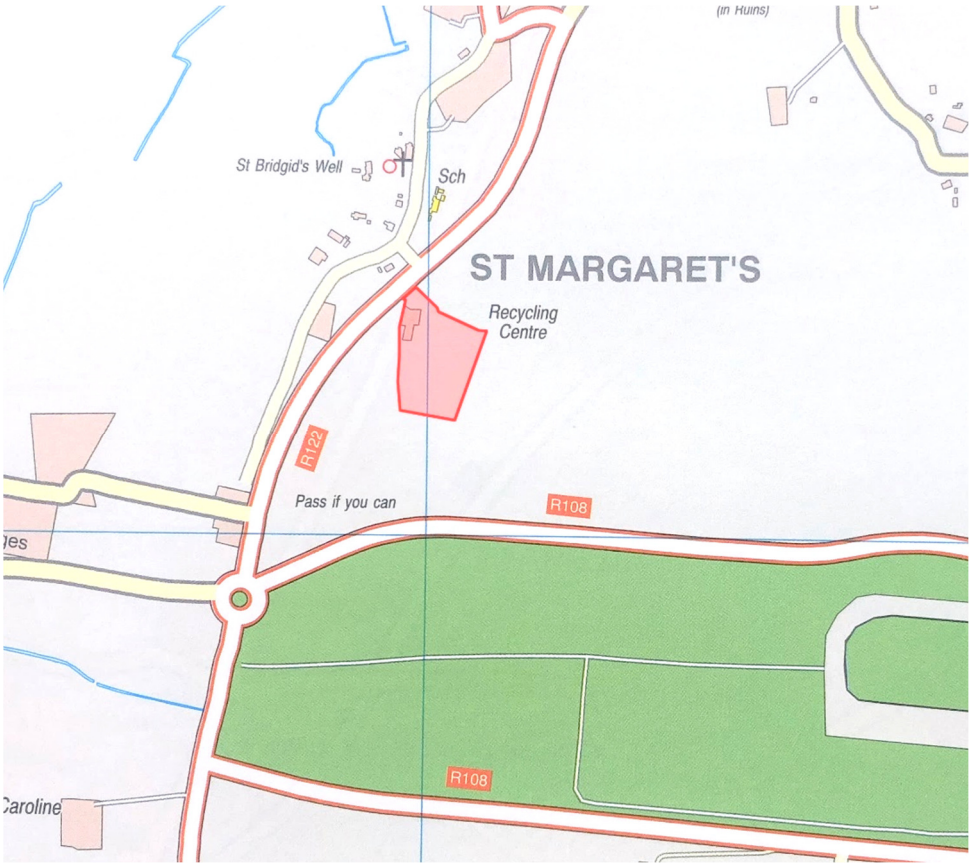


Figure 1: Location Map

1.3 Project Timetable

In compliance with the requirements of the *Transport Assessment Guidelines* (2014), this TTA includes junction impact assessment at base year, year of opening, year of opening plus 5 years, and year of opening plus 15 years

The following timetable has been adopted for the transportation assessment of the subject development:

- 1997 Parent Planning Permission (Waste throughput of 21,000 tonnes)
- 2024 Opening Year (Waste throughput of 21,900 tonnes)
- 2029 Design Year (Opening Year + 5) (Waste throughput of 21,900 tonnes)
- 2039 Future Year (Opening Year + 15) (Waste throughput of 21,900 tonnes).

Traffic surveys were carried out at the site access in 2019 and again in 2023.

The project timetable has been used in the assessment of the impact that the proposed development would have on the traffic and transportation infrastructure and network in the surrounding area

1.4 Methodology

The methodology for the preparation of this TTA included: -

(a) Desktop review of the documentation provided by the project design team.

(b) Visits to the site and surrounding area including survey of existing transportation facilities and observation of traffic movements.

(c) Survey of existing traffic movements.

(d) Review of public transport services, routes, and timetables.

(e) Review of proposals for transportation improvements by Transport Infrastructure Ireland (TII), National Transport Authority (NTA) and Fingal County Council (FCC).

(f) Review of trips to and from the development for different annual waste throughputs.

(g) Review of public transport, both existing and proposed.

(h) Assessment of the transportation impacts of the development.

(i) Assessment of the mitigation and monitoring measures in place.

1.5 Standards

This Traffic & Transport Assessment (PTTA) has been prepared in accordance with Section 14.17.4 *Traffic and Transport Assessment* of the Fingal County Development Plan 2023 - 2029.

It has also been prepared in compliance with the requirements of the TII *Traffic and Transport Assessment Guidelines* and the UK's Institution of Highways and Transportation Guidelines.

1.6 Threshold

Thresholds for transport assessments are set out in Table 2.1 of the TII *Traffic and Transport Assessment Guidelines.*

Where traffic to and from a development does not exceed 10% of the traffic flow on the adjoining road, a transport assessment is not required.

This threshold reduces to 5% of the traffic flow on the adjoining road where congestion exists, or the location is sensitive. *

2. Receiving Environment

2.1 Regional Route R122

The R122 is a Regional Route linking Finglas to the south with Balbriggan to the north via St Margaret's, Naul and Oldtown.

The R122 is a two lane road with a carriageway width of 7.5 metres. In the area of the subject site, the alignment is relatively flat with gentle horizontal curvature. See Figure 2.

Centreline road markings are dashed white lines in need of renewal with dashed yellow lines delineating the edges of the carriageway.

Grass verges are provided on both sides with a footpath for pedestrians along the west side. There are no cycle facilities on the R122.

Public lighting is provided from lamp standards along the west side.

The posted speed limit on the R122 in the area of the subject site is 80 kph.

Figure 2: R122 looking south near the entrance to the subject site.

2.2 Existing Traffic Conditions

Traffic conditions on the R122 St Margarets Road at the access to the subject site are generally free flowing save for occasional short duration incidents or accidents.

.

2.3 Traffic Surveys

Classified traffic surveys on the R122 St Margarets Road at the entrance to the subject site were carried out by Traffinomics Ltd on Wednesday 3rd April 2019 and by IDASO on Wednesday 18th October 2023

The surveys recorded the 24-hour traffic flow on the R122 together with the arrivals to and departures from the St Margaret's Transfer and Recycling Centre.

The traffic movements were classified in seven groups as per the standard COBA Classification for traffic surveys:

- Pedal Cycles (P/C) - Includes all types of pedal cycles.
- Motorcycles (M/C) - Includes all types of motorcycles and also those with sidecars.
- Cars (CAR) - Cars, taxis, 'people carriers' and other passenger vehicles (for example, minibuses motorhomes and camper vans), normally ones which have less than 16 seats.
- Light Goods Vehicles (LGV) - All car type delivery vans and those of the next larger carrying capacity such as transit vans. Included here are small pickups, ambulances which look like vans without windows and milk floats. Most of this group are delivery vans of one type or another and goods vehicles (middle-sized trucks) with single rear wheels
- Ordinary Goods Vehicle 1 (OGV1) - All larger rigid vehicles with two or three axles including larger ambulances with double rear wheels, tractors (without trailers), road rollers for tarmac pressing, box vans, similar large vans and middle-sized trucks which have double rear wheels.
- Ordinary Goods Vehicle 2 (OGV2) - Includes all rigid vehicles with four or more axles and all articulated vehicles. Also included in this class are OGV1 goods vehicles towing a caravan or trailer.
- Public Service Vehicle (PSV) - Includes all public service vehicles and works buses with a gross vehicle weight of 3.5 tonnes or more, usually vehicles with more than 16 seats.

2.4 Traffic Survey 2019

Description

A classified traffic survey on the R122 St Margarets Road at the entrance to the subject site was carried out by Traffinomics Ltd on Wednesday 3rd April 2019 some 2.5 weeks before Easter 2019 which fell on 21st April 2019. The survey covered the 12-hour period between 07.00 and 19.00. The survey confirmed the AM and PM Peak Hours to be 08:00 – 09:00 and 17:00 – 18:00.

Results

The results of the 2019 traffic survey are summarised in Tables 1 and 2.

The 12-hour traffic flow recorded on the R122 was 14,019 vehicles at the subject site with 6,468 vehicles travelling northbound and 7,551 vehicles travelling southbound. The HGV content recorded was 11% northbound and 10% southbound. The totals for the R122 in Table 2 include a total of 55 buses travelling northbound and 68 buses travelling southbound.

The survey recorded a total of 178 arrivals to the recycling centre and 170 departures during the 12-hour survey period.

The proportions of traffic movements into and out of the subject site comprised 38% Cars, 27% LGV, 24% OGV1 and 011% OGV2.

Table 1: Summary of Traffic Survey April 2019

Time	R122		Recycling Centre	
	Northbound	Southbound	Arrivals	Departures
07.00 – 08.00	369	952	13	5
08:00 – 09:00	464	980	8	7
09.00 – 10.00	388	661	16	14
10.00 – 11.00	374	448	21	19
11.00 – 12.00	364	431	14	8
12.00 – 13.00	475	442	23	16
13.00 – 14.00	515	525	23	25
14.00 – 15.00	520	502	15	19
15.00 – 16.00	580	502	22	13
16.00 – 17.00	784	625	17	23
17.00 – 18.00	916	797	4	20
18.00 – 19.00	719	686	2	1
Total	6,468	7,551	178	170

Table 2: Arrivals and Departures 2019

Time	Arrivals				Departures			
	Car	LGV	OGV1	OGV2	Car	LGV	OGV1	OGV2
07.00 – 08.00	9	1	2	1	0	0	2	3
08:00 – 09:00	3	4	0	1	1	3	1	2
09.00 – 10.00	8	2	2	4	5	3	3	3
10.00 – 11.00	8	5	5	3	10	3	5	1
11.00 – 12.00	6	3	4	1	1	2	4	1
12.00 – 13.00	6	6	9	2	4	4	5	3
13.00 – 14.00	7	11	4	1	5	12	7	1
14.00 – 15.00	6	3	5	1	7	5	6	1
15.00 – 16.00	9	4	7	2	6	3	3	1
16.00 – 17.00	6	8	2	1	10	6	6	1
17.00 – 18.00	2	0	1	1	13	6	0	1
18.00 – 19.00	2	0	0	0	1	0	0	0
Total	72	47	41	18	63	47	42	18
			178				170	

2.5 Traffic Survey 2023

Description

A classified traffic survey on the R122 St Margarets Road at the entrance to the subject site was carried out by IDASO on Wednesday 18th October 2023 some two weeks before the Halloween school break. The survey covered the 24-hour period between 00.00 and 00.00. The survey confirmed the AM and PM Peak Hours to be 08:00 – 09:00 and 17:00 – 18:00.

Results

The results of the 2023 traffic survey are summarised in Tables 3.

The 24-hour traffic flow recorded on the R122 was 15,729 vehicles at the subject site with 7,127 vehicles travelling northbound and 8,602 vehicles travelling southbound. The HGV content recorded was 10% northbound (705 vehicles) and 9% southbound (768 vehicles). The totals for the R122 in Table 3 include a total of 66 PSV travelling northbound and 97 PSV travelling southbound.

The 12-hour traffic flow recorded on the R122 was 12,950 vehicles at the subject site with 5,893 vehicles travelling northbound and 7,057 vehicles travelling southbound. The HGV content recorded was 10% northbound (606 vehicles) and 9% southbound (632 vehicles). The totals for the R122 in Table 3 include a total of 66 PSV travelling northbound and 97 PSV travelling southbound (97 vehicles).

The survey recorded a total of 118 arrivals to the recycling centre and 121 departures during the 24-hour survey period.

The corresponding arrivals and departures during the 12-hour period between 07.00 and 19.00 were 115 vehicles and 121 vehicles respectively. There were only 3 arrivals and 0 departures outside the 07.00 – 19.00 period.

The proportions of traffic movements into and out of the subject site for 2019 and 2023 are presented in Table 5

Table 3: Summary of Traffic Survey October 2023

Time	R122		Recycling Centre	
	Northbound	Southbound	Arrivals	Departures
00.00 – 01.00	24	33	-	-
01.00 – 02.00	23	20	-	-
02.00 – 03.00	24	28	-	-
03.00 – 04.00	28	31	-	-
04.00 – 05.00	36	59	-	-
05.00 – 06.00	117	185	-	-
06.00 – 07.00	183	454	3	-
07.00 – 08.00	324	908	15	1
08:00 – 09:00	419	945	3	6
09.00 – 10.00	332	694	13	11
10.00 – 11.00	324	414	6	6
11.00 – 12.00	361	416	12	14
12.00 – 13.00	452	452	12	11
13.00 – 14.00	437	490	17	12
14.00 – 15.00	468	491	13	17
15.00 – 16.00	575	482	9	11
16.00 – 17.00	747	623	14	22
17.00 – 18.00	886	700	1	10
18.00 – 19.00	568	442	-	-
19.00 – 20.00	350	308	-	-
20.00 – 2100	183	189	-	-
21.00 – 22.00	141	105	-	-
22.00 – 23.00	75	90	-	-
23.00 – 00.00	50	43	-	-
Total 07.00 – 19.00	5,893	7,057	115	121
Total 00.00 – 00.00	7,127	8,602	118	121

Table 4: Arrivals and Departures 2023

Time	Arrivals				Departures			
	Car	**LGV**	**OGV1**	**OGV2**	**Car**	**LGV**	**OGV1**	**OGV2**
00.00 – 01.00	-	-	-	-	-	-	-	-
01.00 – 02.00	-	-	-	-	-	-	-	-
02.00 – 03.00	-	-	-	-	-	-	-	-
03.00 – 04.00	-	-	-	-	-	-	-	-
04.00 – 05.00	-	-	-	-	-	-	-	-
05.00 – 06.00	-	-	-	-	-	-	-	-
06.00 – 07.00	1	2	-	-	-	-	-	-
07.00 – 08.00	12	-	1	2	-	1	-	-
08:00 – 09:00	-	1	2	-	-	1	2	3
09.00 – 10.00	7	2	1	3	4	2	3	2
10.00 – 11.00	-	2	2	2	3	1	-	2
11.00 – 12.00	4	1	2	5	6	1	3	4
12.00 – 13.00	4	5	2	1	2	4	2	3
13.00 – 14.00	7	5	3	2	4	4	2	2
14.00 – 15.00	1	6	2	4	5	6	4	2
15.00 – 16.00	2	5	1	1	3	5	-	3
16.00 – 17.00	4	4	2	4	9	8	2	3
17.00 – 18.00	-	1	-	-	9	1	-	-
18.00 – 19.00	-	-	-	-	-	-	-	-
19.00 – 20.00	-	-	-	-	-	-	-	-
20.00 – 2100	-	-	-	-	-	-	-	-
21.00 – 22.00	-	-	-	-	-	-	-	-
22.00 – 23.00	-	-	-	-	-	-	-	-
23.00 – 00.00	-	-	-	-	-	-	-	-
Total	42	34	18	24	45	34	18	24
Grand Total			118				121	

2.6 Comparison Between Traffic Surveys

A comparison between the results of the 2019 and 2023 surveys revealed that all of the surveyed traffic movements fell between the pre-Covid survey in 2019 and the post-Covid survey in 2023.

- The total 12-hour traffic volume on the R122 at the subject site fell by 8% from 14,019 vehicles in 2019 to a post-Covid level of 12,950 vehicles in 2023.
- The total 12-hour flow northbound past the subject site fell by 9% from 6,468 vehicles in 2019 to 5,893 vehicles in 2023.
- The total 12-hour flow southbound past the subject site fell by 7% from 7,551 vehicles in 2019 to a post-Covid level of 7,057 vehicles in 2023.
- The proportion of HGV on the R122 fell marginally from 10-11% in 2019 to 9-10% in 2023.
- The number of arrivals to the subject site in the 12-hour period between 7am and 7pm fell by 34% from 178 in 2019 to 118 in 2023.
- The number of departures from the subject site in the 12-hour period between 7am and 7pm fell by 29% from 170 in 2019 to 121 in 2023.
- The proportion of cars and LGVs in the site traffic remained consistent between the 2019 and 2023 surveys at 65 – 66% of site traffic.
- Between 2019 and 2023, the numbers and proportion of the smaller OGV1 reduced while the numbers and proportion of the larger OGV1 increased.

The details are presented in Table 5 below.

Table 5: Proportions of Site Traffic

Type	2019		2023	
	No	%	No	%
Car	67	39%	44	37%
LGV	47	27%	34	28%
OGV1	42	24%	18	15%
OGV2	18	10%	24	20%
Total	174	100%	120	100%

2.7 Existing Pedestrian Facilities

Existing pedestrian facilities in the area of the subject site comprise a footpath on the west side of St Margarets Road.

2.8 Existing Cycle Facilities

No existing cycle facilities were noted in the area of the subject site.

2.9 Existing Car Sharing Service

No car sharing bases operated by Go Car or other companies were noted in the area of the subject site.

2.10 Public Transport – Existing

Bus services in the area of the development are a combination of historic services operated by Dublin Bus and new services to be provided under the auspices of Bus Connects.

R122 St Margarets Road

Dublin Bus Route 40b links Parnell Street with Toberburr. There are 6 services in each direction each day.

There are no bus stops on the R122. The existing stops in St Margaret's Village are located at a walking distance of 3 minutes (290 metres) from the subject site.

St Margarets Village

Route 196 operated by TFI Local Link links Swords Pavilion to St Margaret's Village.

The service operates 15 times per day in both directions between 07.00 and 20.00.

The present terminus of Local Link Route 196 is in St Margarets Village at a walking distance of 3 minutes (290 metres) from the subject site.

Junction R122 and R108

Dublin Bus Route 83: Kimmage – Harristown operates along the R122 and R108 between the City Centre and Harristown at a frequency of 12 minutes in both directions.

The junction of the R122 / R108 to the south of the subject site is located at a walking distance of 12 minutes (950 metres) from the subject site.

2.11 Staff Travel Survey 2022

Surveys by the applicants in 2022 recorded a total staff of 30 persons of which 22 drove to work each day and parked on site.

The remining 8 staff arrived as car passenger (4), bus (2) and on foot (2).

3. Planned Future Receiving Environment

3.1 Roads and Junctions

The applicants are not aware of any road or junction improvements proposed in the area of the subject site.

3.2 Pedestrian Facilities

The applicants are not aware of any new cycling facilities proposed in the area of the subject site.

3.3 Cycle Facilities

Draft proposals published by the NTA for the Greater Dublin Area Cycle Network envisage secondary cycle routes along the R108 and R122 St Margarets Road. See Figure 3.

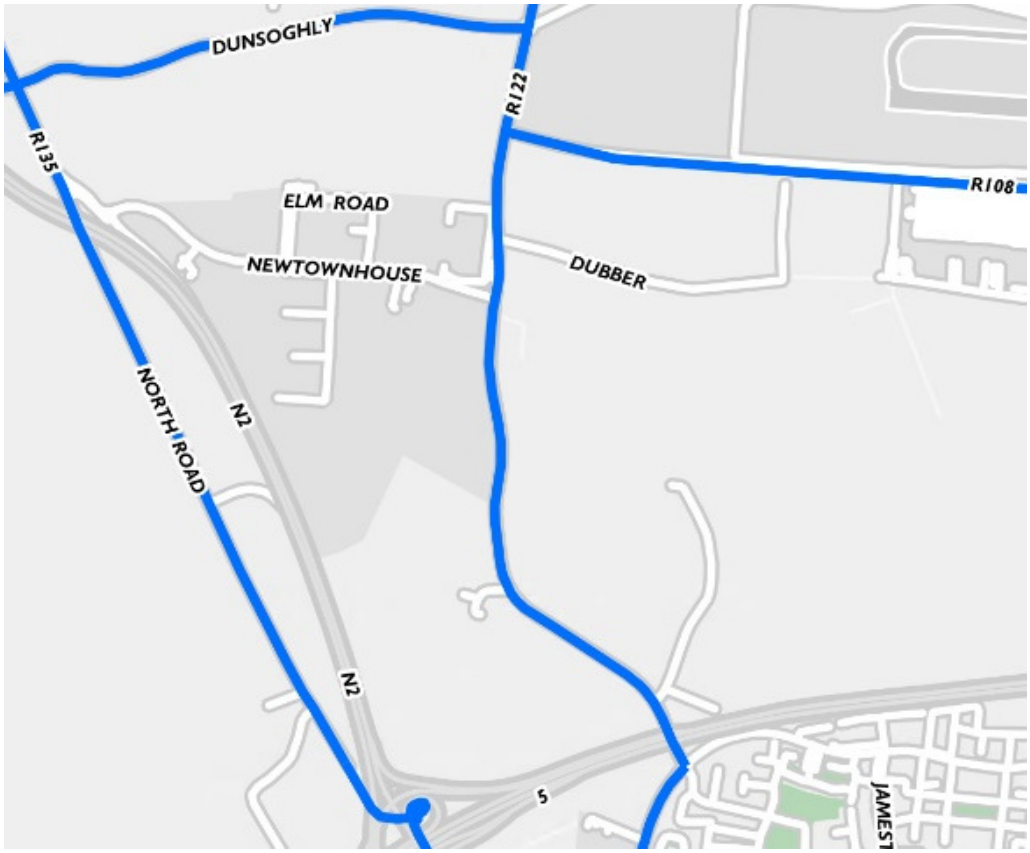


Figure 3: Extract from Sheet 1-9 of Draft GDA Cycle Network

3.4 Car Sharing

The applicants are not aware of any new car sharing facilities proposed in the area of the subject site.

3.5 Public Transport - Bus Services

Bus Connects is an ongoing project by the National Transport Authority to deliver a more efficient, reliable and better bus system for the Greater Dublin Area (GDA).

This is being achieved by: -

(a) Building a network of bus corridors to make journeys faster and more reliable.

(b) Redesigning the bus network to provide a more efficient network with high frequency spines, new orbital routes and increased services.

Proposals by Bus Connects for the Finglas area envisage the following routes serving the subject site as illustrated in Figure 4:-

- City Bound Route 24: Dublin Airport – Merrion Square
- Local Route L89: Finglas - Swords

It is expected that these services could be altered and / or extended as the surrounding area develops.

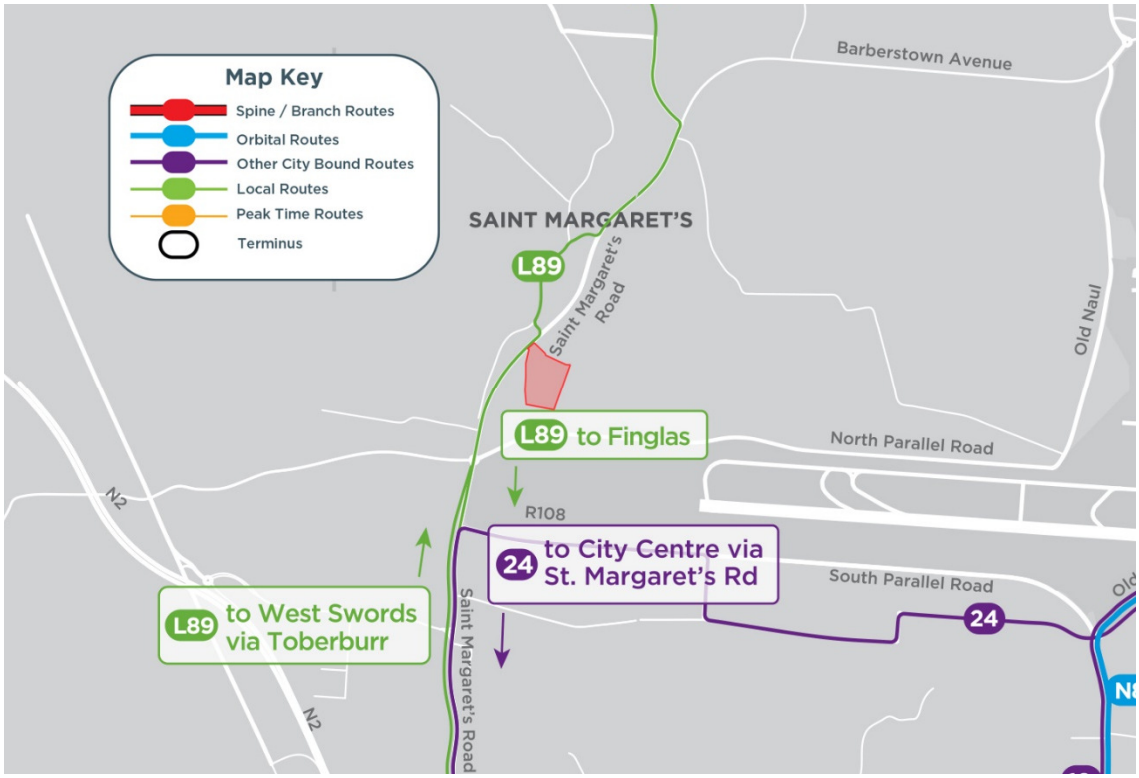


Figure 4: Extract from Bus Connects Map for Finglas Area

4. Characteristics of the Development

4.1 Description of Proposed Development

The proposed development relates to the on-going use of the facility with a waste throughput of up to 21,900 tonnes per annum on a site of c.1.75 ha for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles.

The proposed development also includes for the following development/physical works and additional mitigation including -

- Underground surface water attenuation tank with a capacity of c..675 cubic metres, and an above ground overflow connected to same comprising 1500 sqm.
- Enhancement of car parking provision, including installation of 2 no. EV charging points
- Alterations to site boundary arrangements, including replacement of existing internal boundary comprising stacked steel containers with 3m high concrete panel and steel post wall, augmentation of dust netting where applicable, etc.

The existing site layout is shown in Figure 5 and the proposed site layout in Figure 6.

4.2 Operational Measures

The impact of the subject development on the surrounding transportation network during recent years has been and will continue to be positive due to the mitigation measures implemented by the applicants of eliminating individual / smaller vehicles arriving at the site, and focussing on larger commercial waste collectors, thereby reducing vehicle numbers to / from the site, and improving efficiency and recycling capabilities on site.

As a result of these mitigation measures, there has been a 33% reduction in the number of vehicles accessing the site between 2019 and 2023.

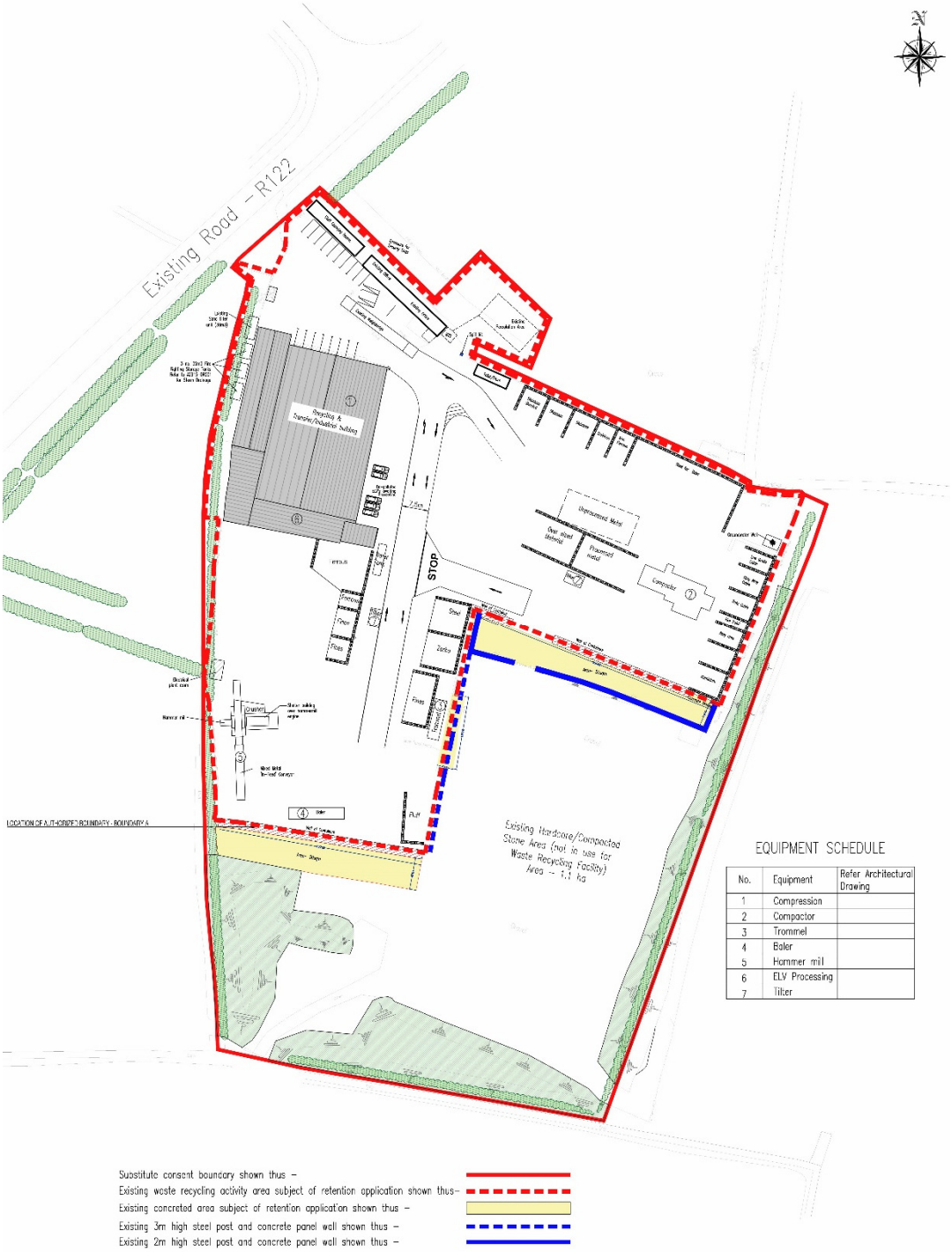


Figure 5: Existing Site Layout

(Extract from CWPA Drawing Site Plan – Retention Permission)

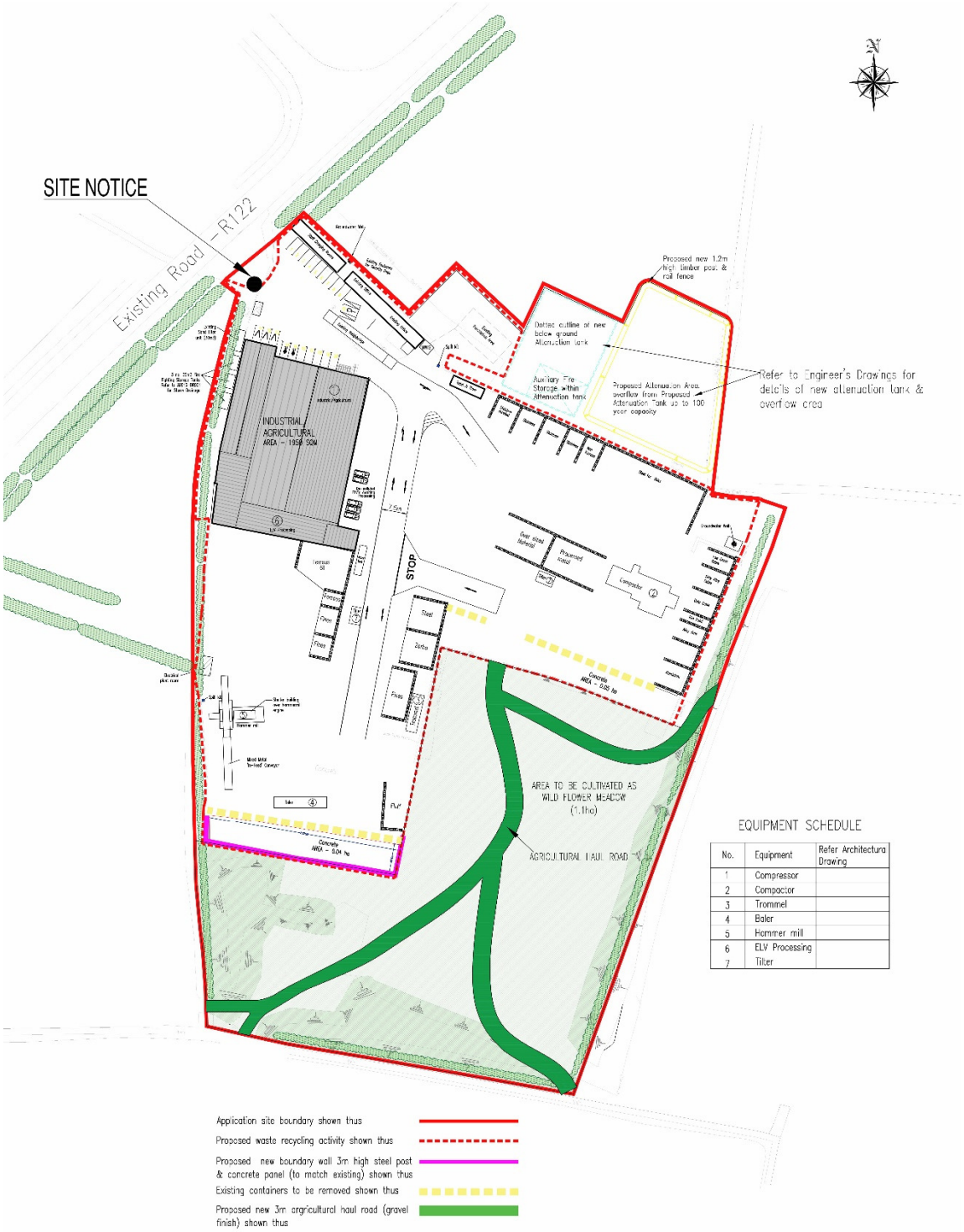


Figure 6 Proposed Site Layout

(Extract from CWPA Drawing Proposed Site Plan)

4.3 Site Access

Access to the site is from the R122 through a 9.0 metre wide gateway on the east side of the R122 set back some 25.0 metres from the edge of the carriageway. See Figure 7.

To the north (right), the sightline exceeds the required 145 metres for a Regional Road with a posted speed limit of 80 kph, as required by Fingal County Council. However, in order maintain a 145 metre sightline to the south (left) continued maintenance of the maturing growth along the western boundary is required. Sightline visibility is maintained by ongoing maintenance of the existing hedgerow.

Figure 7: Site Access from R122 St Margarets Road

4.4 Car Parking

The existing and proposed car parking provision at the subject site is 20 spaces as shown in Figure 6 and on the drawings accompanying the planning application.

4.5 Truck Parking

The existing truck parking at the subject site is located on the concrete hard standing as shown as shown in Figure 6 and on the drawings accompanying the planning application.

5. Planning Background

5.1 Fingal County Development Plan 2023 - 2029

Chapter 14 of the Fingal County Development Plan 2023 – 2029 sets out standards and criteria to be applied to developments in the area.

5.2 Car Parking

Standards for car parking are set out in Table 14.19 of Fingal County Development Plan 2023 – 2029.

For the purpose of car parking, the subject site is located in Zone 2: *All Other Areas.*

The maximum standards applicable to the subject development are

- Offices – General 1 space per 40 sqm
- Industry – General 1 space per 50 sqm

For non-residential developments, a minimum of 5% of car parking spaces is required to be provided for disabled car parking.

For non-residential developments, functioning EV charging points are required to be provided at a minimum of 10% of all spaces and all other spaces appropriate infrastructure (ducting) to allow for future fit out of a charging point is required to be provided at all other spaces.

Based on the standards in the County Development Plan, the car parking for the subject site is a maximum of 45 spaces calculated as follows:-

• Offices	177 sqm x 1 spaces per 40sqm	5 spaces
• Industrial buildings	1,950 sqm x 1 spaces per 50sqm	40 spaces
	Total	45 spaces

The proposed car parking provision is 20 no spaces including 1 no. disabled space and 3 spaces for electric charging.

The locations of the car parking spaces are shown in Figure 6 and on the drawings included with the planning application.

5.3 Truck Parking

No standards for truck parking were noted in the Development Plan.

5.4 Motorcycle Parking

For non-residential developments, motorcycle parking is required to be provided on the basis of one motorcycle parking bay per 10 car parking spaces.

5.5 Cycle Parking

Standards for cycle parking are set out in Table 14.17 of Fingal County Development Plan 2023 – 2029.

The minimum standards applicable to the subject development are

-	Offices – General	Long Stay	1 space per 60 sqm
		Short Stay	1 space per 200 sqm
-	Industry – General	Long Stay	1 space per 80 sqm
		Short Stay	1 space per 200 sqm

Based on the standards in the County Development Plan, the cycle parking for the subject site is a total of 56 spaces comprising 45 long stay spaces for staff and 11 short stay spaces for visitors calculated as follows:-

Long Stay - Staff

•	Offices	177 sqm x 1 spaces per 60sqm	5 spaces
•	Industrial buildings	1,950 sqm x 1 spaces per 80sqm	40 spaces
		Total Long Stay	45 spaces

Short Stay - Visitors

•	Offices	177 sqm x 1 spaces per 200sqm	1 spaces
•	Industrial buildings	1,950 sqm x 1 spaces per 200sqm	10 spaces
		Total Short Stay	11 spaces

A staff travel survey in 2022 recorded that none of the 30 staff travelled by bicycle.

6. Traffic Assessment 2023

6.1 Surveyed Traffic Flow

The traffic movements for the access junction to the subject site during the AM Peak Hour 8 – 9 and the PM Peak Hour 5 – 6 as surveyed in October 2023 are set out in Tables 3 and 4 and illustrated in Figure 9.

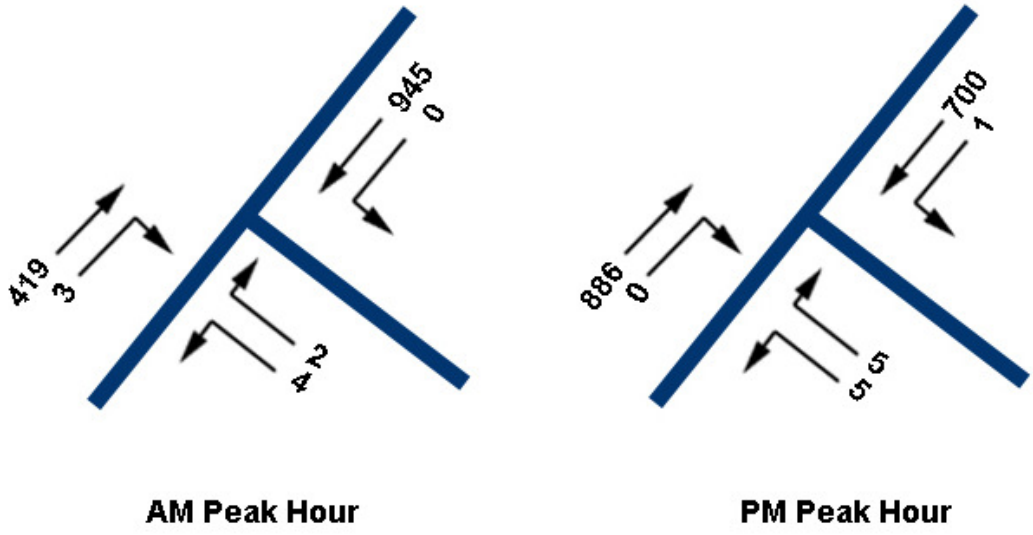


Figure 8: Surveyed Traffic Movements 2023

6.2 Trip Generation and Assignment

The surveyed traffic movements in Figure 9 are those generated by a waste turnover of 33,695 tonnes per annum in 2023.

They include 3 arrivals and 6 departures during the AM Peak Hour 8 – 9 and 1 arrivals and 10 departures during the PM Peak Hour 5 – 6.

6.3 Modelling Background

The existing access to the subject site from St Margarets Road was assessed using the computer program PICADY which is a software for modelling priority-controlled junctions. This programme utilises junction's geometry and traffic flows input by the user to determine Ratio of Flow to Capacity (RFC) and queue length for each link on the junction.

Typically, a junction is said to be working satisfactorily when the RFC of each arm does not exceed 90% / 0.9. Acceptable RFC values are considered to be in the range of 0.8 to 1.0 with higher values indicating restrained movements.

6.4 St Margarets Road / Site Access

The site access was modelled as a priority junction in its existing configuration. The HGV proportion was taken at 11% on the major road (R122) and 40% on the minor road (site access).

Within the PICADY model, the arms of the junction were labelled as follows:

- Arm A: St Margarets Road (north)
- Arm B: Site Access (east)
- Arm C: St Margarets Road (south).

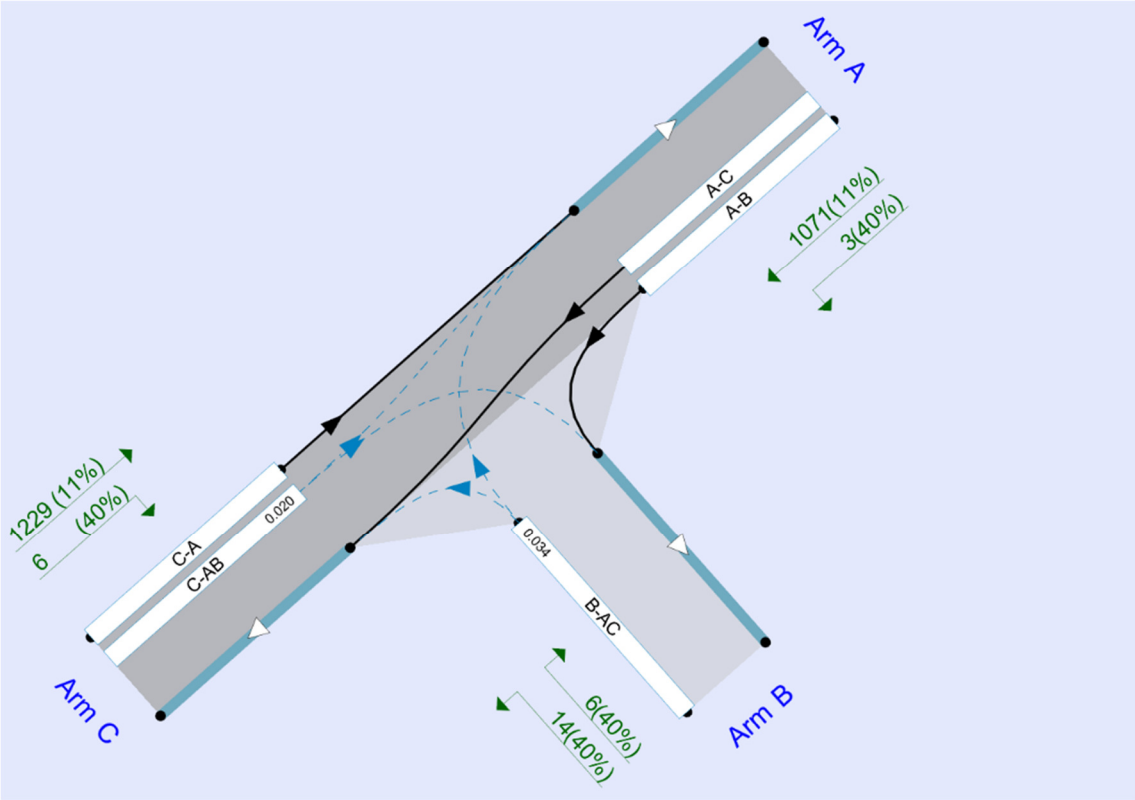


Figure 9: PICADY Layout for Access Junction

6.5 Results of Traffic Modelling

The results of the junction assessment confirmed that the access operated satisfactorily in 2023 with a maximum RFC of 0.11 and a maximum queue length of 1 vehicles in both the AM and PM Peak Hours.

7. Traffic Assessment 2029 and 2039

7.1 Base Traffic Flows

The methodology adopted for the determination of base flows for future years is described below.

Firstly, the surveyed traffic flows on the R122 were extracted from the traffic survey carried out in October 2023.

Secondly and in line with the requirements of *'Transport Assessment Guidelines (May 2014)*', the years for the assessment were selected to be: :

- 2024 Opening Year:
- 2029 Design Year (Opening Year + 5)
- 2039 Future Year (Opening Year + 15)

7.2 Contiguous Development

The applicants are not aware of any contiguous development(s) which would affect the base traffic flows for this development.

7.3 Traffic Growth

Thirdly, the base traffic flows for the selected future years were obtained by factoring up the 2023 baseline traffic flows using factors from the TII Publication – *Project Appraisal Guidelines for National Roads Unit 5.3 – Travel Demand Projections* (May 2021).

The Central Growth Rate factors extracted from Table 6.1 of that publication are set out below.

- 2023– 2029: 1.082
- 2023 – 2039: 1.266

The projected base flows for the R122 at the access junction to the subject site during the period 7am – 7 pm are 14,011 vehicles in 2029 and 16,395 vehicles in 2039.

7.4 Development Traffic

Based on an ongoing waste throughput of 21,900 tonnes per annum, the traffic generated by the subject development in the Design Year 2029 and the Future Year 2039 will be less than the 118 arrivals and 121 departures generated in 2023 when the waste turnover was 33,695 tonnes per annum).

7.5 Traffic Impact

As the traffic generated by the subject development will continue to be significantly less than the 10% threshold set out in the Transport Assessment Guidelines published by TII in 2014, no further traffic assessment is required.

8. Transportation Impact

8.1 Roads

The extent of traffic impact from the development was determined by checking whether the total traffic generated by the subject development during the 12-hour period between 7am and 7pm exceeded 10% of the traffic flow on the adjoining road during the same period.

The traffic generated by the St Margarets Metal Recycling Centre reduced from 186 vehicles per day for a waste throughput of 33,524 tonnes per annum in 2019 to 121 vehicles per day for a waste throughput of 33,696 tonnes per annum in 2023.

Externally, the traffic flow on the R122 over a period of 12 hours reduced from 14,019 vehicles in 2019 to 12,950 vehicles in 2023. The generated traffic was therefore equivalent to some 1 - 2% of the flow on the adjoining road.

As the traffic generated by the subject development was significantly less than the 10% threshold set out in the Transport Assessment Guidelines published by TII in 2014, no further traffic assessment is required.

This is borne out by the results of the discretionary PICADY junction assessment described in Sections 6.0 and 7.0.

8.2 Road Junctions

The results of the junction assessment confirmed that the access from the R122 to the subject site operated satisfactorily and within capacity for a waste throughput of 33,524 – 33,696 tonnes per annum.

8.3 Public Transport – Bus

Passenger Demand

Based on a staff of 18 -22 persons in 2019 and up to 29 persons in 2023 persons together with a modal spilt for public transport of 20%, the peak demand from the development for travel by bus was up to 6 passengers during the AM Peak.

Based on the location of the development, it is assumed that 50% of these passengers travelled from Finglas and 50% from St Margarets.

Bus Capacity

Based on a review of the fleet of double deck buses operated by Dublin Bus in the area of the development, the average capacity of each bus including standing passengers was found to be 87 passengers per bus.

Demand v Capacity

The demand of 3 passengers per hour in each direction during the AM Peak Hour is significantly within the existing capacity of up to 400 passengers per hour provided by the current timetable for Dublin Bus Routes 40b, 83 and 196.

9. Summary

This Traffic and Transport Assessment (TTA) assesses the use of the subject site for

- Waste turnover of 21,900 tonnes per annum.
- Opening Year 2024
- Design Year 2029
- Future Year 2039

The conclusion of this TTA is that the access junction from the R122 to the subject site operated satisfactorily and within capacity with a waste turnover of 33,696 tonnes per annum in 2023.

The TTA also concluded that the access junction from the R122 would continue to operate satisfactorily through the Design Year of 2029 to the Future Year of 2039 with a waste turnover of 21,900 tonnes per annum.

The public transport demand is significantly within the existing capacity of the bus services in the area of the subject site.

The impact of the subject development on the surrounding transportation network during recent years has been and will continue to be positive due to the mitigation measures implemented by the applicants of eliminating individual / smaller vehicles arriving at the site, and focussing on larger commercial waste collectors, thereby reducing vehicle numbers to / from the site, and improving efficiency and recycling capabilities on site.

As a result of these mitigation measures the Ratio of Flow to Capacity for the access junction has significantly reduced notwithstanding the normal increases in traffic flow on the R122.

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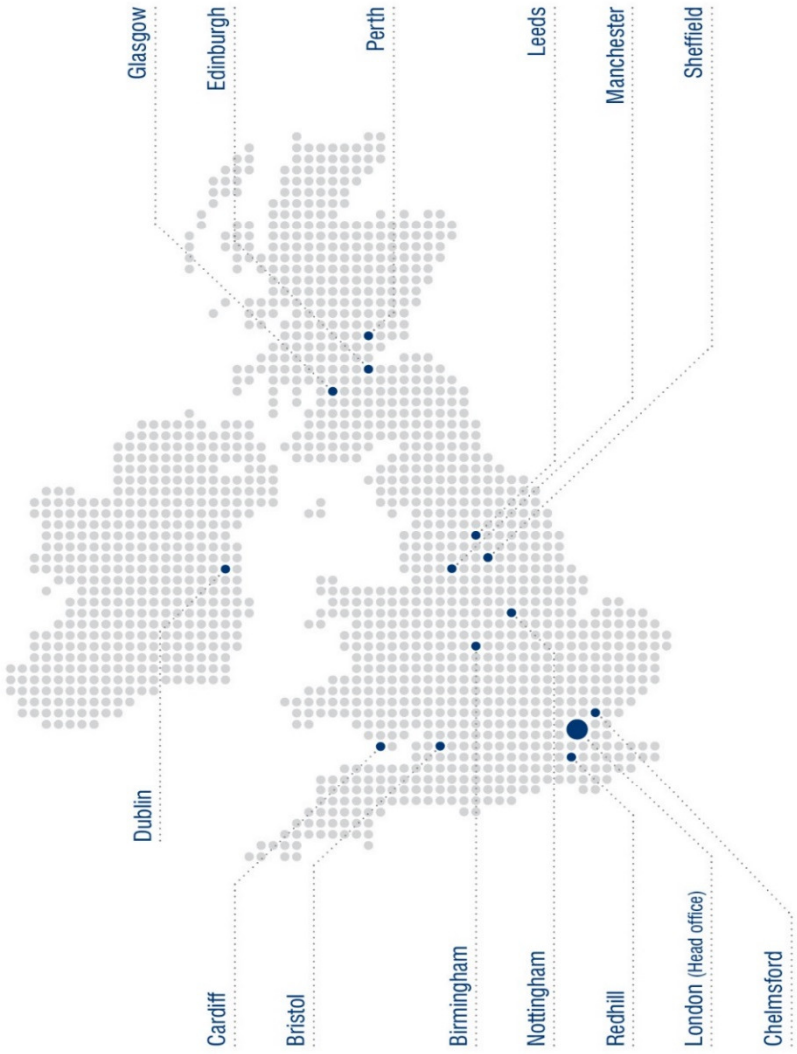
UK and Ireland Office Locations



APPENDIX 4

December 2024

CWPA
Planning & Architecture

Prepared by CWPA Planning & Architecture

APPENDIX 5

CWPA
Planning & Architecture

Non- Technical Summary –

Remedial Environment Impact Assessment Report

In support of Substitute Consent Application

for development at St. Margaret's Waste Recycling & Transfer Centre

Quality Assurance – Mandate Stature

This document has been prepared and reviewed in accordance with CWPA Planning & Architecture Quality Assurance team provisions.

Date of Preparation	Prepared By	Checked By	Approved By
December 2024	Rachel Kenny Roisin Corr	Rachel Kenny Joe Corr	Joe Corr

Application Information:

Applicant:	St Margaret's Recycling & Transfer Ltd.
Planning Authority:	An Bord Pleanála
Local Authority:	Fingal County Council
RE:	Substitute Consent relating to Retention of existing works and activities (including annual tonnage ranging from 21,900 to 45,000 tonnes) at the waste recycling and transfer centre at St. Margaret's, Co. Dublin
Subject Site:	St. Margaret's Recycling & Transfer Centre, Sandyhill, Co. Dublin
Prepared By:	CWPA Planning & Architecture

Contents

1.0 INTRODUCTION

St. Margaret's Waste Recycling & Transfer Centre Ltd. has been in operation for almost 3 decades, with the first application for retention of development and operations on site lodged in 1997. The site has a lengthy and complex planning history, largely because of the temporary nature of planning permissions over the last 20 years.

The waste recycling and transfer centre was first permitted under F97A/0109, and this is the only permanent permission granted for waste recycling development and operations on site. However, in 2003 under F03A/1561, a permanent permission was granted for the use of an enlarged site, allowing for parking and storage ancillary to the waste recycling and transfer facility.

Planning History

Although not under the current applicant's control, it would appear that the site has operated as a waste recycling facility since 1995. This is in part evidenced by the Fingal County Council planner, who in attaching conditions to the permission under F03A/1561, referenced the site (on which the portacabins were located) returning to its original state, being January 1995. To this end, it would appear that activities on site were understood to have commenced in January 1995 and were subject of retention in 1997.

While the original permission granted under F97A/0109 related to a c.0.6ha site, and limited operations to 10,000 tonnes intake per annum, the site has never operated at this level, with tonnage generally being a minimum of c.21,000 tonnes per annum from c.1998 onwards.

The waste licence permitted on site under EPA Licence No. 134-1 allowed for 60,000 tonnes per annum, and this would appear to have been the principal enabler of the tonnages operated on site during this period (ie from c.2001 to 2006). EPA records show annual tonnages ranged

from c.60,000 tonnes per annum to 95,000 tonnes per annum during the period of the Licence (from 2002 to 2006) on a c.1.6ha.

To facilitate the tonnages in an efficient and safe manner the site was enlarged during the late '90s, and prior to 2003, and this is partially reflected in the EPA licence drawings submitted in 2001. The existence of the enlarged site is also noted by the Planning Authority in the planning report and permission granted under F03A/1561. Notwithstanding the inclusion of conditions seeking the reduction in site size to that permitted under F97A/0109, the site continued to operate without the benefit of planning permission in respect of the larger site. In addition to operating on a larger site, a greater waste intake was processed on site for in excess of 12 years. This development and use took place without any enforcement action being taken. During this time (i.e. from 1998 to 2010) it should be noted that permissions granted in 2003 did not include conditions specifically addressing tonnage.

Noting the planning history on site, and the nature and extent of development on site, it would appear that at minimum, from 1998, the unauthorised development (being that over and above that permitted under F97A/0109) had already commenced. The planning authority temporarily permitted elements of this unauthorised development over the subsequent years from December 2003 onwards under F03A/1561, F10A/0177, F11A/0443, and F13A/0409. However, at no point did the development operate as permitted, and as such it appears that from the earliest time operations have been non-conforming. Specifically, that the non-conforming use relates to the site operating at c.22,000 tonnes from 1997 and that no attempt at regularisation of this tonnage was introduced until 2010 under F10A/0177. Noting that permissions were only granted for temporary periods between 3 and 5 years, and that applications took time to prepare and to be permitted, at various stages in between, the development had no permission in place, and yet was considered to comply with the non-conforming use provisions. With the lapse of permission in August 2019, the development and operations on site generally reverted to the unauthorised development originally commenced on or before1998.

While the development, at its current levels of c.22,000 tonnes per annum is unauthorised, as it commenced in 1998 or before, and as no enforcement proceedings were initiated during the preceding years, it is outside of the 'enforcement period'. This scale of development is understood to be the non-conforming use on site. It is our professional opinion that the granting

of temporary permissions post this 'enforcement period' does not alter this date in such a way as to allow enforcement proceedings to be taken. A similar position relates to the site size on which operations are occurring.

Notwithstanding the fact that the majority of the development (and operations at 22,000 tonnes per annum) is outside of the period during which the Planning Authority can take enforcement proceedings, previous operators and the applicant have endeavoured to regularise matters on site, applying for retention on numerous occasions. Most recently under F20A/0029, where the Planning Authority granted permission and An Bord Pleanála overturned this decision.

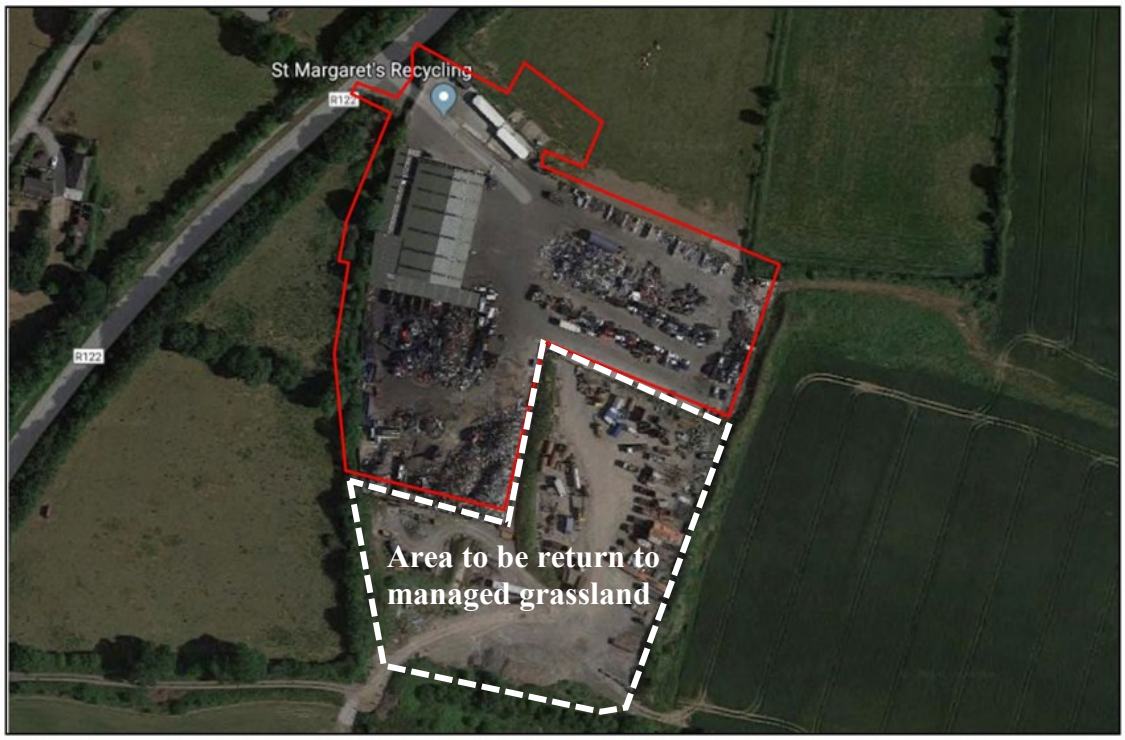
Current Situation

The applicant is again endeavouring to regularise this non-conforming and unauthorised use and development on site. St. Margaret's Recycling & Transfer Centre Ltd. is applying to An Bord Pleanála for substitute consent for retention of existing structures and plant on site, retention of revised and extended site area and associated site boundaries, retention of previous recycling use for the period 2019 to 2023 for c.26,000 tonnes per annum to 42,500 tonnes per annum, and for the on-going use of the site from 2024 to date of decision of this application for up to 21,900 tonnes per annum.

The lands upon which the recycling activity takes place extend to c.1.6 hectares and are located to the west of Dublin Airport. The overall site was noted as c.2.93ha in recent applications, as it includes the additional 1.1ha, the subject of retention as an area of hard standing (compacted hard core) for the temporary and ad hoc storage of plant, machinery, trucks, and skips. The restoration of this area to managed grassland/wildflower meadow is a proposed mitigation measure in this substitute consent application.

In a simultaneous application, planning permission is sought for the on-going use of the site for this purpose, at 21,900 tonnes per annum, on a c.1.75ha site, and for augmentation of ancillary infrastructure including additional surface, storm and fire water retention attenuation, installation of EV charging points, bicycle parking and improvements to internal boundary arrangements. An EIAR is included with this application.

Figure 1.1 - St Margaret's 'Waste Recycling' facility - Aerial Photo



Substitute Consent

As the development operated at tonnages in excess of 25,000 tonnes for several years (and therefore required a mandatory EIAR), and noting that it relates to 'Retention', the application must be submitted under 'Substitute Consent' provisions, commenced in December 2023.

This document provides a non-technical summary in respect of the remedial EIAR (rEIAR). It should be noted that this rEIAR has been prepared to address any concerns regarding the potential significant environmental impacts resulting from the existing physical development on site, and the increase of waste throughput at the facility to accept up to 42,500 tonnes per annum for a temporary period (from 2019 to 2023), and with its on-going use to recycle and process up to 21,900 tonnes of waste per annum.

2.0 DEVELOPMENT DESCRIPTION

Substitute consent is sought by St. Margaret's Recycling & Transfer Ltd. at St. Margaret's Recycling & Transfer, Sandyhill, St. Margaret's, Co. Dublin, for -

Retention of:

1. Enabling Ancillary Works, including, but not limited to, that subject of permissions under with Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682 and F97A/0109, including amendments to site access and gateway, boundary arrangements, dust mitigation measures, installation of an impermeable concrete surface over c.1.7 ha, above and below ground surface water drainage, proprietary waste water treatment plant, fire water storage and retention tanks (105m3), surface water attenuation and storage tanks (206m3), truck and vehicle parking,

2. Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility, and authorised facility for the treatment of 'end of life vehicles' (ATF for ELVs). Existing development comprises the weighbridge, offices, recycling, and transfer/industrial buildings, hard standing, car parking, plant, and machinery, detailed below:
    - Prefabricated cabins (2no.) - 177sqm. - comprising ancillary offices, staff facilities, control room;
    - Prefabricated w/c & Steel Container (store) - 29 sqm;
    - Recycling and transfer/Industrial buildings of 1917 sqm;
    - Weighbridge; and
    - Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.
3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6 ha (permitted under F97A/0109) to 1.75ha of which 1.6ha is associated with waste permit with additional lands comprising site access, proprietary wastewater treatment system, installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system.

4. Historic use of 1.6 ha of the site (as per Waste Permit area under WFP-FG-13-0002-03), as a waste transfer recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, during the period 2019 to 2023, where waste throughput at the facility ranged from c.26,000 to 42,500 tonnes per annum, without the benefit of planning permission, and from 2024 onwards with operations comprising waste throughput of up to 21,900 tonnes per annum.

5. Laying out and historic use (i.e. 2009 to 2023) of lands comprising c.1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity, and existence as a hardstanding area to date, pending restoration.

Substitute consent is sought for -

6. Proposed restoration of the above referenced lands, being c.1.1 ha of compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands, (referenced at item 5 above).

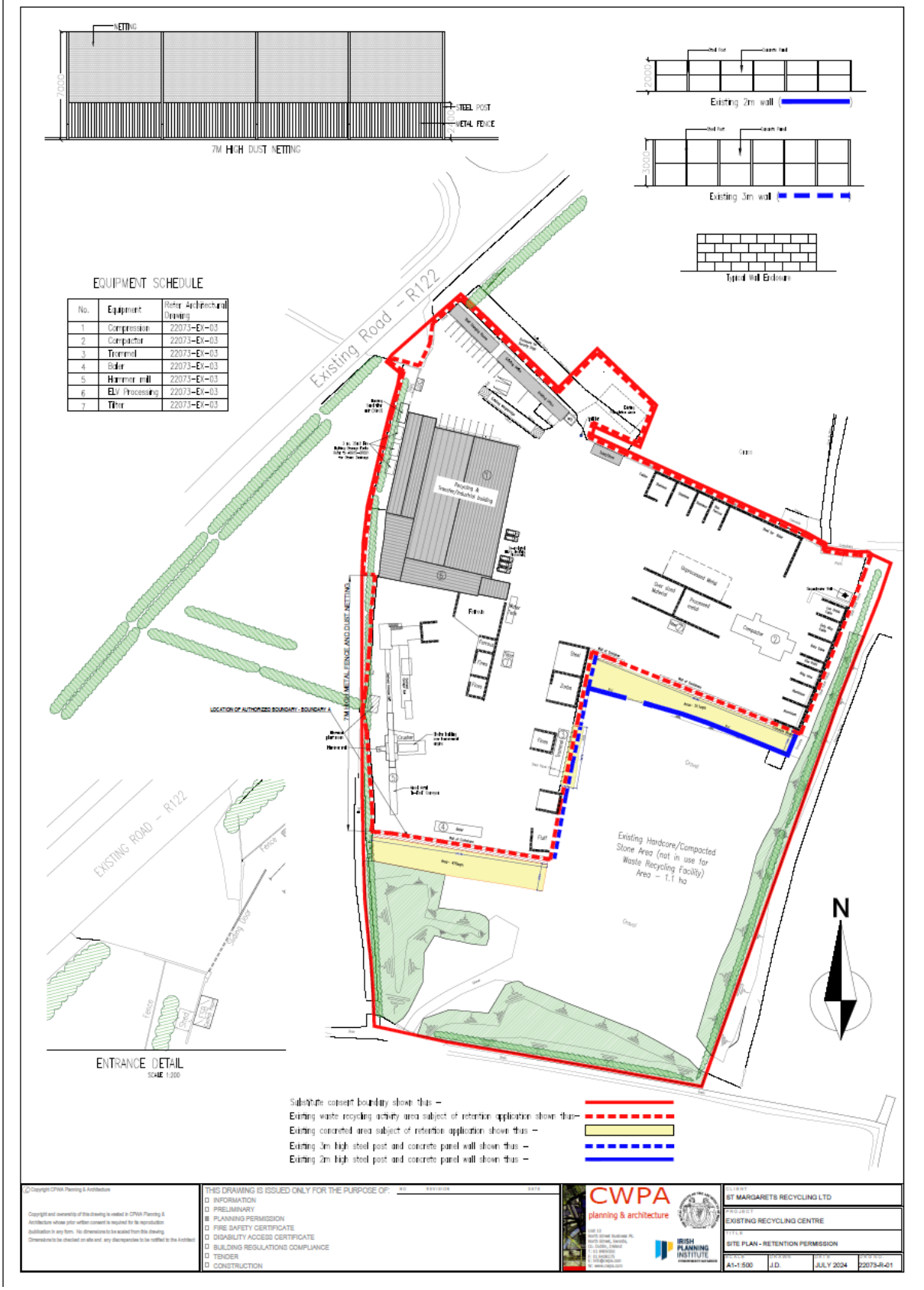
7. Use of the existing metal processing and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a proposed waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and an Authorised Treatment Facility for end-of-life vehicles, pending the decision in respect of this substitute consent application.

The application for retention will be accompanied by a remedial Environmental Impact Assessment Report (rEIAR) and a remedial Natura Impact Statement (rNIS).

Simultaneous Planning Application for Future Use of Facility

The future permanent use of the site, as a waste recycling and transfer centre for up to 21,900 tonnes per annum, is considered and assessed in a separate Environmental Impact Assessment Report (EIAR), Natura Impact Statement (NIS) and associated documents and drawings submitted in tandem with the application for substitute consent.

Figure 2.1 Development the subject of Retention (for representational purposes only)

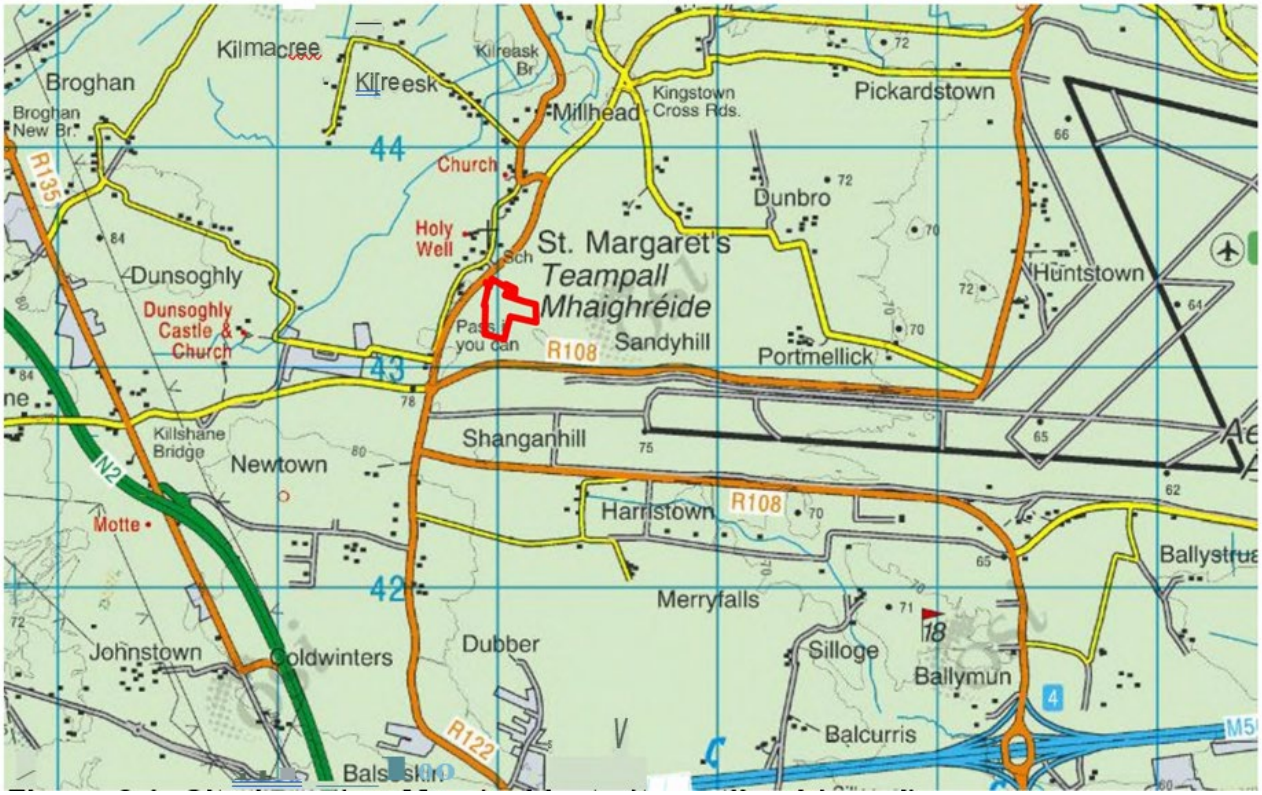


2.1 GENERAL DESCRIPTION OF SITE AND SURROUNDINGS

The site is located in the town land of Sandyhill, approximately 100 m south of St. Margaret's village and 6 km southwest of Swords, County Dublin. The R122 passes in a north-south direction close to the western edge of the site, adjoining the boundary only at the northwestern corner, where the site entrance is located. The R108 lies to the south which runs to the south of the site and Dublin Airport is located immediately to the west within the southern runway lying to the southeast.

The site is relatively isolated, bounded to its southern, western and eastern boundaries by agricultural lands, much of which is in family ownership. The village of St. Margaret's is located on the western side of the R122 and as such, the facility is somewhat disconnected and separate from the village.

Figure 2.2 Site Location



2.2 NON-TECH SUMMARY OF ENVIRONMENTAL IMPACTS

Potential environmental impacts associated with the subject development have been assessed under the following headings (and within the noted chapters of the rEIAR)–

3.0 Alternatives

4.0 Project description

5.0 Population & human health

6.0 Biodiversity

7.0 Land, soils & geology

8.0 Water & hydrology

9.0 Air quality & climate

10.0 Noise & vibration

11.0 landscape and visual impact

12.0 Material assets

13.0 Traffic & transportation

14.0 Waste management

15.0 Archaeology & cultural heritage

16.0 Accident & disaster risks

17.0 Interactions & cumulative effects

A summary of the potential impacts and conclusions of the assessments under these headings is provided here under.

3.0 ALTERNATIVES

As the subject development relates to retention under the substitute consent procedures, the extent to which alternatives can be considered as per EIAR guidance is limited.

For the purposes of this rEIAR, as the application and subject development is one of retention and relates to works that have already taken place on site. The physical works/development on site have largely been subject of previous temporary permissions, and as such consideration of alternatives is somewhat limited and on a practical level would have been restricted primarily to 'use' of the site, rather than the physical works on site.

An alternative typically considered is to 'do nothing'. In the case of the subject development, being that of retention, 'do nothing' makes little sense, in that the physical development and operations on site were already in existence, and during the period in question are in existence.

In effect, in continuing to operate the development, and not remove the development, the applicant did nothing.

However, we have also examined the scenario, of 'do noting' as in 'do not operate'. However, in practise this makes little sense as following the expiration of the temporary permission the existing recycling centre use would not be discontinued, given the existing 'non=conforming' use established on site.

With the exception of the Zoning Objective, the continuation of use on the site is in line with Fingal Development Plan objectives, and with national policy as it relates to maximising use, recycling at source/close to source, reducing carbon footprints, etc. To cease operations on site would result in adverse social, economic and environmental impacts associated with its closure.

Similarly, in terms of alternative location, as the site is in operation and development on site already exists, an alternative site or alternative development design scenario equally makes little sense. The development (as in the physical works) was permitted at this location, i.e. on the subject site, and generally at the scale in place during the previous temporary permission period. All the infrastructure associated with St. Margaret's Recycling is in place on the subject site including hardstanding area, entrance road, existing building infrastructures, weighbridge

etc. The existing facility has been previously assessed and approved by Fingal County Council and was not considered to cause an adverse environmental impact. It is considered that the retention of the development is in accordance with the proper planning and sustainable development of the area.

In terms of alternative designs and processes, in terms of mitigation and ongoing use it was considered that such alternatives would reduce efficiency and result in poorer working conditions on site and would result in a greater environmental impact and carbon footprint in removing hardstanding and suds underground infrastructure.

In summary the continued use of the site at the long-established tonnage of c.22,000 tonnes per annum is considered to have a net benefit, complying with the development plan objectives regarding recycling and reusing waste, and carrying out this function within the county as opposed to exporting from the county which would occur were the development not to operate.

4.0 PROJECT DESCRIPTION

As the development is one of retention and ongoing use, the existing situation on the site, represents the 'proposed development' and describes the project. The site is an existing brownfield site, comprising the waste recycling operations in place since 1997, and is relatively isolated, bounded to its southern, western and eastern boundaries by agricultural lands, much of which is in family ownership. The village of St. Margaret's is located on the western side of the R122 and as such, the facility is somewhat disconnected and separate from the village.

Access to the site is from the existing approved entrance onto the R122 and the entrance is formed by a high block concrete wall with metal panel gate. A concrete splayed area is situated between the entrance and roadside boundary. On entering the premises, a car parking area is provided to the left. A weighbridge and several portacabins which function as office space, canteen and toilets are situated within the application site.

The vast majority of the site is hard surfaced with impermeable concrete. A number of galvanised steel sheds are located to the western boundary of the site. These sheds access onto a concrete surfaced yard area.

Existing buildings and enabling infrastructure on site, include internal roads, internal boundaries and walled open air storage areas, proprietary waste water treatment system, surface water drainage and attenuation (c.206cu.m), fire prevention system, firewater retention attenuation (105cu.m), impermeable concrete surface over approx. 1.7ha, industrial buildings comprising 1917 sqm and prefabricated ancillary office and staff facilities, control room comprising 206 sqm and weigh bridge. Machinery comprising hammermill, shredders, bailers, tilters, forklifts, grabbers, et al are located on site, although not permanent structures.

The extract below is included for illustrative purposes. Please refer to the enclosed scaled plans prepared by CWPA and Waterman Moylan which set out the existing and proposed site layout and the existing and proposed engineering details.

4.1 General Description of Operations

The site is an established waste facility and has been in operation for the past 28 years (c. 1997) and operates as an authorised treatment for end-of-life vehicles (ATF for ELVs) under Waste Facility Permit from Fingal County Council (WFP-FG-13-0002-02).

All input material is weighed and recorded at the facility weighbridge. Input tonnages are monitored on a monthly and quarterly basis by the applicant. The waste types accepted on site comprise the following:

- Metals
- Construction and demolition waste
- Bulky/skip waste
- Wood waste
- Glass
- End-of-Life Vehicles (ELVs)
- Batteries

The above waste types, including that from members of the public were recycled on site at the time of the 1997 permission, and at a tonnage consistent with that in operation today.

The St. Margaret's Recycling Facility does not and will not accept food waste (putrescible wastes) or green waste. Waste acceptance procedures are in place to ensure that food waste is not presented as part of the Construction & Demolition waste or other incoming waste streams. It was noted within the previous application on the lands that there were concerns relating to birds due to its proximity to Dublin Airport Runways. The applicant has adhered to the restriction on green and food waste. The only organic/biodegradable waste stream accepted on site is wood/timber waste, which is not a food source and therefore not deemed to be an attraction to scavenging birds. All handling and processing of Construction & Demolition waste skips is carried out undercover and indoors. The facility has no record of complaints/non-compliance or history associated with bird nuisance.

Potential impacts relating to bird nuisance are therefore considered to be insignificant for this facility and operation. Continued implementation of the Waste Acceptance Procedure, in line with the requirements of the site's Waste Facility Permit, and the procedure of works as part of the development procedure will continue to be applied. The Dublin Airport Authority had no

objection to the principle of the extant temporary planning permission granted under Reg. Ref. F13A/0409 provided mitigation measures were met. It is submitted that mitigation measures will continue to be implemented on site as there are no proposed amendments in relation to the recyclable waste and material accepted on site.

There are no changes proposed to the existing layout for the site, including in respect of buildings etc.

Operating Hours

The site operates from 8 am to 5.30 pm on weekdays, 8am to 2pm on Saturday, and the site is closed on Sundays and bank/public holidays.

Emissions

This is an existing site with an existing Waste Facility Permit (WFP-FG-13-0002-03) under which the emissions monitoring is required and reported. Emissions on site were not considered to result in a significant adverse impact.

Noise and vibration on site were measured and considered to be below acceptable levels, whether at the higher or lower tonnage levels. No other emissions pertain.

Construction

Most of the construction on site took place prior to 2003, and in subsequent years as outlined in the planning history.

From 2019 to date, limited construction/new works took place, with the following being the only additional elements –

- 2 no. areas comprising c. 0.05ha and c.0.05 ha of hardstanding and replacement of stacked steel containers as boundary to kerb and steel post and concrete panel wall;
- Replacement of previously permitted prefabricated office buildings with new prefabricated office buildings on the same footprint, replacement of hammermill plant and miscellaneous machinery.
- Enhancement of fire safety measures,

- Enhancement of surface water drainage measures.
- Maintenance and replacement of the proprietary wastewater treatment system.
- Installation of additional dust monitoring and mitigation measures.

These works are of a very minor nature and there, over and above those previously permitted and assessed, no material or significant construction works took place during the period 2019 to 2024 that would have resulted in a significant or notable environmental impact. Installation of solar panels on the industrial buildings is understood to be exempt.

Future Construction Works

As this application is generally one of retention, future construction works are limited to proposed mitigation. In this regard, it is proposed to topsoil and seed an area of c.1.1ha, which was converted to compacted hardcore by the previous operator, i.e. prior to 2010. The Planning Authority sought the reversion of this land to agricultural use by condition in 2014 (i.e. conditions 3 and 6, under F13A/0409). The restoration works have not taken place to date. However, the applicant proposes to implement this condition in so far as is practicable, and specifically as outlined in the substitute consent, subject to Board approval.

Project Description

1.0 Existing buildings, plant and machinery and their use associated with the daily operations of the waste recycling and transfer facility, and authorised facility for the treatment of 'end of life vehicles' (ATF for ELVs). Existing development comprises the weighbridge, offices, recycling, and transfer/industrial buildings, hard standing, car parking, plant, and machinery, detailed below:

- Prefabricated cabins (2no.) - 177sqm. - comprising ancillary offices, staff facilities, control room;
- Prefabricated w/c & Steel Container (store) - 29 sqm;
- Recycling and transfer/Industrial buildings of 1917 sqm;
- Weighbridge; and
- Machinery incl. hammermill, shredders, bailers, tilters, forklifts, grabbers, et al.

2. Enabling Ancillary Works, including, but not limited to, that subject of permissions under with Reg. Ref's. F13A/0409, F11A/0443, F10A/0177, F03A/1561, F03A/1682

and F97A/0109, including amendments to site access and gateway, boundary arrangements, dust mitigation measures, installation of an impermeable concrete surface over c.1.7 ha, above and below ground surface water drainage, septic tank, fire water storage and retention tanks (105m3), surface water attenuation and storage tanks (206m3), truck and vehicle parking,

3. The enlargement of the site for waste transfer and recycling purposes, including an Authorised Treatment Facility for End-of-Life Vehicles, increasing the site size from 0.6 ha (permitted under F97A/0109) to 1.75ha of which 1.6ha is associated with waste permit with additional lands comprising site access, proprietary wastewater treatment system, installation of an impermeable reinforced concrete slab surface throughout, and underground surface water drainage system.
4. Historic use of 1.6 ha of the site (as per Waste Permit area under WFP-FG-13-0002-03), as a waste transfer recycling centre and an Authorised Treatment Facility for End-of-Life Vehicles, during the period 2019 to 2023, where waste throughput at the facility ranged from c.26,000 to 42,500 tonnes per annum, without the benefit of planning permission, and from 2024 onwards with operations comprising waste throughput of up to 21,900 tonnes per annum.
5. Laying out and historic use (i.e. 2009 to 2023) of lands comprising c.1.2 ha to the east of the licenced 'waste transfer and recycling centre', surfaced with compacted hardcore and used for the temporary storage of vehicles, plant and machinery associated with the waste recycling activity, and existence as a hardstanding area to date, pending restoration. The restoration of c.1.1 ha of this compacted hardcore surfaced lands to grassland or wildflower meadow, and to include agricultural haul roads/tracks to serve adjacent agricultural lands, in general compliance with conditions 3 and 6 of F13A/0409 is included as a mitigation measure.
6. On-going use of the existing metal processing and transfer facility, and Authorised Treatment Facility for End of Life Vehicles, with a waste throughput at the facility to accept up to 21,900 tonnes per annum (in line with waste permit) for the bulking, transfer and recycling of metals, construction & demolition waste, bulky/skip waste, batteries, wood waste, glass, other non-biodegradable non-hazardous wastes, and end-of-life vehicles with the potential impact of this assessed in the rEIAR to the date of the application, and its future use assessed in the simultaneous application for permission.

5.0 POPULATION & HUMAN HEALTH

The subject site was examined by Rachel Kenny BE Civil, MRUP, FIPI, on behalf of CWPA, in terms of its impact on the human environment in the general area. Specific aspects examined were population levels, human health, fire risk and safety, impact on employment, commercial activity, community infrastructure and social facilities

Impact Assessment

The continued operation of the site as a waste recycling centre enabled the employment of 20 to 30 people on site. This was considered to be a long term, positive and slight impact. The development had an additional positive effect on employment during the minor construction phase as well as during the ongoing operational phase. The continuation of use of the waste transfer and recycling facility has maintained commercial activity associated with the facility at current levels.

Additionally, the operator pays rates and contributes to the economy in the County, providing 'waste transfer and recycling facilities' which would not otherwise be provided, e.g. re. processing of metal and being one of only 3 authorised treatment facilities for End-of-Life Vehicles. This was and is considered to be a positive impact.

It is noted that the work force generally commuted to the site and did not take up residence in the immediate vicinity. However, as outlined in the traffic impact assessment, this did not result in a significant adverse impact on the carrying capacity or road safety of the area.

Mitigation Measures

It was found that because of the nature of the development there were no effects on population levels in terms of 'human health,' 'fire risk and safety' and 'social facilities' for the wider area.

The construction of any project has the potential to give rise to an impact on health and safety of human beings if construction activities are not managed appropriately. Measures to address health and safety concerns were addressed in the construction and environmental management plan (CEMP). As result no significant adverse impact arose or was likely to arise, no mitigation

measures were proposed over above Best Available Techniques and implementation of the Fire Safety Plan, CEMP, etc.

Residual Effects

Overall, the continuation of activities on site ensures that any residual impacts on population are permanent, positive, and slight during the operational phase, and were momentary, negligible to slight and neutral during the construction phase.

6.0 BIODIVERSITY

A review of the site was carried out on behalf of ESC Environmental Ltd, by Serena Alexander, Ecologist; Peter McCormick, Environmental Scientist and Martijn Leenheer, Environmental Scientist, comprising of a site survey and study of existing information from the area. A site survey was carried out during March and August 2024. The biodiversity value of the proposed development area was assessed and potential impacts of the proposed development on the ecology of the surrounding area and within the potential zone of influence (ZoI), particularly nearby Natura 2000 sites.

The assessment approach followed the Chartered Institute of Ecology and Environmental Management (CIEEM), as well as EPA guidelines. Taken into account were national planning policy, structure, and local plan policies in respect of nature conservation and protected species legislation. Potential impacts to biodiversity and ecology were investigated and mitigation measures proposed.

Impact Assessment and Mitigation Measures

The site is a brownfield site, with minimal additional construction or erosion of any habitat since c.2003 in respect of the 1.6ha on which the site operates its waste recycling and transfer operations (as per the Waste Permit), and since c.2010 in respect of the 1.2ha of hardstanding used for vehicle, plant, machinery and other storage and parking.

The only construction elements for this project, which were not previously assessed by the planning authority, are limited to (i) two additional concrete slabs which are of a relatively small size (c 0.1ha), (ii) the installation of the hammermill at its current location and (iii) replacement of prefabricated cabins on same footprint as previously permitted prefabricated cabins.

The only potential for impact was due to accidental spills and leaks, and as the Best Available Techniques were adhered to for the construction, it has been deemed that the effect on land, soil, and geology would have been brief, imperceptible and neutral prior to mitigation measures being carried out. Due to this low risk, mitigation measures for the protection of Biodiversity

during construction are unnecessary. As these works have already been carried out, it can be confirmed that no significant adverse impacts occurred.

Equally, as Best Available Techniques were adhered to for the construction and operations, it had been deemed that the effect on water and hydrogeology would be brief, imperceptible and neutral prior to mitigation measures being carried out. This is due to the silt traps and oil interceptors present in the design of the site that all water must pass through before the introduction to the environment. Due to this low risk, mitigation measures for the protection of water and hydrogeology during construction are unnecessary. Therefore, no related potential impact arose in respect of biodiversity that may be sensitive to water quality/

It has been determined that the application site is not within or adjacent to any area that has been designated for nature conservation at a national or international level. There are no examples of habitats listed on Annex I of the Habitats Directive. No alien invasive species or plants which are rare or protected were detected on site. Minimal (proxy) evidence of mammalian activity was detected on site. Overall, hedgerows on the site are of local biodiversity value but are not associated with habitats listed on Annex I of the Habitats Directive or for which SACs/SPAs are typically designated. Other habitats are of low or negligible biodiversity value.

The proposed development is considered unlikely to have a significant negative environmental effect; risks to local ecology and/or ecological corridors are minimal. The proposed restoration of 1.1ha of the site to meadow and grassland is considered to be a net benefit. Risks to off-site aquatic receptors will be minimised through adherence to construction best practice and with the implementation and utilisation of proposed mitigation measures, e.g. on-site water drainage network with associated oil interceptors throughout.

Residual Effects

Overall, the measures ensure that any residual impacts on biodiversity will be minimal, safeguarding local ecosystems and adhering to environmental standards.

7.0 LAND, SOILS & GEOLOGY

This chapter was carried out on behalf of ESC Environmental Ltd, by Peter McCormick, Environmental Scientist and Martijn Leenheer, Environmental Scientist, and assesses potential impacts that may arise from the subject site on land, soils, geology, and hydrogeology within the local environment. According to the desktop study of the subject site, the encountered bedrock can be classified as limestone and shale belonging to the Malahide Formation. This unit is classified as Lower Impure Limestones.

The soils on site have been reported as predominantly moderately well-drained grey, brown podzolics of loam to clay loam texture. The soil can become less well-drained in the very flat, lower-lying areas. Where gravels are present in the subsoil the surface texture can contain a higher sand content and exhibit rapid permeability.

The GSI/Teagasc subsoil mapping database of the quaternary sediments in the area of the subject site indicates one principal soil type: Limestone Till Carboniferous (TLs). This till is made up of glacial Clays which are less permeable than alluvium subsoils.

The Groundwater Body (GWB) underlying the site is the Swords GWB. Currently, the most recent WFD groundwater status for this water body (2013-2018) is 'Good' with a current WFD risk score 'Under Review'

The importance of the hydrogeological features at this site is rated as Low. This is based on the assessment that the attribute has a medium quality significance or value on a local scale. The aquifer is not widely used for public water supply or generally for potable use.

Impact Assessment and Mitigation Measures

There is little potential for an impact on land use as all activities are contained within the boundary of the existing site.

The only construction elements for this project, which were not previously assessed by the planning authority, are limited to (i) two additional concrete slabs which are of a relatively small size (c 0.1ha) and (ii) replacement of prefabricated cabins on same footprint of previously permitted prefabricated cabins. The only potential for impact was due to accidental spills and leaks, and as the Best Available Techniques were adhered to for the construction, it has been deemed that the effect on land, soil, and geology would have been brief, imperceptible and neutral prior to mitigation measures being carried out. Due to this low risk, mitigation measures for the protection of land soil, and geology during construction are unnecessary. As these works have already been carried out, it can be confirmed that no significant adverse impacts occurred.

The operational phase has one direct discharge to ground from the current operations on site. These are due to the wastewater treatment system and percolation area on site for staff use. The wastewater treatment system was installed in and has been designed according to all relevant guidance. Due to this there is no potential for impact due to direct discharges to ground. The magnitude of the direct impacts to the land, soils and geological environment due to the operational phase is considered to be long-term, neutral, and insignificant and additional mitigation measures were deemed unnecessary.

Residual Effects

Residual impacts refer to the degree of environmental change that will occur after the proposed mitigation measures have taken effect. As the site has no potential for impact prior to mitigation measures, the residual impacts are assessed to be momentary, neutral and negligible in both the construction phase and the operational phase.

8.0 WATER & HYDROGEOLOGY

This chapter was carried out on behalf of ESC Environmental Ltd, by Peter McCormick, Environmental Scientist and Martijn Leenheer, Environmental Scientist, and assesses potential impacts that may arise from the subject site on water and hydrology in the area.

The site comprises a waste recycling and transfer facility site which was and is fully surfaced with an impermeable surface. Due to this, surface water, rainfall, discharged from the site into a nearby watercourse via a field drain. The surface water which fell on site was and is only discharged from site after being treated by a series of silt traps, a buffer tank with oil decanting unit and two hydrocarbon interceptors, which manages and treats runoff from the defined hardstanding areas. The field drain is culverted beneath the R122 and emerges as an open channel 180 m downstream of the site. The field drain outfalls to the Huntstown Stream 500 m downstream from the site.

The Huntstown Stream generally flows in a north-easterly direction to join the River Ward to join the Ward River c. 4.4 km to the northeast of the site (at Saint Margaret Golf and Country Club). The Ward River flows towards Malahide Estuary, a Natura 2000 Site (SPA/SAC/pNHA) located approximately 7.6 km to the northeast of the site after joining the Broadmeadow River. The Huntstown Stream belongs to the Ward_030 WFD surface water body, which currently, the EPA classifies as having ‘Moderate’ and is ‘At risk of not achieving good status’. This moderate status is related to the nitrogen (nitrate, specifically) and orthophosphate conditions measured in the Ward River.

There is extremely low risk of flooding affecting the site from fluvial or coastal sources, since the site lies within Flood Zone C (i.e., where the probability of flooding from rivers is less than 0.1% or 1 in1000).

Hydrological features at this site are rated as low in importance, based on the assessment that the attribute has a low-quality significance or value on a local scale.

Impact Assessment and Mitigation Measures

The only construction elements for this project, which were not previously assessed by the planning authority, are limited to (i) two additional concrete slabs which are of a relatively small size (c 0.1ha) and (ii) replacement of prefabricated cabins on same footprint of previously permitted prefabricated cabins. Due to this, there is not considered to be many potential impacts on water and hydrogeology due to the construction on site.

The only potential for impact during construction of the two slab areas or delivery of new prefabricated cabins and the replacement and removal of older prefabricated cabins was due to accidental spills and leaks. As the Best Available Techniques were to be adhered to for the construction, it had been deemed that the effect on water and hydrogeology would be brief, imperceptible and neutral prior to mitigation measures being carried out. This is due to the silt traps and oil interceptors present in the design of the site that all water must pass through before the introduction to the environment. Due to this low risk, mitigation measures for the protection of water and hydrogeology during construction are unnecessary.

To minimise any impact from material spillages, all oils, paints etc. used during construction were stored within temporary bunded areas. All tanks are bunded to 110% of the capacity of the largest tank/container within the bunded area(s) (plus an allowance for 30 mm of rainwater ingress). Refuelling of construction vehicles and the use of any hydraulic oils or lubricants took place in a designated area (off site) and away from surface water gullies or drains.

Foul water on site is directed to an on-site wastewater treatment system as per the current operation of the site. The wastewater treatment system has been designed and installed according to the standards outlined in the Code of Practice 2009 for wastewater treatment. The treatment plant is monitored and maintained, as applicable and as required, and has been replaced in accordance with Best Practice and in line with EPA Guidelines. Due to this, there is no potential for impact on hydrology and hydrogeology due to foul water on site.

Residual Effects

Residual impacts refer to the degree to environmental change that will occur after the mitigation measures have taken effect. As the site has no potential for impact prior to mitigation

measures, the residual impacts are assessed to be momentary, neutral and negligible in both the construction phase and the operational phase.

9.0 AIR QUALITY & CLIMATE

The chapter examines impacts during construction and operation – when air-borne factors such as dust can have an impact if not properly planned for.

Air Quality

In terms of the existing air quality environment, baseline data and data available from similar environments indicate that levels of nitrogen dioxide and particulate matter less than 10 microns and less than 2.5 microns are generally well below the National and European Union (EU) ambient air quality standards.

Impact Assessment and Mitigation Measures

During the construction phase there was the potential for dust emissions to impact nearby sensitive receptors resulting in potential dust soiling and human health impacts.

Regarding larger dust particles that can give rise to nuisance dust, there are no statutory guidelines regarding the maximum dust deposition levels that may be generated during the construction and decommissioning phases of a development in Ireland. With regard to dust deposition, the German TA-Luft standard for dust deposition (nonhazardous dust) sets a maximum permissible emission level for dust deposition of 350 mg/m2/day averaged over a one-year period at any receptors outside the site boundary.

Residual Effects

The residual effects on air quality were predicted to be long-term, negative and range from imperceptible to slight.

Climate

The existing climate baseline can be determined by reference to data from the EPA on Ireland's total Greenhouse gas (GHG) emissions and compliance with European Union's Effort Sharing Decision "EU 2020 Strategy" (Decision 406/2009/EC).

Impact Assessment and Mitigation Measures

Based on the scale and short-term nature of the construction works, the potential impact on climate change from the construction of the subject site is deemed to be momentary and imperceptible in relation to Ireland's obligations under the EU 2030 target.

No significant on-site CO2 emissions would have occurred as a result of the construction on the subject site. The construction was small in size and scope and had very little potential for impact on the environment.

During the operation of the site, from a climate perspective the increased tonnage accepted on the site has a positive impact due to the proximity principle. Although the operation of the site relies on diesel engines, the site's waste activity decreases waste being transported to Belfast, being the nearest available destination for recycling of metal waste. The emissions saved by the transportation of the accepted waste outweigh the emissions of the diesel engines used by the plant on site.

Human Health

The impact of construction of the subject site is considered to have been small, and therefore is considered to have been to be neutral, momentary and imperceptible with respect to human health.

Impact Assessment

For the operational phase of the subject site, dust is the main emission which could have a direct impact on the air quality. However, monitoring results show that no dust is transmitted past the boundary of the site after the existing mitigation measures and there was no trend to indicate the hammermill had an adverse impact on the dust before mitigation measures.

Air pollution concentrations due to operations has been assessed and are predicted to be compliant with all National and EU ambient air quality limit values and, therefore, will not result in a significant impact on human health. The impact from the operation phase of the subject site is considered to be brief, neutral and imperceptible.

Mitigation Measures

No mitigation measures were necessary for the construction of the 2 concrete slabs, the installation of the hammermill at its current location or the replacement of the prefabricated cabins as there was no potential for impact on climate or air quality during this phase.

During the operation of the site the main potential emission from the site is dust. The most recent reliable monitoring results show that there are no exceedances after the existing mitigation measures. The mitigation measures introduced with the installation of the hammermill consist of misting (at the intake of the hammermill and on the site during dry periods) and dust netting. Alongside this there are existing mitigation measures such as housekeeping, closed fencing, tree lines and earth banks.

Residual Effects

On implementation of the mitigation measures outlined in this assessment, the residual impacts on air quality or climate from the construction will be momentary, neutral, and imperceptible.

The residual impacts on air quality for the operational phase of the subject site will be brief, neutral and imperceptible, while the impacts on climate will be short-term, positive and imperceptible.

10.0 NOISE & VIBRATION

The Noise and Vibration Chapter was carried out by Shane Carr of Irwin Carr Consulting which focuses on assessing the noise and vibration impacts associated with the waste processing and transfer facility at St. Margaret's, Co. Dublin. The assessment was conducted by Irwin Carr Consulting, an environmental consultancy based in Ireland with extensive experience in noise impact assessments.

The main objectives of the report are to evaluate the noise and vibration environment during the construction and operational phases of the facility. The study pays particular attention to sensitive receptors, such as residential areas and local amenities, like schools that are located near the site.

The report outlines the following key points:

- The facility's noise and vibration impacts were assessed for different periods, between 2019 to 2023 for tonnages ranging from 25,000 tonnes per annum to 42,500 tonnes.
- The main noise source in the vicinity is Dublin Airport, with consistent airplane movements throughout the day.
- The study follows various guidelines and standards, including those from the Environmental Protection Agency (EPA) and the World Health Organization (WHO), to evaluate the noise levels and their impact on the surrounding area.
- The report includes a baseline noise survey conducted in July 2024 to establish the existing noise levels at the nearest noise-sensitive receptors.
- The assessment also considers the potential vibration impacts during the construction phase, with specific guidelines for allowable vibration levels to prevent damage to nearby properties.

Impact Assessment

Overall, the report aims to provide a comprehensive evaluation of the noise and vibration impacts of the facility, ensuring that the development complies with relevant guidelines and minimizes any adverse effects on the surrounding environment.

Mitigation Measures

Due to the site's location adjacent to Dublin Airport and associated runway, the level of background noise, and the distance to nearby noise sensitive locations, in tandem with the nature and scale of development, and existing and established boundary arrangements which also act as a noise buffer in respect of site operations, no specific or additional mitigation measures were necessary for the construction and/or operation phase.

Residual Effects

The residual impacts on Noise and Vibration for the operational phase of the subject site will be on-going, negative and imperceptible.

11.0 LANDCSAPE & VISUAL IMPACT ASSESSMENT

The Remedial EIAR Chapter for landscape and visual impact assessment was prepared by Ronan MacDiarmada, of RMDA ltd. and the site and surrounding area was reviewed in respect of the potential visual impact for the existing Waste Recycling & Transfer Facility at St. Margaret's, Co. Dublin.

The assessment reflects on the site's complicated planning history and its current state, as well as the anticipated changes. The assessment recognises that the landscape has evolved over time due to economic-driven settlement patterns.

The assessment criteria evaluate the sensitivity of the townscape to changes while stressing the Recycling Centre's role as an essential resource for the community and noting its long established non-conforming use status. The facility's layout reflects its agricultural roots, making it compatible with the surrounding landscape.

Overall, the proposal for the Recycling Centre along the R122 is seen as a positive development that integrates seamlessly into the rural setting and promotes economic activity while preserving the area's character. The project aims for long-term positive impacts on biodiversity and landscape aesthetics in St. Margaret's with the proposal to restore c.1.ha to managed grassland/wildflower meadow.

The operational phase as it relates to potential for visual impact is considered to be so negligible as to be imperceptible. The principle or sole focus therefore relates to the existing physical development on site.

Impact Assessment

Key findings indicate that the recycling facility integrates well into the rural landscape, striking a balance between supporting economic growth and maintaining the rural character of the area. A significant aspect of the proposal when first introduced involved retaining existing hedgerows and trees, which enhances biodiversity and enriches the landscape through the planting and/retention of pollinator-friendly species and minimises any potential visual impact.

The assessment concludes that the existing development and operations of the recycling centre at this location have minimal visual impact and do not obstruct any protected views.

Mitigation Measures

Mitigation measures have been incorporated into the design to manage the retention of existing natural features and ensure that waste storage areas remain discreet.

A minor construction phase is proposed focused on-site enhancements, with existing structures requiring minimal visual alteration. The principal mitigation measure proposed is to restore c.1.ha of hard standing and former area of parking and storage associated with operations on site, and to convert it to managed grassland/wildflower meadow. This proposed mitigation measure aims for long-term positive impacts on biodiversity and landscape aesthetics in St. Margaret's.

Residual Effects

On implementation of the mitigation measures outlined in this assessment, impacts on the visual and landscape amenity of the area will be long-term (pending future development, noting the site is zoned DA), positive and slight.

View looking Northeast along R122

12.0 MATERIAL ASSETS

This section of the remedial Environmental Impact Assessment Report (rEIAR) has been prepared by Rachel Kenny, BE Civil, MRUP, FIPI, on behalf of CWPA and provides analysis of the potential impact of the development on Material Assets.

The related topics of water (supply and wastewater) and roads and traffic are separately addressed in other chapters of the rEIAR, principally:

- Chapter 8 Water & Hydrology
- Chapter 13 Traffic & Transportation
- Chapter 14 Waste Management

This chapter covers the built services (except traffic) – comprising energy demand and supply (electrical and gas) and water services.

Impact Assessment

The assessment concludes that the existing development and operations of the recycling centre at this location have a positive, slight and long-term impact on material assets due to the positive impact and compliance with Waste Management Objectives for the County and Country.

The site benefits from use of solar energy to meet its electricity demands, and therefore does not adversely impact on energy demand from the national grid.

The site is served by a proprietary wastewater treatment system, therefore does not place a demand on public infrastructure in this regard. As outlined in the hydrology chapter, there is no adverse impact arising, and no mitigation or residual impacts arise.

Water supply is via public mains. However, grey water is stored on site to provide for potential fore water demands.

Mitigation Measures

Mitigation measures were incorporated into the design to manage surface water drainage and fire water retention and storage requirements.

Further mitigation measures were introduced through the monitoring and management of foul water treatment on site.

Mitigation measures comprising the installation of solar panels on the roof of the industrial buildings minimises energy demand from the national grid and ensures its provision in a sustainable manner.

Residual Effects

The conclusion of the chapter is that there were no residual effects on the material assets during the construction or operational phase and there were no cumulative impacts on the material assets with other developments.

13.0 TRAFFIC & TRANSPORTATION

This chapter of the Remedial Environmental Impact Assessment Report (rEIAR), prepared by Brian McCann and Ian Worrell of Waterman Moylan Engineers, provides an assessment of the impact that the existing development / use subject of retention, in combination with the existing and permitted development on the subject site at St Margaret's Metal Recycling at Sandyhill, St Margarets, Co Dublin, has had and would have, if permitted on the traffic and transportation infrastructure and network in the surrounding area. It also sets out the existing receiving environment in terms of roads conditions, traffic activity and transportation accessibility. It also describes the existing and permitted development in terms of operational traffic impact on the receiving environment.

A Traffic & Transport Assessment (TTA) was prepared by Waterman Moylan in August 2024. The TTA presents survey data for the existing traffic conditions in 2019 and 2023 together with the ongoing transport demand that was generated by the development. The traffic generated during both the morning and evening peak times was also assessed. An assessment of the percentage impact of traffic on local junctions, and accessibility of the site by sustainable modes including walking, cycling and public transport is included. The TTA also addresses the existing capacity on the public transport network.

Project Timescale

In compliance with the requirements of the *Transport Assessment Guidelines* (2014) which requires junction impact assessment at base year, year of opening, year of opening plus 5 years, and year of opening plus 15 years, the years for assessment have been expanded to incorporate the impact of differing waste throughputs in previous and future years.

The project timetable has been used in the assessment of the impact that the existing development / use subject of retention, in combination with the existing and permitted St Margarets Metal Recycling development on the subject site has had and would have, if permitted at its current intensity, on the traffic and transportation infrastructure and network in the surrounding area

The following timetable has been adopted for the transportation assessment of the subject development:

- 1997 Parent Planning Permission (Waste throughput of 21,000 tonnes)
- 2013 Planning Permission (Waste throughput of 22,250 tonnes)
- 2019 Base Year (Waste throughput of 33,524 tonnes)
- 2020 Outbreak of Covid-19 (Waste throughput of 26,233 tonnes)
- 2022 Lifting of Covid–19 Restrictions (Waste throughput of 42,522 tonnes)
- 2023 Opening Year - 1 (Waste throughput of 33,695 tonnes)
- 2024 Opening Year (Waste throughput of 21,900 tonnes)
- 2029 Design Year (Opening Year + 5) (Waste throughput of 21,900 tonnes)
- 2039 Future Year (Opening Year + 15) (Waste throughput of 21,900 tonnes).

Traffic surveys were carried out at the site access in 2019 and again in 2023.

Receiving Environment

Site Location

The site occupied by St Margarets Metal Recycling is located on the R122 to the south of St Margarets at Sandyhill, St Margarets, Co Dublin.

The R122 is a Regional Route linking Finglas to the south with Balbriggan to the north via St Margarets, Naul and Oldtown. It is a two-lane road with a carriageway width of 7.5 metres. In the area of the subject site, the alignment is relatively flat with a gentle horizontal curvature. See Figure 13.2. Traffic conditions on the R122 St Margarets Road at the access to the subject site are generally free flowing save for occasional short duration incidents or accidents.

Public Transport Facilities

Bus services in the area of the development are a combination of historic services operated by Dublin Bus and new services to be provided under the auspices of Bus Connects. Proposals by Bus Connects envisage two new routes serving the subject site.

Description of Existing Development

St. Margaret's Recycling & Transfer Centre Ltd. will apply to An Bord Pleanála for substitute consent for planning permission, under substitute consent provisions for permanent retention of existing works and retention of existing use on site

Access to the site is from the R122 through a 9.0-metre-wide gateway on the east side of the R122 set back some 25.0 metres from the edge of the carriageway. The existing sightlines at the access to the subject site from St Margarets Road at a setback of 3.0metres are 60 metres to the left (south) and in excess of 160 metres to the right (north). The sightline to the left (south) from 60 metres to 160 metres is being increased by cutting back the existing boundary hedge to a point 3m from the roadside edge. Sightline visibility is maintained by ongoing maintenance of the existing hedgerow.

The existing car parking provision at the subject site is 20 spaces, which meets the requirements of the site, in that the staff numbers on site remain generally consistent at c.20-25, with others off site (transporting/transferring waste); and with limited visitors parking on site, in that visitors/customers of the site arrive by truck (with loads).

The existing truck parking at the subject site is located on the concrete hard standing, although is relatively low in respect of long-term parking. Trucks primarily enter the site to drop or collect loads.

Existing And Predicted Impacts

There are no existing or predicted impacts arising from the construction stage which has been completed.

The conclusion of the Traffic and Transport Assessment was that the access junction from the R122 to the subject site operated satisfactorily and within capacity with a waste turnover of 25,000 tonnes per annum in 2019 and a waste turnover of 33, 696 tonnes per annum in 2023. The TTA also concluded that the access junction from the R122 would continue to operate satisfactorily through the Design Year of 2029 to the Future Year of 2039 with a waste turnover of 21,900 tonnes per annum.

The public transport demand falls significantly within the existing capacity of the bus services in the area of the subject site.

The impact of the subject development on the surrounding transportation network during recent years has been positive due to the mitigation measures implemented by the applicants, which include eliminating individual / smaller vehicles arriving at the site, and focussing on larger commercial waste collectors, thereby reducing vehicle numbers to / from the site, and improving efficiency and recycling capabilities on site.

As a result of these mitigation measures, there has been a 33% reduction in the number of vehicles accessing the site between 2019 and 2023. This reduction has significantly reduced the Ratio of Flow to Capacity for the access junction notwithstanding the normal increases in traffic flow on the R122.

Mitigation And Monitoring Measures

Construction Phase - No mitigation and monitoring measures are proposed for the construction phase which has been completed or is of an insignificant scale (i.e. importation of topsoil for an area of c.1.1ha).

Operational Phase - The mitigation measures in place at the St Margarets Metal Recycling are based on an ongoing transfer of incoming waste from a combination of private cars, vans and trucks to truck operated by the larger licensed waste collection companies and trade /

construction companies resulting in an ongoing reduction in the number of vehicles accessing the site each day.

Other ongoing mitigation and monitoring measures during the Operational Phase include-

- Monitoring of truck numbers and weights of incoming waste loads.
- Ongoing maintenance of the sightline to the south of the access onto the R122.

Residual Impacts

Construction Phase

The applicants are not aware of any residual impacts on traffic and transportation arising from the construction phase.

Operational Phase

Due to the mitigation measures outlined above, the residual impact of the development during the operational stage is moderate, positive and long term for the duration of the operation of the St Margarets Metal Recycling.

Therefore, no further mitigation measures are required over and above those already in place.

Monitoring & Reinstatement

Construction Phase - Construction of the development has been completed and all monitoring / reinstatement measures have been addressed.

Operational Phase - During the Operational Phase, the applicants monitor the operation of the access from the R122 on an ongoing basis and with a view to advising Fingal County Council in relation to any operational or safety issues noted.

No reinstatement is proposed during the Operational Stage other than the ongoing maintenance of roads, footpaths, buildings, and services.

Cumulative Impact

For the purpose of cumulative impact, the Traffic and Transport Assessment Guidelines, issued by TII in May 2014 require that *'Traffic and Transport Assessment should consider all committed developments within the vicinity of the site. This includes sites which have previously been granted planning permission, but which are yet to become operational as well as any planning applications that have been submitted but have yet to be determined.'*

No other significant construction projects have been identified in the area of the subject site which has or could result in a significant cumulative impact on Traffic and Transportation either during the construction or operational phases.

However, measures currently being considered by NTA, TII and Fingal County Council for the intensification of public transport services and cycle facilities in the surrounding area are likely to have a cumulative long term significant impact.

14.0 WASTE MANAGEMENT

The subject site is a waste facility and is therefore a waste management measure in itself. The facility accepts waste mainly for recovery with metals as a principal activity. The facility is an essential part of the recovering and reuse of waste materials as per waste hierarchy. The facility contributes to set EU targets as it reaches a 95% recovery rate. The end product of the mechanical treatment on site is of a high standard and is sent for reuse.

Mitigation Measures

Construction Phase - The site has been an existing waste facility since 1997 and construction of most buildings and infrastructure was assessed previously under various applications and are not considered in this rEAIR. The construction considered in this application consists of the installation of the hammermill and the replacement of portacabins and the construction of some concrete slabs.

The construction was of a small scale and was largely within the same footprint of the existing concrete surfaced yard, with the exception of the concrete slabs which were an extension of the yard. The installation of the hammermill consisted of prefabricated parts being installed within the existing concrete surfaced yard area at the subject side and had no waste that required any mitigation under the construction phase. The replacement of the portacabins did not require any waste management as the old units were taken for reuse. The construction of the concrete slabs did not require waste management either as no waste was generated.

Operational Phase - As the site has been in an operational phase the facility treats waste for the purpose of recovery and reuse. This is achieved through mechanical selection and separation of metals. The facility is an integral part of the waste management structure in Fingal as Fingal County Council has put in their development plan the aim to make Fingal self-sufficient for waste management. Without this facility metal waste will be diverted out of Fingal to Belfast. The processes and plant are set out in detail in the rEIAR chapter. In essence, the waste is made into smaller fractions to enable sorting through the use of magnets, trommels, vibrating tables, Eddie currents and hand picking.

The site is an existing waste facility that has a high recovery rate and is contributing to the aims set in the Circular Economy and Miscellaneous Provisions Act 2022 and waste hierarchy and reaching EU recycling and recovering targets. The site could be viewed as a mitigation measure for reducing waste on a regional level. The waste management of the accepted waste is currently dealt with under the existing Waste Facility Permit (WFP-FG-13-0002-03). With the increased annual throughput, the amount of residual waste was increased. These wastes have EWC codes 19 10 04 (fluff-light fraction and dust other than those mentioned in 19 10 03) and 19 12 12 (wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11). The 19 10 04 - fluff-light fraction from the hammermill will be sent off-site for further recovery and 19 12 12 wastes will be returned to the source site.

All existing plant, infrastructure and accepted tonnage should therefore be viewed as a mitigation measure for the recovery and reuse of waste.

Residual Effects

As no waste was produced during construction the effects are momentary, imperceptible and neutral.

During the operational phase the site was beneficial in both local and national respects as the operation of the site contributes to the reaching of waste recovery targets. A high rate of reuse, recycling and recovery was achieved, the impact of the operational phase on the environment will be long-term, slight and positive.

15.0 ARCHAEOLOGY AND CULTURAL HERITAGE

This section of the Environmental Impact Assessment Report (rEIAR) has been prepared by Fran Whelan and Joe Corr of CWPA and provides analysis of the impact of the development on features of architectural heritage, archaeological and cultural heritage merit and measures used to safeguard these features associated with the continued use of the existing and permitted waste processing and transfer facility at St. Margaret's, Co. Dublin.

Existing And Predicted Impacts

The Archaeological Impact Assessment report sought to identify and describe known and potential archaeological or cultural heritage constraints within and/or immediately adjacent to the site. The following factors were identified in the course of desktop study:

- The site is moderate in scale occupying an area of approximately 1.75 Ha.
- There are no recorded monuments situated within the site boundaries, there are 8 sites within 500m of the site boundaries.
- No potential archaeological features were recorded in aerial photos of the subject site.
- Examination of the cartographic sources indicates no archaeological features.
- There were no previous archaeological excavations within the subject site and only four excavations were noted as having taken place in the surrounding townlands.
- The site visit shows that the site has been extensively disturbed and little of the original ground profile remains.

These factors indicate that, prior to any groundwork's taking place; this site had moderate potential (based on the site's size) for the survival of buried archaeological remains. It was recommended that groundworks at this site were the subject of archaeological monitoring.

Mitigation Measures

Mitigation measures were incorporated into previous permissions as applicable. In that no material or significant ground works were carried out during the relevant period (i.e. since development on site was assessed in 2013/2014), no further or additional mitigation measures were required.

In respect of the proposed construction/implementation phase relating to the conversion of c.1.ha of hard standing to managed grassland/wildflower meadow, as no removal of the existing hardcore is proposed, but rather importation of topsoil and seeding of same, no disturbance of the ground at this location will take place. Therefore, archaeological monitoring is not considered to be a necessary mitigation measure.

Residual Effects

The applicants are not aware of any residual impacts on archaeology or cultural heritage arising from the construction phase.

During the operational phase there are no further residual effects.

16.0 ACCIDENT & DISASTER RISKS

This Chapter was prepared by Martijn Leenheer of ESC Environmental Ltd. Potential effects associated with accident & disaster risks during the construction and operation of the proposed development have been assessed.

Impact Assessment

The principal attributes (and impacts) that have been assessed include the following:

- Water Bodies and Flood Risk
- Seismic Activity
- Fire Risk
- Outer Public Safety Zone of Dublin Airport

Mitigation Measures

Water Bodies and Flood Risk

There is limited potential for an impact on the site due to flooding. Therefore, there are no mitigation measures necessary.

Seismic Activity

There is no risk of seismic activity on site and therefore no mitigation measures or monitoring is necessary.

Fire Risk

St Margaret's has a detailed fire strategy and risk assessment report prepared to ensure the proper measures to prevent any major impacts from a fire. Ongoing and regular reviews of the site layout and associated issues and identifying potential problems and remedying same. The most up to date Fire Prevention Plan has been submitted to Fingal County Council as part of the ongoing monitoring and review of the waste permit on site.

Outer Public Safety Zone

St. Margaret's Recycling is located within the Outer Public Safety Zone (PSZ) of Dublin Airport. The ERM Public Safety Report 2005 states that the principal purpose of the outer PSZ is to minimise the possibility of a multiple fatality accident. The purpose of PSZ is to protect the public on the ground from the small but real possibility that an aircraft might crash in a populated area. The potential for a major accident is considered extremely unlikely with a risk rating of 1 in one million per year applying to the Outer Public Safety zone. Therefore, the potential risk posed by a major accident and or disaster has been considered based on a low vulnerability of such a risk and the overall risk is considered to be low. There are no mitigation measures which can alleviate this risk, and therefore, no mitigation measures are proposed.

Residual Effects

Due to the comprehensive controls and design standards that have been followed during initial design and that will be followed during detailed design, combined with the measures contained in the Preliminary CEMP, there is no significant potential for the proposed development to give rise to significant adverse effects on the environment due to accidents or disasters. This applies to accidents/ disasters arising from external factors as well as accidents arising from activities at the site.

Water Bodies and Flood Risk -Due to the limited potential for flooding on site, the residual impact from the changes in the existing facility are considered to be long-term, neutral and negligible in both the construction and operational phase.

Seismic Activity- As there is no potential for seismic effects, the residual impact on the site from seismic activity is considered to be long-term, neutral and negligible in both the construction and operational phase.

Fire Risk- The facility operated in line with the relevant fire safety plan associated with the current licence during the relevant period, and therefore due to this, ie. after the mitigation measures the residual impact from the site is considered to be long-term, positive and moderate.

Outer Public Safety Zone- The potential risk posed by a major accident and or disaster have been considered based on a low vulnerability of such a risk and the overall risk is considered to be low. The residual impact from the site is considered to be long-term, neutral and imperceptible.

17.0 CUMMULATIVE IMPACT

17.1 Introduction

The interactions and cumulative effects of the facility have been assessed and written by Joe Corr and Rachel Kenny on behalf of CWPA.

Joe Corr was the founder and Managing Director of Corr & Associates Spatial Planning and is now Managing Director of Planning with CWPA Planning and Architecture consultants. He holds a MSc. in Spatial Planning which was obtained from Technological University Dublin and a Diploma in Legal Studies obtained from the Honourable Kings Inns. Joe is also a former President of the Irish Planning Institute (2018 – 2020). Throughout his career, Joe has worked on large scale strategic infrastructure projects including the Poolbeg GSE, Huntstown Power Station and Dublin Port Tunnel.

Rachel Kenny is a senior planning consultant with CWPA, Planning and Architecture consultancy, and has 30 years' experience as a planner in public and private sector organisations, including Fingal, Meath, and Louth County Council and An Bord Pleanála (as Director of Planning). She holds a degree in Civil Engineering (be (Civil) (Hons) and Masters in Regional and Urban Planning (MRUP), both from University College Dublin. She is a fellow and corporate member of the Irish Planning Institute. She has experience in both forward planning and development management, and specialises in, inter alia, Strategic Infrastructure Development, and large scale EIAR projects.

17.2 Population & Human Health / Population & Human Health

The population and human health content of this application will impact on the existing environment in terms of the provision of services, facilities and employment. Chapter 5 of this EIAR found that the impact on Population and Human Health as a result of the development will be positive or neutral in the general area of the proposed development. The continued use of the waste transfer and recycling facility at the facility to accept up to 21,900 tonnes per annum with minor infrastructural works as part of the planning application will help maintain current employment in the area.

17.3 Population & Human Health / Land, Soil & Geology

For the purposes of this rEIAR, as the development in question is already constructed, we are satisfied that no material or significant discharges to the ground arose other than those previously considered and permitted will take place.

The attribute is considered to be of only low importance, and generally positive and of benefit from a visual amenity perspective. However, this positive impact is not considered to be permanent, in that the area is zoned for development (i.e. DA zoning) and will not remain in grassland or agricultural use indefinitely, as it is the Vision for this zoning that the lands would be developed for aviation related activities. This, however, will be the subject of a future application and not within the immediate tor short-term time frame.

Additionally, there are no direct discharges to ground from the current or proposed operations on site. Chemical pollution (e.g. hydrocarbon spillages as a result of operational activities) has the potential to occur at the site. However, as the entire footprint of the site has been capped with hardstanding for the purposes of site operations and storing of de-polluted vehicles, there will be no resultant impacts to the underlying geological environment as a result of the continued operation and minor infrastructure works.

17.4 Population & Human Health / Air Quality & Climate

As the development in question is already constructed, dust emissions are unlikely to arise as a result of construction activity. While retention for these works is sought, the works were for the most part previously permitted, and associated impacts previously assessed and deemed not to be significant. Minor works that took place since 2019 did not result in dust or vibration that would be considered anything other than imperceptible, neutral and short-term/brief.
In order to ensure that any dust nuisance is minimised during ongoing operation, a series of mitigation measures have been set out in Chapter 9.

No project specific mitigation measures have been identified but emissions of pollutants from site traffic can be controlled by either controlling the number of road users or by controlling the flow of traffic. For the majority of vehicle-generated pollutants, emissions rise as speed drops, although the opposite is true at very high speeds (i.e. speeds greater than 120 km/hr). Emissions also tend to be higher under stop-start conditions when compared with steady speed driving. The free flow of traffic into and out of the site and limiting the idling time of vehicles and plant will allow for the generation of lower concentrations. In light of the above, emissions arising as a result of any traffic associated with the proposed development is unlikely to impact on air quality standards.

17.5 Population & Human Health / Noise & Vibration

Construction activity that has taken place was on a relatively small scale. Nevertheless, minor short-term vibration impacts may have occurred during the construction phase as a result of the use of heavy plant and machinery; but these impacts will be unlikely to propagate beyond the construction site boundary.

It is not anticipated that there will be any significant changes in the ongoing operational noise levels attributable to the development site and the operational vibration will have negligible adverse impacts on sensitive receptors as a result of the operational phase of the proposed development.

17.6 Population & Human Health / Landscape & Visual Effect

The subject lands are characterised as having 'Low Lying Landscape Character Type' and 'Low Lying Agriculture Landscape Character Area.' Chapter 11 indicates that there will be no visual effects arising from the proposed development within the wider study area.

The introduction of the subject development has not modified the landscape character locally or outside of the development site. The potential direct and indirect effects on landscape character at the site location and within the wider area will be of negligible neutral significance.

The proposed development integrates into the existing landscape and due to its location and screening effects of the existing vegetation the significance of visual effects ranges from none to negligible adverse for viewpoints close to the site entrance.

17.7 Population & Human Health / Traffic & Transportation

The traffic impacts and the level of traffic generated at the R122 by the use of the waste transfer and recycling facility have been calculated and are considered relatively low. As a result, it is deemed that no mitigation measures are required.

No specific monitoring proposals are considered necessary during the operation of this development other than normal monitoring undertaken by Fingal County Council.

17.8 Biodiversity / Land, Soils & Geology

It has been seen that the application site is not within, or adjacent to, any area that has been designated for nature conservation at a national or international level.

There are no examples of habitats listed on Annex I of the Habitats Directive or records of rare or protected plants. There are no alien invasive species. There will be no effects to biodiversity as a result of the proposed development.

17.9 Biodiversity / Water & Hydrology

During the construction and operational phases hydrocarbon and silt interceptors have been and will be serviced and maintained on a regular basis by an independent licensed contractor to ensure that there is no impact on aquatic flora and fauna. Good site management practices will also ensure that pollution to existing watercourses does not occur during the construction and operation phases. No negative effects to biodiversity are predicted to occur due to the continuation of use of these lands.

17.10 Biodiversity / Landscape and Visual Impact

The existing flora on the site is limited and not of any general merit. The body of the site is entirely composed of buildings and artificial surfaces. The proposed development will remain integrated into the existing landscape and due to its location and screening effects of the existing vegetation will continue to make an overall positive contribution.

17.11 Land Soils & Geology / Water & Hydrology

The implementation of topsoiling and seeding of c.1.ha of lands, is considered to be a direct and positive impact. This attribute is considered to be of only low importance. The impact is not considered to be permanent, in that a portion of land is zoned and may ultimately be development, the impact of which would be assessed at this time, and not anticipated to be within the life of this Plan period.

17.12 Air Quality & Climate / Traffic & Transportation

The development will give rise to direct emissions from onsite and offsite vehicles and also indirect emissions relating to the energy demand of the onsite site buildings, power tools and electrical equipment.

However, as the site is currently operational and there are no proposed changes to the permitted activities at the site, it is anticipated that there will be no significant change in terms of air quality as a result of the site's continued operation. No project specific mitigation measures have been identified but emissions of pollutants from site traffic can be controlled by either controlling the number of road users or by controlling the flow of traffic.

For the majority of vehicle-generated pollutants, emissions rise as speed drops, although the opposite is true at very high speeds (i.e. speeds greater than 120 km/hr). Emissions also tend to be higher under stop-start conditions when compared with steady speed driving. The free flow of traffic into and out of the site and limiting the idling time of vehicles and plant will allow for the generation of lower concentrations. No monitoring is deemed necessary due to the negligible impact of the development on air quality.

17.13 Air Quality & Climate / Air Quality & Climate

As the development in question is already constructed, the construction phase assessment is minimal/negligible. While small in scale, the construction phase of the scheme had the potential to generate a number of short-term emissions to the atmosphere. No monitoring is deemed necessary due to the negligible impact of the development on air quality.

17.14 Noise & Vibration / Population & Human Health

The potential sources of environmental noise during the construction phase of the proposed development would have primarily arisen from increased traffic on the surrounding road network (from construction workers and delivery of plant and materials) and actual on-site works where heavy plant and earth moving machinery may be required.

The assessment considered noise impacts associated with the proposed continued use of the existing waste processing and transfer facility. As such, with no changes to the permitted activities, it is not anticipated that there will be any significant changes in the noise levels attributable to the development site.

17.15 Noise & Vibration / Traffic & Transportation

The potential sources of environmental noise during the construction phase of the proposed development would have primarily arisen from increased traffic on the surrounding road network (from construction workers and delivery of plant and materials) and actual on-site works where heavy plant and earth moving machinery may be required. Overall, the noise climate in the area was dominated by road traffic noise from the R122 and M50, and aircraft landing and taking off from the airport.

17.16 Air Quality & Climate / Biodiversity

The development will have no effect on climatic conditions that would be sufficient to affect animal populations on or in the vicinity of the site.

17.17 Traffic & Transportation / Biodiversity

While traffic associated with the construction and operation stages may have disrupted fauna, impacts are unlikely to be significant.

17.18 Traffic & Transportation / Air Quality & Climate

During the operational phase a scheme of this nature has the potential to generate greenhouse gases through vehicular traffic into and out of the site as well as from the site operations, plant and machinery, space heating and energy use within the site buildings. Transport emissions, including greenhouse gases, from light and heavy-duty vehicles are continually being reduced through EU and national initiatives. As such, transport mitigation of GHG emissions are primarily delivered by EU legislation to ensure an ongoing reduction in emissions per car. Other national initiatives to reduce emissions include fiscal measures to promote the use of electric vehicles and the biofuels obligation scheme. No monitoring is deemed necessary due to the insignificant impact of the development on climate.

17.19 Waste Management / Traffic & Transportation

In 2022 St Margaret's took in on average 1,545 tonnes per month from the 4,400 tonnes produced by their clients. On average the transportation emits 57 grams CO2/tonne/km (International Council on Clean Transportation website 2023). An HGV will load 20 tonnes and the distance to the nearest waste facility with the capability to recover this type of waste is in Belfast at c.145km distance.

The assessment considered the traffic impacts associated with the use to date and the proposed continued use of the existing waste processing and transfer facility. With no changes to the permitted activities, it is not anticipated that there will be any significant changes in the emissions levels attributable to the development site.

17.20 Residual Impacts and Cumulative Impacts

Residual impacts can be defined as the final impacts that occur after proposed mitigation measures have taken effect. Many of the findings of the rEIAR have been incorporated into previous permission and the design of the development as previously granted. This has contributed to the reduction or amelioration of potential impacts. Where residual impacts arise, they are detailed in the relevant chapters and further mitigation measures detailed where necessary, including in the EIAR associated with the future use of the site.

Cumulative impacts are defined as: "The addition of many small impacts to create one larger, more significant, impact" (EPA 2002). Cumulatively, these impacts may be significant if they occur close together in terms of location and time. The cumulative impact of the proposed development is categorised as neutral and moderate.

17.21 Environmental Commitments and Mitigation Measures

Mitigation measures to be adopted during the construction and operational phases of the subject development are detailed within each chapter. These measures should be implemented through planning conditions imposed by An Bord Pleanála.

Mitigation measures will be managed by the developer/ landowners thereafter.

17.22 Summary

OVERALL IMPACT ON THE ENVIRONMENT

The remedial Environmental Impact Assessment Report has assessed the characteristics of the proposal for significant environmental impacts. Each topic was examined and the resultant environmental impact, if any, noted and mitigation or reductive measures have been put in place. Accordingly, the proposed development will result in no significant negative impacts on the environment. It has also identified potential for interactions between a range of factors identified in Table 17.1. These interactions require the implementation of suitable mitigation measures to ameliorate the impact of the development on the environment. This rEIAR has found that subject to the full implementation of the various mitigation measures specified by the rEIAR team, the development will have no significant negative impact on the environment.

The subject development, in terms of physical works comprises various environmental improvement measures that have been implemented on a phased basis over the last 25 years, ultimately resulting in a positive, long-term, slight to moderate impact, where these works include improvements to access arrangements, site surfaces, oil interceptors, new waste water treatment system, installation of solar panels, SUDs and fire water access and retention, etc. . Other works including mitigation measures regarding dust suppression, improved boundary treatment, etc. which have resulted in slight, positive and long-term benefits. The buildings on the site are only visible at the site access, and appear not unlike agricultural structures and therefore do not materially alter the landscape character. The site has since prior to 1995 comprised the industrial buildings, being former agricultural buildings. Their impact is considered to be imperceptible, neutral and long term.

The on-going use of the existing facility as a waste recycling and transfer centre is a more sustainable option than development of a greenfield site, or transporting the county's waste to Northern Ireland. In respect of metal waste, c.70 to 80% would be required to be transported to northern Ireland if the Centre were not to accept it, as there is no other centre that can cater and process the metal waste as per St Margarets. The proposed development, comprising the on-going use of the centre, is considered to be a long-term, positive, moderate impact.

APPENDIX 5

APPENDIX 6

CWPA

planning & architecture

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RIAI

IRISH PLANNING INSTITUTE
CORPORATE MEMBER

ISSUE SHEET

PROJECT:
RENTENTION SUBSTITUTE CONSENT:
ST MARGARETS RECYCLING CENTRE, CO. DUBLIN

CLIENT:
SAINT MARGARETS RECYCLING & TRANSPORT LIMITED

JOB NO: 22073

SHEET 1 OF 1

ISSUED TO: FINGAL COUNTY COUNCIL

Date:	**06/12/2024**												
ISSUE CODE	**R**												
Client													
Project Manager													
Structural Engineer													
Quantity Surveyor													
Sevices Engineer													
Contractor Head office													
Contractor Site office													
Local Authority **FINGAL COUNTY COUNCIL**	**6**												

Drg/Doc No.	Title	Scale	Size	Status	
22073-R-100	Site Location Map	1:2500	A2	R	/
22073-EX-01	Existing Portacabins - Floor Plans, Elevations and Sections	1:100	A1	R	/
22073-EX-02	Existing Industrial Building	1:200	A1	R	/
22073-EX-03	Existing Eqipment Details	NTS	A1	R	/
22073-EX-04	Existing & Proposed Contiguous Elevations	1:500, 1:250	A1	R	/
22073-R-01	Site Plan - Retention Permission	1:500	A1	R	/
23073-R-02	Proposed Landscape Plan	1:500	A1	R	/
23073-R-03	Site Layout - Planning History	1:500	A1	R	/
	ENGINEER'S DRAWINGS				
MAR-WMC-ZZ-GF-DR-C-P014	Contiguous Elevations		A1	R	/
MAR-WMC-ZZ-GF-DR-C-P020	Proposed Drainage Layout		A1	R	/
MAR-WMC-ZZ-GF-DR-C-P021	Existing Drainage Layout		A1	R	/
MAR-WMC-ZZ-GF-DR-C-P025	Attenuation Details		A1	R	/

Status Code:	**I - Info. / P - Prelim. / PP - Planning / FSC - Fire Cert / D - DAC / T - Tender / C - Construction**
Issue Code:	**P - Print / CD - Compact Disc / E - e-mail / F - Fax / R - Retention**
Comments:	