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ENVIRONMENTAL IMPACT ASSESSMENT SCREENING REPORT FOR PROPOSED BLACK ASH PARK AND RIDE – BUS INTERCHANGE AT MICK BARRY ROAD, BLACK ASH CO. CORK

Report Prepared For
Cork City Council

Report Prepared By
Natalie Machado, Environmental Consultant

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Details	Written by	Approved by
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Title	Environmental Consultant	Senior Environmental Consultant
Date	04 February 2025	04 February 2025

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1.0 INTRODUCTION

On behalf of National Transport Authority (NTA) Park and Ride Development Office (PRDO) and Cork City Council (CCC), AWN Consulting Limited (AWN) has prepared the following Environmental Impact Assessment (EIA) Screening Report to accompany the planning application for a proposed bus interchange (the "proposed development") at the existing Black Ash Park and Ride at Mick Barry Road, Black Ash, Cork.

Mick Barry Road is located immediate adjacent the northern boundary of the site; the proposed bus interchange along with the existing Black Ash Park and Ride site are both accessed via Mick Barry Road. The N27 South City Link Road is located to the immediate east of the site. The site is bounded to the west by Black Ash Road and commercial developments and to the south by commercial developments. The site is located approximately 2.3km south of Cork city centre. The wider area can be characterized by a mix of commercial developments, residential settlements and recreational infrastructure including Tramore Valley Park and various sports grounds.

The proposed development site was previously part of the Kinsale Road Landfill, opened in the early 1960's and having operated for approximately 35 years receiving over 3 million tonnes of waste from Cork homes and businesses.

The proposed development will provide a new bus interchange facility including 4 additional bus bays, appropriate pedestrian infrastructure, cycle parking, lighting and servicing within the existing Black Ash Park and Ride site. The site is currently operating below its 940 no. parking space capacity. The proposed development will reduce the capacity by 104 no. spaces.

The proposed development redline boundary is outlined in Figure 1.1 below.

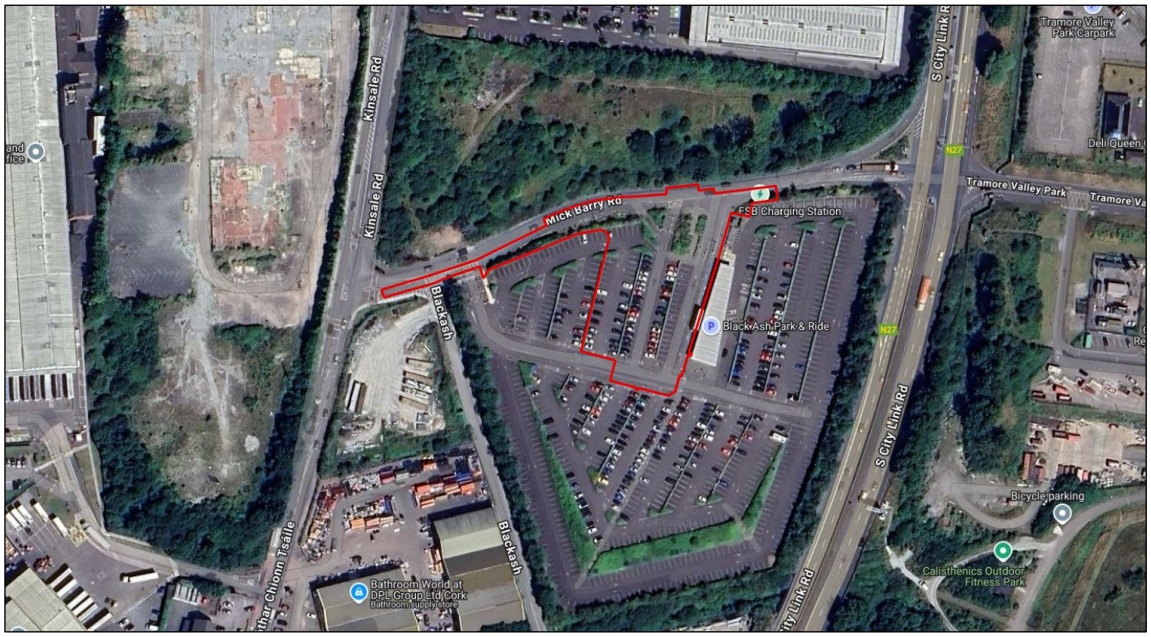

Figure 1.1 *Proposed Development site (site boundary in red) (source: Google Maps)*

1.1 PURPOSE OF THIS REPORT

The purpose of this report is twofold, to provide CCC with the information required under Schedule 7A to demonstrate the likely effects on the environment, having regard

to the criteria set out in Schedule 7 of the Planning and Development Regulations 2001, as amended. This information will enable CCC to undertake a screening determination in respect of the need for an Environmental Impact Assessment Report (EIAR) for the proposed development. The second reason for this report is to document the studies undertaken by the Applicant, and the design team, which demonstrate there are no significant effects predicted as a result of the proposed development and the application can be determined by CCC without an EIAR having been submitted.

There is a mandatory requirement for an EIAR to accompany a planning application for some types of development that meet or exceed the "thresholds'' as outlined in the Planning and Development Regulations 2001, as amended. In addition to the mandatory requirement, there is a case-by-case assessment necessary for sub-threshold developments as they may be likely to have significant effects on the environment. If a sub-threshold development is determined to be likely to have significant effect on the environment, then an EIAR will be required.

1.2 EIA SCREENING LEGISLATION AND GUIDANCE

The legislation and guidance listed below has informed this report and the EIA Screening methodology:

- European Union (Planning & Development) (Environmental Impact Assessment) Regulations 2018;
- Environmental Impact Assessment of Projects – Guidance on Screening. (2022). European Commission.
- Guidelines on the Information to be contained in Environmental Impact Assessment Reports. (2022). Environment Protection Agency.
- Environmental Impact Assessment of Projects - Guidance on the preparation of the Environmental Impact Assessment Report. (2022) European Commission.
- European Union Environmental Impact Assessment (EIA) Directive 2011/92/EU as amended by 2014/52/EU
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment. (August 2018). Department of Housing, Planning and Local Government.
- Planning and Development Act, 2000 (as amended)
- Planning and Development Regulations 2001 (as amended)
- Guidance for Consent Authorities regarding Sub-threshold Development (2003; DoEHLG).

The screening process followed in this report is in accordance with the EIA Directive 2011/92/EU of the European Parliament and of the Council as amended by 2014/52/EU and as transposed by the Act and the Regulations and follows the format as per Section 3.2 of the EPA Guidelines (2022). The potential for significant effects of the proposed Project has been considered against the criteria under Annex II A of the EIA Directive 2011/92/EU as amended by 2014/52/EU and Schedule 7 of the *Planning and Development Regulations, 2001* as amended.

1.3 EIA SCREENING METHODOLOGY

The information required to be submitted for CCC to make a determination if the project should be subject to EIA is set out in Annex IIA of the EIA Directive. The Annex IIA information is set out below:

1. A description of the project, including in particular:

(a) a description of the physical characteristics of the whole project and, where relevant, of demolition works;

(b) a description of the location of the project, with particular regard to the environmental sensitivity of geographical areas likely to be affected.

2. A description of the aspects of the environment likely to be significantly affected by the project.

3. A description of any likely significant effects, to the extent of the information available on such effects, of the project on the environment resulting from:

(a) the expected residues and emissions and the production of waste, where relevant;

(b) the use of natural resources, in particular soil, land, water and biodiversity.

4. The criteria of Annex III shall be taken into account, where relevant, when compiling the information in accordance with points 1 to 3.

An evaluation of the characteristics of the project, the sensitivity of the location of the proposed development, and the potential for significant impacts has been made with regard to Annex III of the EIA Directive. Annex III of the EIA Directive sets out the criteria to determine whether a development would or would not be likely to have significant effects on the environment. The criteria is broadly set out under the three main headings:

1. Characteristics of projects

The characteristics of projects must be considered, with particular regard to:

(a) the size and design of the whole project;

(b) cumulation with other existing and/or approved projects;

(c) the use of natural resources, in particular land, soil, water and biodiversity;

(d) the production of waste;

(e) pollution and nuisances;

(f) the risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge;

(g) the risks to human health (for example due to water contamination or air pollution).

2. Location of projects

The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to:

(a) the existing and approved land use;

(b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground;

(c) the absorption capacity of the natural environment, paying particular attention to the following areas:

(i) wetlands, riparian areas, river mouths;

(ii) coastal zones and the marine environment;

(iii) mountain and forest areas;

(iv) nature reserves and parks;

(v) areas classified or protected under national legislation; Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC;

(vi) areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;

(vii) densely populated areas;

(viii) landscapes and sites of historical, cultural or archaeological significance

3. Type and characteristics of the potential impact

The likely significant effects of projects on the environment must be considered in relation to criteria set out in points 1 and 2 of this Annex, with regard to the impact of the project on the factors specified in Article 3(1), taking into account:

(a) the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected); (b) the nature of the impact;

(c) the transboundary nature of the impact; (d) the intensity and complexity of the impact;

(e) the probability of the impact;

(f) the expected onset, duration, frequency and reversibility of the impact;

(g) the cumulation of the impact with the impact of other existing and/or approved projects;

(h) the possibility of effectively reducing the impact.

The competent authority must have regard to the Annex III criteria in forming an opinion as to whether or not a development is likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location and should be subject to EIA.

1.4 CONTRIBUTORS TO THE EIA SCREENING REPORT

The preparation and co-ordination of this screening report has been completed by AWN Consulting in conjunction with the project design team and developer.

Table 1.1 *Contributors to this Report*

Role	Contributor
Developer	Cork City Council
Planning	Clifton Scannell Emmerson Associates
Civil, Mechanical and Electrical Engineering, Traffic and Transportation	Clifton Scannell Emerson Associates
Population and Human Health; Land Soils, Geology, Hydrogeology, and Hydrology; Air Quality and Climate; Noise and Vibration; Material Assets; Waste Management including RWMP	AWN Consulting Limited
Biodiversity including Appropriate Assessment Screening	Doherty Environmental Services

The various reports address a variety of environmental issues and assess the impact of the proposed development and demonstrate that, subject to implementation of the construction and design related mitigation measures recommended in this report, the proposed development will not have a significant impact on the environment. This EIA Screening Report should be read in conjunction with the plans and particulars submitted with the planning application.

2.0 SCREENING EVALUTATION

Schedule 5 of the Planning & Development Regulations 2001, as amended, sets out a number of classes and scales of development that require EIA. With respect to the proposed development, the relevant EIA thresholds from Part 2 of Schedule 5 are set out in Table 2.1 below.

Table 2.1 *Relevant Part 2 Schedule 5 Thresholds for EIA and determination of requirement of EIA*

Development for the Purposes of:	Related Development Details	Exceeds Threshold?
10. Infrastructure projects - (b) (iv) Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere.	The proposed development is conservatively deemed to be located within a 'business district' and hence 2 hectares is the applicable threshold. The proposed development site is 0.56 hectares which is below the stated threshold.	No.
15. Any project listed in this Part which does not exceed a quantity, area or other limit specified in this Part in respect of the relevant class of development, but which would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7.	The following Sections 3.0, 4.0 and 5.0 of this report will provide information on the characteristics of the proposed development; in order to provide information on the likelihood of the project to have significant effects on the environment from these works, having regard to the criteria set out in Schedule 7.	Determined by this EIA Screening Report.

2.1 CONCLUSION – SUB THRESHOLD DEVELOPMENT

The proposed development is 'of a type set out in Part 2 of Schedule 5 [in the Planning and Development Regulations, 2001 (as amended)] which does not equal or exceed, as the case may be, a quantity, area or other limit specified in that Schedule in respect of the relevant class of development'. The development is outside the mandatory requirements for EIA and is considered to be sub-threshold for the relevant project type.

An EIAR is still required to accompany a planning application for sub-threshold development which would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7. Therefore, it is also necessary to consider whether an EIAR is required because the development will be likely to have significant effects on the environment, even though it does not meet nor exceed the relevant thresholds in Schedule 5 to the Planning and Development Regulations.

The remainder of this report is to form the basis of the application made for sub-threshold screening for EIA under and presents the information required by Schedule 7A to demonstrate the likely effects on the environment, having regard to the criteria set out in Schedule 7.

The following Sections 3.0, 4.0 and 5.0 will provide information on the characteristics of the proposed development; the location and context, and its likely impact on the environment as well as a description of any features of the project and/or measures envisaged to avoid or prevent what might otherwise have been significant adverse effects on the environment. These sections present the information required under Schedule 7A of the Regulations, broadly set out in the same structure as presented in Schedule 7, to ensure that each aspect for consideration is robustly addressed.

For the avoidance of doubt, the mitigation measures, which are referred to in this Screening Report, should be considered as measures envisaged to avoid or prevent what might otherwise have been significant adverse effects on the environment for the purposes of EIA Screening.

3.0 CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

This section addresses the characteristics of proposed development by describing the physical characteristics of the whole proposed development and, where relevant and a description of the location of the proposed development, with regard to the environmental sensitivity of geographical areas likely to be affected.

3.1 SIZE AND DESIGN OF THE PROPOSED DEVELOPMENT

This EIA Screening Report should be read in conjunction with the plans and particulars submitted with the planning application. The overall site application area is 0.56 hectares.

The proposed development, comprise in a new Bus Interchange facility to be located at the existing Black Ash Park and Ride Facility. This will include:

- U-shaped bus only entry/exit.
- 4 new bus bays.
- 4 bus shelters.

- New bus standing area.
- 3 pedestrian crossings.

The proposed development layout is presented in Figure 3.1 below.

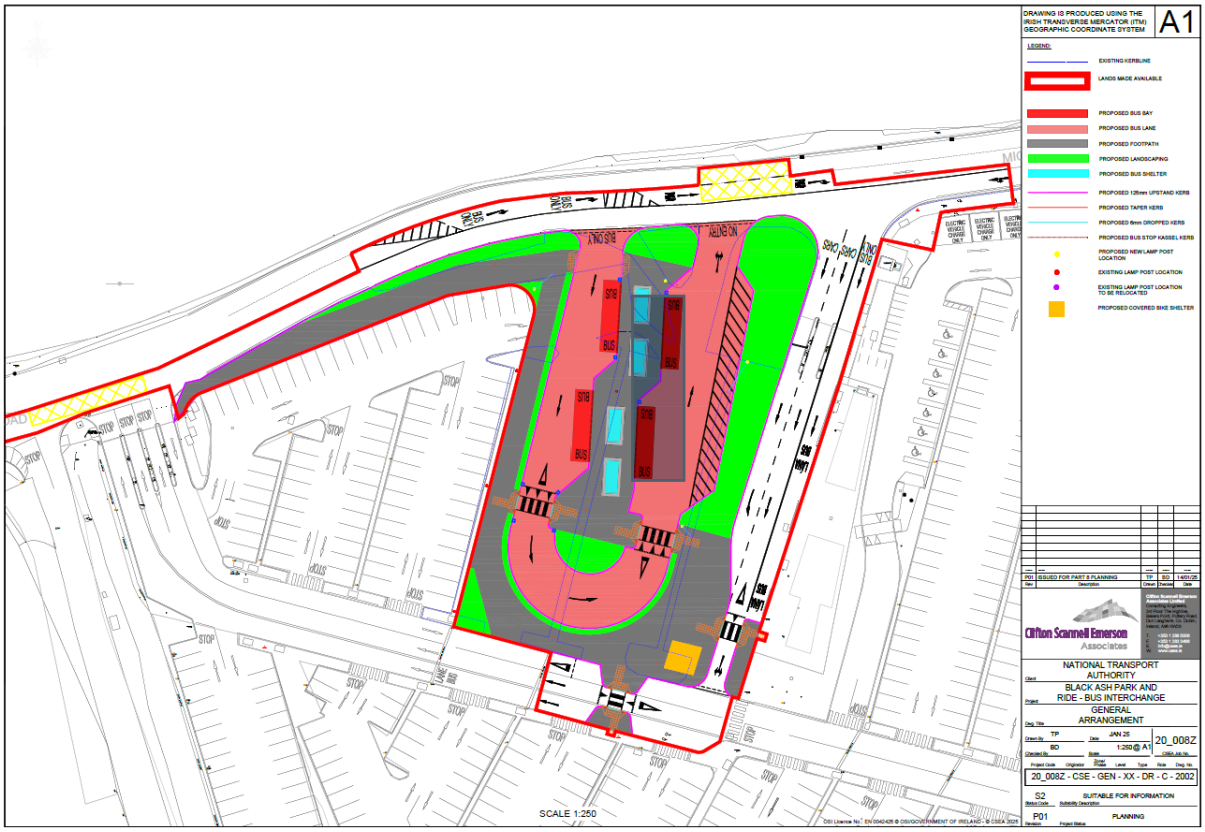

Figure 3.1 *Proposed Development Layout (Source: CSEA, Drawing Number: 20_008Z - CSE - GEN - XX - DR - C - 2002)*

3.1.1 Construction Phase

This section of the EIA Screening Report provides an outline description of the construction phase of the proposed development.

The appointed construction contractor will prepare a Construction Environmental Management Plan (CEMP) prior to commencement of construction works on site. The CEMP will include all mitigation measures outlined within this EIA Screening Report. The CEMP will contain information of practices and measures to avoid, minimise or mitigate any construction effects on the environment. This plan will be viewed as a live document that will be updated as and when required. The contractor will then prepare specific method statements setting out site working requirements which manage perceived risks to the environment e.g., traffic management, work safety plans etc.

A construction compound will be established within the proposed development site for use by the construction contractor. Welfare facilities (canteens, toilets etc.) will be available within the construction compound.

Temporary connections to the services, such as electricity, potable water network, storm water network and foulwater network will be utilised (subject to relevant applications and approvals as required by Uisce Éireann, CCC and ESB).

The construction phase of the development will require 10 to 15 personnel for the entire duration of the project, approximately 9 months.

For the duration of the proposed infrastructure works typical construction hours will be adopted. Works shall not occur outside 07:00 to 18:00 Monday to Friday (excluding bank holidays) and 08:00 to 14:00 Saturdays, unless otherwise agreed with the planning authority. No working will be allowed on Sundays and Public Holidays.

Additional traffic from construction staff, delivery of materials and removal of waste is expected during construction stage. Deliveries will be arranged with suppliers on suitably sized rigid body HGVs, notably flat-bed lorries. All materials will be transported directly onto site - no storage of materials will be permitted on the streets. Despite the increase in traffic levels as result of proposed development, the traffic impact will not be significant during construction stage. The impact of construction traffic has been assessed by CSEA (2024b) as per Traffic and Transport Assessment, which has been submitted with the planning documentation.

To enable proposed development, the partial excavation of in-situ tarmac and concrete, as well as some excavation of soil and stone, will be required. The development engineers Clifton Scannell Emerson Associates (CSEA) have estimated that 2,270m^3 of material will need to be excavated to do so. There will also be a requirement for the removal of lighting on the site.

3.1.1.1 Underlying Landfill

The proposed development site is overlying a section of the historical Kinsale Road Landfill. The site is currently managed in accordance with the waste licence EPA Register No.: W0012-03. Following the closing of the landfill, the site was capped and a monitoring regime was conditioned as part of the ongoing waste licence.

As part of the ongoing monitoring, an underground leachate and landfill gas collection and treatment system was established on the site and monitoring will continue in line with licence conditions.

The capping of the landfill site includes an underground 100mm concrete slab with mesh reinforcement. The purpose of this layer is to separate the leachate and landfill gas monitoring system from the above surface drainage layer and carpark surface.

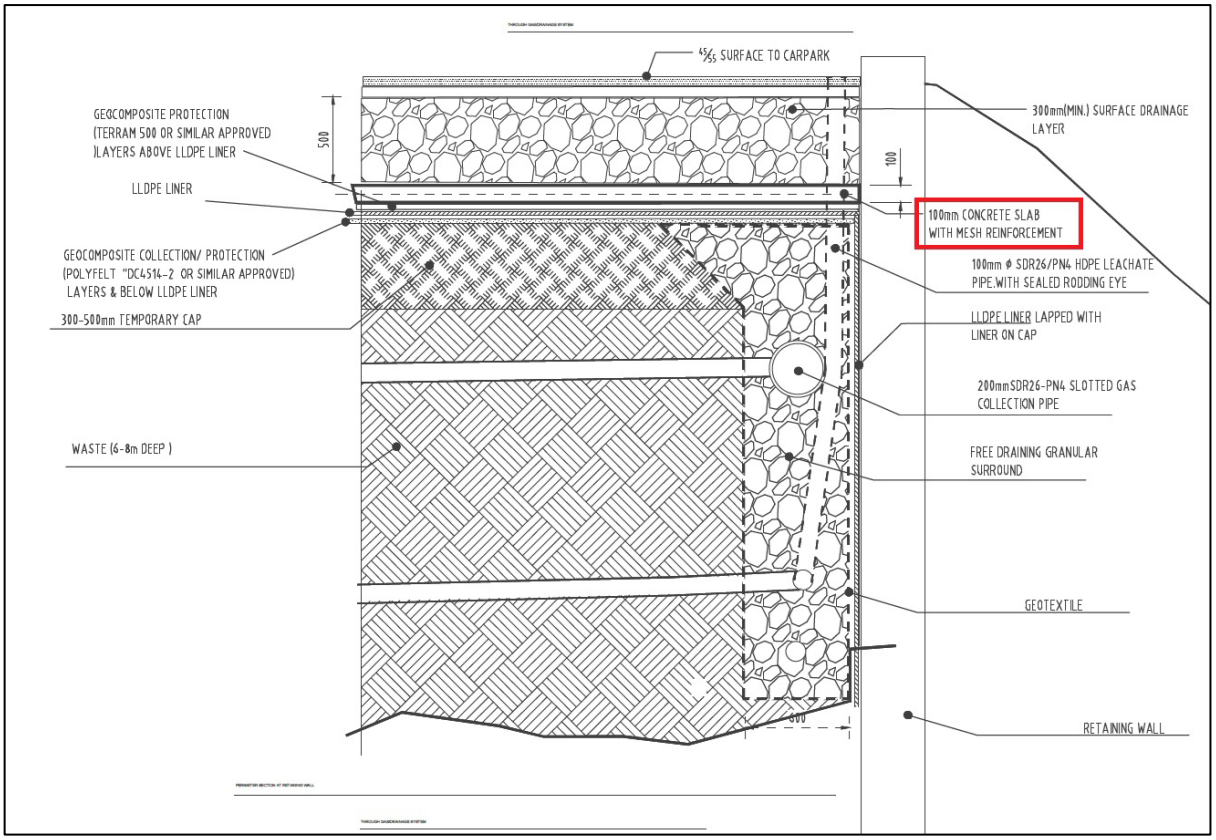

Figure 3.2 *Leachate and Landfill Gas Collection & Treatment System (Source: Fehily Timoney)*

In order to avoid disturbance of the underlying landfill material and monitoring infrastructure or potentially increasing ground instability or risk of environmental contamination, the proposed excavation works, and installation of the new infrastructure will be restricted to above the existing 100mm thick concrete slab.

During the construction phase of the proposed development, access will remain open to the existing bus bays and for car access to the existing Black Ash Park and Ride facility. Users of the Black Ash Park and Ride facility will be able to utilise all existing car parking spaces outside of those within the proposed development site boundary The pedestrian crossing buildout and refreshed pavement markings will be carried out using appropriate controlled traffic management of cars and buses entering the site. As proposed development will be located within an operational, levelled, Park and Ride site no levelling and cut and fill works are expected as part of construction works.

There will be temporary construction stage landscape impacts relating to excavations, piling of excavated materials, temporary storage of building materials, and the presence and movement of construction machinery.

3.1.2 Operational Phase

When the proposed development is operational it will function as a bus interchange as designed.

According to Heritage Council's online database (https://heritagemaps.ie/), the proposed development site and greater area are located within the City Harbour and Estuary Landscape Character Area (LCA), with the area presenting a 'High' landscape

sensitivity. The proposed development is considered relatively modest in terms of its scale and nature, and ultimately, the proposed development will not change the landscape nature of the site.

The proposed development is mostly screened out from streets and public views by mature boundary planting around the Black Ash Park and Ride facility.

The design of the proposed development included for U-shaped bus only entry/exit, 4 new bus bays, 4 bus shelters, new bus standing area, and 3 pedestrian crossings. These structures will have low visual impact due the limited height and extent of the structures.

The proposed development site is currently serviced by a surface water, drainage system. To facilitate the proposed development the existing surface water drainage infrastructure within the site will be removed and new drainage infrastructure will be installed in line with the proposed development design. The new drainage infrastructure will tie into the drainage infrastructure at the Black Ash Park and Ride facility. No new public connections are required as part of proposed development. The proposed drainage design in shown in Figure 3.3 below.

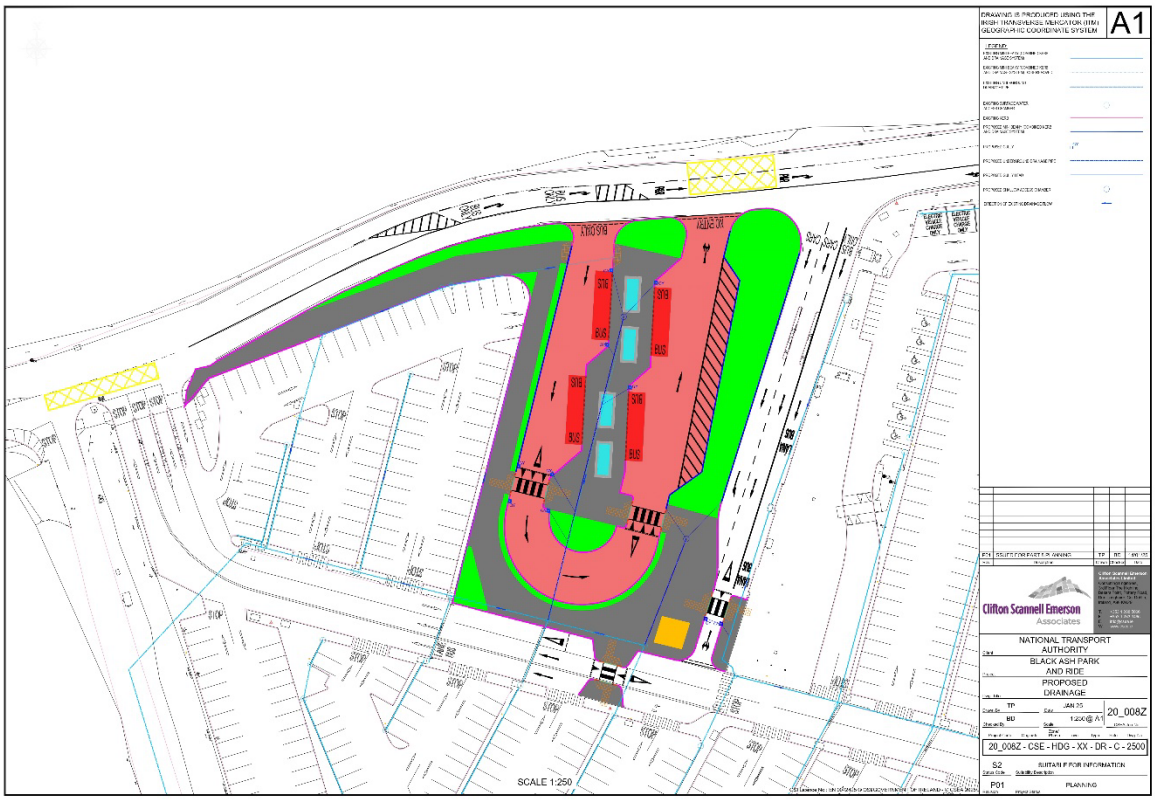

Figure 3.3 *Proposed Drainage (Source: CSEA, Drawing Number:20_008Z - CSE - HDG - XX - DR - C - 2500)*

During operations, the additional energy demand will not be significant and the existing energy supply agreements with ESB will remain in place for proposed development.

For further details on proposed utilities, please refer to the Planning and Engineering Report (CSEA, 2024a) provided with the planning documentation.

In order to assess the potential impact of proposed scheme during its operational stage, a Traffic and Transport Assessment has been prepared by CSEA (2024b) and is included with this planning application.It is anticipated that the proposed opening year for proposed development is 2025 and once operational, the proposed development will provide for new high quality bus interchange facility in support of the delivery of BusConnects Cork. The proposed bus interchange is required to deliver improved services along the following bus services:

- 6 Bus Route – Two-way Grange Road – Douglas Road – UCC – Black Ash Loop2
- 13A Bus Route – Haulbowline to Kent Station, passing Black Ash P&R
- 13B Bus Route – Kinsale to Kent Station
- 13 Bus Route – Cork Airport to Kent Station, passing Black Ash P&R
- 14 Bus Route – CUH to Mahon Point, passing Black Ash P&R
- 23 Bus Route – Old Youghal Road to Black Ash P&R

As result of proposed development, Black Ash Park and Ride working hours will be Monday to Friday between 04:30 and 00:30, Saturdays between 05:30 and 00:30 and Bank holidays & and Sundays between 08:00 and 00:30.

In terms of design, the proposed scheme will maintain the existing site access while the proposed bus bays will be segregated from private cars entering and exiting the Park and Ride.

In order to comprehend the potential impacts of the proposed scheme, the Traffic and Transport Assessment (CSEA, 2024b) has assessed two junctions, the Kinsale Rd/ Mick Barry Rd Junction and the N27 S City Link Rd/ Mick Barry Rd/ Tramore Valley Park Junction.

As per Traffic and Transport Assessment, it is estimated that a total of 25 no. buses will access the site during the peak hours. In terms of trip generation at the assessed junctions, this has been calculated to be equivalent to 50 no. trips, given that the buses will detour to stop at Black Ash Park and Ride and then return to the junctions to continue their route.

For further information, please refer to the Traffic and Transport Assessment prepared by CSEA (2024b).

3.2 CUMULATION WITH OTHER EXISTING OR PERMITTED DEVELOPMENT

This section outlines the potential cumulation with other existing or permitted development. As part of the assessment of the impact of the proposed development, account has been taken of any relevant developments that are currently permitted, or under construction and substantial projects for which planning has been submitted within the surrounding areas, as well as existing local land uses.

The National Planning Application Map was consulted for the previous 5 years to identify notable granted permissions (permitted development) within 1 km of the development site. The National Planning Application Map includes planning application data sourced from the 31 individual local authorities across Ireland.

Minor developments such as single dwelling refurbishments and/or extensions were not included in this planning search as it is understood that due to the scale of the development, they do not represent a risk for potential cumulative effects to arise.

This list of notable consented development is shown in Appendix A of this report. These consented developments have been, where relevant, considered as a part of the overall project impact.

It is important to note that each project shown which has been permitted is subject to an EIA and/or planning conditions which include appropriate mitigation measures to minimise environmental impacts. Any new large-scale development proposed in the surrounding area would be accompanied by an EIA, or EIA Screening as appropriate and the take mitigation plan taken into consideration in the development of this site.

Each environmental discipline who has contributed to this report has considered relevant permitted or proposed projects and assessed the potential for cumulative impact due to these projects. This is further discussed in Section 5.10.

3.3 NATURE OF ANY ASSOCIATED DEMOLITION WORKS

No demolition works are envisaged as part of the proposed scheme.

3.4 USE OF NATURAL RESOURCES (LAND, SOIL, WATER, BIODIVERSITY)

This section describes the proposed development in terms of the use of natural resources, in particular land, soil, water, and biodiversity.

Land and Soil

The proposed land use as a bus interchange is acceptable within the context of the surrounding Black Ash Park and Ride facility.

As an operational bus interchange, the proposed development site will be largely covered by tarmacadam and concrete with a few islands comprising landscaping trees and other landscaping vegetation. The proposed development involves a relatively minor land take of 5,641m^2. Excavation of existing made ground, as well as underlying soil and stone will be required to facilitate the construction of proposed layout and installation of services. The development engineers Clifton Scannell Emerson Associates have estimated that 2,270m^3 of material will need to be excavated to do so. It is currently envisaged that all excavated material will need to be removed offsite due to the limited opportunities for reuse on site. Excavated material being removed from site will be taken for appropriate offsite reuse, recovery, recycling and / or disposal. See Section 3.5 for further details on the management of excavated material on site.

The management of excavated materials on site during construction stage will be carried out in accordance with the RWMP prepared by AWN Consulting and included as Appendix C of this report.

In order to preserve the existing underground leachate and landfill gas collection systems, the proposed excavations will be limited to above the existing 100mm concrete slab. Therefore, no bedrock will be encountered during construction works.

Other construction activities will include site storage of aggerate, materials, fuels for construction vehicles. development, detail on the physical characteristics of the proposed development please refer to the engineering drawings, and Planning and Engineering Report which accompany the planning application.

Water consumption and wastewater requirement.

As outlined in the Planning and Engineering Report provided with the planning documentation, the existing surface water drainage network underlying the site will be replaced to allow for the proposed configuration of the proposed development.

There is no requirement for connections to the potable water network or foul water network on the proposed development site.

Biodiversity

Investigations into the impacts on biodiversity including species and habitats have been undertaken by the Doherty Environmental Consulting (DEC). The Appropriate Assessment (AA) Screening report is included as Appendix B of this report.

As outlined in the AA screening, the project site is located within the urban land cover area of the existing Black Ash Park and Ride facility and is not directly connected with or necessary for the future conservation management of any European Sites.

According to report, no European Sites, Natural Heritage Areas (NHAs) or proposed Natural Heritage Areas (pNHAs) occur along or in the vicinity of the proposed project. The closest European listed sites are as follow:

- Cork Harbour SPA and Douglas River Estuary pNHA, Lough Mahon section, located approximately 2km to the east of the project site.
- Great Island Channel SAC located approximately 9km to the east.
- Cork Lough pNHA, located approximately 1.4km to the northwest

No NHAs occur in the wider surrounding area, with the nearest being Sovereign Islands NHA, located approximately 22km to the south.

As the nearest European Site is buffered from the project site by a distance of 2km, the project will not have the potential to result in direct impacts to European Sites.

The proposed development is located within the Glasheen [Corkcity]_SC_010 of the Tramore-Coastal of the catchment, and the Tramore River is the principal watercourse in relation to the site and is separated from proposed development by approximately 100m.

The AA Screening informs that the buffer from the proposed development to the Tramore River is much bigger than the usual 5m and 10m implemented to protect watercourses from land use activities, therefore the risk of direct impacts does not arise. However, potential indirect impacts could still arise during the construction and operational phases of proposed development via surface water discharges to the surface water sewer system.

During the construction phase surface water runoff will be to ground as per the existing surface water runoff regime at the project site. In line with standard construction practices sediment drain filters will be added to impacted gullies prior to construction commencement. The surface water runoff during this phase of the project as well as during the operation phase will be subject to treatment via a full class petrol and silt interceptors in place as part of the existing surface water treatment system.

According to the submitted AA Screening, the implementation of the above-mentioned controls and treatment measures will ensure that proposed construction and

operational discharges will not have the potential to function as a pollution pathway. Therefore, the potential for a hydrological pathway is eliminated.

With respect to the existing habitats, the report states that there are no habitats within proposed development site that would be suitable for special conservation interest bird species of the Cork Harbour SPA or any other European Sites that could be relied upon by these species. The proposed development is not considered to cause reduction of habitat area, nor habitat or species fragmentation.

Further details on Biodiversity resources are discussed in section 4.3.2 (Biodiversity and Areas of Conservation) of this EIA Screening report.

3.5 PRODUCTION OF WASTE

Construction Phase

During the construction phase, waste will be produced from surplus materials such as broken or off-cuts of timber concrete, bricks, etc. Waste from packaging (cardboard, plastic, timber) and oversupply of materials may also be generated. The appointed Contractor will be required to ensure that oversupply of materials is kept to a minimum and opportunities for reuse of suitable materials is maximised.

There will be soil, stones and made ground excavated to facilitate construction of the proposed development including the installation underground services. The development engineers Clifton Scannell Emerson Associates (CSEA) have estimated that 2,270m^3 of material will need to be excavated to do so. It is currently envisaged that all excavated material will need to be removed offsite due to the limited opportunities for reuse on site. Excavated material being removed from site will be taken for appropriate offsite reuse, recovery, recycling and / or disposal.

In order to establish the appropriate reuse, recovery and / or disposal route for the soils and stones to be removed off-site, it will first need to be classified. Waste material will initially need to be classified as hazardous or non-hazardous in accordance with the EPA publication *Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous* (2019). Environmental soil analysis will be carried out prior to removal of the material on a number of the soil samples in accordance with the requirements for acceptance of waste at landfills (Council Decision 2003/33/EC Waste Acceptance Criteria). This legislation sets limit values on landfills for acceptance of waste material based on properties of the waste, including potential pollutant concentrations and leachability. It is anticipated that the surplus material will be suitable for acceptance at either inert or non-hazardous soil recovery facilities / landfills in Ireland or, in the unlikely event of hazardous material being encountered, be transported for treatment / recovery or exported abroad for disposal in suitable facilities.

If the material is deemed to be a waste, then removal and reuse / recovery / disposal of the material will be carried out in accordance with the *Waste Framework Directive* (Directive 2008/98/EC), the *Waste Management Act 1996* as amended, the *Waste Management (Collection Permit) Regulations 2007* as amended and the *Waste Management (Facility Permit & Registration) Regulations 2007* as amended. Once all available beneficial reuse options have been exhausted, the options of recycling and recovery at waste permitted and licensed sites will be considered. See the RWMP (AWN, 2024) (Appendix C)for further details.

Waste will also be generated from construction phase workers e.g. organic / food waste, dry mixed recyclables (waste paper, newspaper, plastic bottles, packaging, aluminium cans, tins and Tetra Pak cartons), mixed non-recyclables and, potentially, sewage sludge from temporary welfare facilities provided on-site during the Construction phase. Waste printer / toner cartridges, waste electrical and electronic equipment (WEEE) and waste batteries may also be generated in small volumes from site offices.

Further detail on the waste materials likely to be generated during the excavation and construction works are presented in the project specific RWMP (AWN, 2024) (Appendix C). The RWMP provides waste management measures and an estimate of the main waste types likely to be generated during the construction phase of the proposed development. These are summarised in Table 3.1.

Table 3.1 *Estimated off-site Reuse, Recycle and Disposal Rates for Construction Waste*

Waste Type	Tonnes	Reuse		Recycle / Recovery		Disposal	
		%	Tonnes	%	Tonnes	%	Tonnes
Mixed C&D	13.8	10	1.4	80	11.1	10	1.4
Timber	4.7	40	1.9	55	2.6	5	0.2
Metals	3.4	5	0.2	90	3.0	5	0.2
Concrete	2.5	30	0.8	65	1.6	5	0.1
Other	12.6	20	2.5	60	7.6	20	2.5
Total	**37**		**6.7**		**25.9**		**4.4**

Operational Phase

The proposed development will give rise to minor quantities of waste during the operational phase, i.e. when the project is completed, and fully operational. Given the nature and function of the development as a bus interchange, the waste generated will be limited / confined to bins strategically provided on the site for the users of the bus interchange. The waste generated will be collected and disposed regularly by an assigned waste contractor in the locality.

All waste contractors collecting waste from the site must hold a valid collection permit to transport waste must be held by each waste contractor which is issued by the National Waste Collection Permit Office (NWCPO) and waste will only be brought to suitably registered/permitted/licenced facilities. It is essential that all waste materials are dealt with in accordance with regional and national legislation, as outlined previously, and that time and resources are dedicated to ensuring efficient waste management practices.

These measures will ensure the waste arising from the development is dealt with in compliance with the provisions of the *Waste Management Act 1996*, as amended, associated Regulations, the *Litter Pollution Act 1997* and the *Waste Action Plan for a Circular Economy (2020-2025)*.

3.6 POLLUTION AND NUISANCES

There are potential temporary nuisances such as dust, noise, as well as the potential for pollution of groundwater or storm drains associated with excavations and construction. A (RWMP) (AWN, 2024) has been prepared by AWN Consulting (Appendix C). In advance of work starting on site, the works contractor will prepare a detailed CEMP. This CEMP will set out the overarching vision of how the construction

of the proposed development will be managed in a safe and organised manner by the Contractor.

The CEMP will include mitigation measures to ensure that pollution and nuisances arising during construction phase of proposed development are prevented where possible and managed in accordance with best practice and any subsequent planning conditions relevant to the proposed development.

This CEMP will be maintained by the contractors during the construction phase and covers all potentially polluting activities and include an emergency response procedure. All personnel working on the site will be trained in the implementation of the procedures.

3.7 RISK OF MAJOR ACCIDENTS AND/OR DISASTERS

Landslides, Seismic Activity and Volcanic Activity

The Geological Survey Ireland (GSI) landslide database was consulted landslide in closest proximity to the proposed development was approximately 5.4 km to the south of the site. The cause or year of the event has not been recorded. There have been no recorded landslide events at the subject site. The GSI Landslide Susceptibility Map indicates that the site is in an area of 'Low' susceptibility to landslides.

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 are studied for local and regional events. Records since 1980 show that the nearest seismic activity to the proposed development was around the Cork Area (M1.0 – M2.2 (magnitude)). 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.

Flooding/Sea Level Rise

The potential risk of flooding on the site was reviewed with regard to incidences of historical, regional and local flooding relevant to the area of the subject site. A review of the information available on OPW Flood Maps (Floodinfo.ie), indicates that the site would be considered an area of low risk of fluvial or coastal flooding. See Figures 3.3 and 3.4 below. No flood incidents have been recorded on the site.

Figure 3.4 *Fluvial Flooding Probability with Proposed Development Site Indicative Location Marked with Red X (Source: Floodinfo.ie)*

Figure 3.5 *Coastal Flooding Probability with Proposed Development Site Indicative Location Marked with Red X (Source: Floodinfo.ie)*

According to OPW Flood Maps, the closest past flood events registered are the Flooding at Tramore Stream Culvert, c. 250m southwest from proposed development site boundary, and the Flooding at Kinsale Road Roundabout, located c. 480m

southwest of proposed development site boundary. Both flood events were caused by blockages in the drainage infrastructure.

The proposed development is not deemed to be at any significant risk of flooding which is mainly attributable to the local topography and local environment. The proposed works are unlikely to raise significant flooding issues and do not obstruct existing flow paths.

The existing development site already predominantly covered by hard paving, therefore, the proposed development works will not represent increased runoff or pose additional flood risks.

Major Accidents/Hazards

The Seveso Directive (Directive 82/501/EEC, Directive 96/82/EC, Directive 2012/18/EU) was developed by the EU after a series of catastrophic accidents involving major industrial sites and dangerous substances. Such accidents can give rise to serious injury to people or serious damage to the environment, both on and off the site of the accident. The Chemicals Act (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2015 (S.I. No. 209 of 2015) (the "COMAH Regulations"), implement the latest Seveso III Directive (2012/18/EU).

The purpose of the COMAH Regulations is to transpose the Seveso Directive into Irish law and lay down rules for the prevention of major accidents involving dangerous substances, and to seek to limit as far as possible the consequences for human health and the environment of such accidents, with the overall objective of providing a high level of protection in a consistent and effective manner.

The proposed development is not within the consultation distance of any Seveso Site, nor is the proposed development a Seveso/COMAH establishment. The closest Seveso site to the proposed development is the Lower Tier establishment Goulding Chemicals Ltd, which is located c. 2.2km northeast. Due to the separation distances, it is not considered that the proposed development is at risk of major accidents/hazards.

Minor Accidents/Leaks

There is a potential impact on the receiving environment as a result of minor accidents/leaks of fuel/oils during the construction. However, as previously mentioned, the proposed development site is predominantly covered by hard paving and serviced by appropriately designed drainage with hydrocarbon interceptors, reducing significantly the risk of environmental contamination in the case of minor accidents or leaks.

Additionally, the implementation of the mitigation measures outlined in this EIA Screening report, to be included in the CEMP, will ensure that any potential impacts are mitigated and that the residual effect on the environment is imperceptible.

3.8 RISKS TO HUMAN HEALTH

The characteristics of the proposed development, in terms of the risks to human health have been considered in this assessment. The primary potential impacts of the proposed development on human health would be due to an increase in air pollution

(dust), noise, traffic, the visual impact and inappropriate management of construction waste during the construction phase.

The location of the proposed development is within an already developed and largely modified site. The nearest sensitive receptors are the are the residential properties located c. 260 m north of the site.

The Geological Survey of Ireland data shows that the site does not lie within a drinking water protection area. The area is serviced by mains water supply therefore it is unlikely that any wells are used for potable water supply. There are no watercourses on the site and no open water connection to surface waterbodies. As such the only pathway for contamination of a water resource would be through the stormwater drainage system. The proposed mitigation measures outlined in this EIA Screening report will ensure that there are no impacts on groundwater or the stormwater drainage system. The proposed development will include an appropriately designed stormwater network including hydrocarbon interceptors that will ensure any risk from diesel spills through the bus interchange is minimised.

The CEMP will incorporate best practice construction methodologies for the control of dust generation, traffic, and noise, as well as the management of impacts on groundwater or storm drainage system during the construction phase as outlined in this EIA Screening report, as well as any subsequent conditions on planning outlined by CCC. Any impacts associated with dust generation, traffic, and noise will be ***temporary***.

The potential impacts on human health as a result of the generation of noise and air emissions are considered to be ***not significant***.

4.0 LOCATION AND CONTEXT OF THE PROPOSED DEVELOPMENT

4.1 EXISTING AND APPROVED LAND USE

The proposed development site currently exists as a portion of the Black Ash Park and Ride facility. The site is largely covered by hardstand with just a few small, landscaped areas throughout.

The subject site is well suited for the existing and proposed development, which is permissible under the zoning of the lands as Zoning Objective ZO 14 - Public Infrastructure and utilities, which has a principal objective “to provide for public infrastructure and utilities”. The Cork City Development Plan states that “*This zone covers the provision of public and utilities infrastructure, which can include **park and ride facilities**, and various other transport, water, drainage, emergency services, electricity, gas, telecommunications, maintenance purposes and other utility facilities*”. The proposed development site zoning is shown below in Figure 4.1.

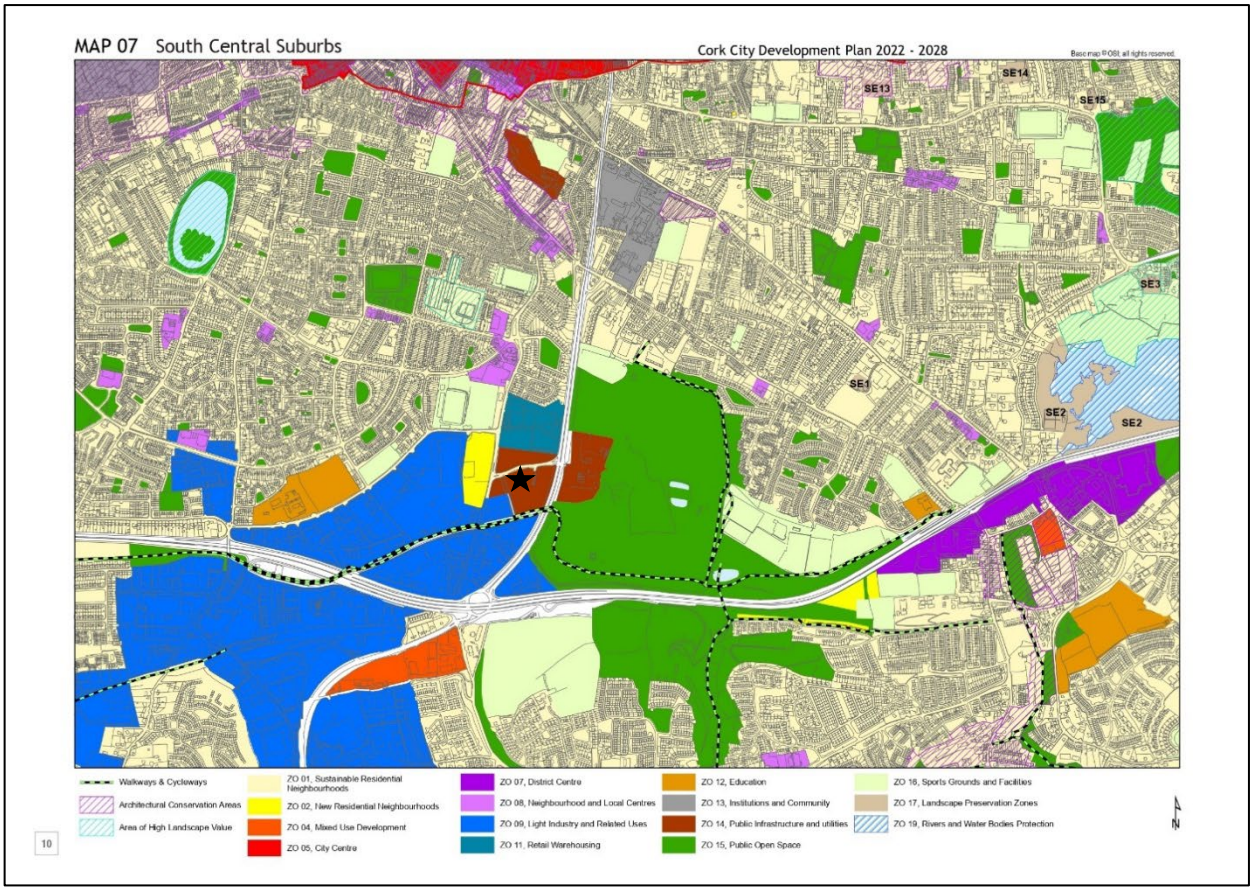

Figure 4.1 *Site Zoning, approximate site location indicated by black star (Source: Cork City Development Plan 2022-2028 Zoning Map 07)*

4.2 RELATIVE ABUNDANCE, AVAILABILITY, QUALITY AND REGENERATIVE CAPACITY OF NATURAL RESOURCES IN THE AREA AND ITS UNDERGROUND

4.2.1 Hydrogeology

The GSI (2024) National Bedrock Aquifer Map classifies the bedrock aquifer beneath the subject site as a Regionally Important Aquifer - Karstified (diffuse). The proposed development is located within the two different groundwater bodies, 'Waste Facility' groundwater body (European Code W0012-03) to the northeast of the site and 'Ballincollig' groundwater body (European Code IE_SW_G_002) to the southwest of the site. The most recent WFD groundwater status (2016-2021) for Waste Facility' groundwater body is 'Poor' with a current WFD risk score of 'At risk', while the most recent WFD groundwater status (2016-2021) for 'Ballincollig' groundwater body is 'Good' with a current WFD risk score of 'Not at risk'.

The GSI/Teagasc (2024) mapping database of the quaternary sediments in the area of the subject site describes the principal subsoil type in the area as till derived from Devonian sandstones.

Mapping from the Geological Society of Ireland (GSI, 2024) indicates the majority of bedrock underlying the Site is part of the Waulsortian Limestones Formation and made up of massive unbedded lime-mudstone.

There are no sensitive soil receptors, no identified areas of geological heritage or groundwater supplies in the vicinity of the site boundary.

The GSI Well Card Index is a record of wells drilled in Ireland, water supply and site investigation boreholes. It is noted that this record is not comprehensive as licensing of wells is not currently a requirement in the Republic of Ireland. This current index does not show any wells drilled or springs at the site, there are a number of wells and springs in the general area which are listed for Industrial use and some for unknown use. The area is serviced by Local Authority mains therefore it is unlikely that any wells are used for potable supply. The site is not located near any public groundwater supplies or group schemes. There are no groundwater source protection zones in the immediate vicinity of the Site.

There are no sensitive soil receptors, no identified areas of geological heritage or groundwater supplies in the vicinity of the Site boundary.

4.2.2 Hydrology

The proposed development site lies within the Lee, Cork Harbour and Youghal Bay Hydrometric Areas (Hydrometric Area 19) (EPA, 2024).

The closest surface water feature is the Douglas (Lee) waterbody, located along the south boundary of the Black Ash Park and Ride site and c. 100m south of proposed development redline boundary. The Douglas (Lee) waterbody flows east for about 2.6km before discharging into Cork Harbour and Cork Harbour SPA.

The Environmental Protection Agency (EPA, 2024) on-line mapping presents the available water quality status information for water bodies in Ireland. The Douglas (Lee) waterbody is named by the WFD as MONEYGURNEY_010 and has 2016-2021 WFD status of ‘Good’ and risk status under review (EPA, 2024). The nearest downstream Water quality monitoring station to the proposed development is the Ford in Tramore valley park located c. 190m downstream from the Black Ash Park and Ride site (ID: RS19D050710).

A review of aerial photography, Ordnance Survey Ireland (OSI) mapping and OSI Geographical Information System (GIS) data for rivers and streams indicates that there are no notable surface water features onsite and no direct hydrological pathways to offsite surface water bodies. There is, however, an indirect hydrological connection between proposed development site and surface water bodies via surface water discharges. Surface water discharges during operational phase will be directed to municipal surface water network which outfalls into the Tramore Stream at the southeast corner of the Black Ash Park and Ride site.

4.2.3 Biodiversity and Areas of Conservation

The potential ecological impacts of proposed development have been considered in terms of the sensitivity of the location through the Doherty Environmental Consulting Appropriate Assessment (AA) Screening report (2023) included as Appendix B of this document.

The proposed development site is currently an operational Park & Ride facility, largely covered by tarmacadam and concrete with a few islands comprising landscaping trees and other landscaping vegetation. As per submitted AA Screening, there are no habitats within proposed development site that would be suitable for special conservation interest bird species of the Cork Harbour SPA or any other European

Sites that could be relied upon by these species. The proposed development is not considered to cause reduction of habitat area, nor habitat or species fragmentation.

No European Sites, Natural Heritage Areas (NHAs) or proposed Natural Heritage Areas (pNHAs) occur along or in the vicinity of the proposed development. As mentioned in section 3.4 (Use of Natural Resources (Land, Soil, Water, Biodiversity)), the nearest areas of conservation are Cork Harbour SPA and Douglas River Estuary pNHA (2km east), Great Island Channel SAC (9km east) and Cork Lough pNHA (1.4km northwest).

As the nearest European Site is buffered from the project site by a distance of 2km, the project will not have the potential to result in direct impacts to European Sites, such as loss, habitat damage or disturbance to Annex 1 qualifying habitats or physical interaction with Annex 2 qualifying species/special conservation interest bird species within the boundary of the European Site.

Thus, the AA Screening exercise focuses on investigating whether it can or cannot be excluded, on the basis of objective information, that the project will have the potential to result in indirect effects to European Sites (i.e., impacts via emission pathways or interaction with mobile species outside of European Sites).

The absence of any potential impact pathways including Hydrological Pathway, Groundwater, Air, Noise & Vibration, Light, Visual Disturbance, Mobile Species Pathway and Human Disturbance Pathway, as identified in the AA Screening, will ensure that this project does not have the potential, either alone or in combination with other projects, to result in likely significant effects to European Sites or the local environment surrounding the project site.

The AA Screening concludes that:

> *"During the Screening of the project 2 European Sites were identified as occurring in the wider area surrounding the project site, the nearest of which is the Cork Harbour SPA, located c. 2km to the east. All other European Sites are located at greater distance from the project site.*
>
> *Given that no European Sites occur within or bounding the project site a source-pathway-receptor model was used to identify the presence of any European Sites in the wider surrounding area occurring within the zone of influence of the project. The examination based on the source-pathway-receptor model found that no pathways connect the proposed project to any European Sites occurring in the wider area surrounding the proposed project and there will be no potential for the proposed project to interact with them or their qualifying features of interest/special conservation interests. Given the absence of any pathways and any European Sites occurring within the zone of influence of the proposed project, there will be no potential for the proposed project to combine with other plans, projects, or existing pressures to result in cumulative adverse effects to European Sites in the wider surrounding area.*
>
> *In light of the findings of this report it is the considered view of the authors of this Screening Report for Appropriate Assessment that it can be concluded by Cork City Council that the proposed project is not likely, alone or in-combination with other plans or projects, to have a significant effect on any European Sites in view of their Conservation Objectives and on the*

basis of best scientific evidence and there is no reasonable scientific doubt as to that conclusion.

This Screening has resulted in a Finding of No Significant Effects and as such a Stage II Appropriate Assessment is not required."

4.3 ABSORPTION CAPACITY OF THE NATURAL ENVIRONMENT

The proposed development, due to its size and localised nature will not have any effect on wetlands, riparian areas, river mouths, coastal zones and the marine environment, mountain and forest areas, nature reserves and parks, or densely populated areas.

The environmental sensitivity of the proposed location in respect of Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive been addressed through the AA Screening (Appendix B).

A review of the Heritage Council's online database (https://heritagemaps.ie/). has considered the landscapes and sites of historical, cultural or archaeological significance that are likely to be affected by the proposed development.

The review concluded that there is no recorded architectural heritage, archaeological or national monuments located within the proposed development site boundary or in proximity to the proposed development site. Hence, no archaeological / heritage site will be impacted, directly or indirectly, by the proposed development.

5.0 TYPES AND CHARACTERISTICS OF POTENTIAL IMPACTS

This section sets out the likely significant effects on the environment of the proposed development in relation to criteria set out under paragraphs 1 and 2 (as set out in Sections 3.0 and 4.0), with regard to the impact of the project on the factors specified in paragraph (b)(i)(I) to (v) of the definition of 'environmental impact assessment report' in section 171A of the Act (as amended).

The quality, magnitude and duration of potential impacts are defined in accordance with the criteria provided in the *Guidelines on Information to be contained in Environmental Impact Assessment Reports* (EPA, 2022). This criteria is duplicated in Table 5.1.

Table 5.1 *Schedule of Impacts following EPA Guidelines*

Characteristic	Term	Description
Quality of Effects	Positive	A change which improves the quality of the environment
	Neutral	No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error.
	Negative/Adverse	A change which reduces the quality of the environment
Describing the Significance of Effects	Imperceptible	An effect capable of measurement but without significant consequences
	Not significant	An effect which causes noticeable changes in the character of the environment but without significant consequences
	Slight Effects	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities
	Moderate Effects	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends
	Significant Effects	An effect, which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment
	Very Significant	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.
	Profound Effects	An effect which obliterates sensitive characteristics
Describing the Extent and Context of Effects	Extent	Describe the size of the area, the number of sites, and the proportion of a population affected by an effect.
	Context	Describe whether the extent, duration, or frequency will conform or contrast with established (baseline) conditions (is it the biggest, longest effect ever?)
Describing the Probability of Effects	Likely Effects	The effects that can reasonably be expected to occur because of the planned project if all mitigation measures are properly implemented.
	Unlikely Effects	The effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented.
Describing the Duration and Frequency of Effects	Momentary Effects	Effects lasting from seconds to minutes
	Brief Effects	Effects lasting less than a day
	Temporary Effects	Effects lasting less than a year
	Short-term Effects	Effects lasting one to seven years.
	Medium-term Effects	Effects lasting seven to fifteen years
	Long-term Effects	Effects lasting fifteen to sixty years
	Permanent Effects	Effects lasting over sixty years
	Reversible Effects	Effects that can be undone, for example through remediation or restoration
	Frequency of Effects	Describe how often the effect will occur. (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually)
Describing the Type of Effects[1]	Indirect Effects (a.k.a secondary or Off-site effects)	Effects on the environment, which are not a direct result of the project, often produced away from the project site or because of a complex pathway.

[1] For the purposes of facilitating the Competent Authority in conducting Environmental Impact Assessment as defined by Annex 1 of the EU Directive, the terms “imperceptible effects”, “not significant effects”, “slight effects”, and “moderate effects” used within this report, while exhibiting varying degrees of impact, are all considered to be without significant consequence.

	Cumulative Effects	The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.
	'Do Nothing Effects	The environment as it would be in the future should the subject project not be carried out
	`Worst case' Effects	The effects arising from a project in the case where mitigation measures substantially fail
	Indeterminable Effects	When the full consequences of a change in the environment cannot be described
	Irreversible Effects	When the character, distinctiveness, diversity, or reproductive capacity of an environment is permanently lost
	Residual Effects	The degree of environmental change that will occur after the proposed mitigation measures have taken effect
	Synergistic Effects	Where the resultant effect is of greater significance than the sum of its constituents (e.g. combination of Sox and NOx to produce smog)

5.1 POPULATION AND HUMAN HEALTH

5.1.1 Construction Phase

Potential Impacts

The potential impacts of the proposed development on population human health and populations would be nuisances such as increased air pollution (dust), noise, traffic, visual impact and inappropriate management of construction waste. There is no significant risk of pollution of soil, groundwater or watercourses associated with the proposed development.

The potential impact of the proposed development with respect to population and human health during the construction phase is ***negative***, ***not significant*** and ***temporary***.

Mitigations Measures

The mitigation measures set out in this EIA Screening in relation to construction phase air quality (Section 5.4.1), noise (Section 5.5.1), traffic (Section 5.8.1 and the Traffic and Transport Assessment (CSEA (2024b)), landscape and visual (Section 5.6.1) and waste (Section 5.9.1 and the RWMP (AWN, 2024) (Appendix C)) will be included in a site specific CEMP. The CEMP will set out binding construction hours, requirements and standards in relation to construction noise, traffic, and dust generation that must be met during the construction stage and will include any subsequent planning conditions relevant to the proposed development.

Residual Impact

The residual impact of the proposed development with respect to population and human health during the construction phase is ***negative***, ***not significant*** and ***temporary***.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of Population and Human Health impacts during the construction phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.1.2 Operational Phase

Potential Impacts

Once operational, the proposed development will represent an improvement in the public transport network, facilitating population access and travel and having a positive effect on Cork City's wider population.

Furthermore, the expansion of the public transport network will lead to a reduction in individual car trips, culminating in a diminution of car emissions into the atmosphere by decreasing the number of vehicles on the road and contributing to an improved air quality. Additionally, if the bus fleet includes for the use of electric or hybrid vehicles this would further reduce environmental impacts, as these vehicles emit considerably fewer pollutants and less noise when compared to conventional internal combustion engine vehicles.

Encouraging the use of public transportation and improving access will reduce the number of individual vehicles in busy areas, thereby alleviating traffic congestion and decreasing the time people spend in traffic congestion.

There are no planned direct discharges to water or land, although the risk of accidental discharge or spills exists. A number of design measures will be adopted to prevent the contamination of groundwater during the operational phase as described in Section 5.2.2.

The design of proposed development will be in line with the existing site character and will not appear out of place. Landscape and visual impacts are discussed further in Section 5.6.

Considered the above, the potential impact of the proposed development with respect to populations and human health during the operational phase is ***neutral to positive***, ***not significant*** and ***long-term***.

Mitigation Measures

There are no significant impacts to populations and human health as a result of the operational phase of the proposed development therefore no mitigation is proposed.

Residual Impact

The residual impact of the proposed development with respect to populations and human health during the operational phase is ***neutral to positive****,* ***not significant*** *and* ***long-term****.*

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of Population and Human Health impacts during the operational phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.2 LAND, SOILS, GEOLOGY, HYDROGEOLOGY, HYDROLOGY

5.2.1 Construction Phase

Potential Impacts

Soil and Ground Movement

The site preparation and excavations works required to facilitate construction of proposed development including access and the installation of services will require the removal of the carpark surface and the surface drainage layer. As outlined in Section 3.1.1 of this report, the proposed excavations will be limited to above the existing 100mm concrete slab. There will be no disturbance to the underlying landfill during excavation and construction works.

Excavated material will arise during the construction period and will be stored (if required) on site prior to being removed by a specialist contractor. Any material, which is exported from site, if not correctly managed or handled, could impact negatively on human beings (onsite and offsite) as well as water and soil environments.

Stockpiles of soil and construction aggregate can have the potential to cause negative impacts on air and water quality.

In respect of the foregoing, the potential impact of soil and ground movements on land, soils, geology, hydrogeology, and hydrology during construction phase is considered to be ***negative, not significant*** and ***temporary***.

Soil and Groundwater Quality

As the proposed development site is currently predominantly covered by hard paving, the risk of soils and groundwater contamination will be highest during excavation works prior to reinstatement of impermeable surfaces.

Contaminants such as hydrocarbons can have long-lasting effects on soil health. Unmitigated leaks or spills of petroleum hydrocarbons, oils, paints, and cement may lead to contamination of soil, severely affecting its health. Contaminants such as hydrocarbons, which are known carcinogens in many animals and suspected to be carcinogenic to humans, can adversely impact soil and water quality.

However, as the proposed development site is situated on the footprint of a former landfill, and the underlying 100mm concrete slab will not be breached during the construction phase, any spills or leaks will not penetrate into the layers of landfill and soil and subsequently will not reach the underlying aquifer.

There is a potential for an accidental spills or leaks reach the boundaries of the 100mm concrete slab and infiltrate into the ground.

There is potential for water (rainfall and/or discontinuous perched groundwater) to become contaminated with pollutants associated with construction activity. Contaminated water which arises from construction sites can pose temporary risk to water quality for the duration of the construction if contaminated water is allowed percolate to the aquifer or accidental discharges into surface water. Potential impacts could arise from accidental spillage of fuels, oils, paints, cement, etc.

In respect of the foregoing, the potential impact of soils and ground contamination on land, soils, geology and hydrogeology during construction phase is considered to be ***negative, imperceptible*** and ***temporary***.

Surface Water Quality

There is no notable surface water features onsite and no direct hydrological pathways to offsite surface water bodies during the construction phase.

The existing drainage scheme at the Black Ash Park and Ride site was appropriately designed and equipped with hydrocarbon interceptors to the southwest and southeast corner of the site, reducing significantly the risk of indirect environmental contamination in the case of minor accidents or leaks.

In respect of the foregoing, the potential impact of surface water contamination on hydrology during construction phase is considered to be ***negative, imperceptible*** and ***temporary***.

Wastewater

Welfare facilities will be provided for the contractors on site during the construction works. During construction, portable sanitary facilities will be provided with waste collected and disposed of appropriately to an appropriate licenced facility. There are no predicted adverse impacts on wastewater systems during construction.

Mitigation Measures

It is envisioned that the construction contractor will install silt cloths on the gullies in order to filter the surface water discharges to ensure adequate silt removal prior to discharging to the surface water drainage system.

Movement of material will be minimised to reduce generation of dust. Excavations will remain open for as little time as possible before the placement of fill. This will help to minimise the potential for water ingress into excavations. Soil from works will be stored away from existing drainage features to avoid any potential impact

All excavated materials will be visually assessed for signs of possible contamination such as staining or strong odours. Should any unusual staining or odour be noticed, samples of this soil will be analysed for the presence of possible contaminants in order to ensure that historical pollution of the soil has not occurred. Should it be determined that any of the soil excavated is contaminated, this will be disposed of by a licensed waste disposal contractor.

The effects of excavations and stockpiling during construction will be mitigated through the implementation of an appropriate earthworks handling protocol in accordance with guidance documents (for example CIRIA Guideline Document C532 Control of Water Pollution from Construction Sites).

To mitigate the risk of contamination of soils and groundwater quality from accidental spills and leaks, best practice construction methods with respect to storage of any hazardous substances (fuels, chemicals and other construction materials that may pose a risk to the environment) will be employed. These will be included in a detailed CEMP that will be submitted prior to the start of construction works.

Residual Impact

The residual impact on land, soils, geology, hydrogeology, and hydrology during construction is considered to be ***negative, imperceptible*** and ***temporary***.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of Land, Soils, Geology, Hydrogeology, Hydrology impacts during the construction phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.2.2 Operational Phase

Potential Impacts

Potential Impact of Hardstand

As the existing site is already largely covered by impermeable surfaces, the proposed development will not represent an increase in hardstanding or an impact on infiltration capacity and increased surface run-off.

There are no predicted adverse impacts on from inclusion of hardstand during the operational phase.

Potential Impact on Surface Water Quality

The proposed development will have an indirect connection to the Tramore Stream via the surface water drainage network.

Stormwater from the site will be directed to the onsite stormwater network where it will join the Black Ash Park and Ride Network. Refer to Figure 3.3.

The predicted impact on hydrology during operation is considered to be ***neutral, imperceptible and long term.***

Mitigation Measures

As per Planning and Engineering Report (CSEA, 2024a), the proposed surface water drainage will remain consistent with the existing Black Ash Park and Ride facility. According to the report, there are existing beany block combined kerb and drainage systems throughout the existing car park positioned at the top of the car park rows. These will remain intact along the car parking spaces that will be maintained. Where the proposed U-shaped bus turning bay is positioned, a similar system of shallow drainage will be implemented and will ultimately tie into the drainage system of the existing Black Ash Park and Ride facility.

The stormwater will pass through an interceptor prior to discharge to the Tramore Stream, to the southeast corner of the Black Ash Park and Ride site.

Residual Impact

The residual impact on land, soils, geology, hydrogeology, and hydrology during operation is considered to be ***neutral, imperceptible and long term.***

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of Land, Soils,

Geology, Hydrogeology, Hydrology impacts during the operational phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.3 BIODIVERSITY

The AA Screening Report prepared by prepared by Doherty Environmental Consultants Ltd states in Section 1.2 that measures intended to avoid or reduce the harmful effects of the proposed project on European sites (i.e. “mitigation measures”) have not been taken into account in the screening stage appraisal. As a result, this Biodiversity Impact section focuses solely on potential impacts and does not account for any mitigation measures or residual impacts.

5.3.1 Construction Phase

Potential Impacts

The potential impact from the proposed development on biodiversity with particular attention to species and habitats protected under the Habitats Directive and the Birds Directive has been considered as a part of the AA Screening Report prepared by Doherty Environmental Consultants Ltd.

With reference to watercourses, the nearest waterbody to the subject site is the Tramore River, located approximately 100m from the proposed development. There are no watercourses within proposed development site boundary and no direct hydrological connection from proposed development site to downstream habitats.

During construction phase sediment drain filters will be in place to ensure no negative impacts arise from generated surface water discharges. Additionally, any generated water runoff will be treated via the existing full class petrol and silt interceptors on site. This will ensure that the potential for an indirect hydrological pathway is eliminated.

The absence of any potential impact pathways identified in the AA Screening report (Appendix B), will ensure that the proposed does not have the potential, either alone or in combination with other projects, to result in likely significant effects to European Sites or the local environment surrounding the project site.

On the basis of the above with regard to the evidence set out within the AA Screening Report the potential effects on local biodiversity are ***neutral***, ***imperceptible,*** and ***temporary*** for the construction phase.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of Biodiversity impacts during the construction phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.3.2 Operational Phase

Potential Impacts

During its operational phase the proposed development will be serviced by existing full class hydrocarbons and silt interceptors, which will ensure that the potential for an indirect hydrological pathway is eliminated.

The proposed operations will be consistent with the existing site and will have no effect on Biodiversity and local environs.

The operational phase of the proposed development is predicted to have a ***neutral***, ***imperceptible*** and ***long-term*** impact on biodiversity.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of Biodiversity impacts during the operational phase. Therefore, a requirement for sub-threshold EIA does not arise

5.4 AIR QUALITY AND CLIMATE

5.4.1 Construction Phase

Potential Impacts

Potential Impacts on Air Quality

The greatest potential impact on air quality during the construction phase of the proposed development is from construction dust emissions and the potential for nuisance dust and PM10/PM2.5 emissions. Dust emissions will primarily occur as a result of site preparation works, earthworks, removal of some of the existing structures and the movement of trucks on site and exiting the site. Primarily construction works will involve excavating material, loading and unloading of materials, tipping and stockpiling activities, all which can lead to dust emissions.

While construction dust tends to be deposited within 250 m of a construction site, the majority of the deposition occurs within the first 50 m based on Transport Infrastructure Ireland (TII) guidance (2024). The scheme has limited potential for dust impacts during construction due to the separation distance between the site and the nearest sensitive receptors, the residential properties c.260m to the north of the site.

Therefore, during construction, there is limited potential for dust impacts on these sensitive receptors which would be considered in the absence of mitigation ***negative, slight*** and ***temporary.***

Construction stage traffic also has the potential to impact air quality through vehicle exhaust emissions. Based on the results outlined in the Traffic Impact Assessment (CSEA, 2024b) conducted for the proposed development, the construction stage traffic has been reviewed in line with the TII screening criteria (Section 2.2) and it was determined that a detailed air quality modelling assessment of construction stage traffic was not required due to the low-level changes in traffic and low volume of construction stage traffic. As the construction stage traffic did not meet the screening criteria, a detailed air quality assessment of construction stage traffic emissions was screened out. It can be concluded that construction phase traffic emissions will have a ***localised, negative, not significant*** and ***temporary*** impact on air quality.

Potential Impacts on Climate

Construction stage traffic and embodied energy of construction materials are expected to be the dominant source of greenhouse gas emissions as a result of the construction phase of the development. Construction vehicles, generators etc., may give rise to some CO_2 and N_2O emissions.

In the absence of mitigation measures the potential impacts during the construction phase on climate are ***negative***, ***imperceptible,*** and ***long term.***

Mitigation Measures

Air Quality

The pro-active control of fugitive dust will ensure the prevention of significant emissions, rather than an inefficient attempt to control them once they have been released. The main contractor will be responsible for the coordination, implementation and ongoing monitoring of a Dust Management Plan. The key aspects of controlling dust are listed below. These measures will be incorporated into a CEMP prepared for the site.

In summary the measures which will be implemented will include:

- Hard surface roads will be swept to remove mud and aggregate materials from their surface while any un-surfaced roads will be restricted to essential site traffic.
- Any road that has the potential to give rise to fugitive dust will be regularly watered, as appropriate, during dry and/or windy conditions.
- Vehicles exiting the site will make use of a wheel wash facility where appropriate, prior to entering onto public roads.
- Vehicles using site roads will have their speed restricted, and this speed restriction must be enforced rigidly. On any un-surfaced site road, this will be 20 kph, and on hard surfaced roads as site management dictates.
- Public roads outside the site will be regularly inspected for cleanliness and cleaned as necessary.
- Material handling systems and site stockpiling of materials will be designed and laid out to minimise exposure to wind. Water misting or sprays will be used as required if particularly dusty activities are necessary during dry or windy periods.
- During movement of materials both on and off-site, trucks will be stringently covered with tarpaulin at all times. Before entrance onto public roads, trucks will be adequately inspected to ensure no potential for dust emissions.

At all times, these procedures will be strictly monitored and assessed. In the event of dust nuisance occurring outside the site boundary, movements of materials likely to raise dust would be curtailed and satisfactory procedures implemented to rectify the problem before the resumption of construction operations.

Climate

A range of mitigation measures will be employed to ensure that GHG emissions are minimized wherever possible during the construction phase. The measures will include:

- All vehicles will be required to switch off engines when stationary (no idling);
- All vehicles will be serviced and maintained to ensure emissions are minimised;
- Where practicable, materials will be reused within the extent of the proposed development; and
- Where practicable, materials will be sourced locally to reduce the embodied emissions associated with transport.

Residual Impact

The residual effects on air quality will be ***negative, slight*** and ***temporary*** during the construction phase***.***

The residual effects on climate will be ***negative, imperceptible*** and ***long-term*** during the construction phase***.***

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of air quality impacts during the construction phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.4.2 Operational Phase

Potential Impacts

Potential Impacts on Air Quality and Climate

Once operational, the proposed development will expand the public transport network, enabling population transport accessibility and ultimately leading to a reduction in individual car travels. This shift from private car usage to public transportation will represent a diminution of car emissions into the atmosphere. By decreasing the number of vehicles on the road, we can expect a reduction in the emissions of carbon dioxide (CO2), nitrogen oxides (NOx), particulate matter (PM), and other pollutants. This transition not only contributes to improving air quality but also aids in mitigating climate change by lowering the overall carbon footprint of the transportation sector. Additionally, the use of electric or hybrid vehicles within the public transport fleet would further reduce environmental impacts, as these vehicles emit considerably fewer pollutants compared to conventional internal combustion engine vehicles.

In the absence of mitigation measures the potential impacts during the operational phase on air quality are ***negative***, ***imperceptible,*** and ***long term.***

In the absence of mitigation measures the potential impacts during the operational phase on climate are ***negative***, ***imperceptible,*** and ***long term.***

Mitigation Measures

There are no significant impacts to air quality as a result of the operational phase of the proposed development therefore no mitigation is proposed.

There are no significant impacts to climate as a result of the operational phase of the proposed development therefore no mitigation is proposed.

Residual Impact

The residual effects on air quality will be ***negative, imperceptible*** and ***long-term*** during the operational phase***.***

The residual effects on climate will be ***negative, imperceptible*** and ***long-term*** during the operational phase***.***

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of Air Quality and

Climate impacts during the operational phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.5 NOISE AND VIBRATION

5.5.1 Construction Phase

Potential Impacts

The largest noise and vibration impact of the proposed development will occur during the construction phase due to the operation of various plant machinery and HGV movement to, from and around the site. However, the construction impacts will be temporary only.

A Traffic Impact Assessment (CSEA, 2024b) relating to the proposed development has been prepared as part of the planning application. According to the report, the proposed development will not generate a significant volume of additional vehicular traffic during construction phase. The level of traffic increase is not likely to have any adverse transport-related environmental effects in terms of noise or vibrations.

In the absence of mitigation measures the potential impacts on noise and vibration during the construction phase are ***negative***, ***not significant,*** and ***temporary.***

Mitigation Measures

The application of binding construction hours will be set down by planning conditions for construction.

With regard to construction activities, best practice control measures for noise and vibration from construction sites are found within BS 5228-1. Whist construction noise and vibration impacts are expected to vary during the construction phase depending on the distance between the activities and noise sensitive buildings, the contractor will ensure that all best practice noise and vibration control methods will be used, as necessary in order to ensure impacts at off-site noise sensitive locations are minimised. The best practice measures set out in BS 5228-1 and BS 5228-2 include guidance on several aspects of construction site mitigation measures.

The relevant mitigation measures BS 5228-1 and BS 5228-2, which will be incorporated into the CEMP, cover topics including, but not limited to:

- Selection of quiet plant;
- Noise control at source;
- Screening, and;
- Liaison with the public.

Additionally, the monitoring and control of construction traffic will be ongoing during construction works.

Residual Impact

On the basis of the above and considered the implementation best practice construction measures, it is concluded that during the construction phase of the proposed development, the impact with regards to noise and vibration will be ***negative, not significant*** and ***temporary***.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of noise and vibration impacts during the construction phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.5.2 Operational Phase

Potential Impacts

The key potential noise source associated with the site operation relates to traffic along the existing road network and traffic entering and exiting the already existing Park and Ride car park.

The existing road network already carries high traffic volumes, and it is considered that the proposed development will not cause a change in traffic levels sufficient to cause a significant increase in traffic noise or vibration levels. According to the Traffic Impact Assessment (CSEA, 2024b), the level of traffic increase is not likely to have any adverse transport-related environmental effects in terms of noise or vibrations.

Moreover, the introduction of more efficient public transportation options, including electric and/or hybrid buses, which operate more quietly than traditional vehicles, could potentially lead to a reduction in noise pollution over time. Regular monitoring and maintenance of vehicles and infrastructure will further ensure that noise and vibration levels remain within acceptable limits, contributing to a quieter and more sustainable urban environment.

On the basis of the above, the potential effects on noise and vibration are ***neutral, imperceptible***, and ***long term*** for the operational phase.

Mitigation Measures

There are no significant impacts to noise and vibration as a result of the operational phase of the proposed development therefore no mitigation is proposed.

Residual Impact

The residual effects on noise and vibration will be ***negative, imperceptible*** and ***long-term*** during the operational phase***.***

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of noise and vibration impacts during the operational phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.6 LANDSCAPE AND VISUAL IMPACT

5.6.1 Construction Phase

Potential Impacts

Construction of the proposed development will give rise to short term and substantially localized effects on landscape character. Within the local context of a largely modified

site within a developed area, the scale of the development is not considered to result in significant landscape or visual impacts during construction.

Construction activity including movement of construction vehicles and gradual emergence of structures will result in localized disturbance.

The potential impact on landscape and visual impact during construction is ***negative, slight*** and ***temporary***.

Mitigation Measures

The site area will be enclosed with hoarding, details of which are to be agreed with CCC. Hoarding panels will be maintained and kept clean for the duration of the works. No further mitigation with regard to landscape and visual impacts is required as the anticipated impact is not significant.

Residual Impact

The residual impact on landscape and visual impact during construction will be ***negative, slight*** and ***temporary***.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of Landscape and Visual impacts during the construction phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.6.2 Operational Phase

Potential Impacts

The proposed development will represent modifications to an already existing and operational Park and Ride facility. The proposed enhancements are designed to integrate seamlessly with the current infrastructure, ensuring that the character of the site remains unchanged. This development will not alter the type of operations currently conducted at the site. When considered within the overall context of the site and its surroundings, the proposed improvements will blend harmoniously with the existing environment and urban landscape. The proposal will enhance the capabilities of the Park and Ride facility without changing the established aesthetic and operational patterns.

The potential impact of the proposed development during operational stage with regards to landscape and visual impact is considered to be ***neutral, imperceptible*** and ***long-term.***

Mitigation Measures

Outside of the design and landscape design there are no proposed mitigations measures in relation to landscape and visual impacts during the operational phase of the proposed development.

Residual Impact

The residual impact of the proposed development during operational stage with regards to landscape and visual impact is considered to be ***neutral, imperceptible*** and ***long-term.***

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of Landscape and Visual impacts during the operational phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.7 ARCHAEOLOGY, ARCHITECTURE AND CULTURAL HERITAGE

5.7.1 Construction Phase

Potential Impacts

A review of the Heritage Council's online database (https://heritagemaps.ie/) determined that there are no recorded archaeological sites or monuments within the proposed development lands. The proposed development site does not lie within the zone of notification for any recorded monuments. Therefore, the proposed development will pose no impact on recorded heritage and monuments.

When developing, there is the potential for previously unrecorded archaeological features to survive in greenfield areas. As the proposed development site is entirely developed and artificial, there is an undiscernible risk of unrecorded monuments being discovered on site.

On the basis of the above, there is no potential for impacts on archaeology, architecture and cultural heritage during the construction phase of the proposed development.

Mitigation Measures

There are no impacts on archaeology, architecture and cultural heritage as a result of the construction phase of the proposed development therefore no mitigation is proposed.

Residual Impact

The construction phase of the proposed development is not predicted to have any impact on archaeological, architectural and cultural heritage.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of Archaeology, Architecture and Cultural Heritage impacts during the construction phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.7.2 Operational Phase

Potential Impacts

It is concluded that are no recorded architectural heritage, archaeological or national monuments located within the proposed development site boundary or in proximity to

the proposed development site and there is no risk of unrecorded monuments having survived on site.

On the basis of the above, there is no potential for impacts on archaeology, architecture and cultural heritage during the operational phase of the proposed development.

Mitigation Measures

There are no impacts on archaeology, architecture and cultural heritage as a result of the operational phase of the proposed development therefore no mitigation is proposed.

Residual Impact

The operational phase of the proposed development is not predicted to have any impact on archaeological, architectural and cultural heritage.Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of Archaeology, Architecture and Cultural Heritage impacts during the operational phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.8 TRAFFIC AND TRANSPORTATION

CSEA has undertaken a Traffic and Transportation Assessment (2024b) in order to assess the risks of traffic impacts as a result of the proposed development. This assessment is included as part of the planning documentation.

5.8.1 Construction Phase

Potential Impacts

During the construction phase of the proposed development, there will be additional traffic movements to/from the site from transportation of site machinery and materials, construction personnel, security staff, professional staff (i.e. design team, utility companies), excavation plant, dumper trucks and deliveries/removal of materials (waste/spoil). It is estimated that on average 10 to 15 staff will be working on the site during the entire duration of the construction phase.

The proposed development will not generate a significant volume of additional vehicular traffic during construction or operational phases. The level of traffic increase is not likely to have any adverse transport-related environmental effects in terms of noise, air quality, vibrations, etc. The environmental impact of the construction period will be temporary and not significant in nature.

The Traffic and Transportation Assessment confirmed following traffic modelling that there will be multiple potential impacts during the construction phase which include delay and inconvenience to existing traffic on the road network, noise / disturbance to other properties in the vicinity, dust generated from construction traffic, and dirt / mud dragged onto the road by construction traffic.

On the basis of the above with regard to the evidence set out within the Traffic and Transportation Assessment the potential impacts on traffic and transportation are ***negative, not significant*** and ***temporary*** for the construction phase.

Mitigation Measures

Mitigation measures have been set out in the Traffic and Transportation Assessment (2024b):

- The contractor will be required to provide wheel cleaning facilities, and regular cleaning of the local road network will be carried out.
- Temporary car parking facilities for the construction workforce will be provided within the site and the surface of the car park will be prepared and finished to a standard sufficient to avoid mud spillage onto adjoining roads.
- Monitoring and control of construction traffic will be ongoing during construction works.

Residual Impact

The residual impact of the proposed development during construction stage on traffic and transportation is considered to be ***negative, not significant*** and ***temporary.***

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of Traffic and Transport impacts during the construction phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.8.2 Operational Phase

Potential Impacts

The proposed bus interchange facility will consist of 4 new bus bays and associated passenger facilities as part of the strategic locations for the provision of Park and Ride facilities in Cork Metropolitan Area

The existing Black Ash Park and Ride is serviced by 940 car parking spaces which are operating below capacity. The proposed development will not increase the number of carparking spaces, in fact, the proposed development will result in a reduction of 104 spaces by implementing the new bus interchange services along with new bus standing area.

The Traffic Impact Assessment has analysed the potential impacts to the Kinsale Rd/ Mick Barry Rd Junction and the N27 S City Link Rd/ Mick Barry Rd/ Tramore Valley Park Junction.

The modelling results obtained show that even though the performance of the junctions during the PM peak are recorded to be almost at capacity, the impacts of the proposed development can be described as unsignificant. The capacity issues observed during this assessment scenario can be attributed mainly to the high volume of background traffic and forecasted increase in such turning movements. On that basis, the traffic impact of the proposed development can be described as imperceptible.

The Traffic and Transportation Assessment demonstrates that the additional traffic generated as a result of the operational phase can be accommodated within the surrounding road network and will not have an adverse impact.

The operational traffic associated with the surrounding permitted developments has been accounted for in the Traffic and Transport Assessment and therefore the cumulative impact has been accounted for.

The Engineering and Planning report included with the planning submission provides for the transportation needs of people during the operational phase of the proposed development. The core aim of the proposed development is to encourage sustainable and public transport modes over the use of the private car.

On the basis of the above with regard to the evidence set out within the Traffic and Transportation Assessment the potential effects on traffic and transportation are ***imperceptible, neutral*** and ***long-term, neutral*** for the operational phase.

Mitigation Measures

There are no significant impacts to traffic and transportation as a result of the operational phase of the proposed development therefore no mitigation is proposed.

Residual Impact

The residual impact of the proposed development during operational stage on traffic and transportation is considered to be ***neutral, imperceptible*** and ***long-term.***

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of Traffic and Transport impacts during the operational phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.9 MATERIAL ASSETS, AND WASTE

5.9.1 Construction Phase

Potential Impacts

Utilities: Foul Sewer, Stormwater, Potable Water and Energy

Welfare facilities (canteens, toilets etc.) will be required for the construction phase. It is anticipated foul sewage arising from welfare facilities will either be collected by tanker or a temporary connection to the mains network be established. There will be approximately 10 to 15 staff required for the construction phase of the proposed development.

Based on the initial investigation of the Planning and Engineering Report, the proposed works will have no major impact on the existing utilities on site and most of the current utilities' installations will remain unchanged. Where changes to the surface water drainage are necessary, at the location of the proposed U-shaped bus turning bay, the proposed drainage scheme will follow the same principals as the existing drainage philosophy on site.

There will be required connections to the foul water network and potable water network on site during the construction phase of the proposed development.

The power and electrical supply requirements during construction are relatively minor, and there is no potential impact anticipated on existing users in the area.

Any excavations and connections will be undertaken with consultation with the utility operators, therefore there is no potential impact anticipated on electrical infrastructure to existing users.

In the absence of mitigation measures the potential impacts during the construction phase on utilities are ***negative***, ***not significant,*** and ***temporary***.

Waste and Waste Management

A RWMP (AWN, 2024) has been prepared for proposed development and its implementation aims to ensure maximum recycling, reuse and recovery of waste with diversion from landfill, wherever possible. It also seeks to provide guidance on the appropriate collection and transport of waste from the site to prevent issues associated with litter or more serious environmental pollution.

There will be waste materials produced in the construction of the proposed development which will be disposed of using licensed waste disposal facilities and contractors. The scale of the waste production in conjunction with the use of licensed waste disposal facilities and contractors does not cause concern for likely significant effects on the environment.

It is considered that the proposed development will not have any significant impact in terms of resources or waste generation.

A carefully planned approach to waste management as set out in the RWMP (AWN, 2024), ensures that during the construction phase the impact on waste and waste management will be ***imperceptible, negative*** and ***temporary***.

Mitigation Measures

Temporary connections to utilities required during the construction phase, i.e. the foul water network and potable water network, will be agreed upon with Uisce Éireann and CCC.

All waste arising during the construction phase will be managed and disposed of in a way that ensures the provisions of the *Waste Management Act 1996* as amended and associated amendments and regulations and the *National Waste Management Plan for a Circular Economy 2024 – 2030* (2024). In the event there is excess material with no defined purpose, it will be transported to an authorised soil recovery site or notified to the EPA as a by-product when it will be beneficially used. Waste during construction will be managed in accordance with the RWMP (AWN, 2024), as well as any subsequent planning conditions.

If any potentially contaminated material is encountered, it will need to be segregated from clean / inert material, tested and classified as either non-hazardous or hazardous in accordance with the EPA publication entitled *'Waste Classification: List of Waste & Determining if Waste is Hazardous or Non-Hazardous'* using the *HazWasteOnline* application (or similar approved classification method). The material will then need to be classified as clean, inert, non-hazardous or hazardous in accordance with the *EC Council Decision 2003/33/EC,* which establishes the criteria for the acceptance of waste at landfills.

In the event that Asbestos Containing Materials (ACMs) are found within the excavated material, the removal will only be carried out by a suitably permitted waste contractor, in accordance with *the Safety, Health and Welfare at Work (Exposure to Asbestos)*

Regulations 2006-2010 and the Best Practice Guidance for Handling Asbestos (2023). All asbestos will be taken to a suitably licensed or permitted facility.

In the event that hazardous soil, or historically deposited waste is encountered during the construction phase, the contractor will notify CCC and provide a Hazardous / Contaminated Soil Management Plan, to include estimated tonnages, description of location, any relevant mitigation, destination for disposal / treatment, in addition to information on the authorised waste collector(s).

Residual Impact

The residual impact on waste management during construction is considered to be ***neutral, imperceptible*** and ***temporary***.

The residual impact on utilities during construction is considered to be ***neutral, imperceptible*** and ***temporary***.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of Material Assets and Waste management impacts during the construction phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.9.2 Operational Phase

Potential Impacts

Utilities: Foul Sewer, Stormwater and Potable Water

The current stormwater network on the proposed development site will be removed during the construction phase and new stormwater infrastructure will be installed. This tie into the existing drainage scheme on the Black Ash Park and Ride site. The proposed development will not increase hardstanding on site and therefore will not have impact on increased runoff. No new public connections are required as part of proposed development.

No requirement for connections to the foul water network or the potable water network at the site.

There will be a requirement for connection to electricity infrastructure via the existing Black Ash Park and Ride facility to power any electrical components at the proposed development

In the absence of mitigation measures (or design measures) the potential impacts during the operational phase on utilities are ***neutral***, ***imperceptible,*** and ***long term***.

Waste and Waste Management

The proposed development will give rise to minor quantities of waste during the operational phase, i.e. when the project is completed, and fully operational, and will feed into the existing waste management procedures on the Black Ash Park and Ride site-site. Given the nature and function / purpose of the development as a bus interchange, the waste generated will be limited / confined to bins strategically provided and dispersed across the site for the users of the Park and Ride facility. The waste generated will be collected and disposed regularly by an assigned waste contractor in the locality.

In the absence of mitigation measures (or design measures) the potential impacts during the operational phase on waste management are **negative**, **not significant,** and **long term**.

Mitigation Measures

As the identified impacts with regard to utilities during the operational phase of the proposed development will be imperceptible, there is no requirement for operational mitigation measures.

A collection permit to transport waste must be held by each waste contractor which is issued by the NWCPO. Waste receiving facilities must also be appropriately permitted or licensed.

Residual Impact

The residual impact on utilities during operation is considered to be ***neutral, imperceptible,*** and ***long term***.

The residual impact on waste management during operation is considered to be ***neutral, imperceptible,*** and ***long term***.

Having regard to the foregoing, there is no likelihood of significant effects on the environment arising from the proposed development in respect of Material Assets and Waste management impacts during the operational phase. Therefore, a requirement for sub-threshold EIA does not arise.

5.10 ASSESSMENT OF POTENTIAL IMPACTS FROM INTERACTIONS AND CUMULATIVE IMPACTS

Interactions

This section discusses the potential interactions and inter-relationships between the environmental factors discussed in the preceding sections. This section covers both the construction and operational phases of the proposed development.

In accordance with the guidance, not only are the individual significant impacts required to be considered when assessing the impact of a development on the environment, but so must the interrelationships between these factors be identified and assessed.

The majority of the interactions that are considered to have a neutral effect (i.e., no effects or effects that are imperceptible, within the normal bounds of variation or within the margin of forecasting error).

The interaction of the foregoing impacts, described above, would not give rise to any significant negative impacts on the environment. There is a potential interaction between land, soil geology, hydrogeology and hydrology through poorly managed surface water run-off during the construction phase of the proposed development that in the absence of mitigation measures could negatively impact on biodiversity. There is a potential for the construction activity in terms of air quality and of dust generated to impact on human health and biodiversity. There is a potential interaction between noise and vibration, and negative impacts on human health.

However, these are potential temporary interactions associated with the construction phase. This EIA Screening has outlined mitigation measures along with measures outlined in the RWMP (AWN, 2024) and Traffic and Transport Assessment (CSEA, 2024b) to ensure that pollution and nuisances arising from site excavations and construction activities are prevented where possible and managed in accordance with best practice. There will be site specific CEMP prepared prior to any works taking place on site that will include any subsequent planning conditions relevant to the proposed development that will also reduce the impact of any environmental interactions.

It is considered that there will be no likely significant interactions during construction or operation which would warrant preparation of an EIAR.

Cumulative Impacts

As part of the assessment of the proposed development, the likelihood of potential cumulative impact of the proposed development has been considered with any future development (as far as practically possible) and the cumulative impacts with developments in the locality (including planned and permitted developments).

As outlined in Section 3.2, above, a list of notable consented developments located in close proximity to the development site is included in Appendix A of this report.

Cumulative impacts are those impacts that relate to incremental / additive impacts of the planned development in addition to historical, present or foreseeable future actions. Cumulative impacts can be thought of as occurring through two main pathways: first, through persistent additions or losses of the same materials or resource, and second, through the compounding effects as a result of the coming together of two or more effects.

The proposed development is construction on a partially developed site. Mitigation is included in the project design to minimise impacts on the receiving environment.

The greatest potential for cumulative impact would be related to traffic impacts, however, the traffic modelling has considered the baseline environment and projections for future years. The modelling has determined the impact will be not significant and already accounts for cumulative impact

Existing developments that are already built and in operation contribute to the characterisation of the baseline environment. As such any further environmental impacts that the proposed development may have in addition to these already constructed and operational developments has been assessed in the various impact reports and assessments attached to this EIA Screening report.

Any future development will be required to incorporate appropriate mitigation measures (e.g. noise management, dust management, traffic management, management of water quality in run-off water, landscape, etc) during the construction phase as such any cumulative development will not have a significant effect on human health, material assets, land, soils, geology, hydrogeology, and hydrology.

Any future development proposed on the surrounding lands should be cognisant with the zoning and will be subject to EIA and/or planning conditions which include appropriate mitigation measures to minimise environmental impacts.

Based on the assessment of the environmental sensitivities in the existing environment and consideration of potential cumulative impacts, it is concluded that there are no likely significant cumulative environmental impacts which would warrant preparation of an EIAR.

6.0 FINDINGS AND CONCLUSIONS

The purpose of this EIA Screening Report has been to consider whether there is a requirement for the preparation of an EIAR to accompany the planning application to CCC for the proposed development.

The proposed development and component parts have been considered against the thresholds outlined in Schedule 5 in the Planning and Development Regulations 2001 (as amended). On the basis of the evaluation set out in Section 2.0, an EIA for the proposed development is not mandatory; the proposed project is considered to be a sub-threshold development and therefore there is discretion over the submission of an EIAR with the planning application.

CCC is required to assess whether the proposed development is likely to have significant effects on the environment in order to determine whether the submission of an EIAR is required for a subthreshold development. The information necessary to enable this screening assessment has been provided in this report and the methodology used has been informed by the available guidance, legislation and Directives.

It is concluded, based on the evidence documented in Sections 3.0, 4.0 and 5.0, that having regard to the nature, scale and location of the subject site, there is no likelihood of significant effects on the environment arising from the proposed development on the environment (direct, indirect or cumulatively with other development) and therefore it is considered that an EIAR is not required in this instance.

7.0 REFERENCES

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European Union. Guidance on the preparation of the Environmental Impact Assessment Report. EU Luxembourg: 2017.

Department of Housing, Planning and Local Government. Guidelines for Planning Authorities and An Bord Pleanala on carrying out Environmental Impact Assessment. DHPLG: 2018.

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Environmental Protection Agency. Guidelines on the Information to be contained in Environmental Impact Assessment Reports. EPA 2022.

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APPENDIX A

PLANNING HISTORY WITHIN THE VICINITY OF THE SUBJECT SITE

Planning Reference	Applicant and Location	Development Description	Decision Date	Grant Date
2443043	Malting Company of Ireland Ltd The Maltings, South Link, Togher, Cork	The construction of a temporary single-storey modular office building and associated site works, including connections to existing on-site services, concrete footpath and all ancillary site works	26/08/2024	07/10/2024
2342464	Hanleys Home and Garden Centre Limited Hanleys Home & Garden Centre, Frankfield Road, Ballycurreen, Cork	Permission is sought for the removal of existing car parking spaces and for the construction of a new single-storey extension and openings into the existing seasonal shop building together with a secure external storage area and all associated site development works.	29/04/2024	10/06/2024
2342404	Harvey Norman Leasing (Cork) Limited Harvey Norman, Kinsale Road, Ballycurreen, Cork	Permission is sought for the construction of a 111 sqm canopy to the external service yard and all necessary and associated site works.	19/03/2024	29/04/2024
2342337	Rubelite Ltd Ard Na Gaoithe, South Douglas Road, Cork	Permission is sought for development consisting of the construction of 21 no. residential dwellings in 2 no. apartment blocks and 1 no. detached dwelling house. The development will consist of Block 1, a 3-storey apartment block providing 4 no. 1-bed apartment units on ground floor and 4 no. 2-bed duplex apartments on first and second floor; Block 2, a 2 and 3-storey apartment block providing 6 no. 2-bed duplex apartments on ground and lower ground floor and 6 no. 1-bed apartment units on first floor, and, 1no. 2 storey, 3-bed detached dwelling house. The development will also include car parking, bicycle parking, external refuse store, all internal roads, footpaths and walkways, all landscaping works, including new gardens and amenity area, boundary walls, fences and all associated site development works	14/03/2024	22/04/2024
2342332	Irish Pioneer Works (Fabricators) Limited Kinsale Road, Cork City, T12K7XR	The development will consist of a Roof Mounted Solar PV Array of 1107 number PV Panels (c. 2400m2) and all associated works, on the roofs of our offices and factory	27/11/2023	15/01/2024

2342242	Irish International Trading Corporation (Cork) Plc Irish International, Trading Building, Tramore Road, Cork	Permission for a 174.3kWp solar photovoltaic (PV) array to be mounted on the cladded roofs over the existing Irish International Trading Corporation Building at Tramore Road, Cork T12WK59. The solar PV array will generate on site green electricity which will be fully used to reduce the carbon footprint of the building.	16/10/2023	27/11/2023
2241459	Terry Rea Gas and Oil Services Ltd. 1B The Cottages, Tramore Road, Ballyphehane, Cork	Permission for the demolition of an existing shed/structure and the construction of 5 no. dwelling units to include 3 no. 3-bed townhouses, 1no. 2-bed apartment and 1 no. 1-bed apartment and all associated site development works including access, parking, landscaping, drainage, bin and bike storage and amenity areas.	13/03/2023	04/08/2023
2140353	Denis McBarron The Kinsale Road, Ballycureen, Cork	Permission for the demolition and removal of an existing dwelling and ancillary structures and the construction of a mixed-use residential and commercial development in 13 no. blocks comprising: 134 no. residential units in 12 no. 3-storey blocks (comprising a mix of 1,2 and 3 bed apartments/duplexes), a 3 storey neighbourhood centre building (block 10) which includes a restaurant/take-away, convenience retail, gym, dentist, physio, hairdressers and outdoor amenity at roof level; a creche (included in Block 9); a 158 no. bed hotel (Block 7, which primarily ranges in height from 6 to 9 storeys with a 2-storey annex) and which includes a swimming pool, gym, bar, cafe, restaurant and function room; a new entrance/signalised junction and improvements to the N27 including 2 no. bus stops, cycle lane and footpaths; and all associated ancillary development works including an ESB sub-station, landscaping and amenity areas, solar panels (at roof level), bin storage, car and bicycle parking.	16/06/2022	18/07/2023
2140066	Rutland Street Properties Ltd. The Manhattan Bar, Lower Friars Walk, Ballyphehane	Permission for a proposed development consisting of 1.) Demolition of an existing single storey commercial premises 2.) The construction of a new four storey residential apartment block of total 26 no. units, consisting of 14 no. 1-bedroom apartments, 10 no. 2-bedroom apartments and 2 no. 3-bedroom apartments 3.) The creation of 13 no. car parking spaces accessed off Lower Friars Walk 4.) All other necessary site services and ancillary works necessary to facilitate the development	05/01/2022	15/05/2023

2240906	Watfore Limited Former CMP Dairies site, known as Creamfields, at Kinsale Road and Tramore Road, Cork	Permission for development at the former CMP Dairies site, known as Creamfields, at Kinsale Road and Tramore Road, Cork. the proposed development will consist of the construction of a Primary Care Centre (c. 7,767m2), of principally 4 storeys and part 7 storeys in height above ground, to include a ground floor pharmacy (c.290.5m2); HSE services at ground, 1st, 2nd and 3rd floor, including an external play area at ground floor; GP and medical support/offices at 4th floor; and medical support/offices at 5th and 6th floor; town square; 98 no. car parking spaces, including EV charging points (57 no. undercroft spaces and 41 no. surface spaces); 45 no. bicycle parking spaces in a dedicated bike store and 9 no. motorcycle spaces in the undercroft; all ancillary plant and facilities at undercroft and surface level, including a generator, substation and switchrooms; rooftop solar PV panels; signage; an upgrade of the Kinsale Road/Mick Barry Road junction to facilitate improved pedestrian access to the Black Ash Park and Ride; an upgrade to the existing access from Tramore Road; pedestrian/cycle lane connections from Kinsale Road and a cycle lane on Tramore Road; all site development works, to include the diversion of the existing combined sewer and manhole, at the c. 1.37ha former CMP Dairies site, known as Creamfields, at Kinsale Road and Tramore Road, Cork. A Natura Impact Statement will be submitted to the Planning Authority with the application.	10/08/2022	21/09/2022
2241147	Musgrave Operating Partners Ireland Tramore Road, Cork	Permission for an 899KWp solar photovoltaic (PV) array to be mounted on the cladded roofs over the existing Chill Foods Building adjoining the Main Ambient Warehouse Building at Tramore Road, Cork. T12N799. The solar PV array will generate on site green electricity which will be fully used to reduce the carbon footprint of the building.	26/07/2022	06/09/2022
2241065	Ontower Ireland Limited Dosco Industrial Estate, Vernon View, South Douglas Road, Cork	For retention permission of an existing telecommunications support structure (previously granted under Plan Ref No. 10/34652) together with associated ground equipment within a fenced compound.	22/06/2022	03/08/2022
2241101	Home Applicances t/a DID Electrical Ltd Unit B, Turners Cross Retail Park, Kinsale Road, Cork	Permission is sought for a new mezzanine floor to the existing retail warehouse unit, new externally illuminated signage at high level on the front façade and new vinyl applied signage to window over main entrance door.	12/07/2022	23/08/2022

2139948	Meteor Mobile Communications Limited Frankfield Golf Range, Airport Road Frankfield, Curraghconway, Douglas Co.Cork	Retention permission of an existing development at this site Frankfield Golf Range, Airport Road, Frankfield, Curraghconway, Douglas, Co.Cork. The development consists of an existing 20 metre high telecommunications support structure carrying telecommunications equipment, together with existing equipment container and associated equipment within a fenced compound as previously granted under local authority reference 10/08141. The development will continue to form part of Meteor Mobile Communications Ltd existing and future telecommunications and broadband network.	20/04/2021	01/06/2021
2039467	C.H. Marine C.H. Marine , Unit 4 & 5 , Frankfield Industrial Estate, Cork	Permission for a proposed new reinforced gable delivery/security double door with roller shutter on the western elevation and incorporating all necessary ancillary works.	05/10/2020	16/11/2020
2039252	The Minister for Education & Skills The Grounds of, Colaiste Stiofain Naofa, Tramore Road, Cork	Permission for development at the grounds of Colaiste Stiofain Naofa, Tramore Road, Cork. The development will consist of the provision of temporary primary school accommodation by way of construction of a prefabricated buildings (c 275 Sq. Mtrs) with associated site works including relocation of displaced car parking spaces as a result of proposed development, boundary treatments, bicycle parking etc. Temporary Permission for a period no longer than 2 years is being sought.	18/09/2020	29/10/2020
2039396	Coiste Naionra an Teaghlaigh Naofa Coiste Naionra an Teaghlaigh Naofa, Tory Top Road, Ballyphehane, Cork	Permission for retention for 3 no. single storey temporary classroom units and toilets.	27/08/2020	05/10/2020
1938739	Motor Services Limited Kinsale Road Retail Park, Kinsale Road, Turner's Cross, Cork	Permission is sought for the construction of a retail warehouse unit including associated access, car parking, bicycle parking, hard and soft landscaping and signage	05/03/2020	25/08/2020

2039193	Tennants Building Products Limited Unit 2, Touchdown Business Park, Kinsale Road, Cork	Permission for the retention of the provision of 2 security shutters to existing door openings, the installation of a roller shutter door to the west elevation, permission to erect palisade fencing and security gate and all associated site works.	03/07/2020	10/08/2020
1938786	Motor Services Limited Kinsale Road Retail Park, Kinsale Road, Turner's Cross, Cork	Permission... for the construction of a single storey café and a single storey restaurant including associated access, amendments to existing car parking layout, bicycle parking, signage, external bin storage areas, and hard and soft landscaping.	18/03/2020	22/06/2020
2039158	Ringdeen Investments Ltd. Tramore Commercial Park, Tramore Road, Cork	Permission to refurbish existing storage unit to provide showroom with new glazed entrance, repositioned roller shutter door to replace existing dock leveller, the construction of new access ramps and steps, and for the application of cladding to the exterior wall.	25/06/2020	04/08/2020
2039041	An Post An Post Delivery Service Unit, Togher DSU, Togher Industrial Estate	Permission for the construction of an extension of existing rain shelter canopy located to the front elevation of the existing building	11/03/2020	22/04/2020
1938775	Malting Company of Ireland Limited Togher Industrial Estate, Togher, Cork	Permission... for the construction of a new single storey office building and all associated site works.	02/12/2019	16/01/2020
1938668	DAOL Office Supplies Limitedd Unit 7, Frankfield Industrial Estate, Kinsale Road, Ballyphehane	Permission for (1) Provision of new roller shutter door to rear wall (west side) of Unit 7 and (2) Relocation of existing escape door to a new location on rear wall (west side) of Unit 7	25/10/2019	02/12/2019

194036	Progressive Commercial Construction Ltd Blackash Road, Curraghconway, South Link Road, Co. Cork	A part single-storey, part two-storey building (c. 4,378m2 in area) with ancillary workshop and offices. The building is to be constructed in two phases, with Phase 1 comprising part single-storey, part two-storey building (c. 1,929m2) to be used for the hire and sale of plant and/ or machinery and/or tools; and Phase 2 comprising a single-storey building to be used as a warehouse (c.2449m2). The proposed development also includes an external yard for the storage of plant/machinery; palisade fence/wall to boundaries; signage, including stand-alone totem sign; car parking; replacement new access from Blackash Road; and all associated site development, drainage and landscaping works. A Natura Impact Statement (NIS) will be submitted to the Planning Authority with the application.	30/07/2019	-

APPENDIX B

APPROPRIATE ASSESSMENT (AA) SCREENING REPORT

Black Ash Park & Ride – Bus Interchange

Screening Report for Appropriate Assessment

Doherty Environmental Consultants Ltd.

January 2025

Black Ash Park & Ride

- Bus Interchange

Screening Report for Appropriate Assessment

Document Stage	Document Version	Prepared by
Draft	1	Pat Doherty MSc, MCIEEM

This report has been prepared by Doherty Environmental Consultants Ltd. with all reasonable skill, care and diligence. Information report herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is prepared for Clifton Scannell Emerson Associates (CSEA) and we accept no responsibility to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

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1.0 INTRODUCTION

Doherty Environmental Consultants (DEC) Ltd. has been commissioned by CSEA Consulting Engineers on behalf of the NTA PRDO to prepare a Screening Report in support of an Appropriate Assessment (AA), under Article 6 of the EU Habitats Directive, for the upgrade of the existing Black Ash Park and Ride. The location of the proposed works area in which works will be undertaken for the upgrade of the existing park and ride facility is shown on Figure 1.1 while an aerial view of the works area is shown on Figure 1.2. The proposed upgrade works layout is provided as Appendix 1.

This Screening Report for Appropriate Assessment forms Stage 1 of the Habitats Directive Assessment process and is being undertaken in order to comply with the requirements of the Habitats Directive Article 6(3). The function of this Screening Report is to identify the potential for the project to result in likely significant effects to European Sites and to provide information so that the competent authority can determine whether a Stage 2 Appropriate Assessment is required for the project.

1.1 STATEMENT OF AUTHORITY

This Appropriate Assessment Screening Report has been prepared by Mr. Pat Doherty BSc., MSc, MCIEEM, of DEC Ltd. Mr. Doherty is a consultant ecologist with over 20 years' experience in completing ecological impact assessments and environmental impact assessments. Pat has been involved in the completion of assessment reports for proposed developments and land use activities under the EIA Directive and Article 6 of the Habitats Directive since 2003 and 2006 respectively. He has extensive experience completing such reporting for projects located in a variety of environments and has a thorough understanding of the biodiversity issues that may arise from proposed land use activities. Pat was responsible for completing one of the first Appropriate Assessment reports for large scale infrastructure developments in Ireland when he prepared the Appropriate Assessment for the N25 New Ross Bypass in 2006/07. Since then, Pat has completed multiple examinations of both plans and projects in Ireland. He has completed Natura Impact Statements for national scale plans such as Ireland's CAP Strategic Plan and National Seafood Development Plan and regional and county scale plans including County Development Plans, Local Area Plans, Tourism Strategies and Climate Action Plans. Pat has completed multiple Natura Impact Statements for a range of development types that include large scale infrastructure developments in sectors such as

transport and energy as well as industrial, commercial and residential developments. Pat has completed focused certified professional development training in Appropriate Assessment as well as in a range of ecological survey techniques and assessment processes. Training has been completed for National Vegetation Classification (NVC) and Irish Vegetation Classification (IVC) surveying, bryophyte survey for habitat assessment and identification, professional bat survey and assessment training, mammal surveying and specific training for bird and bat survey techniques. Ongoing training has been completed by approved training providers such as CIEEM, British Trust for Ornithology, the Botanic Gardens and the Field Studies Council.

Blackash Park & Ride

Figure 1.1

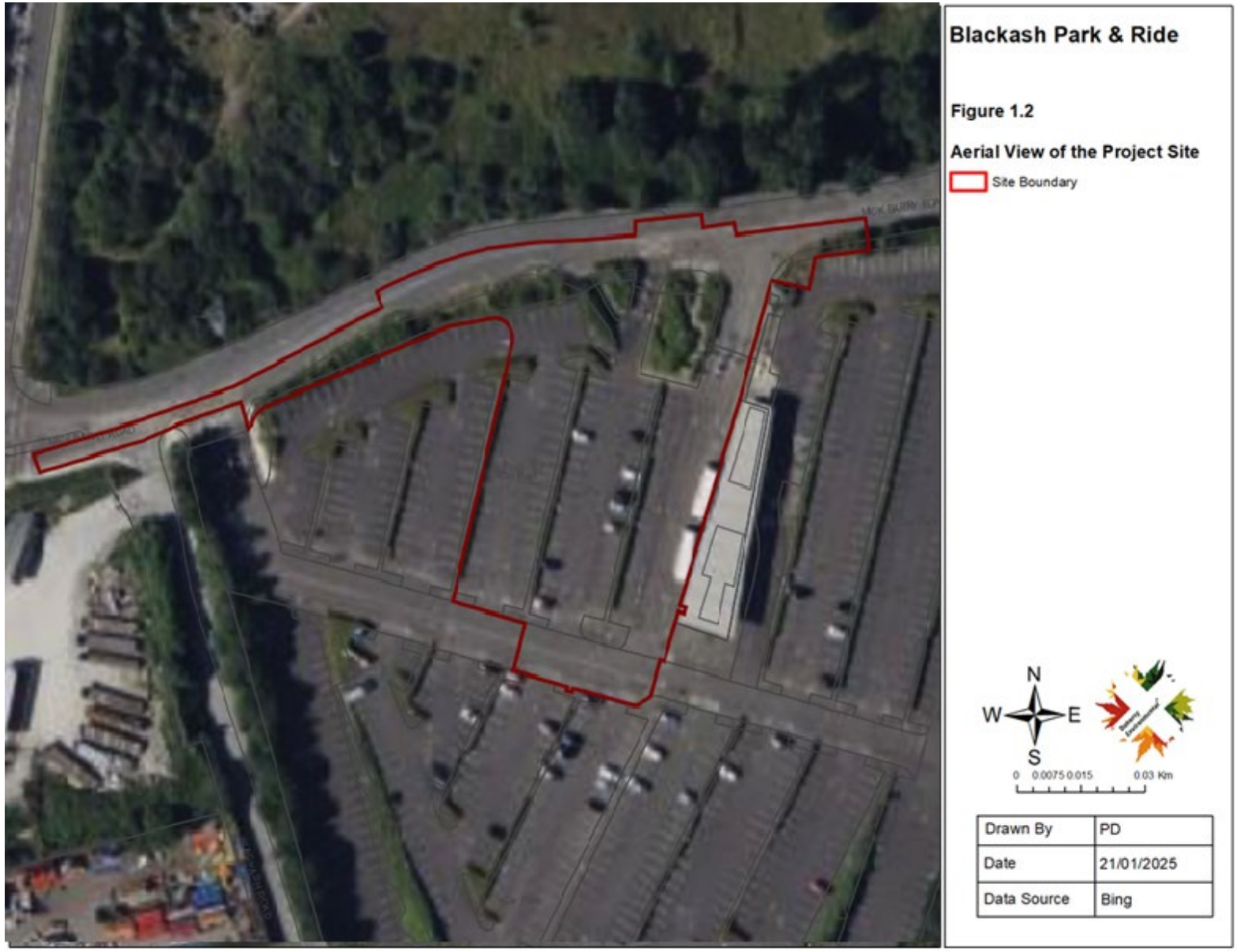
Project Site Location

Site Boundary

N
W E
S

0 0.225 0.45 0.9 Km

Drawn By	PD
Date	21/01/2025
Data Source	Bing


Blackash Park & Ride
Figure 1.2
Aerial View of the Project Site
Site Boundary
N
W
E
S
0 0.0075 0.015 0.03 Km
Drawn By PD
Date 21/01/2025
Data Source Bing

1.2 LEGISLATIVE CONTEXT

Legislative protection for habitats and species is provided within the European Union by the Habitats Directive. The Habitats Directive has been implemented in Ireland and throughout Europe through the establishment of a network of designated conservation areas known as the Natura 2000 (N2K) network. The N2K network includes sites designated as Special Areas of Conservation (SACs), under the EU Habitats Directive and Special Protection Areas (SPAs) designated under the EU Birds Directive 2009/147/EC (as amended). SACs are designated in areas that support habitats listed on Annex I and/or species listed on Annex II of the Habitats Directive. SPAs are designated in areas that support: 1% or more of the all-Ireland population of bird species listed on Annex I of the EU Birds Directive; 1% or more of the population of a migratory species; and more than 20,000 waterfowl.

This Screening Report for Appropriate Assessment is being prepared in order to enable the competent authority to comply with Article 6(3) of Council Directive 92/43/EEC (The Habitats Directive). It is prepared to assess whether or not the project alone or in combination with other plans and projects is likely to have a significant effect on any European Site in view of best scientific knowledge and in view of the conservation objectives of the European Sites and specifically on the habitats and species for which the sites have been designated. Measures ***intended*** to avoid or reduce the harmful effects of the proposed project on European sites (i.e. "mitigation measures") have not been taken into account in this screening stage appraisal of the project. It is noted that, as per the EC (2021) Guidelines, design and generic measures can be taken into account at the screening stage. Furthermore it is noted that European legal precedent[1] has established that account may be taken of features of a project which involve the removal of contaminants and which therefore may have the effect of reducing the harmful effects of the project on a European Site, where those features have been incorporated into that project as standard features, inherent in such a project, irrespective of any effect on the site.

[1] ECJ Judgement C-721/21 of the 15th June 2023

1.2.1 Requirement for an Assessment under Article 6 of the Habitats Directive

According to section 177U(1) of the Planning and Development Act 2000 (as amended) the competent authority has a duty to:

- Determine whether the proposed Project is directly connected to or necessary for the management of one of more European Sites; and, if not,

- Determine if the Project, either individually or in combination with other plans or projects, would be likely to have a significant effect on the European Site(s) in view of best scientific knowledge and the Conservation Objectives of the site(s).

This report contains information to support a Screening for Appropriate Assessment and is intended to provide information that assists the competent authority when assessing and addressing all issues regarding the construction, operation and decommissioning of the Project and to allow the competent authority to comply with the Habitats Directive. Article 6(3) of the Habitats Directive defines the requirements for assessment of projects and plans for which likely significant effects on European Sites may arise. The Birds Directive and the Habitats Directive together list habitats and species that are of international importance for conservation and require protection. The Habitats Directive requires competent authorities, to carry out a Screening for Appropriate Assessment of plans and projects that are not directly connected to or necessary for the management of a European Site, to assess whether the plan or project alone or in combination with other plans or projects, would be likely to have significant effects on European Sites in view of best scientific knowledge and the Site's conservation objectives. This requirement is transposed into Irish Law by, inter alia, Part XAB of the Planning and Development Act, 2000 (as amended). Section 177U(4) of Part XAB of the Planning and Development Act states:

"The competent authority shall determine that an appropriate assessment of a draft Land use plan or a proposed development, as the case may be, is required if it cannot be excluded, on the basis of objective information, that the draft Land use plan or proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site. "

1.3 SCREENING METHODOLOGY

This Screening Report has been prepared in order to comply with the legislative requirements outlined in Section 1.1 above and aims to establish whether or not the proposed project, alone or in combination with other plans or projects, would be likely to have significant effects on European Sites in view of best scientific knowledge and the Site's conservation objectives. In this context "likely" means a risk or possibility of effects occurring that **cannot** be ruled out based on objective information and "significant" means an effect that would undermine the conservation objectives of the European sites, either alone or in-combination with other plans and projects (Office of the Planning Regulator (OPR), 2021).

The nature of the likely interactions between the proposed upgrade works and the Conservation Objectives of European Sites will depend upon the:

- the ecological characteristics of the species or habitat, including their structure, function, conservation status and sensitivity to change; *and/or*
- the character, magnitude, duration, consequences and probability of the impacts arising from land use activities associated with the plan, in combination with other plans and projects.

This Screening Report for Appropriate Assessment has been undertaken in accordance with respective National and European guidance documents: Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities (DEHLG 2010); *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites – Methodological Guidance of the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC;* and *Office of the Planning Regulator – OPR Practice Note PN01: Appropriate Assessment Screening for Development Management* (2021), and recent European and National case law. The guidance document *Managing Natura 2000 Sites – The provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission (2018)* was also of relevance during the preparation of this Screening Report.

The EC (2021) guidelines outline the stages involved in undertaking a Screening Report for Appropriate Assessment for projects. The methodology adopted during the preparation of this Screening Report is informed by these guidelines and was undertaken in the following stages:

- Describe the project and determine whether it is necessary for the conservation management of European Sites;

- Identify European Sites that could be influenced by the project;

- Where European Sites are identified as occurring within the zone of influence of the project identify potential effects arising from the project and screen the potential for such effects to negatively affect European Sites identified under Point 2 above; and

- Identify other plans or projects that, in combination with the project, have the potential to affect European Sites.

2.0 PROJECT DESCRIPTION

2.1 BACKGROUND

In coordination with BusConnects Cork, a park and ride strategy is being developed to outline and deliver suitable bus and rail-based park and ride facilities within and outside Cork City to facilitate public transport intervention. The strategy includes upgrading the existing Black Ash Park and Ride.

2.2 PROJECT DESCRIPTION

The scope of this project is to provide a new bus interchange facility including 4 additional bus bays, appropriate pedestrian infrastructure, cycle parking, lighting and servicing within the existing Black Ash Park and Ride. The Black Ash Park and Ride is accessible through Mick Barry Road, between Kinsale Road and N27 South City Link Road junctions. The site is currently operating below its approximately 940 parking space capacity. The proposed layout will reduce the capacity by 104 spaces by implementing new bus interchange services along with new bus standing area. Figure 2.1 below illustrates the general arrangement.

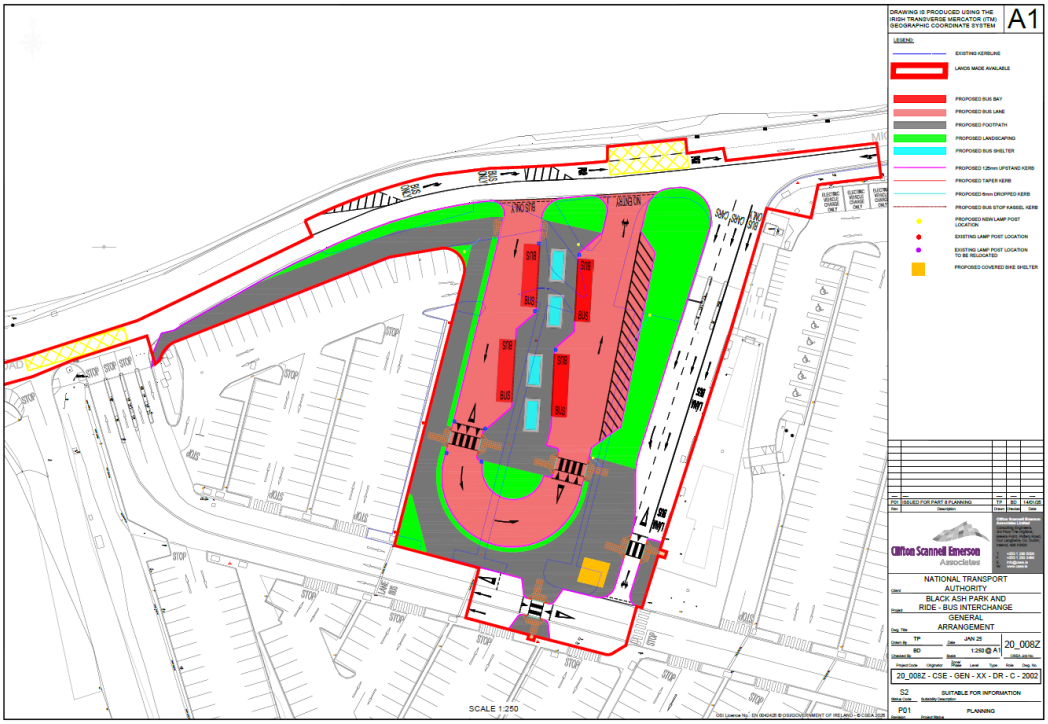


Figure 2.1: ***Proposed*** *General Arrangement (Black Ash Park and Ride)*

An existing gas drainage system for the former Kinsale Road Landfill site is in place under the site. There are both existing gas and leachate collection pipes running through the site. The detailed location of the gas infrastructure has informed the design of the project and construction phase of the project will be completed with full cognisance of this infrastructure such that it will not be disturbed or interfered with in any way during the construction phase. There are also three gas monitoring stations and one ground water monitoring stations near the proposed works.

The existing road structure of the car parking area within the Black Ash Park and Ride consists of:

- 40mm wearing course
- 50mm base course and
- 150mm minimum sub-base and drainage layer

- 100mm reinforced A393 concrete (K35-20) slab
- Geotextile LLDPE layers
- Capping
- Compacted waste

The existing road structure of the roadway lanes within the Black Ash Park and Ride consists of:

- 40mm wearing course
- 50mm base course
- 90mm road base course (clause 903)
- 150mm minimum sub-base and drainage layer
- 100mm reinforced A393 concrete (K35-20) slab
- Geotextile LLDPE layers
- Capping
- Compacted waste

Above the gas drainage systems, the existing road construction detail consists of two layers of asphalt, 45mm and 55mm. Below this is 300mm of drainage layer on 100mm concrete layer reinforced with A393 mesh. Below the reinforced concrete layer, lies a geomembrane (Terram 500 or similar), a linear low-density polyethylene (LLDPE) layer and a second geomembrane (Terram 500 or similar) layer and a layer of ecomposite pozidrain. Under these layers, exist 300mm to 500mm of capping above 6m to 8m of waste material.

2.3 DETAILED DESCRIPTION OF SURFACE WATER MANAGEMENT FOR THE OPERATION PHASE

There are existing surface water pipes and a drainage network. Gullies will be added to low points and connected to the existing drainage network. The surface water drainage infrastructure is already serviced by existing full class hydrocarbons and silt interceptors. Given that the land cover at the project site will remain the same as the existing land cover (i.e. buildings and artificial surfaces) no perceptible changes to surface water volumes are anticipated as the existing site is already mostly impermeable surfacing. In view of this all surface water runoff from the project site will be directed to the existing surface water management system, where it will be treated prior to release to the receiving environment.

2.4 DETAILS OF ANY SITE INVESTIGATION ON SITE IF COMPLETED AND TO HAND

In preparation for the proposed planning application for a new bus interchange, a site walkover was undertaken on September 5th, 2024. It could be seen from the walkover that differential settlement around the administration building was occurring. This is possibly due to the administration building being on a piled foundation while the adjacent surface is on less stabilised ground.

There were no issues noted with existing drainage, lighting or others servicing. Some traffic signs were damaged and will need to be replaced. Parking occupancy was approximately 55% on the day of the site walkover.

2.5 DESCRIPTION OF THE CONSTRUCTION PHASE THAT PROVIDES DETAILS ON THE FOLLOWING:

2.5.1 Construction phase surface water management

During the construction phase surface water runoff will be to ground as per the existing surface water runoff regime at the project site. In line with standard construction practices sediment drain filters will be added to impacted gullies prior to construction commencement.

The location of proposed works and topography of the existing site are such that the surface water runoff will flow northwards from the works zone away from the Tramore Stream.

2.5.2 Construction phase waste management

A Construction & Environmental Management Plan (CEMP) will be prepared for the proposed development and provided to the planning authority prior to the commencement of construction.

2.5.3 Construction plant, equipment and materials

The following construction materials will be required for the works:

- Concrete: This will be delivered by bottle truck and placed directly in prepared forms.
- Asphalt/Blacktop: This will be delivered by dump truck and placed directly into an asphalt hopper.
- All other non-hazardous material will be stored in the site compound. No hazardous materials are anticipated to be used.

2.5.4 Location of temporary construction compound

A Construction & Environmental Management Plan (CEMP) will be prepared for the proposed development and provided to the planning authority prior to the commencement of construction. This will ultimately be determined by a Contractor at a later project stage. At this early stage, it could be anticipated to be west of the proposed bus interchange.

2.5.5 Construction sequence

The depth for constructing of the new infrastructure is restricted as deep excavation could disturb the underlying landfill material, potentially leading to ground instability or environmental contamination. It would be intrusive for any excavation under the 100mm thick concrete slab.

For the section of the proposed alterations adjacent to the administration building, access will remain open for the existing bus bays and car access. The pedestrian crossing buildout and refreshed pavement markings will be carried out using appropriate controlled traffic management of cars and buses entering the site.

For the area where the U-shaped portion of the bus interchange will be built, the initial procedure would be to close the impacted area from vehicular and pedestrian traffic.

Areas of excavation will be rebuilt as required for the loading they are to receive in the future layout. Such that the areas to be traversed by buses will have a thicker pavement structure than those only for cars.

2.5.6 Expected duration of the construction phase

It is estimated that the construction sequence would take approximately 9 months to complete. A more detailed construction programme will be provided by the Contractor at Construction stage.

2.5.7 Estimated no. of personnel required for the construction phase.

It is estimated that the number of personnel required for the construction would be between 10 to 15 personnel for the entire duration of the project. A resource allocated construction programme will be provided by the Contractor at Construction stage.

3.0 OVERVIEW OF THE PROJECT AREA

The project site is located within the urban land cover area of the existing Black Ash Park and Ride facility.

EPA maps show the project site to be located within the Glasheen[Corkcity]_SC_010 of the Tramore-Coastal of the catchment. The Tramore River is located approximately 100m to the south of the project site.

No European Sites, Natural Heritage Areas (NHAs) or proposed Natural Heritage Areas (pNHAs) occur along or in the vicinity of the proposed project. The nearest European Site to

the proposed project is the Cork Harbour SPA, the Lough Mahon section of which is located approximately 2km to the east of the project site. The Tramore River to the south of the project site drains from the project site to this SPA.

The nearest SAC to the project site is the Great Island Channel SAC. This SAC is located approximately 9km to the east.

The Lough Mahon section of the Cork Harbour SPA is also listed as the Douglas River Estuary pNHA. The Cork Lough pNHA is located approximately 1.4km to the northwest.

No NHAs occur in the wider surrounding area, with the nearest being Sovereign Islands NHA, located approximately 22km to the south

4.0 IS THE PROJECT NECESSARY FOR THE CONSERVATION MANAGEMENT OF EUROPEAN SITES

The project has been described in Section 2 of the Screening Report and it is clear from the description provided that the project is not directly connected with or necessary for the future conservation management of any European Sites.

5.0 EUROPEAN SITES WITHIN THE ZONE OF INFLUENCE OF THE PROJECT

5.1 WITHIN/ADJOINING EUROPEAN SITES

Current guidance (OPR, 2021) informing the approach to screening for Appropriate Assessment defines the zone of influence of a project as the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. It is recommended that this is established on a case-by-case basis. In order to identify European Sites that could potentially be located within the zone of influence of the project, the current digital mapping (shapefile) of European Sites in Ireland,

as published by the NPWS[2], was reviewed to identify the European Sites that could conceivably be connected to the project site via pathways. The OPR guidelines recommend that for projects that are located within or immediately adjacent to European Sites, the relevant European Site should be automatically selected for consideration in the screening exercise. No European Sites occur within or bound the project site with the nearest European Site, the Cork Harbour SPA, located approximately 2km to the east of the project site. As such no European Sites are automatically triggered for inclusion within the zone of influence of the project.

5.2 SOURCE-PATHWAY-RECEPTOR MODEL

Current guidance (OPR, 2021) informing the approach to screening for Appropriate Assessment defines the zone of influence of a project as the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European Site. It is recommended that this is established on a case-by-case basis using the Source-Pathway-Receptor (SPR) framework. In order to identify the European Sites that could be located within the zone of influence, the current digital mapping (shapefile) of European Sites in Ireland[3], as published by the NPWS, was reviewed to identify the European Sites that could conceivably be connected to the project site via pathways.

All European Sites occurring in the wider surrounding area were identified and these sites are shown on Figure 5.1 and Figure 5.2 below. The qualifying interest/special conservation interests of these European Sites are provided as Appendix 2 to this screening report.

As can be seen in Figures 5.1 & 5.2 no European Sites are occurring at or in the immediate vicinity of the project site. The nearest European Sites is the Cork Harbour SPA, located over 2km to the east of the project site.

[2] Current SAC shapefile layer dated May 2024; current SPA shapefile layer dated January 2024

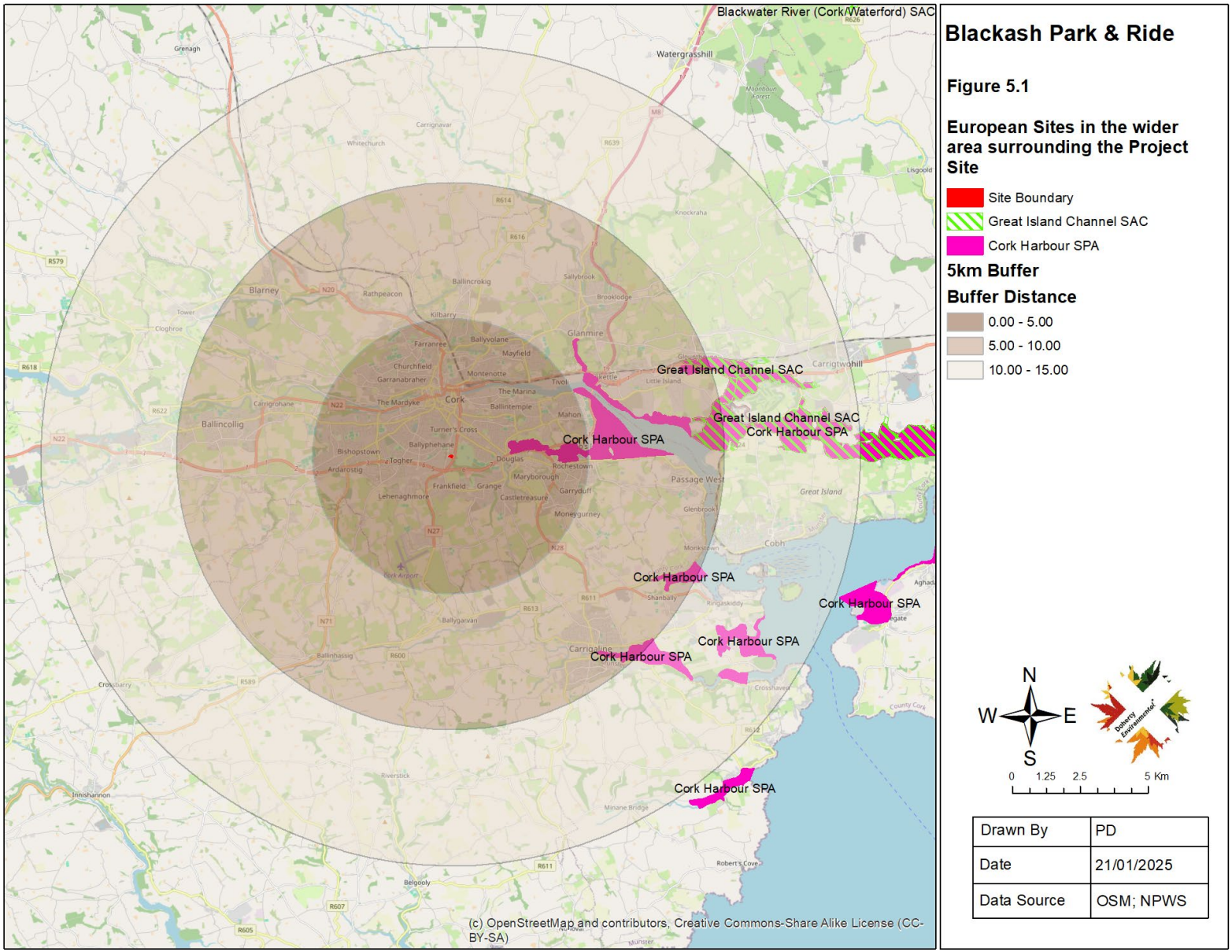
As the nearest European Site is buffered from the project site by a distance of 2km, the project will not have the potential to result in direct impacts to European Sites, such as loss, habitat damage or disturbance to Annex 1 qualifying habitats or physical interaction with Annex 2 qualifying species/special conservation interest bird species within the boundary of the European Site. Thus, this Screening exercise focuses on investigating whether it can or cannot be excluded, on the basis of objective information, that the project will have the potential to result in indirect effects to European Sites (i.e. impacts via emission pathways or interaction with mobile species outside of European Sites).

Using the SPR framework the project, as described in Section 2 of this Screening Report, represents the source of potential impacts to European Sites.

Potential pathways are restricted to any potential emission pathways connecting the project site to European Sites. An examination of the presence or absence of emission pathways and mobile species pathways connecting the project site to European Sites in the wider surrounding area is provided in Section 5.1 below.

The receptors represent European Sites and their associated qualifying features of interest.

European Sites and their associated qualifying features are likely to occur in the zone of influence of the project only where pathways establish a link between the project and a European Site downstream.


Blackwater River (Cork/Waterford) SAC
Great Island Channel SAC
Great Island Channel SAC
Cork Harbour SPA
Cork Harbour SPA
Cork Harbour SPA
Cork Harbour SPA
Cork Harbour SPA
Cork Harbour SPA
Cork Harbour SPA
(c) OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)
Blackash Park & Ride
Figure 5.1
European Sites in the wider area surrounding the Project Site
Site Boundary
Great Island Channel SAC
Cork Harbour SPA
5km Buffer
Buffer Distance
0.00 - 5.00
5.00 - 10.00
10.00 - 15.00
N
W
E
S
0 1.25 2.5 5 Km
Drawn By PD
Date 21/01/2025
Data Source OSM; NPWS

5.3 EXAMINATION OF PATHWAYS

Using the SPR framework, the project, as described in Section 2 of this Screening Report, represents the source of potential indirect impacts to European Sites. The construction works associated with projects such as the park and ride infrastructure upgrade, can in theory, generate the following emissions:

- Emissions to surface water
- Emissions to groundwater
- Noise and vibration emissions
- Emissions to air
- Light emissions
- Visual emissions
- Mobile species pathway; and
- Human Disturbance Pathway

Whether each of these potential pathways occur in the context of the current project and connect the project to any European Sites in the wider surrounding area is examined in the following bullet points:

5.3.1 Hydrological Pathway

The Tramore River is the only watercourse occurring in the wider area surrounding the project site. This river is separated from the project site by approximately 100m. The buffer from the project to this watercourse, which inherently arises as a result of the project site location, is in excess of a range of standard buffer distances that are implemented to protect watercourses from land use activities. Examples of such standard buffer distances include:

- European Union (Good Agricultural Practices for Protection of Waters) Regulations 2023 specifies a setback distance of 5m from a watercourse, or 10m where land slopes are >10%;

- Draft Environmental Requirements for Afforestation (2016) specifies a setback distance of 5m from a watercourse;

- Protection and conservation of fisheries habitat with particular reference to road construction (IFI, 2016) specifies a setback distance of 5m from a watercourse; and

- Working at Construction and Demolition Sites: PPG6 Pollution Prevention Guidelines (Environment Agency, Northern Ireland Environmental Agency and Scottish Environment Protection Agency, 2012) specifies a setback distance of 10m from a watercourse.

Surface water runoff generated at the project site will eventually drain to the existing surface water sewer system in place at the existing Black Ash Park and Ride facility. During the construction phase surface water runoff will be to ground as per the existing surface water runoff regime at the project site. In line with standard construction practices sediment drain filters will be added to impacted gullies prior to construction commencement. The surface water runoff during this phase of the project as well as during the operation phase will be subject to treatment via a full class petrol and silt interceptors in place as part of the existing surface water treatment system.

In view of the foregoing, it is concluded that surface water runoff from areas of construction works and during the operation phase and its discharge to the existing sewer network, will not have the potential to function as a pollution pathway between areas of construction works, the operation of the project site and the receiving sewer network and the receiving waterbody network downstream.

Therefore, the potential for a hydrological pathway is eliminated.

5.3.2 Groundwater Pathway

The project will not result in interactions with underlying groundwater bodies. Excavations will be completed with the formation of the existing park and ride formation. Full cognisance of the existing gas drainage network at and surrounding the project site will be exercised during the construction phase such that no disturbance to or interference of this network arises during construction works.

In view of the above and the presence of overburden that will form a barrier between all works associated with the site and any underlying groundwater bodies, the potential for a groundwater pathway to connect the project to European Sites in the wider surrounding area, is eliminated.

5.3.3 Air Pathway

Guidance outlined by Holman et al. (2014), provides a risk assessment for ecological impacts arising from air emissions associated with the construction projects. European Sites including SACs and SPAs are ranked as highly sensitive sites and the risk to high sensitive sites ranges from high (at less than 20m from source) and medium (at less than 50m from source). Given the location of the nearest European Sites is c. 4km from the project site, the project site lies well outside the 50m zone of influence of air emissions and as such any air emissions generated at the project site will not have the potential to result in likely significant effects to European Sites in the wider surrounding area.

5.3.4 Noise & Vibration

Noise and vibration emissions are considered to have the potential to result in negative impacts to biodiversity up to a 300m distance from the emission source. This distance is based on the maximum noise disturbance zone of 300m for waterbirds, as specified by Cutts et al. (2013)[4].

[4] **It is noted Nature Scotland (2022) published disturbances zones for bird species at a greater distance than 300m. However, unlike Cutt et al. (2013) who specifically examined disturbance effects generated by noise stimuli, the potential disturbance stimuli set out in the Nature Scotland**

No European Sites are located within this distance of the project site. Furthermore, no habitats occur at the project site that provide suitable habitat for special conservation interest bird species of the Cork Harbour SPA or any other European Sites that could be relied upon by these species.

The construction phase will be completed such that no vibration will potential to result in disturbance to the existing gas drainage network at the project site will arise.

As such any noise or vibration emissions generated at the project site will not have the potential to result in likely significant effects to European Sites in the wider surrounding area.

5.3.5 Light

Given the distance of the project site from the nearest European Sites at c. 2km there will be no potential for the project to result in light emission to any European Sites occurring in the wider surrounding area. As such the potential for a light emission pathway to connect the project site to European Sites is ruled out.

5.3.6 Visual Disturbance

Given the distance of the project site from the nearest European Sites at c. 2km there will be no potential for the project to result in visual emission to any European Sites in the wider surrounding area. As such the potential for a visual emission pathway to connect the project site to European Sites is ruled out.

publication are not concerned specifically with noise stimuli. As such the Cutts et al. (2013) publication and maximum noise disturbance distance is relied upon.

5.3.7 Mobile Species Pathway

No habitat suitable for supporting special conservation interest bird species of the Cork Harbour SPA or any other qualifying features of interest occur within or surrounding the project site and as such no mobile species pathway connects the project to the European Sites.

5.3.8 Human Disturbance Pathway

Human disturbance, ex-situ of a project site, to a European Sites can arise as a result of land use activities generated by a project. An example of such an indirect impact is an increase in human presence and associated pressures within a European Sites. Projects in areas outside of, but proximate to European Sites, can result in an increase in the presence of people within European Sites, such as for recreational activities. However given the nature of the project, which will not generate increased levels of human activity within surrounding European Sites this example of a human disturbance pathway will not arise.

6.0 EXAMINATION OF LIKELY SIGNIFICANT EFFECTS

The absence of any potential impact pathways identified in Section 5 above will ensure that this project does not have the potential, either alone or in combination with other projects, to result in likely significant effects to European Sites or the local environment surrounding the project site. A Screening Matrix, in line with European Commission (2021) guidelines is provided below in Table 6.1.

Table 6.1: Screening of the Project's potential to negatively affect European Sites

Assessment Criteria
Describe any likely direct, indirect, or secondary impacts of the project (either alone or in combination with other plans or projects) on European Sites by virtue of:

Size and Scale	The project is small is size and scale, comprising the upgrade of existing park and ride infrastructure.
Land-take	The project does not involve any land-take from European Sites.
Distance from the nearest European Sites or key features of the site	The project site is located c. 2km from the nearest European Site, the Cork Harbour SPA.
Resource requirements	No resources associated with any European Sites will be required for or utilized by the proposed project.
Emissions	**Wastewater Discharge** The project will not generate wastewater emissions. **Surface Water Drainage** The risk of pollution to the aquatic environment from construction works associated with the project and the operation phase of the project will not arise due to the implementation of standard construction phase measures to control the generation and release of contaminated surface water runoff from the project site and due to the existing surface water treatment infrastructure at the existing park and ride facility. As per the examination of the hydrological pathway above the project will not be connected to any European Sites via a hydrological pathway that has the potential to function as a vector for pollution

	Groundwater The project will not result in the emission of water to any groundwater body that could in turn result in the drainage of base flows to European Sites. **Air** All European Sites are located outside the zone of influence for air emissions that could be generated by the project. **Noise & Vibration** All European Sites are located outside the zone of influence for noise and vibration emissions that could be generated by the project. **Light** All European Sites are located outside the zone of influence for light emissions that could be generated by the project. **Visual Emissions** All European Sites are located outside the zone of influence for visual emissions that could be generated by the project. **Mobile species pathway** As per Section 5.3.7 above no mobile species pathway connects the project site to European Sites in the wider surrounding area. **Human Disturbance**

	The project will not result in any changes or increases of human activity within European Sites occurring in the wider surrounding area.
Excavation requirements	Excavations will be required on site during the construction phase. These excavations will be restricted to the project and will not present any risk to the European Sites in the wider surrounding area.
Transportation	Through the provision of active travel infrastructure, the project will have the potential to result in an overall reduction in private car usage and the distance travelled by private car. This will have the potential to result in overall benefits for transportation, traffic management and climate.
Duration of construction, operation etc.	It is estimated that the construction sequence would take approximately 9 months to complete. The project will be designed for a >50-year lifetime.
In-Combination Effects	As there are no pathways connecting the project site to European Sites in the wider surrounding area and given that all such European Sites have been identified as lying outside the zone of influence of the project, there will be no potential for the project to combine with other plans and projects to result in likely significant effects to conservation status of European Sites and their qualifying features of interest in the surrounding area.
Describe any likely changes to the European Sites arising as a result of:	
Reduction of habitat area	The proposed upgrade works will not result in a reduction in area of any habitats occurring within any European Sites in the wider surrounding area.

Disturbance of key species	The proposed project will not result in disturbances to key species designated as qualifying features of interest for surrounding European Sites.
Habitat or species fragmentation	The project will not have the potential to result in habitat or species fragmentation within any European Sites occurring in the wider surrounding area.
Reduction in species density	The project will not result in a reduction in the densities of any key species supported by surrounding European Sites
Changes in key indicators of conservation status	Due to the absence of impact pathways between the project site and surrounding European Sites, the project will not result in changes to key indicators to European Sites as set out under the conservation objectives attributes and targets for these Sites in their published site-specific conservation objectives.
Describe any likely impacts on the European Sites as a whole in terms of:	
Interference with key relationships that define the structure and function of the site	The project will not have the potential to interfere with the key relationships that define the structure and function of European Sites.

Provide indicators of significance as a result of the identification of effects set out above in terms of: Loss Fragmentation Disruption Disturbance Change to key elements of the Site (e.g. water quality etc.)	There will be no loss or fragmentation of, or disturbance or disruption to, European Sites occurring in the wider surrounding area.
Describe from the above the elements of the project or plan or combination of elements, where the above impacts are likely to be significant or where the scale of magnitude of impacts is not known.	
It has been concluded that likely significant effects to the European Sites will not arise as a result of the project. Therefore, a Stage 2 Appropriate Assessment is not required.	

7.0 SCREENING STATEMENT CONCLUSION: FINDING OF NO SIGNIFICANT EFFECTS

During the Screening of the project 2 European Sites were identified as occurring in the wider area surrounding the project site, the nearest of which is the Cork Harbour SPA, located c. 2km to the east. All other European Sites are located at greater distance from the project site.

Given that no European Sites occur within or bounding the project site a source-pathway-receptor model was used to identify the presence of any European Sites in the wider surrounding area occurring within the zone of influence of the project. The examination based on the source-pathway-receptor model found that no pathways connect the proposed project to any European Sites occurring in the wider area surrounding the proposed project and there will be no potential for the proposed project to interact with them or their qualifying features of interest/special

conservation interests. Given the absence of any pathways and any European Sites occurring within the zone of influence of the proposed project, there will be no potential for the proposed project to combine with other plans, projects, or existing pressures to result in cumulative adverse effects to European Sites in the wider surrounding area.

In light of the findings of this report it is the considered view of the authors of this Screening Report for Appropriate Assessment that it can be concluded by Cork City Council that the proposed project is not likely, alone or in-combination with other plans or projects, to have a significant effect on any European Sites in view of their Conservation Objectives and on the basis of best scientific evidence and there is no reasonable scientific doubt as to that conclusion.

This Screening has resulted in a Finding of No Significant Effects and as such a Stage II Appropriate Assessment is not required.

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APPENDIX 1: QUALIFYING FEATURES OF INTEREST

European Sites	**Special Conservation Interests/Qualifying Features of Interest**
Cork Harbour SPA	Little Grebe (Tachybaptus ruficollis) [A004]
	Great Crested Grebe (Podiceps cristatus) [A005]
	Cormorant (Phalacrocorax carbo) [A017]
	Grey Heron (Ardea cinerea) [A028]
	Shelduck (Tadorna tadorna) [A048]
	Wigeon (Anas penelope) [A050]
	Teal (Anas crecca) [A052]
	Pintail (Anas acuta) [A054]
	Shoveler (Anas clypeata) [A056]
	Red-breasted Merganser (Mergus serrator) [A069]
	Oystercatcher (Haematopus ostralegus) [A130]
	Golden Plover (Pluvialis apricaria) [A140]
	Grey Plover (Pluvialis squatarola) [A141]
	Lapwing (Vanellus vanellus) [A142]
	Dunlin (Calidris alpina) [A149]
	Black-tailed Godwit (Limosa limosa) [A156]
	Bar-tailed Godwit (Limosa lapponica) [A157]
	Curlew (Numenius arquata) [A160]
	Redshank (Tringa totanus) [A162]
	Black-headed Gull (Chroicocephalus ridibundus) [A179]
	Common Gull (Larus canus) [A182]
	Lesser Black-backed Gull (Larus fuscus) [A183]
	Common Tern (Sterna hirundo) [A193]
	Wetland and Waterbirds [A999]
Great Island Channel SAC	Mudflats and sandflats not covered by seawater at low tide [1140]

APPENDIX C

RESOURCE WASTE MANAGEMENT PLAN

RESOURCE WASTE MANAGEMENT PLAN FOR PROPOSED BLACK ASH PARK & RIDE – BUS INTERCHANGE AT MICK BARRY ROAD, BLACK ASH CO. CORK

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Cork City Council

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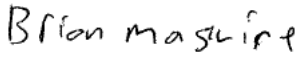
Signature		
Name	Brian Maguire	Chonaill Bradley
Title	Environmental Consultant	Principal Environmental Consultant
Date	17 December 2024	17 December 2024

This report considers the specific instructions and requirements of our client. It is not intended for third-party use or reliance, and no responsibility is accepted for any third party. The provisions in this report apply solely to this project and should not be assumed applicable to other developments without review and modification.

CONTENTS

1.0 INTRODUCTION

AWN Consulting Ltd. (AWN) has prepared this Resource Waste Management Plan (RWMP) on behalf of National Transport Authority (NTA) Park and Ride Development Office (PRDO) and Bus Connects Cork. The Proposed Development will provide a new bus interchange facility including 4 additional bus bays, appropriate pedestrian infrastructure, cycle parking, lighting and servicing within the existing Black Ash Park and Ride, located at Mick Barry Road, Cork City.

This plan will provide information necessary to ensure that the management of Construction & Demolition (C&D) waste at the site is undertaken in accordance with the current legal and industry standards including the *Waste Management Act 1996* as amended and associated Regulations [1], *Environmental Protection Agency Act 1992* as amended [2], *Litter Pollution Act 1997* as amended [3] and National Waste Management Plan for a Circular Economy 2024 - 2030 (NWMPCE) (2024)[4]. In particular, this plan aims to ensure maximum recycling, reuse and recovery of waste with diversion from landfill, wherever possible. It also provides appropriate measures in relation to the collection and transport of waste from the site to prevent issues associated with litter or more serious environmental pollution (e.g. contamination of soil and/or water).

This RWMP includes information on the legal and policy framework for C&D waste management in Ireland, estimates of the type and quantity of waste to be generated by the Proposed Development and prescribes measures for the management of different waste streams. The RWMP should be viewed as a live document and will be regularly revisited throughout the project's lifecycle so that opportunities to maximise waste reduction / efficiencies are exploited throughout, and that data is collected on an ongoing basis so that it is as accurate as possible

2.0 RESOURCE & WASTE MANAGEMENT IN IRELAND

2.1 National Level

The Irish Government issued a policy statement in September 1998*, Changing Our Ways* [5], which identified objectives for the prevention, minimisation, reuse, recycling, recovery and disposal of waste in Ireland. The target for C&D waste in this report was to recycle at least 50% of C&D waste within a five year period (by 2003), with a progressive increase to at least 85% over fifteen years (i.e. 2013).

In response to the *Changing Our Ways* report, a task force (Task Force B4) representing the waste sector of the already established Forum for the Construction Industry, released a report entitled '*Recycling of Construction and Demolition Waste'* [6] concerning the development and implementation of a voluntary construction industry programme to meet the Government's objectives for the recovery of C&D waste.

In September 2020, the Irish Government published a policy document outlining a new action plan for Ireland to cover the period of 2020-2025. This plan, *'A Waste Action Plan for a Circular Economy'* [7] (WAPCE), replaces the previous national waste management plan, *"A Resource Opportunity"* (2012), and was prepared in response to the 'European Green Deal' which sets a roadmap for a transition to an altered economical model, where climate and environmental challenges are turned into opportunities.

The WAPCE sets the direction for waste planning and management in Ireland up to 2025. This reorientates policy from a focus on managing waste to a much greater focus on creating circular patterns of production and consumption. Other policy statements

of a number of public bodies already acknowledge the circular economy as a national policy priority.

The policy document contains over 200 measures across various waste areas including circular economy, municipal waste, consumer protection and citizen engagement, plastics and packaging, construction and demolition, textiles, green public procurement and waste enforcement.

One of the first actions to be taken was the development of the Whole of Government Circular Economy Strategy 2022-2023 'Living More, Using Less' (2021) [8] 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. It is anticipated that the Strategy will be updated in full every 18 months to 2 years.

The Circular Economy and Miscellaneous Provisions Act 2022 [9] 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, that retains the value of resources in our economy for as long as possible and that will work to 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, tackling the delays which can be encountered by industry, and supporting the availability of recycled secondary raw materials in the Irish market, and tackles illegal fly-tipping and littering.

The Environmental Protection Agency (EPA) of Ireland issued '*Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction & Demolition Projects' in November 2021* [10]. These guidelines replace the previous 2006 guidelines issued by The National Construction and Demolition Waste Council (NCDWC) and the Department of the Environment, Heritage and Local Government (DoEHLG) in 2006 [11]. The guidelines provide a practical approach which is informed by best practice in the prevention and management of C&D wastes and resources from design to construction of a project, including consideration of the deconstruction of a project. These guidelines have been followed in the preparation of this document and include the following elements:

- Predicted C&D wastes and procedures to prevent, minimise, recycle and reuse wastes;
- Design teams roles and approach;
- Relevant EU, national and local waste policy, legislation and guidelines;
- Waste disposal/recycling of C&D wastes at the site;
- Provision of training for Resource Waste Manager (RM) and site crew;
- Details of proposed record keeping system;
- Details of waste audit procedures and plan; and
- Details of consultation with relevant bodies i.e. waste recycling companies, Local Authority, etc.

Section 3 of the Guidelines identifies thresholds above which there is a requirement for the preparation of a RWMP for developments. The new guidance classifies developments on a two-tiered system. Developments which do not exceed any of the following thresholds may be classed as Tier 1 development:

- New residential development of less than 10 dwellings.
- Retrofit of 20 dwellings or less.
- New commercial, industrial, infrastructural, institutional, educational, health and other developments with an aggregate floor area less than 1,250m^2.

- Retrofit of commercial, industrial, infrastructural, institutional, educational, health and other developments with an aggregate floor area less than 2,000m^2; and
- Demolition projects generating in total less than 100m^3 in volume of C&D waste.

A development which exceeds one or more of these thresholds is classed as a Tier-2 project. This development is a Tier 2 development as it is an infrastructural, development with an aggregate floor area more than 1,250m^2.

Other guidelines followed in the preparation of this report include *'Construction and Demolition Waste Management – a handbook for Contractors and Site Managers'* [12] , published by FÁS and the Construction Industry Federation in 2002 and the previous guildines, 'Best Practice Guidelines for the Preparation of Waste Management Plans for Construction and Demolition Projects' (2006).

These guidance documents are considered to define best practice for C&D projects in Ireland and describe how C&D projects are to be undertaken such that environmental impacts and risks are minimised and maximum levels of waste recycling are achieved.

2.2 Regional Level

The proposed development is located in the Local Authority area of Cork City Council (CCC).

The *Southern Region Waste Management Plan 2015 – 2021*, which previously governed waste management policy in the CCC area, has been superseded as of March 2024 by the NWMPCE 2024 – 2030, the new national waste management plan for Ireland.

The NWMPCE does not dissolve the three regional waste areas. The NWCPCE sets the ambition of the plan to have a 0% total waste growth per person over the life of the Plan with an emphasis on non-household wastes including waste from commercial activities and the construction and demolition sector.

This Plan seeks to influence sustainable consumption and prevent the generation of waste, improve the capture of materials to optimise circularity and enable compliance with policy and legislation.

The national plan sets out the following strategic targets for waste management in the country that are relevant to the development:

National Targets

1B. (Construction Materials) 12% Reduction in Construction & Demolition Waste Generated by 2030.

3B. (Reuse Facilities) Provide for reuse at 10 Civic Amenity Sites, minimum.

The *Cork City Development Plan 2022 – 2028* [13] *is guided by the National Planning Framework along with several other national and regional plans, including the current regional waste management plan and the Waste Action Plan for a Circular Economy. Waste has been addressed under Chapter 5 Climate Change and Environment, Chapter 9 Environmental Infrastructure and Chapter 11 Placemaking and Managing Development with the following objectives:*

Objectives:

- *Objective 5.13 Waste Management – Construction and Operation of Development:* All development proposals should minimise waste and maximise

the recycling and re-use opportunities during the construction and operation phases.

- *Objective 9.12 Waste management:*
  a) To support the sustainable management of waste in line with the objectives of the Southern Region Waste Management Plan 2015-2021 and the National Waste Management Plan for a Circular Economy (NWMPCE) when published, which will replace the existing Regional Waste Management Plans.
  b) To facilitate the transition to a circular economy facilitating the value recovery and recirculation of resources in order to generate minimal waste.
  c) Continue to fulfil duties under the Waste Management (certification of historic unlicensed waste disposal and recovery activity) Regulations 2008 (S.I. No 524 of 2008), including those in relation to the identification and registration of closed landfills.
  d) To encourage the recycling of construction and demolition waste and the reuse of aggregate and other materials in future construction projects. Applications for large infrastructure projects shall be accompanied by a Construction and Environmental Management Plan that includes details of how construction and demolition waste generated is to be managed and, where reuse/recycling is not practicable, disposed of, in line with legislative requirements.
- *Objective 11.3 Housing Quality and Standards*
  e) Waste: Housing should be designed with adequate and easily accessible storage space that supports the separate collection of dry recyclables, food waste and residual waste;

2.3 Legislative Requirements

The primary legislative instruments that govern waste management in Ireland and applicable to the project are:

- Waste Management Act 1996 (No. 10 of 1996) as amended.
- Environmental Protection Act 1992 (No. 7 of 1992) as amended.
- Litter Pollution Act 1997 (No. 12 of 1997) as amended.
- Planning and Development Act 2000 (No. 30 of 2000) as amended [14].
- Circular Economy and Miscellaneous Provisions Act 2022.

One of the guiding principles of European waste legislation, which has in turn been incorporated into the *Waste Management Act 1996* as amended and subsequent Irish legislation, is the principle of *"Duty of Care"*. This implies that the waste producer is responsible for waste from the time it is generated through until its legal recycling, recovery or disposal (including its method of disposal). As it is not practical in most cases for the waste producer to physically transfer all waste from where it is produced to the final destination, waste contractors will be employed to physically transport waste to the final destination. Following on from this is the concept of *"Polluter Pays"* whereby the waste producer is liable to be prosecuted for pollution incidents, which may arise from the incorrect management of waste produced, including the actions of any contractors engaged (e.g. for transportation and disposal/recovery/recycling of waste).

It is therefore imperative that the developer ensures that the waste contractors engaged by construction contractors are legally compliant with respect to waste transportation, recycling, recovery and disposal. This includes the requirement that a contractor handle, transport and recycle/recover/dispose of waste in a manner that ensures that no adverse environmental impacts occur as a result of any of these activities.

A collection permit to transport waste must be held by each waste contractor which is issued by the National Waste Collection Permit Office (NWCPO). Waste receiving facilities must also be appropriately permitted or licensed. Operators of such facilities cannot receive any waste, unless in possession of a Certificate of Registration (COR) or waste permit granted by the relevant Local Authority under the *Waste Management (Facility Permit & Registration) Regulations 2007* and amended, or a waste licence granted by the EPA. The COR/permit/licence held will specify the type and quantity of waste able to be received, stored, sorted, recycled, recovered and/or disposed of at the specified site.

3.0 DESIGN APPROACH

The client and the design team have integrated the *'Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction & Demolition Projects'* guidelines into the design workshops, to help review processes, identify and evaluate resource reduction measures and investigate the impact on cost, time, quality, buildability, second life and management post construction. Further details on these design principals can be found within the aforementioned guidance document.

The design team have undertaken the design process in line with the international best practice principles to firstly prevent wastes, reuse where possible and thereafter sustainably reduce and recover materials. The below sections have been the focal point of the design process and material selections and will continued to be analysed and investigated throughout the design process and when selecting material.

As noted in the EPA guidelines, the approaches presented are based on international principles of optimising resources and reducing waste on construction projects through:

- Prevention;
- Reuse;
- Recycling;
- Green Procurement Principles;
- Off-Site Construction;
- Materials Optimisation; and
- Flexibility and Deconstruction.

3.1 Designing For Prevention, Reuse and Recycling

Undertaken at the outset and during project feasibility and evaluation the Client and Design Team considered:

- Establishing the potential for any reusable site assets (buildings, structures, equipment, materials, soils, etc.);
- Assessing any existing buildings on the site that can be refurbished either in part or wholly to meet the Client requirements; and
- Enabling the optimum recovery of assets on site.

3.2 Designing for Green Procurement

Waste prevention and minimisation pre-procurement have been discussed and will be further discussed in this section. The Design Team will discuss proposed design solutions, encourage innovation in tenders and incentivise competitions to recognise sustainable approaches. They will also discuss options for packaging reduction with the main Contractor and subcontractors/suppliers using measures such as 'Just-in-Time' delivery and use ordering procedures that avoid excessive waste. The Green procurement extends from the planning stage into the detailed design and tender stage

and will be an ongoing part of the long-term design and selection process for this development.

3.3 Designing for Off-Site Construction

Use of off-site manufacturing has been shown to reduce residual wastes by up to 90% (volumetric building versus traditional). The decision to use offsite construction is typically cost led but there are significant benefits for resource management. Some further considerations for procurement which are being investigated as part of the planning stage design process are listed as follows:

- Modular buildings as these can displace the use of concrete and the resource losses associated with concrete blocks such as broken blocks, mortars, etc.;
    - Modular buildings are typically pre-fitted with fixed plasterboard and installed insulation, eliminating these residual streams from site.
- Use of pre-cast structural concrete panels which can reduce the residual volumes of concrete blocks, mortars, plasters, etc.;
- The use of prefabricated composite panels for walls and roofing to reduce residual volumes of insulation and plasterboards;
- Using pre-cast hollow-core flooring instead of in-situ ready mix flooring or timber flooring to reduce the residual volumes of concrete/formwork and wood/packaging, respectively; and
- Designing for the preferential use of offsite modular units.

3.4 Designing for Materials Optimisation During Construction

To ensure manufacturers and construction companies adopt lean production models, including maximising the reuse of materials onsite as outlined in section 3.1, structures will be designed with the intent of designing out waste. This helps to reduce the environmental impacts associated with transportation of materials and from waste management activities. This includes investigating the use of standardised sizes for certain materials to help reduce the amount of offcuts produced on site, focusing on promotion and development of off-site manufacture.

3.5 Designing for Flexibility and Deconstruction

Design flexibility has and will be investigated throughout the design process to ensure that where possible products (including buildings) only contain materials that can be recycled and are designed to be easily disassembled. Material efficiency is being considered for the duration and end of life of a building project to produce; flexible, adaptable spaces that enable a resource-efficient, low-waste future change of use; durability of materials and how they can be recovered effectively when maintenance and refurbishment are undertaken and during disassembly/deconstruction.

4.0 DESCRIPTION OF THE PROJECT

4.1 Location, Size and Scale of the Development

The scope of this project is to provide a new bus interchange facility including 4 additional bus bays, appropriate pedestrian infrastructure, cycle parking, lighting and servicing within the existing Black Ash Park and Ride. The Black Ash Park and Ride is accessible through Mick Barry Road, between Kinsale Road and N27 South City Link Road junctions. The site is currently operating below its approximately 940 parking space capacity. The proposed layout will reduce the capacity by 104 spaces by implementing new bus interchange services along with new bus standing area. Figure 1 below illustrates the general arrangement.

There are both existing gas and leachate collection pipes running through the site, which must not be disturbed. As a result, careful consideration must be given to any new developments on the site, ensuring minimal disruption to the compacted ground while addressing environmental risks associated with the landfill's legacy. There are also three gas monitoring stations and one ground water monitoring stations near the proposed works.

The existing road structure of the car parking area within the Black Ash Park and Ride consists of:

- 40mm wearing course
- 50mm base course and
- 150mm minimum sub-base and drainage layer
- 100mm reinforced A393 concrete (K35-20) slab
- Geotextile LLDPE layers
- Capping
- Compacted waste

The existing road structure of the roadway lanes within the Black Ash Park and Ride consists of:

- 40mm wearing course
- 50mm base course
- 90mm road base course (clause 903)
- 150mm minimum sub-base and drainage layer
- 100mm reinforced A393 concrete (K35-20) slab
- Geotextile LLDPE layers
- Capping
- Compacted waste

Above the gas drainage systems, the existing road construction detail consists of two layers of asphalt, 45mm and 55mm. Below this is 300mm of drainage layer on 100mm concrete layer reinforced with A393 mesh. Below the reinforced concrete layer, lies a geomembrane (Terram 500 or similar), a LLDPE layer and a second geomembrane (Terram 500 or similar) layer and a layer of ecomposite pozidrain. Under these layers, exist 300mm to 500mm of capping above 6m to 8m of waste material.

Figure 4.1 Site location Map of proposed Park and Ride facility

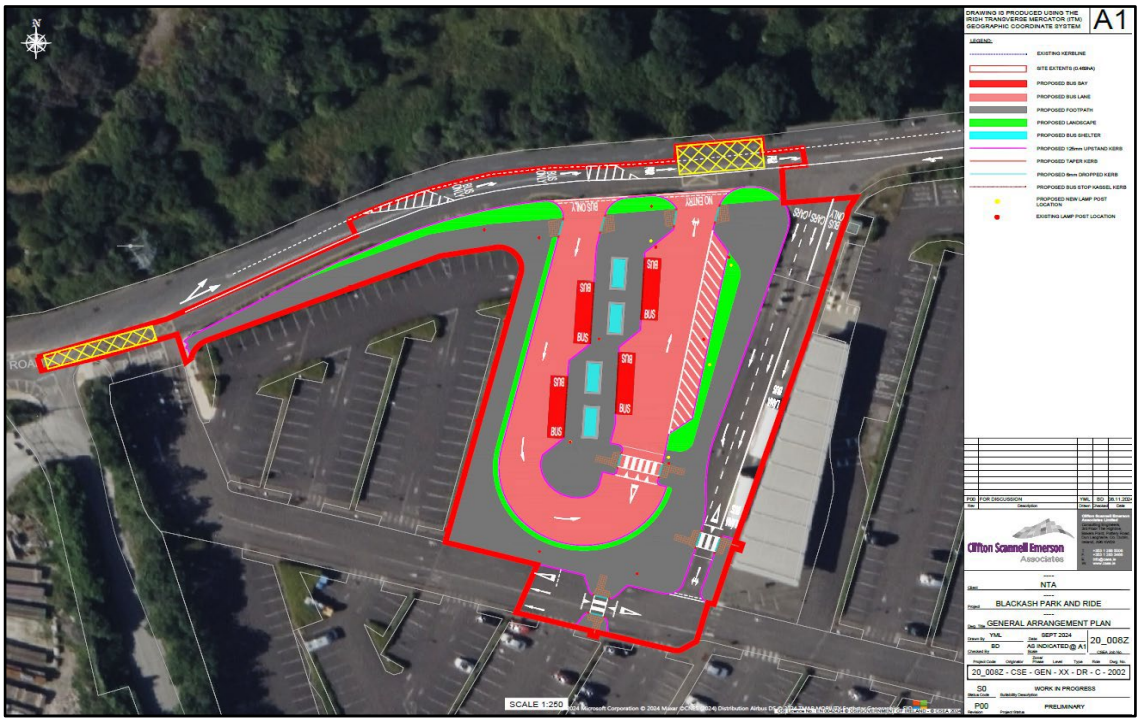


Figure 4.2 Proposed Development Layout (source: CSEA)

4.2 Details of the Non-Hazardous Wastes to be produced

There will be soil, stones, clay, gravel and made ground excavated to facilitate construction of new foundations and the installation underground services. The development engineers Clifton Scannell Emerson Associates have estimated that 2,270m^3 of material will need to be excavated to do so. It is currently envisaged that all excavated material will need to be removed offsite due to the limited opportunities for reuse on site. Excavated material being removed from site will be taken for appropriate offsite reuse, recovery, recycling and / or disposal.

During the construction phase there may be a surplus of building materials, such as timber off-cuts, broken concrete blocks, cladding, plastics, metals and tiles generated. There may also be excess concrete during construction which will need to be disposed of. Plastic and cardboard waste from packaging and supply of materials will also be generated. The contractor will be required to ensure that oversupply of materials is kept to a minimum and opportunities for reuse of suitable materials is maximised.

Waste will also be generated from construction workers e.g. organic / food waste, dry mixed recyclables (waste paper, newspaper, plastic bottles, packaging, aluminium cans, tins and Tetra Pak cartons), mixed non-recyclables and potentially sewage sludge from temporary welfare facilities provided on site during the construction phase. Waste printer / toner cartridges, waste electrical and electronic equipment (WEEE) and waste batteries may also be generated infrequently from site offices.

4.3 Potential Hazardous Wastes to be produced

4.3.1 Contaminated Soil

Prior to any excavations being carried out on site, a site investigation and a Waste Classification report will be created using HazWasteOnline™ software to classify excavated material for disposal.

In the event that any potentially contaminated material is encountered, it will need to be segregated from clean / inert material, tested and classified as either non-hazardous or hazardous in accordance with the EPA publication entitled 'Waste Classification: List of Waste & Determining if Waste is Hazardous or Non-Hazardous' [14] using the HazWasteOnline™ application (or similar approved classification method). The material will then need to be classified as clean, inert, non-hazardous or hazardous in accordance with the EC Council Decision 2003/33/EC [15], which establishes the criteria for the acceptance of waste at landfills.

In the event that Asbestos Containing Materials (ACMs) are found within the excavated material, the removal will only be carried out by a suitably permitted waste contractor, in accordance with S.I. No. 386 of 2006 Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010. All asbestos will be taken to a suitably licensed or permitted facility.

In the event that hazardous soil, or historically deposited waste is encountered during the construction phase, the contractor will notify CCC and provide a Hazardous / Contaminated Soil Management Plan, to include estimated tonnages, description of location, any relevant mitigation, destination for disposal / treatment, in addition to information on the authorised waste collector(s).

4.3.2 Fuel/Oils

As fuels and oils are classed as hazardous materials, any on-site storage of fuel/oil, all storage tanks and all draw-off points will be bunded (or stored in double-skinned tanks) and located in a dedicated, secure area of the site. Provided that these requirements

are adhered to and site crew are trained in the appropriate refuelling techniques, it is not expected that there will be any fuel/oil wastage at the site.

4.3.3 Invasive Plant Species

Prior to construction commencing, a site invasive species survey including a site walkover survey of the entire site, and around part of the outside perimeter to search for any invasive species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) will be undertaken.

If any invasive species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) are identified on site, An invasive species management plan will need to be produced and submitted to CCC outlining a management plan to deal with the invasive plant species that may be discovered during the construction phase.

4.3.4 Asbestos

If ACMs are detected on site, the removal of asbestos or ACMs will be carried out by a suitably qualified contractor and ACMs will only be removed from site by a suitably permitted / licenced waste contractor, in accordance with the *Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010 and the Best Practice Guidance for Handling Asbestos (2023).* All material will be taken to a suitably licensed or permitted facility.

4.3.5 Other known Hazardous Substances

Paints, glues, adhesives and other known hazardous substances will be stored in designated areas. They will generally be present in small volumes only and associated waste volumes generated will be kept to a minimum. Wastes will be stored in appropriate receptacles pending collection by an authorised waste contractor.

In addition, WEEE (containing hazardous components), printer toner/cartridges, batteries (Lead, Ni-Cd or Mercury) and/or light bulbs and other mercury containing waste may be generated from during C&D activities or temporary site offices. These wastes (if encountered) will be stored in appropriate receptacles in designated areas of the site pending collection by an authorised waste contractor.

5.0 ROLES AND RESPONSIBILITIES

The *Best Practice Guidelines on the Preparation of Resource Waste Management Plans for Construction and Demolition Projects* promotes that a suitably qualified Resource Manager (RM) with expertise in waste and resource management to implement the RWMP will be appointed. The RM may be performed by number of different individuals over the life-cycle of the Project, however it is intended to be a reliable person chosen from within the Planning/Design/Contracting Team, who is technically competent and appropriately trained, who takes the responsibility to ensure that the objectives and measures within the Project RWMP are complied with. The RM is assigned the requisite authority to meet the objective and obligations of the RWMP. The role will include the important activities of conducting waste checks/audits and adopting construction methodology that is designed to facilitate maximum reuse and/or recycling of waste.

5.1 Role of the Client

The Client and the body establishing the aims and the performance targets for the project.

- The Client has commissioned the preparation and submission of this RWMP as part of the design and planning submission;
- The Client is to commission the preparation and submission of an updated RWMP as part of the construction tendering process;
- The Client will ensure that the RWMP is agreed on and submitted to the local authority and their agreement obtained prior to commencement of works on site;
- The Client is to request the end-of-project RWMP from the Contractor.

5.2 Role of the Client Advisory Team

The Client Advisory Team or Design Team is responsible for:

- Drafting and maintaining the RWMP through the design, planning and procurement phases of the project;
- Appointing a Resource Manager (RM) to track and document the design process, inform the Design Team and prepare the RWMP.
- Including details and estimated quantities of all projected waste streams with the support of environmental consultants/scientists. This will also include data on waste types (e.g. waste characterisation data, contaminated land assessments, site investigation information) and prevention mechanisms (such as by-products) to illustrate the positive circular economy principles applied by the Design Team;
- Handing over of the RWMP to the selected Contractor upon commencement of construction of the development, in a similar fashion to how the safety file is handed over to the Contractor;
- Working with the Contractor as required to meet the performance targets for the project.

5.3 Future Role of the Contractor

The construction contractors have not yet been decided upon for this RWMP. However, once select they will have major roles to fulfil. They will be responsible for:

- Preparing, implementing and reviewing the RWMP during the construction phase (including the management of all suppliers and sub-contractors) as per the requirements of the EPAGuidlines
- Identifying a designated and suitably qualified RM who will be responsible for implementing the RWMP;
- Identifying all hauliers to be engaged to transport each of the resources / wastes off-site;
- Implementing waste management policies whereby waste materials generated on site are to be segregated as far as practicable;
- Identifying all destinations for resources taken off-site. As above, any resource that is legally classified as a ‘waste’ must only be transported to an authorised waste facility;
- End-of-waste and by-product notifications addressed with the EPA where required;
- Clarification of any other statutory waste management obligations, which could include on-site processing;
- Full records of all resources (both wastes and other resources) will be maintained for the duration of the project; and
- Preparing a RWMP Implementation Review Report at project handover.

6.0 KEY MATERIALS & QUANTITIES

6.1 Project Resource Targets

Project specific resource and waste management targets for the site have not yet been set and this information will be updated for these targets once these targets have been confirmed by the client. However, it is expected for projects of this nature that a minimum of 70% of waste is fully re-used, recycled or recovered where possible. Target setting will inform the setting of project-specific benchmarks to track target progress. Typical Key Performance Indicators (KPIs) that will be used to set targets include (as per guidelines):

- Weight (tonnes) or Volume (m^3) of waste generated per construction value;
- Weight (tonnes) or Volume (m^3) of waste generated per construction floor area (m^2);
- Fraction of resource reused on site;
- Fraction of resource notified as by-product;
- Fraction of waste segregated at source before being sent off-site for recycling/recovery; and
- Fraction of waste recovered, fraction of waste recycled, or fraction of waste disposed.

6.2 Main C&D Waste Categories

The main non-hazardous and hazardous waste streams that could be generated by the construction activities at a typical site are shown in Table 6.1. The List of Waste (LoW) code for each waste stream is also shown.

Table 6.1 Typical waste types generated and LoW codes (*individual waste types may contain hazardous substances)

Waste Material	LoW/EWC Code
Concrete, bricks, tiles, ceramics	17 01 01-03 & 07
Wood, glass and plastic	17 02 01-03
Bituminous mixtures, coal tar and tarred products	17 03 01*, 02 & 03*
Metals (including their alloys) and cable	17 04 01-11
Soil and stones	17 05 03* & 04
Paper and cardboard	20 01 01
Mixed C&D waste	17 09 04
Green waste	20 02 01
Electrical and electronic components	20 01 35 & 36
Batteries and accumulators	20 01 33 & 34
Liquid fuels	13 07 01-10
Chemicals (solvents, pesticides, paints, adhesives, detergents etc.)	20 01 13, 19, 27-30
Organic (food) waste	20 01 08
Mixed Municipal Waste	20 03 01

7.0 WASTE MANAGEMENT

There will be some waste materials generated from modifications required to the existing internal access road and surface water, foul and process wastewater drainage systems.

Table 7.1 shows the breakdown of C&D waste types produced on a typical site based on data from the EPA *National Waste Reports, the GMIT* [16] and other research reports.

Table 7.1 Waste materials generated on a typical Irish construction site

Waste Types	%
Mixed C&D	33
Timber	28
Metals	8
Concrete	6
Other	15
Total	**100**

Table 7.2 shows the predicted construction waste generation for the Proposed Development based on the information available to date along with the targets for management of the waste streams. The predicted waste amounts are based on an average park and ride development waste generation rate per m^2, using the waste breakdown rates shown in Table 7.1.

Table 7.2 Estimated off-site reuse, recycle and disposal rates for construction waste

Waste Type	Tonnes	Reuse		Recycle/Recovery		Disposal	
		%	Tonnes	%	Tonnes	%	Tonnes
Mixed C&D	13.8	10	1.4	80	11.1	10	1.4
Timber	4.7	40	1.9	55	2.6	5	0.2
Metals	3.4	5	0.2	90	3.0	5	0.2
Concrete	2.5	30	0.8	65	1.6	5	0.1
Other	12.6	20	2.5	60	7.6	20	2.5
Total	**37**		**6.7**		**25.9**		**4.4**

In addition to the information in Table 7.2, it is estimated that c. 2,270 m^3 of soil, stone, gravel, clay & made ground will be excavated to facilitate construction of new foundations and underground services. It is estimated that all 2,270 m^3 of material is to be removed off site due to the limited opportunities for reuse on site. Excavated material being removed from site will be taken for appropriate offsite reuse, recovery, recycling and / or disposal.

It should be noted that until final materials and detailed construction methodologies have been confirmed, it is difficult to predict with a high level of accuracy the construction waste that will be generated from the proposed works as the exact materials and quantities may be subject to some degree of change and variation during the construction process.

7.1 Proposed Resource and Waste Management Options

Waste materials generated will be segregated on site, where it is practical. Where the on-site segregation of certain waste types is not practical, off-site segregation will be carried out. There will be skips and receptacles provided to facilitate segregation at source where feasible. All waste receptacles leaving site will be covered or enclosed. The appointed waste contractor will collect and transfer the wastes as receptacles are filled. There are numerous waste contractors in the CCC Region that provide this service.

All waste arisings will be handled by an approved waste contractor holding a current waste collection permit. All waste arising's requiring disposal off-site will be reused,

recycled, recovered or disposed of at a facility holding the appropriate registration, permit or licence, as required.

National End-of-Waste Decision EoW-N001/2023 (Regulation 28) published by the EPA in September 2023, establishes criteria determining when recycled aggregate resulting from a recovery operation ceases to be waste. Material from this proposed development will be investigated to see if it can cease to be a waste under the requirements of the National End of Waste Criteria for Aggregates.

During construction, some of the sub-contractors on site will generate waste in relatively low quantities. The transportation of non-hazardous waste by persons who are not directly involved with the waste business, at weights less than or equal to 2 tonnes, and in vehicles not designed for the carriage of waste, are exempt from the requirement to have a waste collection permit (per Article 30 (1) (b) of the Waste Collection Permit Regulations 2007, as amended). Any sub-contractors engaged that do not generate more than 2 tonnes of waste at any one time can transport this waste off-site in their work vehicles (which are not designed for the carriage of waste). However, they are required to ensure that the receiving facility has the appropriate COR / permit / licence.

Written records will be maintained by the contractor(s) detailing the waste arising throughout the construction phase, the classification of each waste type, waste collection permits for all waste contactors who collect waste from the site and COR/permit or licence for the receiving waste facility for all waste removed off site for appropriate reuse, recycling, recovery and/or disposal.

Dedicated bunded storage containers will be provided for hazardous wastes which may arise such as batteries, paints, oils, chemicals etc, if required.

The management of the main waste streams is outlined as follows:

Soil, Stone, Gravel, Clay & Made Ground

The waste hierarchy states that the preferred option for waste management is prevention and minimisation of waste, followed by preparing for reuse and recycling / recovery, energy recovery (i.e. incineration) and, least favoured of all, disposal. The excavations are required to facilitate construction works so the preferred option (prevention and minimisation) cannot be accommodated for the excavation phase.

It is anticipated that 2,270m^3 of Soil, Stone, Gravel, Clay & Made Ground will be excavated to facilitate construction of new foundations and the installation underground services. It is anticipated that all 2,270 m^3 of excavated material will need to be removed offsite for appropriate reuse, recovery and/or disposal due to due to the limited opportunities for reuse on site.
If material is removed off-site it could be reused as a by-product (and not as a waste). If this is done, it will be done in accordance with Regulation 27 of the European Communities (Waste Directive) Regulations 2011, as amended which requires that certain conditions are met and that by-product notifications are made to the EPA via their online notification form. Excavated material should not be removed from site until approval from the EPA has been received. The potential to reuse material as a by-product will be confirmed during the course of the excavation works, with the objective of eliminating any unnecessary disposal of material.

The next option (beneficial reuse) may be appropriate for the excavated material. Clean inert material may be used as fill material in other construction projects or engineering fill for waste licensed sites. Beneficial reuse of surplus excavation material as engineering fill may be subject to further testing to determine if materials meet the specific engineering standards for their proposed end use.

Any nearby sites requiring clean fill/capping material will be contacted to investigate reuse opportunities for clean and inert material. If any of the material is to be reused on another site as a by-product (and not as a waste), this will be done in accordance with Regulation 27. Similarly, if any soils/stones are imported onto the site from another construction site as a by-product, this will also be done in accordance with Regulation 27. Regulation 27 will be investigated to see if the material can be imported onto this site for beneficial reuse instead of using virgin materials.

If the material is deemed to be a waste, then removal and reuse / recovery / disposal of the material will be carried out in accordance with the waste frame works directive (Directive 2008/98/EC), the *Waste Management Act 1996* as amended, the *Waste Management (Collection Permit) Regulations 2007* as amended and the *Waste Management (Facility Permit & Registration) Regulations 2007* as amended. Once all available beneficial reuse options have been exhausted, the options of recycling and recovery at waste permitted and licensed sites will be considered.

In the unlikely event that contaminated material is encountered and subsequently classified as hazardous, this material will be stored separately to any non-hazardous material. It will require off-site treatment at a suitable facility or disposal abroad via Trans frontier Shipment of Wastes (TFS).

Bedrock
While it is not envisaged that bedrock will be encountered, if bedrock is encountered, it is anticipated that it will not be crushed on site. Any excavated rock is expected to be removed off- site for appropriate reuse, recovery and / or disposal.

Silt & Sludge
Silt and petrochemical interception will be carried out on runoff and pumped water from site works, where required. Sludge and silt will then be collected by a suitably licensed contractor and removed offsite.

Concrete Blocks, Bricks, Tiles & Ceramics
The majority of concrete generated as part of the construction works are expected to be clean, inert material and will be recycled, where possible.

Hard Plastic
As hard plastic is a highly recyclable material, much of the plastic generated will be primarily from material off-cuts. All recyclable plastic will be segregated and recycled, where possible.

Timber
Timber that is uncontaminated, i.e. free from paints, preservatives, glues etc., will be disposed of in a separate skip and recycled off-site.

Metal
Metals will be segregated where practical and stored in skips. Metal is highly recyclable and there are numerous companies that will accept these materials.

Waste Electrical and Electronic Equipment (WEEE)
Any WEEE will be stored in dedicated covered cages/receptacles/pallets pending collection for recycling.

Other Recyclables
Where any other recyclable wastes such as cardboard and soft plastic are generated, these will be segregated at source into dedicated skips and removed off-site.

Non-Recyclable Waste

C&D waste which is not suitable for reuse or recovery, such as polystyrene, some plastics and some cardboards, will be placed in separate skips or other receptacles. Prior to removal from site, the non-recyclable waste skip/receptacle will be examined by a member of the waste team (see Section 9.0) to determine if recyclable materials have been placed in there by mistake. If this is the case, efforts will be made to determine the cause of the waste not being segregated correctly and recyclable waste will be removed and placed into the appropriate receptacle.

Asbestos Containing Materials

Any asbestos or ACM found on-site will be removed by a suitably competent contractor and disposed of as asbestos waste before the construction works begin. All asbestos removal work or encapsulation work must be carried out in accordance with the Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010.

Other Hazardous Wastes

On-site storage of any hazardous wastes produced (i.e. contaminated soil if encountered and/or waste fuels) will be kept to a minimum, with removal off-site organised on a regular basis. Storage of all hazardous wastes on-site will be undertaken so as to minimise exposure to on-site personnel and the public and to also minimise potential for environmental impacts. Hazardous wastes will be recovered, wherever possible, and failing this, disposed of appropriately.

On-Site Crushing

It is currently not envisaged that the crushing of waste materials will occur on-site. However, if the crushing of material is to be undertaken, a mobile waste facility permit will first be obtained from CCC and the destination of the accepting waste facility or if an application under Regulation 28 will be made using National End-of-Waste Decision EoW-N001/2023, will be supplied to the CCC waste unit.

It should be noted that until a construction contractor is appointed it is not possible to provide information on the specific destinations of each construction waste stream. Prior to commencement of construction and removal of any waste offsite, details of the destination of each waste stream will be provided to CCC by the project team.

7.2 Tracking and Documentation Procedures for Off-Site Waste

All waste will be documented prior to leaving the site. Waste will be weighed by the contractor, either by weighing mechanism on the truck or at the receiving facility. These waste records will be maintained on site by the nominated project RM (see Section 9.0).

All movement of waste and the use of waste contractors will be undertaken in accordance with the Waste Framework Directive (Directive 2008/98/EC), the *Waste Management Acts 1996 - 2011*, *Waste Management (Collection Permit) Regulations 2007* as amended and *Waste Management (Facility Permit & Registration) Regulations 2007* and amended. This includes the requirement for all waste contractors to have a waste collection permit issued by the NWCPO. The nominated project waste manager (see Section 9.0) will maintain a copy of all waste collection permits on-site.

If the waste is being transported to another site, a copy of the Local Authority waste COR/permit or EPA Waste/IE Licence for that site will be provided to the nominated project waste manager (see Section 9.0). If the waste is being shipped abroad, a copy of the Transfrontier Shipping (TFS) notification document will be obtained from DCC (as the relevant authority on behalf of all local authorities in Ireland) and kept on-site along with details of the final destination (COR, permits, licences etc.). A receipt from the final destination of the material will be kept as part of the on-site waste management records.

All information will be entered in a waste management recording system to be maintained on site.

8.0 ESTIMATED COST OF WASTE MANAGEMENT

An outline of the costs associated with different aspects of waste management is provided below.

The total cost of C&D waste management will be measured and will take into account handling costs, storage costs, transportation costs, revenue from rebates and disposal costs.

8.1 Reuse

By reusing materials on site, there will be a reduction in the transport and recycle/recovery/disposal costs associated with the requirement for a waste contractor to take the material off-site.

Clean and inert soils, gravel, stones etc. which cannot be reused on site may be used as access roads or capping material for landfill sites etc. This material is often taken free of charge or a reduced fee for such purposes, reducing final waste disposal costs.

8.2 Recycling

Salvageable metals will earn a rebate which can be offset against the costs of collection and transportation of the skips.

Clean uncontaminated cardboard and certain hard plastics can also be recycled. Waste contractors will charge considerably less to take segregated wastes, such as recyclable waste, from a site than mixed waste.

Timber can be recycled as chipboard. Again, waste contractors will charge considerably less to take segregated wastes such as timber from a site than mixed waste.

8.3 Disposal

Landfill charges are currently at around €140 - €160 per tonne which includes a €85 per tonne landfill levy specified in the *Waste Management (Landfill Levy) Regulations 2015 as amended*. In addition to disposal costs, waste contractors will also charge a collection fee for skips.

Collection of segregated C&D waste usually costs less than municipal waste. Specific C&D waste contractors take the waste off-site to a licensed or permitted facility and, where possible, remove salvageable items from the waste stream before disposing of the remainder to landfill. Clean soil, rubble, etc. is also used as fill/capping material, wherever possible.

9.0 TRAINING PROVISIONS

A member of the construction team will be appointed as the RM to ensure commitment, operational efficiency and accountability in relation to waste management during the C&D phases of the development.

9.1 Resource Waste Manager Training and Responsibilities

The nominated RM will be given responsibility and authority to select a waste team if required, i.e. members of the site crew that will aid them in the organisation, operation and recording of the waste management system implemented on site.

The RM will have overall responsibility to oversee, record and provide feedback to the client on everyday waste management at the site. Authority will be given to the Waste Manager to delegate responsibility to sub-contractors, where necessary, and to coordinate with suppliers, service providers and sub-contractors to prioritise waste prevention and material salvage.

The RM will be trained in how to set up and maintain a record keeping system, how to perform an audit and how to establish targets for waste management on site. The RM will also be trained in the best methods for segregation and storage of recyclable materials, have information on the materials that can be reused on site and be knowledgeable in how to implement this RWMP.

9.2 Site Crew Training

Training of site crew in relation to waste is the responsibility of the Waste Manager and, as such, a waste training program will be organised. A basic awareness course will be held for all site crew to outline the RWMP and to detail the segregation of waste materials at source. This may be incorporated with other site training needs such as general site induction, health and safety awareness and manual handling.

This basic course will describe the materials to be segregated, the storage methods and the location of the Waste Storage Area (WSA). A sub-section on hazardous wastes will be incorporated into the training program and the particular dangers of each hazardous waste will be explained.

10.0 TRACKING AND TRACING / RECORD KEEPING

Records will be kept for all waste material which leaves the site, either for reuse on another site, recycling or disposal. A recording system will be put in place to record the waste arisings on Site.

A waste tracking log will be used to track each waste movement from the site. On exit from the site, the waste collection vehicle driver will stop at the site office and sign out as a visitor and provide the security personnel or RM with a waste docket (or Waste Transfer Form (WTF) for hazardous waste) for the waste load collected. At this time, the security personnel will complete and sign the Waste Tracking Register with the following information:

- Date
- Time
- Waste Contractor
- Company waste contractor appointed by, e.g. Contractor or subcontractor name
- Collection Permit No.
- Vehicle Reg.
- Driver Name
- Docket No.
- Waste Type
- LoW
- Weight/Quantity

The waste vehicle will be checked by security personal or the RM to ensure it has the waste collection permit no. displayed and a copy of the waste collection permit in the vehicle before they are allowed to remove the waste from the site.

The waste transfer dockets will be transferred to the RM on a weekly basis and can be placed in the Waste Tracking Log file. This information will be forwarded onto the CCC Waste Regulation Unit when requested.

Each subcontractor that has engaged their own waste contractor will be required to maintain a similar waste tracking log with the waste dockets / WTF maintained on file and available for inspection on site by the main contractor as required. These subcontractor logs will be merged with the main waste log.

Waste receipts from the receiving waste facility will also be obtained by the site contractor(s) and retained. A copy of the Waste Collection Permits, CORs, Waste Facility Permits and Waste Licences will be maintained on site at all times and will be periodically checked by the RM. Subcontractors who have engaged their own waste contractors, will provide the main contractor with a copy of the waste collection permits and COR / permit / licence for the receiving waste facilities and maintain a copy on file, available for inspection on site as required.

11.0 OUTLINE WASTE AUDIT PROCEDURE

11.1 Responsibility for Waste Audit

The appointed RM will be responsible for conducting a waste audit at the site during the C&D phase of the proposed Project. Contact details for the nominated RM will be provided to the CCC Waste Regulation Unit after the main contractor is appointed and prior to any material being removed from site.

11.2 Review of Records and Identification of Corrective Actions

A review of all waste management costs and the records for the waste generated and transported off-site should be undertaken mid-way through the construction phase of the proposed Project.

If waste movements are not accounted for, the reasons for this will be established in order to see if and why the record keeping system has not been maintained. The waste records will be compared with the established recovery / reuse / recycling targets for the site. Each material type will be examined, in order to see where the largest percentage waste generation is occurring. The waste management methods for each material type will be reviewed in order to highlight how the targets can be achieved.

Upon completion of the C&D phase, a final report will be prepared, summarising the outcomes of waste management processes adopted and the total recycling / reuse / recovery figures for the development.

12.0 CONSULTATION WITH RELEVANT BODIES

12.1 Local Authority

Once the construction contractor has been appointed and they have appointed waste contractors, and prior to removal of any C&D waste materials off-site, details of the proposed destination of each waste stream will be provided to the CCC Waste Regulation Unit.

CCC will also be consulted, as required, throughout the excavation and construction phases in order to ensure that all available waste reduction, reuse and recycling

opportunities are identified and utilised and that compliant waste management practices are carried out.

12.2 Recycling / Salvage Companies

The appointed waste contractor for the main waste streams managed by the construction contractors will be audited in order to ensure that relevant and up-to-date waste collection permits and facility registrations / permits / licences are held. In addition, information will be obtained regarding the feasibility of recycling each material, the costs of recycling / reclamation, the means by which the wastes will be collected and transported off-site, and the recycling / reclamation process each material will undergo off-site.

13.0 CONCLUSION

Adherence to this plan will also ensure that waste management during the construction phase at the proposed development is carried out in accordance with the requirements in the EPA's Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction & Demolition Projects and the CCC Waste Bye-Laws and the NWMPCE.

14.0 REFERENCES

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9. Circular Economy and Miscellaneous Provisions Act 2022.
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17. Environmental Protection Agency (EPA), *National Waste Database Reports 1998 – 2020*.
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