

ATKINS

Member of the SNC-Lavalin Group

Residential Development at Clover Hill Court, Bessboro Road, Mahon, Cork

EIA Screening Report

Cork City Council

October 2022



Notice

This document and its contents have been prepared and are intended solely as information for Cork City Council (CCC) and use in relation to the proposed Residential Development at Clover Hill Court, Bessboro Road, Mahon, Cork.

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Contents

Chapter	Page
1. Introduction	1
1.1. The Proposed Project	1
1.2. Purpose of this Report	1
2. Methodology	3
2.1. Relevant Legislation	4
3. Environmental Impact Assessment Screening	6
3.1. Step 1 - Mandatory Screening for EIA	6
3.2. Step 2 - Threshold Screening for EIA	6
3.3. Step 3 - Determining if the project is likely to have significant effect on the receiving environment.	7
3.4. Potential for Significant Effects on the Receiving Environment	28
3.5. Screening Conclusion	28
4. References	30

Figures

Figure 1-1 - Proposed Location (including red-line site boundary) (Source: Punch Consulting Engineers, 2022)	2
Figure 2-1 - EIA Screening Process (Source: 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports' (EPA, 2022)).	4
Figure 3-1 - Proposed Development Layout (Punch Consulting Engineers, 2022)	10

Tables

Table 3-1 - Committed Development in the vicinity of the proposed residential development.	20
Table 3-2 - Seveso Establishments Within 15km of the proposed residential development	24

1. Introduction

Atkins Ireland have been commissioned by Cork City Council (CCC) to prepare an Environmental Impact Assessment (EIA) Screening Report as part of a Part 8 planning application for a new residential development at Clover Hill Court, Bessboro Road, Mahon, Cork.

1.1. The Proposed Project

The proposed development will consist of removal of existing floor slab of former commercial building, relocation of existing substation, construction of 2 no. apartment buildings (1 no. 3-4 storey building and 1 no. 4-5 storey building), linked at ground floor, containing 84 no. apartments in total (28 no. 1-bed apartments and 56 no. 2-bed apartments), each with private balcony/winter garden/terrace, as well as ground floor bin & bicycle stores and plant (including 1 no. relocated substation and 1 no. additional substation), 6 no. 2-storey 3-bed terraced houses, each with private garden, and all associated site development works, services provision, road infrastructure, landscaping/public realm works, 49 no. car parking spaces (43 no. on-street car parking spaces and 6 no. on-curtilage car parking spaces) and 188 no. bicycle parking spaces (94 no. bicycle parking spaces in apartment buildings, 52 no. bicycle parking spaces in freestanding external shelters and 42 no. bicycle parking spaces in open external racks).

This EIA Screening Report has been prepared for the proposed residential development (i.e. the subject of this planning application). The location of the proposed residential development is illustrated in Figure 1.1.

1.2. Purpose of this Report

This report has been prepared to support a planning application by CCC in relation to the proposed residential development. The purpose of this report is to determine whether the proposed project requires the preparation of an Environmental Impact Assessment Report (EIAR). The proposed project has been screened to generate a summarised overview of the potential impacts on the receiving environment, and in the context of relevant statutory requirements

A Stage 1 Screening for Appropriate Assessment has also been prepared (Atkins, 2022). The AA Screening concludes the following *'the proposed project, individually or in-combination with other plants and projects, will not have likely significant effects on Great Island Channel SAC or Cork Harbour SPA in view of their conservation objectives. Thus, it is concluded that the proposed project does not need to proceed to Appropriate Assessment. Should the scope or nature of the proposed project change, a new Screening for Appropriate Assessment report shall be required'* (Atkins, 2022).



Figure 1-1 - Proposed Location (including red-line site boundary) (Source: Punch Consulting Engineers, 2022)

2. Methodology

The Environmental Impact Assessment (EIA) screening has been undertaken for this project based on the following methodology. The project has been screened in accordance with Section 3.2 of the 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports' (EPA, 2022), the Environmental Impact Directive (85/337/EEC) and all subsequent relevant amendments, Planning and Development Regulations (2001-2022), including S.I. No. 296 of 2018 - European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, which came into operation on 1st September 2018 and The Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (DoHPLG, 2018).

As set out under the relevant legislation (detailed further in Section 2.1 of this report), there are three key steps when carrying out EIA screening for a particular project;

- **Step 1** is to determine if the proposed infrastructure works represent a project as understood by the Directive and if a mandatory EIAR is required. Such projects are defined in Article 4 of the EIA Directive and set out in Annexes I and II of the Directive and Planning and Development Regulations (2001-2022), specifically Schedule 5, Part 1 – Development for the purposes of Part 10.
- **Step 2** is to determine whether the project exceeds a specific threshold as set out in Planning and Development Regulations (2001-2022) Schedule 5, Part 2 – Development for the purposes of Part 10 (the only type of project to which thresholds do not apply are those considered to always be likely to have significant effects and therefore require an EIAR).
- **Step 3** is to determine if the project is likely to have significant effects on the receiving environment. There are no exacting rules as to what constitutes “significant” in terms of environmental impacts. The responsibility is on Planning Authorities to carefully examine every aspect of a development in the context of characterisation of the project; location of the project and type and characteristics of potential impacts. It is generally not necessary to provide specialist studies or technical reports to complete this screening process, rather to investigate where further studies may be required, and where risks, if any, to the integrity of the receiving environment may lie.

For the purposes of screening sub-threshold development for an EIA, all of the relevant information as presented within the EIA Planning and Development Regulations 2018 (Schedule 7A) has been provided on behalf of the applicant, CCC. The potential of this project to pose a significant impact to the receiving environment has also been evaluated in accordance with criteria listed in the Planning & Development Regulations (2001-2022), including S.I. No. 296 of 2018 - European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (Schedule 7).

The findings of the EIA screening assessment prepared for the project has informed our professional opinion as to whether an EIAR is warranted for the Project, with due regard to all relevant statutory requirements and technical guidance. The enclosed assessment is intended to assist the Planning Authority in ultimately arriving at their determination as to whether an EIA is required.

Figure 2-1 provides a summary of the main steps involved in the EIA Screening Process.

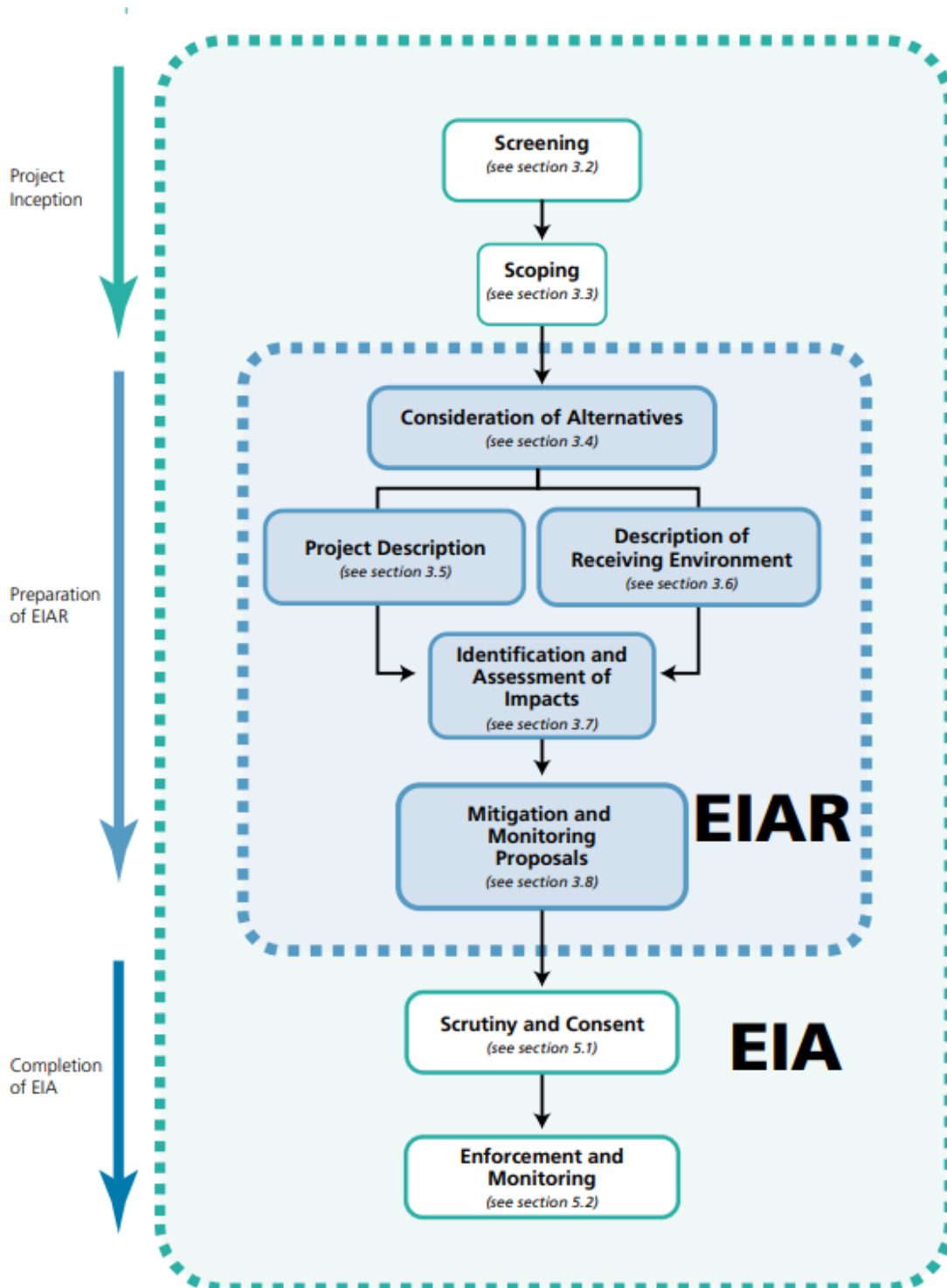


Figure 2-1 - EIA Screening Process (Source: ‘Guidelines on the Information to be contained in Environmental Impact Assessment Reports’ (EPA, 2022)).

2.1. Relevant Legislation

The Environmental Impact Directive (85/337/EEC) was brought into force in 1985. Subsequent amendments were made with the following pieces of legislation - 97/11/EC, 2003/35/EC, 2009/31/EC, 2011/92/EU and 2014/52/EU. The Directive was originally transposed into Irish Law by the European Communities (Environmental Impact Assessment) Regulations, 1989 (S.I. No. 349/1989). This amended the Local Government (Planning and Development Act) 1963 and introduced the requirement for an Environmental Impact Assessment in certain specified circumstances. The most recent amendment to the Directive is focused on clarifying and simplifying the process of EIA. The

screening criteria have been updated, and Member States have a mandate to simplify their assessment procedures. EIA reports are to be made more readily understandable to members of the general public.

New EIA Regulations ((Planning and Development) Environmental Impact Assessment) Regulations 2010 (S.I No. 296 of 2018)) transposing the 2014 EIA Directive were recently adopted and came into operation on 1st September 2018. These regulations amend the Planning and Development Regulations 2001 (S.I. No.600 of 2001); they seek to transpose EIA Directive 2014/52/EU and to give further effect to the 2011 Directive, as follows:

- An EIA is a mandatory requirement on specified large-scale projects, which have a high likelihood of impacting on the receiving environment. These projects are listed in full within the Planning & Development Regulations (2001-2022), Schedule 5, Part 1 – Development for the purposes of Part 10.
- Each EU Member State has discretionary consideration for the requirement of an EIA in relation to various processes and activities. These projects are listed in full within the Planning & Development Regulations (2001-2022), Schedule 5, Part 2 – Development for the purposes of Part 10. If the proposed project is listed under Schedule 5, Part 2, but does not exceed the relevant stated thresholds, it is considered to be sub-threshold. Part 10, article 92 of the Planning & Development Regulations, 2001 as amended states “*‘sub-threshold development’ means development of a type set out in Part 2 of Schedule 5, 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*”. Any sub-threshold developments should be evaluated to determine if the project is likely to have a significant impact on the environment.
- Criteria to evaluate whether significant impacts on the receiving environment will arise from a Project are listed under Schedule 7 of the Planning & Development Regulations (2001-2022). A list of the relevant information to be provided by the applicant or developer for the purposes of sub-threshold EIA screening is presented in Schedule 7A of the Regulations, and summarised below:
 1. A description of the proposed development, including in particular:
 - (a) a description of the physical characteristics of the whole Project and, where relevant, of demolition works; and,
 - (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 proposed development.
 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: and,
 - (b) the use of natural resources, in particular soil, land, water and biodiversity.
 4. The compilation of the information at paragraphs 1 to 3 shall take into account, where relevant, the criteria set out in Schedule 7.

3. Environmental Impact Assessment Screening

3.1. Step 1 - Mandatory Screening for EIA

The residential development has been screened against the list of developments, which have a high likelihood of impacting on the receiving environment and therefore require the mandatory preparation of an EIA, under Schedule 5 Part 1 of the Planning and Development Regulations as amended, 2001-2022. This project does not fall within any category of development requiring a mandatory EIA; hence the preparation of an EIAR is not required under Schedule 5 Part 1.

3.2. Step 2 - Threshold Screening for EIA

The proposed development has been screened against the types of development, various processes and activities listed in Schedule 5 Part 2 of the Planning and Development Regulations as amended 2001-2021. The proposed project may fall within the following categories¹, which provide that an EIA must be completed – subject to specified thresholds being met or exceeded.

10. Infrastructure projects

(b) (i)

Construction of more than 500 dwelling units.

(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.

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.

3.2.1. Infrastructure Projects

The proposed project may be considered to be an ‘urban’ infrastructure project which is proposed to be constructed within a ‘built-up area’. The area of the proposed development is ca. 1.02 hectares (ha) and will involve the construction of 90 no. dwelling units.

On this basis, the proposed project therefore does not require an EIAR to be produced in accordance with either Schedule 5 Part 2 (10) (b) (i), or Schedule 5 Part 2 (10) (b) (iv).

3.2.2. Sub-threshold Development Likely to Have Significant Effects on the Environment

Having regard to the scale and nature of the project and based on a considered assessment as outlined in Section 3.3 and 3.4 of this report, taking account of all available information including proposed standard, routine control measures, the overall probability of significant impacts on the receiving environment arising from the proposed development (during the construction or operational phases) is considered to be low.

¹ Pursuant to Schedule 7(A) of the Planning and Development Regulations as amended 2001-2020

3.3. Step 3 - Determining if the project is likely to have significant effect on the receiving environment.²

3.3.1. Description of the Proposed Development (Schedule 7A (1))

A description of the Physical Characteristics of the Whole Proposed Development and Where Relevant of Demolition Works (Schedule 7A (1) (a))

The project involves the construction of a residential development at Clover Hill Court, Bessboro Road, Mahon in Cork City. The site is a brownfield site that was previously home to Hormann Electronics from 1977 until 2008 when the firm closed. More than 90% of the site area is made up of hardstanding, comprising of macadam access road and carparking facilities.

The proposed development will consist of removal of existing floor slab of former commercial building, relocation of existing substation, construction of 2 no. apartment buildings (1 no. 3-4 storey building and 1 no. 4-5 storey building), linked at ground floor, containing 84 no. apartments in total (28 no. 1-bed apartments and 56 no. 2-bed apartments), each with private balcony/winter garden/terrace, as well as ground floor bin & bicycle stores and plant (including 1 no. relocated substation and 1 no. additional substation), 6 no. 2-storey 3-bed terraced houses, each with private garden, and all associated site development works, services provision, road infrastructure, landscaping/public realm works, 49 no. car parking spaces (43 no. on-street car parking spaces and 6 no. on-curtilage car parking spaces) and 188 no. bicycle parking spaces (94 no. bicycle parking spaces in apartment buildings, 52 no. bicycle parking spaces in freestanding external shelters and 42 no. bicycle parking spaces in open external racks). Refer to Figure 3.1 for the proposed site layout.

Anticipated excavation depths for the development are as follows: -

- Average excavation depth for the roads, driveways and car parking is ca. 0.9m below ground level (bgl);
- Maximum excavation depth for underground services is ca. 4.5m bgl. This will be local to trenches at connection points to the existing public stormwater and foul water networks running through the site; and,
- Excavation depths for the foundations of the dwellings and apartment blocks is ca. 1m bgl.

The proposed project will include the demolition of the existing foundations onsite and the existing foundation as part of the development.

The site is relatively flat and is bounded by the Bessboro Road to the east, Riverview Business Park to the south, Jacobs Engineering Consultancy to the northeast and the Clover Hill housing estate to the northwest.

Stormwater Drainage Design

[Extracted from Punch Consulting Engineers, 2022]

Cork City Council record drawings indicate that there is an existing 1200mm gravity sewer traversing the site from the Clover Hill Estate to the Bessboro Road. The sewer is laid such as to allow storm water to flow in an easterly direction, with the sewer invert levels approximately 4m below existing ground levels which will allow for connection of proposed storm water infrastructure without a requirement for pumping.

A GPR survey conducted by Geodata confirmed the Cork City Council record drawings. The GPR survey confirmed the existence of 100mm and 150mm storm water sewers around the perimeter of

the demolished structure which connect into the main stormwater line. These 100mm and 150mm sewer lines will be removed as part of the demolition works.

Please refer to Appendix A of the *Engineering Planning Report* (Punch Consulting Engineers, 2022) for Cork County Council Record Drawings illustrating the existing stormwater drainage arrangement.

Proposed Stormwater Drainage

[Extracted from Punch Consulting Engineers, 2022]

The proposed surface water drainage system has been designed using Causeway Flow software in accordance with the Department of Environment and Local Government's guidance document "*Recommendations for Site Development Works for Housing Areas*", with guidance taken from the "*Greater Dublin Strategic Drainage Study*" (GSDSDS) and the Cork City Development Plan, 2015-2021.

A new surface water sewer network shall be provided for the proposed development which will be entirely separated from the foul water sewer network. All surface water run-off from roof areas and hardstanding areas are designed to be collected by a gravity pipe network and connected to the existing stormwater network running through the site at Manhole No. S1-8. (refer to drawing CLO-PUNCH- XX-XX-DR-C-0100 for details of connection location prepared by Punch Consulting Engineers; submitted as part of the planning pack).

Notwithstanding that this is a brownfield site, in line with best practice, the storm flows from the development will be restricted by means of a Hydrobrake to the equivalent peak greenfield runoff rate (Q-BAR), which has been calculated as 8.43 litres per second in accordance with the IH124 report published by the Institute of Hydrology (*Flood Estimation for Small Catchments*). As a consequence of this flow limitation, an attenuation tank will be required to store surface waters in extreme events.

Levels and drainage have been designed to ensure that no surface water generated by the development site outfalls to the Bessboro Road.

Proposed finished floor levels range between 9.850m AOD and 10.300m AOD. All floor levels are at least 500mm above maximum drainage water levels for a 100 year return period.

Sustainable Urban Drainage Systems (SuDS) Proposals

The proposed development has been assessed in relation to Sustainable Urban Drainage Systems (SuDS). A variety of SuDS measures may be adopted to comply with Council recommendations. All SuDS measures are to be implemented with reference to the UK Suds Manual and Cork City Council drainage requirements.

Attenuation Tank

The proposed attenuation tank is sized to reduce the peak runoff from the site to the peak greenfield discharge rate of 8.43 l/s. The proposed attenuation tank is 1.6m deep and has a plan area of 155m². The minimum free storage volume of the tank is 236 m³. See Punch Consulting Engineers drawing CLO-PUNCH-XX-XX-DR-C-0100 for a layout of the attenuation tank.

Petrol Interceptor

It is proposed that all surface water run-off from car park areas will outfall via a Class 1 Kingspan Klargester NSBE010 or approved equivalent Bypass Separator, located upstream of the connection to the existing storm water drain on site. This device will remove hydrocarbons and fine sediment particles from the site runoff and lower the risk of downstream contamination following an oil spillage on site.

Please refer to Appendix C of the *Engineering Planning Report* (Punch Consulting Engineers, 2022) for calculations regarding the proposed Petrol Interceptor - Nominal size in accordance with EN 858-2.

Bypass separators fully treat all flows generated by rainfall rates of up to 6.5mm/hr. This covers over 99% of all rainfall events. Flows above this rate are allowed to bypass the separator. These separators are used when it is considered an acceptable risk not to provide full treatment for high flows, for example where the risk of a large spillage and heavy rainfall occurring at the same time is small.

Class 1 devices are designed to achieve a concentration of less than 5mg/l of oil under standard test conditions.

Proposed Foul Water Drainage

The proposed foul water sewers have been designed using Causeway Flow software in accordance with the DOE's "*Recommendations for Site Development Works for Housing Areas*". The foul loading has been calculated in accordance with "*Code of Practice for Wastewater Infrastructure*" (particularly clause 36, Appendix C and Appendix D) published by Irish Water.

It is proposed that the foul sewer will discharge by gravity to the existing foul sewer traversing the site at Manhole No. F1-9. Table 3-1 of the *Engineering Planning Report* (Punch Consulting Engineers, 2022) describes the foul water drainage design parameters used and detailed calculations are enclosed in Appendix D of same.

A Pre-Connection Enquiry Form has been issued to Irish Water in relation to the proposed development. Irish water has provided a response, advising that waste water connection is feasible without any infrastructure upgrade. Please refer to Appendix E the *Engineering Planning Report* (Punch Consulting Engineers, 2022) for the Confirmation of Feasibility from Irish Water.

Proposed Watermain

It is generally accepted that the design loading for foul drainage can be used to evaluate an approximation of the water demand on the site. With reference to Irish Water's *Code of Practice for Water Infrastructure*, the average daily flow is calculated as the number of persons multiplied by the flow rate per person. The average day peak week flow is taken to be 1.25 x the average flow, and the peak demand is taken to be the average day peak week flow multiplied by a peaking factor of 5.

On the basis of calculations presented in the *Engineering Planning Report* (Punch Consulting Engineers, 2022), the development will have an increase in average water demand of 0.527 l/s and a peak water demand of 2.109 l/s.

It is proposed to construct a 100mm nominal diameter HDPE watermain to serve the proposed development based on the above calculated demand and hydrant requirements for the development. The proposed watermain will connect to the existing 300mm nominal diameter ductile iron watermain on Bessboro Road.

This feed will provide potable and firefighting water to the proposed development. A bulk water meter shall be provided at the site boundary at the location of the proposed connection to the existing watermain. The watermain layout has been designed in accordance with "Irish Water Code of Practice for Water Infrastructure". All watermains are to be constructed in accordance with Irish Water Code of Practice and the Local Authority's requirements. Fire coverage is to be reviewed and certified by the fire consultant.

To reduce the water demand on Local Authority water supplies and to reduce the foul discharge from the development, water conservation measures will be incorporated in the sanitary facilities throughout the development.

A Pre-Connection Enquiry Form has been issued to Irish Water in relation to the proposed development. Irish water has provided a response, advising that water servicing is feasible without any infrastructure upgrade.



Figure 3-1 - Proposed Development Layout (O' Mahony Pike, 2022)

A Description of the Location of the Proposed Development, with Particular Regard to the Environmental Sensitivity of Geographical Areas Likely to be Affected (Schedule 7A (1)(b)).

The proposed site is a brownfield site dominated by artificial surfaces. The internal road within the site is tarmac. The centre of the site comprises a large concrete slab that is covered by linoleum and tiles. The linoleum and tile covering are broken with the concrete slab exposed in places.

Under the Cork City Development Plan 2022-2028, the proposed site is zoned as 'ZO 01 Sustainable Residential Neighbourhoods'. The location of the proposed development is detailed in Section 3.3.1. The environmental sensitivity of geographical areas, which could potentially be affected by the proposed development is evaluated in the following section.

Hydrology and European Sites

All surface hydrological features within the vicinity of the proposed development follow topography and flow in an easterly direction towards the coast. The proposed project is located within the Lee, Cork Harbour and Youghal Bay catchment area and the Glasheen [Corkcity]_SC_010 sub catchment area. (EPA, 2022).

There are 2no. European designated sites within the potential zone of influence of the proposed project; Great Island Channel SAC (001058) and Cork Harbour SPA (004030).

Cork Island Channel SAC is situated in the inner area of Cork Harbour, north of Cobh Island and on the eastern side of Cork Harbour, i.e. the opposite side of the Harbour to Douglas estuary and the proposed project. Cork Island Channel is located ca. 5.3km to the east of the proposed project. The SAC is designated for intertidal mudflats and sandflats and Atlantic salt meadows. It must be assumed that surface water drainage from the environs of the site ultimately reaches the harbour; either by direct outfall or via infiltration to groundwater.

Cork Harbour SPA is comprised of a number of discrete elements distributed throughout the harbour. The nearest element is Douglas Estuary, which is located ca. 410m to the south of the proposed project. Mahon industrial estate and Mahon Golf Course lie between the proposed project and the SPA. However, given that the SPA is situated within 500m of the proposed project, it is deemed to be within the zone of influence of the proposed project.

There are no Natural Heritage areas within 15km of the proposed project. There are 22 no. proposed Natural Heritage Areas (pNHA) within 15km of the proposed project. The closest pNHA is the Douglas River Estuary pNHA (Site code 001046), located ca. 410m south of the proposed development (also refers to as the Cork Harbour SPA). There is a potential hydrological connection between the Douglas River Estuary pNHA and the proposed development. There are also a further 7 no. pNHAs located downstream from the proposed development, around Lough Mahon and Cork Harbour.

There are no Geological Heritage Areas within the proposed site. The closest Geological Heritage Areas is Blackrock Diamond Quarry (IGH 6) which is located ca. 2km north west and described as 'Amethyst; tarmac over - coal yard' (GSI, 2021). There is no hydrogeological connection between Diamond Quarry Geological Heritage Area and the proposed site (GSI, 2021).

There will be no land take from any of the designated sites within 15km of the proposed development and, based on the findings of the Stage 1 Appropriate Assessment Screening report (Atkins, 2021) there will be no potential significant adverse effects to the receiving environment arising from the proposed development.

Biodiversity

A site walkover was completed at the proposed site by an experience Senior Ecologist on the 26th of April 2021.

The northern and western boundary of the site is a treeline (WL1) comprised mainly of cherry laurel (*Prunus laurocerasus*), ash (*Fraxinus excelsior*), sycamore (*Acer pseudoplatanus*), hawthorn (*Crataegus monogyna*) and bramble (*Rubus fruticosus*).

As the site has not been actively occupied recently, the site is transitioning in areas. Scattered throughout the site are sapling trees such as sycamore, willow (*Salix* sp.), alder (*Alnus glutinosa*) and butterfly bush (*Buddleia davidii*) fringing the concrete slab area. The south-west area of the site is recolonising bare ground (ED3) with typical colonisers such as dandelion (*Taraxacum* spp.), plantains (*Plantago* sp.), pineappleweed (*Matricaria discoidea*), and grasses.

The site is open with very little cover to support protected species. The treeline has the potential to support nesting passerine birds. The site does not offer supporting habitat to foraging or roosting waterbirds. There was no evidence of animal activity on site and the nature of site (i.e. predominantly artificial surfaces) does not provide suitable resting or breeding places for animals.

No invasive species listed on the 3rd schedule of the European Commission (Birds and Natural Habitats) Regulations 2011 were recorded on site. Butterfly bush was the only non-native invasive species recorded on site.

Tree Management Services (2021) completed an arboricultural tree survey at the proposed site. The tree survey was carried out to the USA's Best Management Practices – Level 2 Assessment and the BS5837:2012 Trees in relation to Design, Demolition and Construction – Recommendations. Tree Management Services (2021) states the following:

- *'The site is currently derelict and there is a low density of trees within the application site area. Areas of the site are being colonized with pioneer scrub species of Birch, Buddleia and Alder.'*
- *The tree species surveyed comprise of naturally-seeded *Alnus glutinosa* (Common alder), *Betula pendula* (Birch), *Acer* spp. (Sycamore), and planted middle-aged to mature species of *Acer platanoides* (Maple), *Cupressus x leylandii* (Leyland cypress), *Pittosporum tenuifolium* (Kohuhu) and other minor species. The trees vary in age and range from young (<15 years) to mature (>40 years).*
- *There are no Grade A trees on the site or 'Those of high quality and in such condition to make a substantial contribution with an estimated life expectancy of at least 40 years'. There are 5 nr. Grade 'B' trees on the site i.e. Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.*
- *There are 13 nr. Grade 'C' trees on the site and categorized as 'Those of low quality with an estimated remaining life expectancy of at least 10 years'.*
- *There are 25 nr. trees categorized as Category 'U' 'Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years'. These include the row of *C. Leylandii* along the western boundary. These trees should be removed for reasons of sound arboricultural management.*
- *The self-seeded Alder and Birch trees are generally in fair condition with little or no arboricultural or silvicultural management practices carried out in the past. The trees are growing in or close to tarmac surfaces and rooting could be poor with little or no underground soils for good tree development.*
- *Generally, Tree no. 183 is a mature and dominant Birch tree on the site. The tree is in good condition and categorized as a B category tree.*
- *Tree no. 191 is a mature Sycamore in poor condition. The tree has a crooked main stem and is growing in within the laurel hedge where growing space is limited. Removal of the tree is recommended.*
- *There are fragmented remnants of trees from the original landscape scheme comprising of *Cupressus lawsoniana* (Lawson cypress) - tag nos. 196 and 950, *Pittosporum tenuifolium* (Kohuhu) tag no. 199 and *Ilex aquifolium* (Holly) tag no. 949.*

- *There is a strong and vigorous hedgerow (H1) of Prunus laurocerassus (Cherry laurel) along the northern boundary growing in the adjacent site (Jacobs). This hedge is up to four metres tall. Limbs overhang and protrude through the wire mesh fencing into the site. Regular pruning and trimming will be required, but any such works is best carried out in consideration of the overall care and maintenance of the hedge.*
- *The fragmented row of C. leylandii (Leyland Cypress) growing along the west boundary is in poor condition. The trees have been partially topped in the past resulting in weak and unbalanced crowns. The trees have poor long-term retention value. Removal of the trees is recommended.*
- *The proposed preliminary tree works are based on current site usage. Any proposed tree works should be carried out to BS 3998:2010 Tree Work - Recommendations. The works as detailed in the Tree Schedule below shall only be carried out by a fully insured, trained, certified and competent Tree Surgery firm.*
- *Timeframe for re-inspection: Trees are not static objects, but growing, living organisms and their condition, size, and relationship to buildings or other trees can change significantly and sometimes unpredictably within a relatively short period of time. The maximum interval of time for which this report and its findings remain valid shall be no more than twelve months from the date the Survey was carried out. Trees should be re-assessed annually or following periods of high winds or stormy weather. Re-assessments shall be at the request of the Tree Owner.'*

Tree Management Services (2021) have completed a tree survey schedule within their report which states the preliminary management recommendations for each tree. This will be implemented during site clearance and construction works.

Hydrogeology

There are no wells or springs present within the site boundary. The closest borehole is located ca. 0.8km north east (used for public supply) (GSI Ref No. 1707SWW085) (GSI 2022).

There are no reported Public Drinking Water Supply or Source Protection Zones within 2km of the proposed development (GSI, 2022). The closest Public Supply Source Protection Area is the Carraignabhfeair PWS (Outer and Inner Source Protection Zone) is located ca. 12km north of the proposed development (GSI, 2022). The closest Group Scheme Preliminary Sources Protection Areas is Walterstown, located ca. 12m east of the proposed development (GSI, 2022). Taking account of the distance of this public water supply there is no residual risk to regional potable supplies.

The proposed development is underlain by a regionally important aquifer - Karstfied (GSI 2022). Groundwater vulnerability beneath the development has been classified as 'high' (GSI 2022).

Geology

The regional bedrock beneath the proposed development comprises massive and crinoidal fine limestone of the Little Island Formation (GSI, 2022). There is a fault line running to the north of the site (GSI, 2022).

There is no evidence of any karst features being present within the vicinity of the proposed development. The closest karst landform is a cave (GSI Reference: 1707SWK0100) located 1.2km north west (GSI, 2022).

There are no historic landslide events or designated landslide susceptibility issues in the vicinity of the proposed site (GSI, 2022).

Flooding

The site has been screened with regard to potential flood risk associated with both baseline conditions, and the proposed development. According to the relevant guidance document; 'The Planning System and Flood Risk Management – Guidelines for Planning Authorities' (DOEHLG,

2009), one of the guiding principles of flood risk assessment is that assessments should be 'proportionate to the risk scale, nature and location of the development'. In the first instance flood risk identification is carried out; identification is the process for deciding whether a plan or project requires a flood risk assessment and is essentially a desk-based exercise based on existing information (DOEHLG, 2009). Taking account of the findings of a desk-based review of available flood mapping, the site is not identified as being at risk of flooding from either fluvial or pluvial sources (OPW, 2022). No historic flooding events are recorded within the vicinity of the proposed development (OPW, 2022). The risk of flooding associated with the current receiving environment is therefore low. The nature, along with the location of the proposed development, is unlikely to give rise to any potential flood risk. No flooding or surface water management issues related to the proposed site have been identified as warranting further investigation. Accordingly, based on the risk scale, nature and location of the development, potential flood risk has been screened out at this preliminary juncture. No flood risk has been identified.

Archaeology and Cultural Heritage

There are no National Inventory of Architectural Heritage (NIAH) or National Monuments Services 'Sites and Monuments Records' (SMR) feature within the proposed site boundary. There are 3no. SMR sites and 2no. NIAH sites within 500m of the proposed development.

The SMR sites are as follows:

- Midden (Reference No. CO074-063----) which is located ca. 450m south of the proposed development and described as:

'On N side of Douglas river estuary. According to Coleman (1945, 62-3) 'an early vertical weathered face of clay and stones some 15 feet from high-water level shows a layer of shells, bones, etc., extending horizontally for about 6 feet, and 12 ins above the shore level. Over the layer is 3 feet of sandy clay and stones'. Layer was composed of opened shells, ox and pig bones. Fragments of modern pottery and glass were also found. Coleman concluded that the midden was 18th or early 19th century in date. Site now in Mahon golf course; no visible surface trace.'

- Icehouse (Reference No. CO074-051----) which is located ca. 360m south east of the proposed development and described as:

'In woodland; built into SW-facing slope in demesne of Bessborough House (CO074-077---). Interior circular (diam. 3.7m); pit infilled to ground floor level; walls constructed of mortared rough limestone. Domed roof (H 2.55m). Door ope (Wth 1.4m) to SW with remains of splayed retaining walls for former earthen covering mound on either side of entry. Exterior composed of very rough stone surface; no remains of covering mound.'

- Country house (Reference No. CO074-077----) which is located ca. 427m south east of the proposed development and described as:

'Mid-18th century 3-storey house overlooking Douglas Estuary to S; 3 bays deep. Entrance front (S) of 7 bays, 3-bay central breakfront, pedimented with oculus. Central door with fanlight, pedimented; central Venetian window at 1st floor, central Diocletian window at 2nd floor; limestone surrounds around all three opes. Sash windows decrease in size with height, prominent limestone keystone. Rendered walls with cut limestone band course, quoins and cornice exposed. Hipped roof with central valley. Numerous additions to rear. Victorian conservatory on W elevation. Farm buildings to N, now been converted to heritage centre. Ice house (CO074-051---) to W.'

The NIAH sites are as follows:

- Bessborough (Reference No. 20872005) which is located ca. 480m south east of the proposed development. This building was original a country house dating back to 1750-1770 and is currently used as a convent / nunnery; and,

- Bessborough (Reference No. 20872006) which is located ca. 430m south east of the proposed development. This building was original a farmyard complex / walled garden dating back to 1870 - 1890 and is currently used as a nursing/convalescence home; crèche/pre-school.

These sites are unlikely to be affected by the proposed developments.

The environmental sensitivity of geographical areas likely to be affected by the proposed development are evaluated further within Section 3.4.2 of this report (*'Location of proposed development - The environmental sensitivity of geographical areas likely to be affected by the proposed development'*) as required under Schedule 7 of the relevant regulations.

3.3.2. Description of Aspects of the Environment Likely to be Significantly affected by the Proposed Development (Schedule 7A (2)).

The proposed development does not lie within any European sites, nature reserves or existing / proposed natural heritage areas (detailed in Section 3.3.1 of this report). There are 2no. European sites within 15km of the site. It is not anticipated that there will be a significant impact on these areas. The AA Screening report states that *'the only connection to European sites is potentially via a remote hydrological linkage through the existing surface water drainage system from the site and environs to Cork Harbour. There is, accordingly, a potential hydrological link between the proposed development site and European sites in Cork Harbour. However, it should be noted that this link is weak and via a very large body of water which offers substantial dilution of surface waters'* (Atkins, 2022).

The AA Screening concludes the following *'the proposed project, individually or in-combination with other plants and projects, will not have likely significant effects on Great Island Channel SAC or Cork Harbour SPA in view of their conservation objectives. Thus, it is concluded that the proposed project does not need to proceed to Appropriate Assessment. Should the scope or nature of the proposed project change, a new Screening for Appropriate Assessment report shall be required'* (Atkins, 2022).

As outlined previously in Section 3.3.1 the proposed development is unlikely to have any significant effects during the construction phase on identified archaeological or architectural features within the immediate vicinity of the proposed development.

The only other relevant aspects of the environment (including human health), which could potentially be significantly affected by the proposed development are the receiving groundwater and surface water environment, the receiving air quality environment, the receiving noise and vibration environment, and the receiving traffic environment, during the construction phase.

During the construction phase of the project a construction compound will be established within the site boundary; this will not be located in proximity to any drains or surface water features through which sediment or other pollutants such as hydrocarbons could be discharged to Cork Harbour.

The proposed project will mainly involve excavations to an anticipated average depth of 0.9m bgl and a maximum depth of 4.5m bgl. GSI (2022) have reported a *'high'* groundwater vulnerability rating for site, indicating that the groundwater beneath this portion of the proposed development may be vulnerable to contamination. Shallow groundwater will likely be encountered during construction work. In the event of a water strike dewatering may be required.

The existing surface water network at the site, described in Section 3.3.1, as noted an existing 1200mm gravity sewer traverses the site from the Clover Hill Estate to the Bessboro Road. This will be protected during the course of construction works. Where any other drains are identified on site, these will be isolated from construction works for the duration of any tasks that might result in silt laden waters entering such drains. During the operational phase, the surface water drainage will flow into an underground attenuation tank/cube. All surface water run-off from car park areas will outfall via a Class 1 Kingspan Klargestor NSBE010 or approved equivalent Bypass Separator, located upstream of the connection to the existing storm water drain on site. This device will remove hydrocarbons and fine sediment particles from the site runoff and lower the risk of downstream contamination following an oil spillage on site.

Due to the nature and scale of the project and proposed drainage infrastructure it is anticipated that the construction and operation of the proposed development will not have a significant impact on surface water and /or groundwater quality. Accordingly, no significant adverse impacts are anticipated with respect to surface quality, levels or flow and groundwater resources or quality.

The nearest potential dust sensitive receptor (residential dwelling) is located ca. 5m west of the proposed development. Dust may be generated during the construction phase. Construction will require the use of machinery such as dump trucks, loading shovels etc. and the presence of such machines may result in a temporary increase of noise and dust. Regional air quality at the proposed development is 'good' (EPA, 2021). However, management of dust will be in line with relevant best practice measures such as those set out in *'Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes'* (NRA, 2011). Due to the nature and scale of the project it is anticipated that the construction and operation of the proposed development will not have a significant impact on air quality.

Noise levels will not exceed the indicative levels of acceptability for construction noise in an urban environment as set out in the NRA guidance *'Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes'* (NRA, 2014). The works involved during the construction of the proposed residential development will occur during daytime hours. No works will be conducted during night-time hours. The Contractor will also be obliged to prepare a project specific CEMP prior to commencement of the proposed development, which will include specific control measures in accordance with standard industry best practice to be implemented to fully address any potential air quality / dust emissions, noise / vibration nuisance, and onsite noise / vibration monitoring should this be necessary. Construction contractors will be required to comply with the requirements of the European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations, 1988 as amended in 1990 and 1996 (S.I. No. 320 of 1988, S.I. No. 297 of 1990 and S.I. No. 359 of 1996), and the Safety, Health and Welfare at Work (Control of Noise at Work) Regulations, 2006 (S.I. No. 371 of 2006). Due to the nature and scale of the project it is anticipated that the construction works, and operation of the proposed development will not have a significant impact on noise.

The proposed site is a brownfield site dominated by artificial surfaces. The internal road within the site is tarmac. The centre of the site comprises a large concrete slab that is covered by linoleum and tiles, which was previous a commercial building. The linoleum and tile covering are broken with the concrete slab exposed in places. Occupational Health and Safety Consultancy (OHSS) (2019) conducted an asbestos survey of the site to HSG264 requirements for the purposes of identifying asbestos containing materials (ACMs) in the premises(s) prior to the demolition of the area. OHSS (2019) stated that chrysotile asbestos was found in the *'vinyl floor tiles'* of the Bessborro site floor slab grounds. OHSS (2019) concluded that it would be a requirement to *'remove ACM's prior to refurbishment or demolition'*. The specialist consultant OHSS will oversee the removal of the ACM's from the site. The demolition contractor shall review the survey report and allow for the specialist removal of asbestos should this be required. Any asbestos material should be removed by a suitably experienced specialist asbestos removal contractor prior to commencement of any demolition or construction works commencing. Asbestos waste should be securely double bagged and removed from site immediately. Asbestos waste is hazardous and should be transported and disposed of by a specialist waste disposal contractor (i.e. ENVA). Written confirmation must be obtained to ensure that all structures scheduled for demolition have been certified to be clear of asbestos material before demolition works occur. No demolition works will be permitted to commence until written confirmation has been obtained that all structures scheduled for demolition have been certified to be clear of asbestos material.

Excavation works will be monitored and in the event that contaminated materials are encountered these will need to be segregated from all uncontaminated soils, temporarily stored (any stockpiles should be lined and covered by heavy duty 1000-gauge plastic), sampled and analysed for relevant parameters (Waste Acceptance Criteria suite e.g. Rilta Disposal Suite). Any contaminated soils must be characterised as per the requirements of the relevant Waste Acceptance Criteria (WAC) under the relevant European Communities Council Decision (EC) (92003/33/EC), and classified in accordance with the requirements of the EPA as set out in the following documents *'Waste Classification List of Waste & Determining if Waste is Hazardous or Non-hazardous'* (EPA, 2018). Any contaminated soils must be transported by appropriately permitted hauliers and disposed of to an appropriate EPA licensed Waste Facility in accordance with all relevant waste management legislation.

During the demolition and construction phases, all C&D waste materials will be segregated onsite into the various waste streams, via. dedicated skips and storage areas. Waste will be removed from site by a suitably permitted waste haulage contractor. The Contractor should clearly identify all proposed waste haulage contractors within the project specific RWMP. Each waste haulage contractor must hold a current valid waste collection permit issued by the National Waste Collection Permit Office (NWCPO). All waste materials generated during the Demolition and Construction Phases must be removed offsite to an appropriately permitted or licenced waste disposal / recovery facility.

It is expected that the project will commence upon receipt of development consent and it is estimated that the duration of the build will be ca. be 8 no. months. There will be a slight increase in traffic during construction, but this will be a temporary and traffic signage and lights will be in place. There will be a slight increase in traffic during operation as the proposed scheme is a residential scheme. It is anticipated that the construction and operation of the proposed development will not have a significant impact on traffic.

3.3.3. A Description of Any Likely Significant Effects (To the Extent of The Information Available on Such Effects) of The Proposed Scheme on The Environment (Schedule 7A(3)).

The Expected Residues and Emissions and the Production of Waste where relevant (Schedule 7A (3)(a)).

The proposed development may give rise to air, noise, water emissions and waste. However, the development will be designed in order to minimise any potential impacts as a result of these emissions during the operational phase. Standard mitigation measures will be implemented by the Contractor to address potential air and noise emissions during the construction phase. The Contractor will ensure that onsite storm water management during the construction phase is carried out in accordance with relevant best practice measures as set out in Construction Industry Research and Information Association (CIRIA) guidance 'C532 - Control of Water Pollution from Construction Sites'.

The AA Screening report states that '*due to the nature of proposed works; i.e. no in-stream works along the Curraheen River; the distance between Westside and Great Island Channel SAC / Cork Harbour SPA, as well as the extent and duration of the proposed works; no negative impacts to European sites, notably Great Island Channel SAC / Cork Harbour SPA through surface waters or via disturbance are anticipated during construction or operation of this scheme*'. During the operation phase, the surface water drainage will flow into an underground attenuation tank/cube. All surface water run-off from car park areas will outfall via a Class 1 Kingspan Klargester NSBE010 or approved equivalent Bypass Separator, located upstream of the connection to the existing storm water drain on site. This device will remove hydrocarbons and fine sediment particles from the site runoff and lower the risk of downstream contamination following an oil spillage on site.

There is a small amount of domestic rubbish, old concrete blocks, drink cans and beer bottles, and a discarded couch and office chair within the site boundary due to fly-tipping. This waste will be removed and disposed of will be disposed of by the Contactor in accordance with all relevant waste management legislation before site clearance.

The demolition and construction phase of the development may generate waste such as construction and demolition waste, concrete, steel, plastic wrapping, wooden pallets, windows, glass and materials from building fabric, metals (copper & steel piping steel and re-bar), electrical cable, reinforcing steel waste, soil arisings or asbestos and waste electrical electronic equipment (WEEE). All C&D waste materials will be segregated onsite into the various waste streams, via. dedicated skips and storage areas. Waste will be removed from site by a suitably permitted waste haulage contractor. The Contractor should clearly identify all proposed waste haulage contractors within the project specific RWMP. Each waste haulage contractor must hold a current valid waste collection permit issued by the National Waste Collection Permit Office (NWCPO). All waste materials generated during the Demolition and Construction Phases must be removed offsite to an appropriately permitted or licenced waste disposal / recovery facility.

The centre of the site comprises a large concrete slab that is covered by linoleum and tiles, which forms the footprint of the former main building. The linoleum and tile covering are broken with the concrete slab exposed in places. Occupational Health and Safety Consultancy (OHSS) (2019) conducted an asbestos survey of the site to HSG264 requirements for the purposes of identifying asbestos containing materials (ACMs) in the premises(s) prior to the refurbishment of the area. OHSS (2019) stated that chrysotile asbestos was found in 2no. locations the 'vinyl floor tiles' of the Bessborro site floor slab grounds. OHSS (2019) concluded that there would be a requirement to 'remove ACM's prior to refurbishment or demolition'. Any asbestos material should be removed by a suitably experienced specialist asbestos removal contractor prior to commencement of any demolition or construction works commencing. Asbestos waste should be securely double bagged and removed from site immediately. Asbestos waste will be hazardous and should be transported and disposed of by a specialist waste disposal contractor (i.e. Enva.). Written confirmation must be obtained to ensure that all structures scheduled for demolition have been certified to be clear of asbestos material before demolition works occur. No demolition works will be permitted to commence until written confirmation has been obtained that all structures scheduled for demolition have been certified to be clear of asbestos material.

The proposed site is a brownfield site dominated by artificial surfaces. Excavation works will be monitored and in the unlikely event that contaminated materials are encountered these will need to be segregated from all uncontaminated soils, temporarily stored (any stockpiles should be lined and covered by heavy duty 1000-gauge plastic), sampled and analysed for relevant parameters (Waste Acceptance Criteria suite e.g. Rilta Disposal Suite). Any contaminated soils must be characterised as per the requirements of the relevant Waste Acceptance Criteria (WAC) under the relevant European Communities Council Decision (EC) (92003/33/EC), and classified in accordance with the requirements of the EPA as set out in the following documents 'Waste Classification List of Waste & Determining if Waste is Hazardous or Non-hazardous' (EPA, 2018). Any contaminated soils must be transported by appropriately permitted hauliers and disposed of to an appropriate EPA licensed Waste Facility in accordance with all relevant waste management legislation.

A new foul service will connect to each property. The new connection will tie into the existing network of services that is currently located within the site boundary. The foul water will be treated in the Waste Water Treatment Plant.

During the operation of the proposed residential development, household waste will be generated. Waste materials generated during the Operational Phase will primarily comprise household waste (including dry recyclables (paper, plastic etc.), glass, food and organic waste, domestic refuse) and occasional maintenance waste (including general waste and green waste). It is assumed that the majority of waste produced during the Operational Phase will be non-hazardous. In the event that any hazardous materials are brought to site for maintenance purposes, the volumes of paints, varnishes, glues, adhesives etc. will be minor, and will be removed offsite and disposed of appropriately by the relevant maintenance contractor. Hazardous wastes (such as waste fuel, oil or chemicals) will therefore not be generated onsite during the Operational Phase. Operational waste of the proposed development will be appropriately characterised, managed and disposed of in accordance with all relevant waste management legislation.

The Use of Any Natural Resources in particular soil, land, water and biodiversity (Schedule 7A (3)(b)).

Natural resources in the area will not be required to facilitate the development during the construction phase. The site comprises a brownfield site with an existing hardstanding surface. The project is not located within or in proximity to any European Site. Tree Management Services (2021) completed an arboricultural tree survey at the proposed site, which comprised a tree survey schedule outlining the preliminary management recommendations for each tree. These will be implemented during site clearance and construction works.

The proposed residential development will involve a maximum excavation depth of 4.5m bgl. All soil requiring disposal offsite will require waste classification in accordance with EPA requirements as set out in the documents 'Waste Classification List of Waste & Determining if Waste is Hazardous or Non-hazardous' (EPA, 2015), and 'Determining if waste is hazardous or non-hazardous' (EPA, 2018), and all relevant waste management legislation. In addition to screening against relevant WAC, the preparation of a waste classification tool (hazwaste online / EPA paper tool or similar etc.) will be

required to be carried out in order to determine the relevant LoW / EWC code for the transport of any waste soils which require offsite removal and disposal.

Any onsite waste should be removed firstly. Engineering grade fill material (hardcore or similar) will be imported to the site during the proposed construction. The use of other natural resources with respect to soils and land will not be required arising from the proposed development. There will not be a significant impact on natural resources.

3.3.4. The Compilation of The Information at Paragraphs 1 To 3 Shall Take into Account, where Relevant, the Criteria set out in Schedule 7 (Schedule 7A(4)).

All relevant criteria set out in Schedule 7 of the Regulations is presented in Section 3.4 ('Criteria for Determining Whether Development Listed in Part 2 of Schedule 5 Should be subject to an EIA') of this screening report.

During the preparation of Sections 3.3.1 to 3.3.3 (i.e. Schedule 7A (1) to (3)) all pertinent Schedule 7 information has been taken account of as required, with specific details presented in the following section of this report (Section 3.4).

Criteria for Determining Whether Development Listed in Part 2 of Schedule 5 Should be subject to an EIA³

3.3.5. Characteristics of proposed development (Schedule 7(1))

The size and design of the whole of the proposed development (Schedule 7(1)(a))

The proposed development is located at Clover Hill Court, Bessboro Road, Mahon, Cork as presented in Figure 3-1.

Refer to Section 3.3.1 under 'A description of the Physical Characteristics of the Whole Proposed Development and Where Relevant of Demolition Works (Schedule 7A (1) (a))'.

Cumulation with other existing development and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment (Schedule 7(1) (b))

Committed Development

A search of Cork City Council Planning Applications has been undertaken for applications submitted within the last 5 years in the vicinity of the proposed development (last reviewed 12/07/2022). Some of the granted applications have already been completed and of those which are not completed, most are generally of small scale in nature (i.e. residential extension works, or property improvement works). Completed or granted applications of such small scale (such as residential improvements) have not been considered further in terms of potential for cumulative impacts.

6no. projects are committed developments, which have not yet been built or are currently under construction. These developments have been further evaluated for the potential of cumulative impacts and are presented in Table 3-1. It is considered unlikely that the granted projects occurring within any sites surrounding the proposed development will act in combination with the proposed project to give rise to significant cumulative impacts on the receiving environment.

³ Pursuant to Schedule 7 of the Planning and Development Regulations as amended 2001-2022

Table 3-1 - Committed Development in the vicinity of the proposed residential development.

Planning Ref	Decision Date	App. Name	Location	Description	Assessment
2140453	17/01/2022	First Step Homes Ireland Ltd	Bessboro, Mahon, Cork	Permission to alter and extend the previously granted Creche building granted under planning reference No. 18/37820 and An Bord Pleanála ABP-302784-18 to incorporate a larger ground floor Creche/Community facility and bin store. The application is also to include for the permission of 10. no. first and second floors apartments to consist of the following: 5 no. first floor apartments: 2 no. 1 bed and 3 no. 2 bed with communal storage and 5 no. second floor apartments: 2 no. 1 bed and 3 no. 2 bed with communal storage and all associated site works.	This development is located ca. 220m south of the proposed site. Based on the location, scale and nature of this project, cumulative impacts associated with the proposed residential development on the receiving environment are unlikely.
1938649	22/10/2019	SR Technics Airfoil Services Ltd	Mahon Industrial Estate, Bessboro Road, Blackrock, Cork City	Permission to construct a single storey extension to the West Side of the existing SR Technics Airfoil Services Ltd factory building.	This development is located ca. 220m south of the proposed site. Based on the location, scale and nature of this project, cumulative impacts associated with the proposed residential development on the receiving environment are unlikely.
1837820	26/09/2018	Bessboro Warehouse Holdings Ltd	Bessboro Road, Mahon, Cork	Permission for the demolition and removal of the existing warehouse/distribution building and associated structures and the construction of 135 no. residential units comprising 24 no. dwelling houses, 64 no. duplex apartments and a three storey apartment block (comprising 20 no. apartments) and a four storey apartment block (comprising 27 no. apartments). 1 no. crèche, provision for the relocation of 2 no. utility buildings (gas and electricity) and all associated ancillary site development works including vehicular access, parking, footpaths, landscaping, drainage and amenity areas.	This development is located ca. 220m south of the proposed site. Based on the location, scale and nature of this project, cumulative impacts associated with the proposed residential development on the receiving environment are unlikely.
1737565	13/03/2018	Denis O' Brien Developments (Cork) Ltd.	Bessboro Road, Ballinure, Mahon, Cork	Permission for the construction of 66 no. residential units and all associated ancillary development works including vehicular access (including 2 no. entrances on to Bessboro Road), parking, footpaths, landscaping, drainage and amenity areas	This development is located 320m east of the proposed site. Based on the location, scale and nature of this project, cumulative impacts associated with the proposed residential development on the receiving environment are unlikely.
1938875	11/03/2020	O'Flynn Construction Co.	Blackrock Business Park, Bessboro Road, Mahon, Cork	Permission for the construction of 12,004 sq. metres (gross) of office floorspace comprising of a 4-storey office building with an option for internal sub-division to provide up to 16 no. office units,	This development is located 460m north east of the proposed site. Based on the location, scale and nature of this project,

		Unlimited Company		174 no. surface car parking spaces and 66 no. undercroft /semi-basement car parking spaces and all associated ancillary development works including landscaping, drainage, plant and solar panels (provided at roof level), 1 no. smoking shelter, motorbike and bicycle parking and 1 no. switch room, electrical substation and bin stores.	cumulative impacts associated with the proposed residential development on the receiving environment are unlikely.
1737286	11/04/2017	O'Flynn Construction Cork	Mahon Business Park , Former Motorola Site , Bessboro Road	Permission is sought for the construction of a new entrance canopy and minor works to existing façade including modifications and replacement of existing door and windows and all necessary ancillary development works to the existing office building	This development is located 410m north east of the proposed site. Based on the location, scale and nature of this project, cumulative impacts associated with the proposed residential development on the receiving environment are unlikely.

The nature of any associated demolition works (Schedule 7(1)(c))

Refer to Section 3.3.1 under ‘A description of the Physical Characteristics of the Whole Proposed Development and Where Relevant of Demolition Works (Schedule 7A (1) (a))’. The existing foundations and hardstanding will be demolished and removed as part of the proposed development.

The use of natural resources, in particular land, soil, water and biodiversity (Schedule 7(1)(d))

Refer to Section 3.3.3 under ‘The Use of Any Natural Resources in particular soil, land, water and biodiversity (Schedule 7A (3)(b))’.

The production of waste (Schedule 7(1)(e))

Refer to Section 3.3.2 under ‘Description of Aspects of the Environment Likely to be Significantly affected by the Proposed Development (Schedule 7A (2))’.

The demolition and construction phase of the development may generate waste such as construction and demolition waste, concrete, steel, plastic wrapping, wooden pallets, windows, glass and materials from building fabric, metals (copper & steel piping steel and re-bar), electrical cable, reinforcing steel waste, soil arisings, asbestos or waste electrical and electronic equipment (WEEE). All C&D waste materials will be segregated onsite into the various waste streams, via. dedicated skips and storage areas. Waste will be removed from site by a suitably permitted waste haulage contractor. The Contractor should clearly identify all proposed waste haulage contractors within the project specific RWMP. Each waste haulage contractor must hold a current valid waste collection permit issued by the National Waste Collection Permit Office (NWCPO). All waste materials generated during the Demolition and Construction Phases must be removed offsite to an appropriately permitted or licenced waste disposal / recovery facility.

Any asbestos material should be removed by a suitably experienced specialist asbestos removal contractor prior to commencement of any demolition or construction works commencing. Asbestos waste should be securely double bagged and removed from site immediately. Asbestos waste will be hazardous and should be transported and disposed of by a specialist waste disposal contractor (i.e. Enva). Written confirmation must be obtained to ensure that all structures scheduled for demolition have been certified to be clear of asbestos material before demolition works occur. No demolition works will be permitted to commence until written confirmation has been obtained that all structures scheduled for demolition have been certified to be clear of asbestos material.

During the operation of the proposed residential development, household waste will be generated. Waste materials generated during the Operational Phase will primarily comprise household waste (including dry recyclables (paper, plastic etc.), glass, food and organic waste, domestic refuse) and occasional maintenance waste (including general waste and green waste). It is assumed that the majority of waste produced during the Operational Phase will be non-hazardous. In the event that any hazardous materials are brought to site for maintenance purposes, the volumes of paints, varnishes, glues, adhesives etc. will be minor, and will be removed offsite and disposed of appropriately by the relevant maintenance contractor. Hazardous wastes (such as waste fuel, oil or chemicals) will therefore not be generated onsite during the Operational Phase. Operational waste of the proposed development will be appropriately characterised, managed and disposed of in accordance with all relevant waste management legislation.

Pollution and nuisances (Schedule 7(1)(f))

Refer to Section 3.3.2 under ‘Description of Aspects of the Environment Likely to be Significantly affected by the Proposed Development (Schedule 7A (2))’.

The AA Screening report states that ‘due to the nature of proposed works; i.e. no in-stream works along the Curraheen River; the distance between Westside and Great Island Channel SAC / Cork Harbour SPA, as well as the extent and duration of the proposed works; no negative impacts to European sites, notably Great Island Channel SAC / Cork Harbour SPA through surface waters or via disturbance are anticipated during construction or operation of this scheme’. During the operation phase, the surface water drainage will flow into an underground attenuation tank/cube. All surface

water run-off from car park areas will outfall via a Class 1 Kingspan Klargestor NSBE010 or approved equivalent Bypass Separator, located upstream of the connection to the existing storm water drain on site. This device will remove hydrocarbons and fine sediment particles from the site runoff and lower the risk of downstream contamination following an oil spillage on site.

The waste currently on site due to fly tipping will be removed and disposed of in accordance with all relevant waste management legislation. The demolition and construction phase of the development may generate waste such as C&D waste, steel, concrete, metals, construction and demolition waste, plastic wrapping, wooden pallets, soil arisings, asbestos or waste electrical and electronic equipment (WEEE). As outlined previously All C&D waste materials will be segregated onsite into the various waste streams, via. dedicated skips and storage areas. Waste will be removed from site by a suitably permitted waste haulage contractor. The Contractor should clearly identify all proposed waste haulage contractors within the project specific RWMP. Each waste haulage contractor must hold a current valid waste collection permit issued by the National Waste Collection Permit Office (NWCPO). All waste materials generated during the Demolition and Construction Phases must be removed offsite to an appropriately permitted or licenced waste disposal / recovery facility.

OHSS (2019) stated that chrysotile asbestos was identified in the 'vinyl floor tiles' of the Bessborro site floor slab grounds. Any asbestos material should be removed by a suitably experienced specialist asbestos removal contractor prior to commencement of any demolition or construction works commencing. Asbestos waste should be securely double bagged and removed from site immediately. Asbestos waste will be hazardous and should be transported and disposed of by a specialist waste disposal contractor (i.e. Enva). Written confirmation must be obtained to ensure that all structures scheduled for demolition have been certified to be clear of asbestos material before demolition works occur. No demolition works will be permitted to commence until written confirmation has been obtained that all structures scheduled for demolition have been certified to be clear of asbestos material.

Excavation works should be monitored and in the unlikely event that contaminated materials are encountered these will need to be segregated from all uncontaminated soils, temporarily stored (any stockpiles should be lined and covered by heavy duty 1000-gauge plastic), sampled and analysed for relevant parameters (Waste Acceptance Criteria suite e.g. Rilta Disposal Suite). Any contaminated soils must be characterised as per the requirements of the relevant Waste Acceptance Criteria (WAC) under the relevant European Communities Council Decision (EC) (92003/33/EC), and classified in accordance with the requirements of the EPA as set out in the following documents 'Waste Classification List of Waste & Determining if Waste is Hazardous or Non-hazardous' (EPA, 2018). Any contaminated soils must be transported by appropriately permitted hauliers and disposed of to an appropriate EPA licensed Waste Facility in accordance with all relevant waste management legislation.

During the operation of the proposed residential development, household waste will be generated. Waste materials generated during the Operational Phase will primarily comprise household waste (including dry recyclables (paper, plastic etc.), glass, food and organic waste, domestic refuse) and occasional maintenance waste (including general waste and green waste). It is assumed that the majority of waste produced during the Operational Phase will be non-hazardous. In the event that any hazardous materials are brought to site for maintenance purposes, the volumes of paints, varnishes, glues, adhesives etc. will be minor, and will be removed offsite and disposed of appropriately by the relevant maintenance contractor. Hazardous wastes (such as waste fuel, oil or chemicals) will therefore not be generated onsite during the Operational Phase. Operational waste of the proposed development will be appropriately characterised, managed and disposed of in accordance with all relevant waste management legislation.

There will be no additional pollution or nuisance issues from the operational stage of the development.

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 (Schedule 7(1)(g))

The site is not identified as being at risk of flooding from either fluvial or pluvial sources (OPW, 2022). No historic flooding events are recorded within the vicinity of the proposed development (OPW, 2022). The risk of flooding associated with the current receiving environment is therefore low. The nature, along with the location of the proposed development, is unlikely to give rise to any potential flood risk.

There are 21no. Seveso (COMAH) establishments within 15km of the proposed development as shown in Table 3-2 below.

Table 3-2 - Seveso Establishments Within 15km of the proposed residential development

Facility	Tier	Location	Distance from Site
BASF Ireland Ltd.	Upper	Little Island Industrial Estate, Little Island, Co. Cork	4 km
Calor Teoranta	Upper	Tivoli Docks, Co. Cork	1.80 km
Flogas Ireland Ltd.	Upper	Tivoli Industrial Estate, Tivoli, Co. Cork	1.80 km
Grassland Agro	Upper	Carrigrohane Road, Cork	6.20 km
Marinochem Ltd.	Upper	Marino Point, Cobh, Co. Cork	9.20 km
Novartis Ringaskiddy Ltd.	Upper	Ringaskiddy, Co. Cork	9.10 km
Pfizer Ireland Pharmaceuticals	Upper	Active Pharmaceutical Ingredients Plant, P.O. Box 140, Ringaskiddy, Co. Cork	9.10 km
Portfolio Concentrate Solutions UL	Upper	Kilnagleary, Carrigaline, Co. Cork	9 km
Thermo Fisher Scientific Cork Ltd	Upper	Currabinny, Carrigaline. Co. Cork	10.20 km
Calor Teoranta	Upper	Whitegate Filling Plant, Midleton, Co. Cork	14.40 km
BOC Gases	Lower	Little Island Co. Cork	4.70 km
Carbon Chemical Group Ltd.	Lower	Raheens Industrial Estate, Ringaskiddy, Co. Cork	9.70 km
Chemical Bulk Storage Ltd.	Lower	Unit 19, Tivoli Industrial Estate, Tivoli, Co. Cork	1.80 km
Goulding Chemicals Ltd.	Lower	Centre Park Road, Cork	2.60 km
Hovione Ltd.	Lower	Loughbeg, Ringaskiddy, Co. Cork	9 km
Irish Oxygen Company Ltd.	Lower	Waterfall Road, Co. Cork	8.70 km
Janssen Pharmaceutical Sciences UC	Lower	Little Island, Cork	4.70 km
Merck Millipore Ltd.	Lower	Tullagreen, Carrigtwohill, Co. Cork	9.50 km
Tervas Ltd.	Lower	Knockburden, Ovens, Co. Cork	14.70 km
Upjohn Manufacturing Ireland ULC	Lower	Little Island Active Pharmaceutical Ingredients Plant, Little Island Co. Cork	4 km
Electricity Supply Board	Lower	ESB Aghada Generating Station, Whitegate, Midleton, Co. Cork	13.40 km

However, the proposed project is not likely to have a significant impact or to be at significant risk of major accident or disaster.

Construction Stage

Due to the nature and scale of the works it is considered that the likely impact from accidents and disasters is not significant.

The contractor will be required to design and implement traffic plans as required in accordance with the 'Guidance for the Control and Management of Traffic at Road Works' (TII, 2010).

Operation Stage

There will be no additional risk of major accidents or disasters associated with the operational stage of the proposed project.

Due to the nature and scale of the works, the site setting of the development, it is considered that the overall risk of major accidents and / or disasters associated with the proposed development is low and does not warrant further consideration.

The risks to human health (for example, due to water contamination or air pollution (Schedule 7(1)(h))

Refer to section 3.3.2 *Description of Aspects of the Environment Likely to be Significantly affected by the Proposed Development (Schedule 7A (2))*.

There are no reported public drinking water supplies within a 2km radius of the development (GSI, 2021). Due to the nature and scale of the project it is not anticipated to have a significant impact on groundwater. Given the location, nature and scale of the proposed project, the overall risk to human health is low.

3.3.6. Location of proposed development - The environmental sensitivity of geographical areas likely to be affected by the proposed scheme (Schedule 7(2))

The existing and approved land use (Schedule 7(2)(a))

The proposed residential development is located within a brownfield site. Under the Cork City Development Plan 2022-2028, the proposed site is zones as 'ZO 01 Sustainable Residential Neighbourhoods'

The area surrounding the proposed project is identified as zoned land use for 'ZO 01 Sustainable Residential Neighbourhoods', 'ZO 10 Business and Technology' and 'ZO 15 Public Open Space'. The location of the proposed development has been detailed previously in Section 3.3.1 under Schedule 7A (1)(a).

The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground (Schedule 7(2)(b))

Refer to Section 3.3.3 under *The Use of Any Natural Resources in particular soil, land, water and biodiversity (Schedule 7A (3)(b))*. The proposed development is not likely to have a significant environmental effect with regard to the use of any natural resources.

The absorption capacity of the natural environment, paying particular attention to the following areas (Schedule 7(2)(c)):

(i) Wetlands, riparian areas, river mouths

No significant impacts on wetlands or riparian areas are anticipated.

(ii) Coastal zones and the marine environment.

The proposed development is located ca. 9.30 km from the coast.

(iii) [Mountain and forest areas.](#)

There are no mountain or forested area within 2km of the proposed development.

(iv) [Nature reserves and parks](#)

The development is not located within any Nature Reserves and there is no Natural Reserves within 15 km of the proposed development.

(v) [Areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive](#)

The AA Screening concludes that *'the proposed project, individually or in-combination with other plants and projects, will not have likely significant effects on Great Island Channel SAC or Cork Harbour SPA in view of their conservation objectives. Thus, it is concluded that the proposed project does not need to proceed to Appropriate Assessment. Should the scope or nature of the proposed project change, a new Screening for Appropriate Assessment report shall be required'* (Atkins, 2022).

Refer to Section 3.3.3 under *'The Use of Any Natural Resources in particular soil, land, water and biodiversity (Schedule 7A (3)(b))'*

It is considered that due to the nature and scale of the works there will be no significant impact on areas classified or protected under legislation from the proposed development.

(vi) [Areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure.](#)

Water Quality

Lough Mahon and Cork Harbour have *'moderate'* water quality status under the Water Framework Directive (WFD) and is *'at risk'* of failing to achieve the relevant WFD objectives by 2027 (EPA, 2022).

It is considered that due to the nature and scale of the project including the proposed drainage arrangements as outlined in Section 3.3.1 the proposed development will not have a significant impact on baseline surface water quality.

Air Quality

Air quality in the area is reported as *'good'* (EPA, 2022). Dust may be generated during the construction phase which has the potential to impact on human health. However, management of dust will be in line with best practice such as that set out in *'Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes'* (NRA, 2011). Due to the nature and scale of the project it is anticipated that there will be no significant impact on air quality.

Noise Quality

It is anticipated that during construction there may be an increase in noise volumes. Noise levels will not exceed the indicative levels of acceptability for construction noise in an urban environment as set out in the NRA guidance *'Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes'* (NRA, 2014).

It is considered that due to the nature and scale of the works there will be no significant impact on water quality, baseline air or noise from the proposed development.

(vii) [Densely populated areas](#)

The proposed development is located within Cork city. Cork city has a population of 124,391 from the 2016 census (CSO, 2016) and 222,333 from preliminary results of the 2022 census (CSO, 2022). The development will be constructed on an existing site which is surrounded by existing residential estate and commercial buildings. Due to the nature and scale of the project is anticipated that there will be no significant impacts on the densely populated areas.

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

Refer to 3.3.1 under ‘A Description of the Location of the Proposed Development, with Particular Regard to the Environmental Sensitivity of Geographical Areas Likely to be Affected (Schedule 7A(1)(b)).’

It is considered that due to the nature and scale of the works there will be no significant impact on landscapes and sites of historical, cultural or archaeological significance from the proposed development.

3.3.7. Types and characteristics of potential impacts (Schedule 7(3))

The likely significant effects on the environment of the proposed development have been evaluated taking into account the following specific criteria.

The magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected) (Schedule 7(3)(a))

The spatial extent of potential impacts is limited to the localised footprint of the proposed development (refer to Figure 1-1). Based on the location, current site setting, and the nature of the proposed development, any potential impacts (during the construction and operational phases) are not likely to be significant in magnitude.

The nature of the impact (Schedule 7(3)(b))

There will be no significant impact on the receiving environment arising from the proposed residential development (during the construction or operational phases).

The transboundary nature of the impact (Schedule 7(3)(c))

There is no potential for transboundary impacts as a result of the proposed residential development (during the construction or operational phases).

The intensity and complexity of the impact (Schedule 7(3)(d))

There will be no significant impact on the receiving environment arising from the proposed residential development (during the construction or operational phases).

The probability of the impact (Schedule 7(3)(e))

The probability of such impacts on the receiving environment is low given the following considerations;

- The receiving environment is not considered to be at risk of significant impact due to the nature and scale of the proposed project;
- The Contractor will be obliged to implement standard best practice procedures prior to commencement of the proposed development including all environmental control measures for the onsite management of any pollution / nuisance issues which could arise during the construction phase.

The expected onset, duration, frequency and reversibility of the impact (Schedule 7(3)(f))

The probability of impacts on the receiving environment is considered to be low, as previously outlined. Therefore, there shall be no requirement for the reversibility of the impacts caused by this development (during the construction or operational phases).

The cumulation of the impact with the impact of other existing and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment (Schedule 7(3)(g))

As previously detailed no significant cumulative impacts associated with the project (during the construction or operational phases) have been identified, arising from other existing and/or approved projects. Refer to Section 3.4.1 under ‘Cumulation with other existing development and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment (Schedule 7(1)(b)).’

The possibility of effectively reducing the impact (Schedule 7(3)(h))

Significant effects on the receiving environment are not anticipated as a result of the provision of the proposed development (during the construction or operational phases).

3.4. Potential for Significant Effects on the Receiving Environment

All relevant information as required under Schedule 7A has been provided on behalf of Cork City Council and is presented within Section 3.3 of this screening report. The potential for this project to pose a significant impact to the receiving environment has also been evaluated in accordance with criteria listed in the Planning & Development Regulations (2001-2022), and EIA Planning and Development Regulations 2018 (Schedule 7), as presented within Section 3.4 of this screening report.

Based on the information provided within Section 3.3 and 3.4 of this report, and summarised below, it is considered that due to the size, nature, and characteristics of the proposed development, no significant effects on the receiving environment are expected; hence a sub-threshold EIAR is not required.

3.5. Screening Conclusion

This EIA screening assessment has been carried out in accordance with the Planning and Development Regulations as amended 2001- 2022 (which give effect to the provisions of EU Directive 2014/52/EU). The report assessed the impact of the proposed project, in conjunction with committed developments in the surrounding area, and other viable scheduled projects within the proposed development.

Based on all available information, and taking account of the scale, nature and location of the proposed project, it is our opinion that the preparation of an EIAR is not a mandatory requirement (under Part 1 or Part 2 of Schedule 5). The project is deemed a sub-threshold development; hence the potential for significant environmental effects arising as a result of the proposed project has been evaluated, in accordance with the requirements of Schedule 7A and Schedule 7.

Key findings are summarised as follows: -

- Limited noise, vibration and dust emissions may be generated during construction; however, this is anticipated to be minimal in effect and will cause no significant impact.
- Waste will be generated during the demolition, construction and operational phases however this is not anticipated to have a significant effect.

- There will be no significant impact on the receiving biodiversity, surface water, groundwater or traffic environment.
- There will be no impact on recorded monuments or historic features.

In summary, no significant adverse impacts to the receiving environment will arise as a result of the proposed scheme.

Accordingly, we consider that the preparation of an EIAR is not required for the proposed project. However, the competent authority will ultimately determine whether an EIA is required or not.

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