CHAPTER 1 INTRODUCTION

1.0 Introduction

1.1 Introduction

John Spain Associates, Planning & Development Consultants, and the associated environmental consultants, have been commissioned by its client, J. Murphy (Developments) Limited, to prepare an Environmental Impact Assessment Report (EIAR) in respect of a Strategic Housing Development application on lands at Fosterstown North, Swords, Co. Dublin.

The application is for a seven year permission for proposals comprising a Strategic Housing Development of 645 no. residential units (comprising 208 no. 1 bedroom units, 410 no. 2 bedroom units, and 27 no. 3 bedroom units), in 10 no. apartment buildings, with heights ranging from 4 no. storeys to 10 no. storeys, including undercroft / basement levels (for 6 no. of the buildings). The proposals include 1 no. community facility in Block 1, 1 no. childcare facility in Block 3, and 5 no. commercial units (for Class 1-Shop, or Class 2- Office / Professional Services or Class 11- Gym or Restaurant / Café use, including ancillary takeaway use) in Blocks 4 and 8.

The proposed development includes road upgrades, alterations and improvements to the Dublin Road / R132, including construction of a new temporary vehicular access, with provision of a new left in, left out junction to the Dublin Road / R132, and construction of a new signalised pedestrian crossing point, and associated works to facilitate same. The temporary vehicular access will be closed when vehicular access to the lands is made available from the lands to the north. The proposal includes internal roads, cycle paths, footpaths, vehicular access to the undercroft / basement car park, with proposed infrastructure provided up to the application site boundary to facilitate potential future connections to adjoining lands.

A detailed description of the proposed development with greater detail regarding the development site and its surrounds can be reviewed within Chapter 2 of this EIAR document.

The central purpose of the EIA process is to undertake an assessment of the likely and significant impact on the environment of the proposed development in parallel with the project design process, and to document this process in an Environmental Impact Assessment Report (EIAR); which is then submitted to the competent/consent authority, in order to inform the subsequent decision as to whether the development should be permitted to proceed.

As set out in Chapter 2, each Chapter of the EIAR includes a baseline and cumulative impact assessment of the proposed development with existing, under construction, permitted, and planned projects in the immediate area. Appendix 2.1 of the EIAR includes the relevant planning history of the surrounding area, which has informed each consultants assessment and they also undertook their own relevant planning history research. The potential cumulative impacts primarily relate to traffic, dust, noise and other nuisances from the construction of the development, with other planned or existing projects, and each of the following EIAR chapters has regard to these in the assessment and mitigation measures proposed.

In preparing this EIAR, the EIAR team have considered a baseline assessment for the subject site against which the likely impacts of the proposed development have been assessed.

This EIAR document has been prepared in accordance with the European Union EIA Directive 85/337/EC as amended by 97/11/EC, 2003/4/EC, 2011/92/EU and Directive 2014/52/EU.

The EIAR has also been prepared in accordance with the Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (published in August 2018) and the 2017 Draft EIAR Guidelines published by the EPA, as well as the European Commission's Guidance on the preparation of the Environmental Impact Assessment Report (2013). It should also be noted that appropriate sectoral guidance has been considered

in the preparation of a number of individual chapters of the EIAR including, for example, Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment (European Commission, 2013).

This Chapter describes the methodology via which the Environmental Impact Assessment Report (EIAR) was carried out and prepared. The methodology used is broadly consistent across all chapters in order to ensure the EIAR is clear and easy to navigate.

1.2 DEFINITION OF EIA AND EIAR

Directive 2014/52/EU (the 2014 Directive amending the 2011 codifying Directive) defines 'environmental impact assessment' as a process, which includes the responsibility of the developer to prepare an Environmental Impact Assessment Report (EIAR), and the responsibility of the competent authority (in this case, An Bord Pleanála) to provide reasoned conclusions following the examination of the EIAR and other relevant information.

Article 1(2)(g) of the 2014 EIA Directive states that "environmental impact assessment" means a process consisting of:

- (i) the preparation of an environmental impact assessment report by the developer, as referred to in Article 5(1) and (2);
- (ii) the carrying out of consultations as referred to in Article 6 and, where relevant, Article 7;
- (iii) the examination by the competent authority of the information presented in the environmental impact assessment report and any supplementary information provided, where necessary, by the developer in accordance with Article 5(3), and any relevant information received through the consultations under Articles 6 and 7;
- (iv) the reasoned conclusion by the competent authority on the significant effects of the project on the environment, taking into account the results of the examination referred to in point (iii) and, where appropriate, its own supplementary examination; and
- (v) the integration of the competent authority's reasoned conclusion into any of the decisions referred to in Article 8a.

The amending Directive (Directive 2014/52/EU) uses the term EIAR rather than environmental impact statement (EIS).

A definition of EIAR has not been included in the EIA Directive; however, section 2 of the Planning and Development Act 2000, as amended, provides the following definition:

'environmental impact assessment report' means a report of the effects, if any, which proposed development, if carried out, would have on the environment and shall include the information specified in Annex IV of the Environmental Impact Assessment Directive".

In addition, the EPA Guidelines (2017)¹ state as follows in relation to an EIAR:

"The EIAR is prepared by the developer and is submitted to a CA (Competent Authority) as part of a consent process. The CA uses the information provided to assess the environmental effects of the project and, in the context of other considerations, to help determine if consent should be granted. The information in the EIAR is also used by other parties to evaluate the acceptability of the project and its effects and to inform their submissions to the CA.

The EIAR consists of a systematic analysis and assessment of the potential effects of a proposed project on the receiving environment. The amended EIA Directive prescribes a range of environmental factors which are used to organise descriptions of the environment and these factors must be addressed in the EIAR.

¹ Guidelines on the Information to be contained in an Environmental Impact Assessment Report, Environmental Protection Agency, 2017

The EIAR should be prepared at a stage in the design process where changes can still be made to avoid adverse effects. This often results in the modification of the project to avoid or reduce effects through redesign".

In summary, EIA is a process of examination, analysis and evaluation, carried out (in this case) by An Bord Pleanála, that identifies, describes and assesses, in an appropriate manner, in the light of this individual case, the direct and indirect significant effects of the proposed development on the environment. An EIAR is the document produced to inform that process and consideration of site-specific considerations and the establishment of the baseline environment against which the likely impacts of a proposed development can be assessed by way of a concise, objective and systematic methodology.

1.3 EIA LEGISLATION

Certain public and private projects that are likely to have significant effects on the environment are subject to EIA requirements derived from EIA Directive 85/337/EC (as amended by Council Directive 97/11/EC, Directive 2003/4/EC, Directive 2009/31/EC, Directive 2011/92/EU and recently Directive 2014/52/EU which amends EIA law in a number of respects by amending Directive 2011/92/EU) which are designed to ensure that projects likely to have significant effects on the environment are subject to a comprehensive assessment of environmental effects prior to development consent being given.

Article 2 of Directive 2014/52/EU provides that Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with the Directive by 16 May 2017.

The Department of Housing, Planning, and Local Government brought forward amendments to the Planning and Development Act 2000, as amended, and the Planning and Development Regulations 2001-2021 to provide for the transposition of the EIA Directive into the Irish planning code for the purposes of the Irish planning system. To this effect, the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 have now transposed the 2014 Directive into Pt XA of the Planning and Development Act 2000, as amended.

The Department has also provided an update to the 2013 "Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment" to provide practical guidance on legal and procedural issues arising from the requirement to undertake EIA in accordance with Directive 2014/52/EU. These new Guidelines – 'Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment' were published in August 2018. These Guidelines have informed the preparation of this EIAR.

As referenced above, the 2017 Draft Guidelines prepared by the EPA have also informed this EIAR.

1.4 EIA GUIDELINES

EIA practice has evolved substantially since the introduction of the first EIA Directive in 1985. Practice continues to evolve and take into account the growing body of experience in carrying out EIAs in the development sector. Table 1.1 sets out the relevant key EIA Guidance which has been consulted in the preparation of this EIAR document. In addition, the individual chapters of this EIAR should be referred to for further information on the documents consulted by each individual EIAR consultant.

TABLE 1.1 – EIA GUIDELINES CONSULTED AS PART OF THE PREPARATION OF THIS EIAR

Irish

 Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, August 2018, DPHLG

- Draft Guidelines on the information to be contained in environmental impact assessment reports, EPA, August 2017
- Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems Key Issues Consultation Paper, Department of Environment, Community and Local Government, 2017.
- Circular letter PL 1/2017 Advice on Administrative Provisions in Advance of Transposition (2017).
- Development Management Guidelines (DoEHLG, 2007).
- Advice Notes on Current Practice (in preparation of Environmental Impact Statements) (EPA 2003).
- Environmental Impact Assessment (EIA), Guidance for Consent Authorities Regarding Sub-Threshold Development (DoEHLG 2003).
- Guidelines on Information to be Contained in an Environmental Impact Statement (EPA 2002).

European Union / European Commission (in addition to Directives referenced above)

- Environmental Impact Assessment of Projects Guidance on the Preparation of the Environmental Impact Assessment Report (2017)
- Environmental Impact Assessment of Projects Guidance on Screening (2017)
- Environmental Impact Assessment of Projects Guidance on Scoping (2017)
- Study on the Assessment of Indirect & Cumulative Impacts as well as Impact Interaction (DG Environment 2002).
- EU Guidance on EIA Screening (DG Environment 2001).
- Guidance on EIA Scoping (DG Environment 2001).
- EIA Review Checklist (DG Environment 2001).
- Guidance on integrating climate change and biodiversity into environmental impact assessment (European Commission, 2013).

The most recent guidelines are the Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment 2018.

The 2017 EPA draft guidelines were prepared to help practitioners interpret the amended EIA Directive and will be published in final form upon the enactment of legislation to transpose the 2014 Directive for the purposes of EPA licencing processes. They provide practical guidance to planning authorities, An Bord Pleanála, and other relevant stakeholders, on procedural issues and the EIA process; and outline the key changes introduced by Directive 2014/52/EU.

The EIA Process

The main purpose of the EIA process is to identify the likely significant impacts on the human environment, the natural environment and on cultural heritage associated with the proposed development, and to determine how to eliminate or minimise these impacts. The EIAR summarises the environmental information collected during the impact assessment of the proposed development.

Several interacting steps typify the early stages of the EIA process and include:

- Screening: Screening is the term used to describe the process for determining whether a proposed development requires an EIA.
- Scoping: This stage firstly identifies the extent of the proposed development and associated site, which will
 be assessed as part of the EIA process, and secondly, it identifies the environmental issues likely to be
 important during the course of completing the EIA process through consultation with statutory and nonstatutory stakeholders. Scoping request letters were issued to a range of stakeholders at the
 commencement of this EIA process and the responses received have been considered as part of the
 compilation of the EIAR.

- Consideration of alternatives: This stage outlines the possible alternative approaches to the proposed development. Consideration of alternative sites and layouts within the final chosen site are set out in Chapter 2 of this EIAR.
- Assessing and evaluating: The central steps of the EIA process include baseline assessment (desk study and field surveys) to determine the status of the existing environment, impact prediction and evaluation, and determining appropriate mitigation measures where necessary.

1.5 SCREENING FOR EIA

Screening is the term used to describe the process for determining whether a proposed development requires an EIA by reference to mandatory legislative threshold requirements or by reference to the type and scale of the proposed development and the significance or the environmental sensitivity of the receiving baseline environment.

Annex I of the EIA Directive requires as mandatory the preparation of an EIA for all development projects listed therein.

Schedule 5 (Part 1) of the Planning and Development Regulations 2001, as amended, transposes Annex 1 of the EIA Directive directly into Irish land use planning legislation. The EIA Directive prescribes mandatory thresholds in respect to Annex 1 projects.

Annex II of the EIA Directive provides EU Member States discretion in determining the need for an EIA on a caseby-case basis for certain classes of project having regard to the overriding consideration that projects likely to have significant effects on the environment should be subject to EIA.

Schedule 5 (Part 2) of the Planning and Development Regulations 2001, as amended, sets mandatory thresholds for each project class. Sub-section 10(b) (i) to (iv) addresses 'Infrastructure Projects' and requires that the following relevant class of project be subject to EIA:

Class 10(b)(i) Construction of more than 500 dwelling units.

The proposed development relates to the provision of 645 no. residential units and associated development and therefore requires EIA.

1.6 **SCOPING**

The EPA Guidelines state that 'Scoping' is a process of deciding what information should be contained in an EIAR and what methods should be used to gather and assess that information. It is defined in the EC guidance² as:

'determining the content and extent of the matters which should be covered in the environmental information to be submitted in the EIAR'.

The applicant is committed to ensuring that the proposal is undertaken in a responsible and sustainable manner. A scoping process to identify the issues that are likely to be most important during the EIA process was carried out by the applicant, design team and EIAR consultants and informed the format of this EIAR.

The EIAR prepared for the scheme has endeavoured to be as thorough as possible and therefore the provisions included in the revised EIA Directive and all of the issues listed in Schedule 6, Sections 1, 2 and 3 of the Planning and Development Regulations 2001-2021 and in recent guidance documents have been addressed in the EIAR.

² Guidance on EIA Scoping, EC, 2001

In this context the following topics/issues have been reviewed and addressed in the context of the proposed development:

- Introduction and Methodology
- Project Description and Alternatives
- · Population and Human Health
- Archaeology and Cultural Heritage
- Biodiversity
- Landscape and Visual Impact
- Land and Soils
- Water
- · Air Quality and Climate
- Noise and Vibration
- Microclimate
- Material Assets
- Interactions of the Foregoing
- Principal Mitigation and Monitoring Measures
- Non-Technical Summary

In addition to the above a series of standalone reports have been prepared to accompany the application and which have helped inform the above chapters of the EIAR where relevant. Waterman Moylan Consulting Engineers have prepared a Construction & Environmental Management Plan, an Engineering Assessment Report and Site-Specific Flood Risk Assessment Report. AWN have prepared a Construction and Demolition Waste Management Plan and an Operational Waste Management Plan. An Appropriate Assessment Screening Report and Natura Impact Statement have also been prepared by Enviroguide. A Traffic Impact Assessment has been prepared by OCSC Consulting Engineers and a DMURS Compliance Statement and Car Parking Rationale and Mobility Management Plan has been prepared by Waterman Moylan Consulting Engineers. A Landscape Design Report has been prepared by Mitchell and Associates, while an Arboricultural Report, including an impact assessment of the proposed development, has been prepared by Charles McCorkell.

It is necessary to examine each of the aforementioned sections of the EIAR with respect to the impacts that the proposed development may have on the environment. The purpose of the scoping exercise is to shape and mould the EIAR so as not to dismiss any potential impacts that may in fact be significant, and to focus on issues which need to be resolved.

The scope of this EIAR has been informed by the following:

- European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, August 2018
- Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports, EPA, 2017
- Environmental Impact Assessment of Projects Guidance on the Preparation of the Environmental Impact Assessment Report (2017) – European Commission
- Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems -Key Issues Consultation Paper, Department of Environment, Community and Local Government, 2017
- Circular letter PL 1/2017 Advice on Administrative Provisions in Advance of Transposition (2017)
- The requirements of Part X of the Planning Acts, and Part 10 of the Planning and Development Regulations 2001, as amended
- Fingal County Council Development Plan 2017-2023
- Fosterstown Masterplan 2019
- National and Regional Planning Policy Documents

- The input from prescribed bodies
- The likely concerns of third parties
- The nature, location and scale of the proposal
- The existing environment together with any vulnerable or sensitive local features and current uses
- The planning history and environmental assessments associated with the subject site and adjoining lands
- The likely and significant impacts of the proposed development on the environment
- Available methods of reducing or eliminating undesirable impacts

The content of this Environmental Impact Assessment Report has been prepared in accordance with the provisions of Article 5(1) and Annex IV of Directive 2014/52/EU. Article 5(1) states:

"The information to be provided by the developer shall include at least:

- (a) a description of the project comprising information on the site, design, size and other relevant features of the project:
- (b) a description of the likely significant effects of the project on the environment;
- (c) a description of the features of the project and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;
- (d) a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;
- (e) a non-technical summary of the information referred to in points (a) to (d); and
- (f) any additional information specified in Annex IV relevant to the specific characteristics of a particular project or type of project and to the environmental features likely to be affected."

Annex IV states:

- "1. A Description of the project, including in particular:
 - (a) a description of the location of the project;
 - (b) a description of the physical characteristics of the whole project, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases;
 - (c) a description of the main characteristics of the operational phase of the project (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used;
 - (d) an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation) and quantities and types of waste produced during the construction and operation phases.
- A description of the reasonable alternatives (for example in terms of project design, technology, location, size
 and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics,
 and an indication of the main reasons for selecting the chosen option, including a comparison of the
 environmental effects.
- 3. A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the project as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.
- 4. A description of the factors specified in Article 3(1) likely to be significantly affected by the project: population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaptation), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.
- A description of the likely significant effects of the project on the environment resulting from, inter alia:
 - (a) the construction and existence of the project, including, where relevant, demolition works;
 - (b) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;

- (c) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste;
- (d) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters);
- (e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;
- (f) the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change;
- (g) the technologies and the substances used.
- The description of the likely significant effects on the factors specified in Article 3(1) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the project. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project.
- 6. A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.
- 7. A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.
- 8. A description of the expected significant adverse effects of the project on the environment deriving from the vulnerability of the project to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to Union legislation such as Directive 2012/18/EU of the European Parliament and of the Council or Council Directive 2009/71/Euratom or relevant assessments carried out pursuant to national legislation may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.
- 9. A non-technical summary of the information provided under points 1 to 8.
- 10. A reference list detailing the sources used for the descriptions and assessments included in the report."

1.7 PURPOSE OF THE EIAR

The objective of the EIAR is to identify and predict the likely environmental impacts of the proposed development; to describe the means and extent by which they can be reduced or ameliorated; to interpret and communicate information about the likely impacts; and to provide an input into the decision making and planning process. As provided for in the EPA guidelines, the EIAR focuses on:

- Impacts that are both likely and significant;
- Impact descriptions that are accurate and credible'

The objective of the EIAR will be to identify and predict the likely environmental impacts of the proposed development; to describe the means and extent by which they can be reduced or ameliorated; to interpret and communicate information about the likely impacts; and to provide an input into the decision making and planning process.

It is intended that this EIAR will assist An Bord Pleanála as the competent authority, statutory consultees and the public in assessing all aspects of the application proposals.

The definition of Environmental Impact Assessment is clarified within the 2014 EIA Directive and is as follows:

"(g) 'environmental impact assessment' means a process consisting of:

the preparation of an environmental impact assessment report by the developer, as referred to in Article 5(1) and (2);

the carrying out of consultations as referred to in Article 6 and, where relevant, Article 7;

the examination by the competent authority of the information presented in the environmental impact assessment report and any supplementary information provided, where necessary, by the developer in accordance with Article 5(3), and any relevant information received through the consultations under Articles 6 and 7:

the reasoned conclusion by the competent authority on the significant effects of the project on the environment, taking into account the results of the examination referred to in point (iii) and, where appropriate, its own supplementary examination; and

the integration of the competent authority's reasoned conclusion into any of the decisions referred to in Article 8a."

Under Article 5(3) of the 2014 Directive, it is expressly required that the developer must ensure that the environmental impact assessment report (EIAR) is prepared by competent experts. Each of the chapters of this EIAR for the subject development have been prepared by experts with the requisite qualifications and competences.

The intention of this EIAR document is to provide transparent, objective and replicable documentary evidence of the EIA evaluation and decision-making processes which led to the selection of the final project configuration. The EIAR documents the consideration of environmental effects that influenced the evaluation of alternatives. It also documents how the selected project design incorporates mitigation measures, including impact avoidance, reduction or amelioration; to explain how significant adverse effects will be avoided.

1.8 OBJECTIVES OF THIS EIAR

The EPA guidelines list the following fundamental principles to be followed when preparing an EIAR:

- Anticipating, avoiding and reducing significant effects
- Assessing and mitigating effects
- · Maintaining objectivity
- Ensuring clarity and quality
- Providing relevant information to decision makers
- Facilitating better consultation.

This EIAR document describes the outcomes of the iterative EIA process which was progressed in parallel with the project design process. This forms the first part of the EIA process which will be completed by the competent authority, which in turn will be required to examine, analyse and evaluate the direct and indirect effects of the development on the various factors listed under Section 171A of the Planning and Development Act 2000, as amended.

The amended EIA Directive prescribes a range of environmental factors which are used to organise descriptions of the environment and the environmental impact assessment should identify, describe and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project on the prescribed environmental factors which are:

- (a) population and human health;
- (b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;
- (c) land, soil, water, air and climate;
- (d) material assets, cultural heritage and the landscape;
- (e) the interaction between the factors referred to in points (a) to (d).

The EIA process was based on the following four key objectives:

- Pursuing Preventative Action
- Maintaining Environmental Focus and Scope
- Informing the Decision
- Public & Stakeholder Participation

1.8.1 Pursuing Preventative Action

Pursuing preventative action is the most effective means by which potential negative environmental impacts can be avoided. A consideration of anticipated likely and significant impacts was undertaken during the screening, informal scoping and the considerations of alternatives stages of the EIA process. This involved forming a preliminary opinion, in the absence of complete data, with respect to the approximate magnitude and character of the likely environmental impacts. This assessment was based on the knowledge, experience and expertise of the EIA and project design team with reference to the EIA Directive, EIA guidance material and local precedents.

Avoidance of impacts has been principally achieved through the consideration of alternatives, through the review of the project design in light of identified key environmental constraints and pre-application consultations with the Planning Authority. This is outlined in greater detail in Chapter 2 of this EIAR, the accompanying Statement of Response to ABP's Pre-Application Opinion, the Statement of Consistency and Planning Report, and the Architectural Design Statement.

1.8.2 Maintain Environmental Scope and Focus

It is important that the EIAR remains tightly focussed. This minimises delays and the potential for a confusing mass of data to obscure relevant facts. The EIA process has been project-managed and steered, so as to ensure that the EIAR addresses those topics and issues which are explicitly prescribed in the legislation, and where environmental impacts may arise. Evaluation and analysis has been limited to topics where the indirect, secondary or cumulative impacts are either wholly or dominantly due to the proposed development and remain focused on issues that:

- Are environmentally based;
- · Are likely to occur; and,
- · Have significant and adverse effects.

1.8.3 Informing the Decision

The EIAR enables the competent/consent authorities to reach a decision on the acceptability of the proposed development in the full knowledge of the project's likely significant impacts on the environment, if any.

1.8.4 Public & Stakeholder Participation

Decisions are taken by competent/consent authorities through the statutory planning process which allows for public participation and consultation while receiving advice from other key stakeholders and statutory authorities with specific environmental responsibilities.

The structure, presentation and the non-technical summary of the EIAR, as well as the arrangements for public access, all facilitate the dissemination of the information contained in the EIAR. A core objective is to ensure that the public and local community are aware of the likely environmental impacts of projects prior to the granting of consent.

Informal scoping of potential environmental impacts was undertaken with the Planning Authority and the Board through pre-application meetings. Public participation in the EIA process will be affected through the statutory

planning application process. Information on the EIAR has also been issued for the Department of Housing, Planning and Local Government's EIA Portal. The EIA Portal No. for the application is **2022072**.

Meetings have taken place with the technical staff of Fingal County Council which assisted in the preparation of this EIAR and planning application. A tripartite pre-application meeting was also undertaken with the Board and the Planning Authority.

The current Environmental Impact Assessment Report and the application as a whole also takes into account the views expressed by the general public and prescribed bodies in the preparation of the Fosterstown Masterplan 2019.

1.9 FORMAT AND STRUCTURE OF THIS EIAR

The preparation of an EIAR requires the assimilation, co-ordination and presentation of a wide range of relevant information in order to allow for the overall assessment of a proposed development. For clarity and to allow for ease of presentation and consistency when considering the various elements of the proposed development, a systematic structure is used for the main body of this EIAR document.

The structure used in this EIAR document is a **Grouped Format** structure. This structure examines each environmental topic³ in a separate chapter of this EIAR document. The structure of the EIAR is set out in Table 1.2 and Table 1.3 below.

TABLE 1.2: STRUCTURE OF THIS EIAR		
Ch.	Title	Content
1	Introduction and Methodology	Sets out the purpose, methodology and scope of the document.
2	Project Description and Alternatives	Sets out the description of the site, design and scale of development, considers all relevant phases from construction through to existence and operation together with a description and evaluation of the reasonable alternatives studied by the developer including alternative locations, designs and processes considered; and a justification for the option chosen taking into account the effects of the project on the environment.
3	Population and Human Health	Describes the demographic and socio-economic profile of the receiving environment and potential impact of the proposed development on population, i.e. human beings, and human health.
4	Archaeology and Cultural Heritage	Provides an assessment of the site and considers the potential impact of the proposed development on the local archaeology and cultural heritage; and recommends mitigation measures.
5	Biodiversity	Describes the existing ecology on site and in the surrounding catchment and assesses the potential impact of the proposed development and mitigation measures incorporated into the design of the scheme.
6	Landscape and Visual Impact	Details the likely effects on the landscape and visual environment of the proposed development with reference to the accompanying verified view montages.
7	Land and Soils	Provides an overview of the baseline position, the potential impact of the proposed development on the site's soil and geology and impacts in relation to land take and recommends mitigation measures.

³ In some instances, similar environmental topics are grouped.

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TABLE 1.2: STRUCTURE OF THIS EIAR		
Ch.	Title	Content
8	Water	Provides an overview of the baseline position, the potential impact of the proposed development on water quality and quantity and recommends mitigation measures.
9	Air Quality and Climate	Provides an overview of the baseline air quality and climatic environment, the potential impact of the proposed development, and recommends mitigation measures.
10	Noise and Vibration	Provides an overview of the baseline noise environment, the potential impact of the proposed development and recommends mitigation measures.
11	Microclimate	This chapter assesses the potential effects of the proposed development on the pedestrian level wind microclimate around the proposed buildings and open spaces, and in the area immediately surrounding the site, and recommends mitigation measures.
12	Material Assets	Describes the existing services and infrastructural service requirements of the proposed development and the likely impact of the proposed development on material assets.
13	Material Assets – Traffic and Transportation	Describes the existing transport services and infrastructural service requirements of the proposed development and the likely impact of the proposed development on these material assets.
13	Interactions of the Foregoing	Describes the potential interactions and interrelationships between the various environmental factors.
14	Principal Mitigation and Monitoring Measures	Sets out the key mitigation and monitoring measures included in the above chapters of the EIAR Document for ease of reference.
Non-Technical Summary Provides a concise non-technical summary of the information contain the EIAR		Provides a concise non-technical summary of the information contained in the EIAR

This systematic approach described above employs standard descriptive methods, replicable assessment techniques and standardised impact descriptions to provide an appropriate evaluation of each environmental topic under consideration. An outline of the methodology employed in most chapters to examine each environmental topic is provided in Table 1.3.

TABLE 1.3: METHODOLOGY EMPLOYED TO EVALUATE EACH ENVIRONMENTAL TOPIC

- **Introduction:** Provides an overview of the specialist area and specifies the specialist who prepared the assessment and their qualifications and competencies.
- **Study Methodology:** This subsection outlines the method by which the relevant impact assessment has been conducted within that chapter.
- The Existing Receiving Environment (Baseline Situation): In describing the receiving environment, the
 context, character, significance and sensitivity of the baseline receiving environment into which the proposed
 development will fit is assessed. This also takes account of any proposed developments that are likely to
 proceed.
- Characteristics of the Proposed Development: Consideration of the 'Characteristics of the Proposed Development' allows for a projection of the 'level of impact' on any particular aspect of the environment that

could arise. For each chapter those characteristics of the proposed development which are relevant to the area of study are described; for example, the chapter on noise describes the machinery and operations which are likely to produce noise while the landscape and visual impact would describe the height, scale and location of the development.

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).

- Potential Impact of the Proposed Development: This section provides a description of the specific, direct and indirect, impacts that the proposed development may have. This is provided with reference to both the Receiving Environment and Characteristics of the Proposed Development sections while also referring to the (i) magnitude and intensity, (ii) integrity, (iii) duration and (iv) probability of impacts. Impact assessment addresses direct, indirect, secondary, cumulative, short, medium and long-term permanent, temporary, positive and negative effects as well as impact interactions. It is important to consider the appropriateness of subdividing sections into 'Construction Phase' and 'Operational Phase' in describing impacts, mitigation measures etc.
- **Do Nothing Impact:** In order to provide a qualitative and equitable assessment of the proposed development, this section considers the proposed development in the context of the likely impacts upon the receiving environment should the proposed development not take place.
- Avoidance, Remedial and Mitigation Measures: Avoidance, Remedial and Mitigation measures describe any
 corrective or mitigative measures that are either practicable or reasonable, having regard to the potential
 impacts. This includes avoidance, reduction and remedy measures as set out in Section 4.7 of the Development
 Management Guidelines 2007 to reduce or eliminate any significant adverse impacts identified.
- Predicted Impacts of the Proposed Development: This section allows for a qualitative description of the
 resultant specific direct, indirect, secondary, cumulative, short, medium and long-term permanent, temporary,
 positive and negative effects as well as impact interactions which the proposed development may have,
 assuming all mitigation measures are fully and successfully applied.
- **Monitoring:** This involves a description of monitoring in a post-development phase, if required. This section addresses the effects that require monitoring, along with the methods and the agencies that are responsible for such monitoring.
- Reinstatement: While not applicable to every aspect of the environment considered within the EIAR, certain
 measures need to be proposed to ensure that in the event of the proposal being discontinued, there will be
 minimal impact to the environment
- **Interactions:** This section provides a description of impact interactions together with potential indirect, secondary and cumulative impacts
- **Difficulties Encountered in Compiling:** This section provides an indication of any difficulties encountered by the environmental specialist in compiling the required information.
- References: Consultants refer to documents referred to in preparing their chapter / undertaking their assessment.

1.10 DESCRIPTION OF IMPACTS IN THE EIAR

The EPA *Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports* 2017 require that the direct, indirect, cumulative and residual impacts of the proposed development for both the construction and operational stages are described. The identified quality, significance and duration of effects for each aspect are categorised, as set out below. Quality refers to the nature of the impact, significance of effects refers to the degree that these will impact on the site and surrounding area and duration refers to how long the effects are likely to last for. A direct impact is an impact the development will give rise to. An indirect impact is similar to a secondary impact – it may result in consequences not in the immediate vicinity of the site. Cumulative Impacts are impacts that arise in conjunction with other consented developments. Residual impacts are those which remain after mitigation measures have been applied.

The quality of potential effects are described as follows:

Table 1.4: Quality of Potential Effects		
Quality of Effects	Definition	
Negative	A change which reduces the quality of the environment	
Neutral	No effects or effects that are imperceptible, within the normal bounds of variation or within the margin of forecasting error.	
Positive	A change that improves the quality of the environment	

The significance of an effect on the receiving environment are described as follows:

Table 1.5: Significance of Effects		
Significance of Effects on the Receiving Environment	Description of Potential 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	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.	
Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.	
Significant	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 a sensitive aspect of the environment.	
Profound	An effect which obliterates sensitive characteristics.	

The duration of effects as described in the Draft EPA Guidelines are:

TABLE 1.6: Duration of Effects	
Duration of Impact	Definition
Momentary	Effects lasting from seconds to minutes

TABLE 1.6: Duration of Effects	
Duration of Impact	Definition
Brief	Effects lasting less than a day
Temporary	Effects lasting one year or less
Short-term	Effects lasting one to seven years
Medium-term	Effects lasting seven to fifteen years
Long-term	Effects lasting fifteen to sixty years
Permanent	Effects lasting over sixty years
Reversible	Effects that can be undone, for example through remediation or restoration

1.11 EIA PROJECT TEAM

Under Article 5(3) of the 2014 Directive, it is expressly required that the developer must ensure that the environmental impact assessment report (EIAR) is prepared by competent experts. Each of the chapters of this EIAR for the subject development have been prepared by experts with the requisite qualifications and competences, as set out in each Chapter.

1.11.1 EIA Project Management

This EIA was project managed, co-ordinated and produced by John Spain Associates in association with a team of specialist environmental consultants, the applicant and overall design team. John Spain Associates' role was to coordinate the EIA process and to liaise between the design team and various environmental specialist consultants. John Spain Associates were also responsible for editing the EIAR document to ensure that it is cohesive and not a disjointed collection of disparate reports by various environmental specialists. John Spain Associates does not accept responsibility for the input of specialist consultants or the design team.

1.11.2 EIA Environmental Specialists

Environmental specialist consultants were also commissioned for the various technical chapters of the EIAR document which are mandatorily required as per the EIA Directive and Regulations.

The amended EIA Directive (Directive 2014/52/EU) states the following in relation to the persons responsible for preparing the environmental impact assessment reports;

'Experts involved in the preparation of environmental impact assessment reports should be qualified and competent. Sufficient expertise, in the relevant field of the project concerned, is required for the purpose of its examination by the competent authorities in order to ensure that the information provided by the developer is complete and of a high level of quality'.

In order to outline compliance with this requirement and in line with emerging best practice the EIAR states the names of the environmental consultants who have prepared each element of the EIAR and lists their qualifications and relevant experience; demonstrating that the EIAR has been prepared by competent experts. This is also in accordance with the 2018 EIA Guidelines for Planning Authorities and An Bord Pleanála.

Each environmental specialist was commissioned having regard to their previous experience in EIA; their knowledge of relevant environmental legislation relevant to their topic; familiarity with the relevant standards and criteria for evaluation relevant to their topic; ability to interpret the specialised documentation of the construction sector and to understand and anticipate how their topic will be affected during construction and operation phases

of development; ability to arrive at practicable and reliable measure to mitigate or avoid adverse environmental impacts; and to clearly and comprehensively present their findings.

Each environmental specialist was required to characterise the receiving baseline environment; evaluate its significance and sensitivity; predict how the receiving environment will interact with the proposed development and to work with the EIA project design team to devise measures to mitigate any adverse environmental impacts identified.

The relevant specialist consultants who contributed to the EIAR and their inputs are set out in Table 1.7 below:

Organisation	EIAR Specialist Topics / Inputs
John Spain Associates Planning & Development Consultants, 39 Fitzwilliam Place, Dublin 2, D02 ND61 T: 01 662 5803 pturley@johnspainassociates.com	 Introduction Project Description and Alternatives Population and Human Health Interactions of the
Paul Turley - BA, MRUP, Dip Environmental & Planning Law, MIPI Kate Kerrigan – BA, MSc, MRTPI	 Foregoing Material Assets Principle Mitigation and Monitoring Measures
Luke Wymer – BA, MRUP, Dip. Planning & Environmental Law, Dip PM, Prof. Cert. Environmental Management, MIPI	Non-Technical Summary
PCOT Architects 57 Fitzwilliam Square North, Dublin 2. +353 (0) 87 905 7945 info@pcotarchitects.ie Paul O'Toole - BArch	 Project Description and Alternatives
Arrow Architects 25 Lower Leeson Street, Dublin 2 asi@arrowarchitects.com Anna Siwik – Architect, MArch, MA Architecture and Urban Planning,	 Project Description and Alternatives
ACS Archaeological Consultancy Services Unit Ltd. Unit 21, Boyne Business Park, Greenhills, Drogheda, Co. Louth Phone: +353 (0) 41 9883396	Archaeology and Cultural Heritage

TABLE 1.7: EIAR SPECIALIST CONSULTANTS, QUALIFICATIONS AND EXPERTISE		
Organisation	EIAR Specialist Topics / Inputs	
Donald Murphy - BA, Member of the Institute of Archaeologists of Ireland Magda Lyne - MA, Member of the Institute of Archaeologist of Ireland		
Enviroguide Consulting Enviroguide Consulting Enviroguide Consulting / Unit 3D, Core C, Block 71, The Plaza, Park West Dublin 12. M Tel: +353 (0) 1 5654730 E: lgaffney@enviroguide.ie Liam Gaffney - BSC, MSC	 Biodiversity Appropriate Assessment Screening Report and Natura Impact Statement (included as separate standalone documents) 	
Mitchell + Associates Unit 5, Woodpark, The Rise, Glasnevin, Dublin 9 +353 1 454 5066 info@mitchelleassoc.net Dave Kirkwood - BSc (Hons), Dip. Env. Man., CMLI, MILI & 3DDB 3D Design Bureau 65 Rock Road, Blackrock, Co Dublin. P: +353 (0)1 288 0186 nick@3ddesignbureau.com	 Landscape and Visual Impact Verified View Montages 	
AWN Consulting AWN Consulting The Tecpro Building IDA Business and Technology Park Clonshaugh	Land and SoilsWaterAir Quality and Climate	

TABLE 1.7: EIAR SPECIALIST CONSULTANTS, QUALIFICATIONS AND EXPERTI	ISE
Organisation	EIAR Specialist Topics / Inputs
Dublin 17 D17 XD90	Noise and VibrationMicroclimate
E: marcelo.allende@awnconsulting.com E: Ciara.nolan@awnconsulting.com E: alistair.maclaurin@awnconsulting.com E: Fergal.Callaghan@awnconsulting.com Marcelo Allende - BSc BEng, MIEI (Land and Soils)	
Ciara Nolan - BSc MSc AMIAQM AMIEnvSc. (Air Quality and Climate) Alistair MacLaurin - BSc PgDip MIOA (Noise and Vibration)	
Dr Fergal Callaghan - BSc, PhD (Microclimate)	
Waterman Moylan Consulting Engineers EastPoint Business Park, Alfie Byrne Rd, East Wall, Dublin 3 Phone: (01) 664 8900 E: e.caulwell@waterman-moylan.ie	 Material Assets Material Assets – Traffic and Transportation
Emma Caulwell - BEng, MSc	

1.12 NON-TECHNICAL SUMMARY

The EIA Directive requires that one of the objectives of the EIA process is to ensure that the public are fully aware of the environmental implications of any decisions.

The EPA guidelines note that the non-technical summary of the EIAR should facilitate the dissemination of the information contained in the EIAR and that the core objective is to ensure that the public is made as fully aware as possible of the likely environmental impacts of projects prior to a decision being made by the Competent Authority.

The 2018 EIA Guidelines prepared by the DHPLG state that the Non-Technical Summary "should be concise and comprehensive and should be written in language easily understood by a lay member of the public not having a background in environmental matters or an in-depth knowledge of the proposed project."

A Non-Technical Summary of the EIAR has therefore been prepared which summarises the key environmental impacts and is provided as a separately bound document.

1.13 LINKS BETWEEN EIA AND APPROPRIATE ASSESSMENT (& OTHER RELEVANT ASSESSMENTS)

Article 6(3) of the Habitats Directive (92/43/EEC) states any project not directly connected with or necessary to the management of a Natura 2000 site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to the Appropriate Assessment procedure of its likely implications for the site in view of the site's conservation objectives.

In January 2010, the Department issued a guidance document entitled 'Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities'. This guidance document enshrines the 'Source-Pathway-Receptor' into the assessment of plans and projects which may have an impact on Natura 2000 sites.

Accordingly, an **Appropriate Assessment Stage 1 Screening** exercise was undertaken by EnviroGuide Consulting in accordance with 'Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites – Methodological Guidance on the Provisions of Article 6 (3) and (4) of the Habitats Directive 92/43/EEC)'. The Stage 1 Screening Report determines that a Stage 2 Appropriate Assessment is required.

In accordance with these Guidelines, the Appropriate Assessment may be a separate document or form part of the EIAR. In the case of the proposed development a separate Appropriate Assessment Screening Report and a Natura Impact Statement are submitted with this application as standalone reports and referenced in the Biodiversity Chapter.

Article 5(1) of the Directive also states that the EIAR shall include the information that may reasonably be required for reaching a reasoned conclusion on the significant effects of the project on the environment, taking into account current knowledge and methods of assessment. The developer shall, with a view to avoiding duplication of assessments, take into account the available results of other relevant assessments under Union or national legislation, in preparing the environmental impact assessment report.

In this regard, while not required under Part 23 of the Planning and Development Regulations 2001-2021, a brief account of how the results of other relevant assessments considered in the preparation of this EIAR is included as Appendix 1.1 to this chapter.

1.14 AVAILABILITY OF EIAR DOCUMENTS

A copy of this EIAR document and Non-Technical Summary of the EIAR document is available for purchase at the offices of An Bord Pleanála and Fingal County Council (the relevant Planning Authority) at a fee not exceeding the reasonable cost of reproducing the document. It can also be viewed on the SHD website set up by the applicant as set within the public notices for the application. The website can be http://www.fosterstownnorthshd.ie

1.15 IMPARTIALITY

This EIAR document has been prepared with reference to a standardised methodology which is universally accepted and acknowledged. Recognised and experienced environmental specialists have been used throughout the EIA process to ensure the EIAR document produced is robust, impartial and objective.

It should be noted that, as highlighted above, an important part of the EIA process is preventative action which causes the project design team to devise measures to avoid, reduce or remedy significant adverse impacts in advance of applying for consent. As a result, where no likely significant impacts have been identified where they might reasonably be anticipated to occur, the design and layout of the proposed development has generally been amended to minimise the potential of any likely significant adverse impacts.

1.16 STATEMENT OF DIFFICULTIES ENCOUNTERED

No particular difficulties were experienced in compiling the necessary information for the proposed development. Where any specific difficulties were encountered these are outlined in the relevant chapter of the EIAR.

1.17 QUOTATIONS

EIAR documents by their very nature contain statements about the proposed development, some of which are positive, and some negative. Selective quotation or quotations out of context can give a very misleading impression of the findings of this EIAR.

The EIAR study team urge that quotations should, where reasonably possible be taken from the conclusions of specialists' chapters or from the non-technical summary and not selectively.

1.18 EIAR QUALITY CONTROL & REVIEW

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

The DHPLG have published guidelines on Environmental Impact Assessment for Planning Authorities and the Board (published August 2018)⁴, and the EPA have published draft guidelines on the information to be contained in an Environmental Impact Assessment Report⁵ which have been consulted in the preparation of this EIAR, in addition to the EIAR guidance published by the European Commission in 2017.

1.19 ERRORS

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

⁴ Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, 2018

⁵ Guidelines on the Information to be contained in an Environmental Impact Assessment Report, Environmental Protection Agency, 2017

APPENDIX 1.1: OTHER RELEVANT ASSESSMENTS CONSIDERED

Relevant **Nature of Assessment Relevant Assessment** Legislation Appropriate **Directive** An Appropriate Assessment Screening Report assessment comes 2022) and 92/43/EEC, the Directive (EnviroGuide from the Habitats Natura Impact seeks Statement (Enviroguide 2022) accompany the **Habitats** (92/43/EEC), which Directive safeguard the long-term survival of current SHD application. Europe's most valuable threatened species and habitats. The AA Screening Report concludes that Stage 2 The geographical areas of particular appropriate assessment is required in relation to importance to these species and the proposed development, as the possibility that habitats have been selected as the Proposed Development will have a significant Special Areas of Conservation effect on the following European Sites, noted to (SAC) and Special Protection Areas be linked by a Source-Pathway-Receptor impact pathway, cannot be excluded; due to the (SPA) which are collectively referred to (in Ireland) as European sites. presence of a hydrological connection with the Together, these sites comprise the Site of the Proposed Development: pan-European Natura 2000 network of protected areas. Malahide Estuary SAC [000205] Malahide Estuary SPA [004025] One of the measures which protects these areas is the requirement that On this basis, a NIS is submitted to enable the every project must undergo an Board to carry out Stage 2 Appropriate assessment of its implications for Assessment. The NIS includes mitigation any European site before consent measures, following the implementation of which for the project is given. Consent for the proposed development is stated to present no the project can only be given after risk of any impact on the integrity of any determining that it will not adversely European Site. affect the integrity of the site(s) concerned in view of the The Board, as competent authority, will carry out conservation objectives of that site.1 an Appropriate Assessment of the proposed order to determine if an development. appropriate assessment is required, a screening process must be carried out for all applications for planning permission. The Habitats Directive (92/43/EEC) and the associated Birds Directive (2009/147/EC) are transposed into Irish legislation by Part XAB of the 2000 Act and the Birds and Natural Habitats Regulations 2011. The legislative provisions for appropriate assessment screening for planning applications are set out in Section 177U of the 2000 Act. **Directive** The Water Framework Directive The EIAR includes a detailed chapter addressing 2000/60/EC, (WFD) (Directive 2000/60/EC) and Water, prepared by AWN Consulting. Water Groundwater Directive The The Framework (Directive 2006/118/EC) requires all Chapter 8 states the following: **Directive** Member States to protect and improve water quality in all waters. The local hydrological network (Gaybrook The WFD is one of the key Stream) is associated with the WFD surface waterbody Gaybrook_010. The most recent overarching instruments in the protection of waters and includes published status (www.epa.ie - River Waterbody subordinate directives or water-WFD Status 2013-2018) of this waterbody is related legislation that complement 'Poor' and its environmental risk is currently or have been developed in response 'Under Review' by the WFD. with, or coherent

requirements of the Water Framework Directive.

The WFD requires 'Good Water Status' for all European waters to be achieved through a system of river basin management planning and extensive monitoring by 2015 or, at the least, by 2027. 'Good status' means both 'Good Ecological Status' and 'Good Chemical Status'.

The WFD does not require site specific assessments to be undertaken by a developer. It lays down standards for the quality of designated waters ("guide" values as well as "imperative" values) and requires Member States to monitor the quality of designated waters and to take measures to ensure that they comply with the minimum standards1.

Q Values are used to express the biological water quality by the EPA, based on changes in the macro invertebrate communities of riffle areas brought about by organic pollution. Q1 indicates a seriously polluted water body, Q5 indicates unpolluted water of high quality. There are no Q values determined for the Gaybrook Stream as there are no EPA water quality monitoring stations along this watercourse.

Subject to the mitigation set out within the EIAR, it was determined that the development would not give rise to any significant impact on water or affect the status of any watercourse under the Water Framework Directive.

Directive 2001/42/EC, The SEA Directive

Environmental The Strategic Assessment (SEA) Directive 2001/42/EC, on the assessment of the effects of certain plans and programmes on the environment requires that an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment. Public plans and programmes that are likely to have significant effects on environment must have a Strategic Environmental Assessment (SEA).

The SEA Directive (2001/42/EC) is implemented in Ireland by the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (SI 435/2004) and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI 436/2004), as amended.

There are no specific assessments required by the developer under the SEA Directive in respect of the current SHD application on site.

SEA has been undertaken by the relevant authority in respect of the Fingal County Development Plan 2017-2023.

The SEA for the relevant County Development Plan incorporates mitigation to minimise the impact of the plans on the environment. The policies of the plan were formulated with regard to the SEA processes undertaken. The subject site was designated for the nature and form of development proposed under the relevant plan, which has been subject to SEA. This is addressed in further detail in the context of the assessment of alternatives within Chapter 2 of this EIAR.

Directive 2002/49/EC.

The Environmental Noise Directive 2002/49/EC relates to the

Chapter 10 of this EIAR for the current SHD application comprises an assessment of noise

regarding environmental noise

assessment and management of environmental noise; this is the main EU instrument to identify noise pollution levels and to trigger the necessary action both at Member State and at EU level. The Directive requires Member States to prepare and publish, every 5 years, noise maps and noise management action plans for:

- agglomerations with more than 100,000 inhabitants
- major roads (more than 3 million vehicles a year)
- major railways (more than 30.000 trains a year)
- major airports (more than 50.000 movements a year, including small aircrafts and helicopters)

When developing noise management action plans, Member States' authorities are required to consult the concerned public. Relevant bodies develop noise action plans that we consider as appropriate.

and vibration impacts associated with the development.

The noise assessment undertaken as part of the EIAR, has regard to the relevant provisions of Directive 2002,49/EC.

Seveso Directive (Directive 82/501/EEC, Directive 96/82/EC, Directive 2012/18/EU)

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 Hazards involving Accident Dangerous Substances) Regulations 2015 (S.I. No. 209 of 2015) (the "COMAH Regulations"), implements the latest Seveso III (2012/18/EU). Directive 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 The subject lands are not proximate to any Seveso/COMAH designated sites.

As set out within Chapter 3 of the EIAR, the site is located beyond the consultation zone for the nearest SEVESO site which is located at Swords, c. 1.4 km to the north of the site.

Furthermore, there are no substances to be stored as part of the proposed development that would be controlled under Seveso Directive of COMAH Regulations.

Due to the separation distance from the proposed development site to the nearest site controlled under the Seveso Directive, and the fact that it lies outside the consultation zone, there are no specific assessments required by the Applicant under the Seveso Directive or COMAH Regulations.

objective of providing a high level of protection in a consistent and effective manner.

Directive 2008/50/EC, the clean air for Europe directive

The Clean Air for Europe (CAFE) Directive 2008/50/EC is the prevailing legislation to improve the quality of air in Europe and limit exposure to air pollution. The CAFE Directive set rules including how to monitor, assess, and manage ambient air quality.

Overall, the main objective of the CAFE Directive is to reduce human and environmental exposure to air pollutants and ensure that the limits of values and thresholds are not exceeded. The CAFE Directive was transposed into Irish legislation by S.I. No. 180/2011 - Air Quality Standards Regulations 2011.

The CAFÉ Directive mandates the and location quantity monitoring stations that Environmental Protection Agency (EPA) should undertake ambient air monitorina. lf there exceedance of the ambient limit value an Air Quality Action Plan must be developed by Local Authorities in conjunction with the EPA.

Chapter 9 of this EIAR includes an assessment of air quality and climate impacts associated with the development.

The analysis and findings within that chapter of the EIAR were made with regard to the provisions of Directive 2008/50/EC.

Due to the nature of the proposed development, there are no specific assessments required by the applicant under the CAFE Directive for the Proposed Development.

The air quality and climate assessment undertaken as part of the EIAR, which had regard to the relevant provisions of Directive 2008/50/EC, concluded that no significant impacts would arise subject to mitigation

Directive 2007/60/EC, regarding the assessment and management of flood risks

The Floods Directive (Directive 2007/60/EC) establishes a framework for the assessment and management of flood risks, with the aim to reduce the adverse consequences on human health, the environment and material assets.

The Floods Directive requires Member States to assess if all water courses and coast lines are at risk from flooding, to map the flood extent and assets and humans at risk in these areas and to take adequate and coordinated

Fingal County Council undertook a Strategic Flood Risk Assessment as part of the Development Plan preparation process, which zoned the subject site for the nature of development proposed.

The application is accompanied by a detailed Site Specific Flood Risk Assessment Report prepared by Waterman Moylan Consulting Engineers.

As set out in Chapter 3 of this EIAR, all proposed residential and commercial development within the subject site is located within Flood Zone C, and there is low to very low residual risk of flooding of any sort on site.

measures to reduce this flood risk. The Floods Directive also reinforces the rights of the public to access this information and to have a say in the planning process.

The Floods Directive must be implemented in tandem with the WFD. In Ireland, the OPW is the national authority assigned with the implementation of the Floods Directive, which was transposed into Irish law by the EU (Assessment and Management of Flood Risks) Regulations SI 122 of 2010.