

Chapter 1:

Introduction and Methodology

1.0 INTRODUCTION

1.1 INTRODUCTION AND TERMS OF REFERENCE

John Spain Associates, Planning & Development Consultants, have been commissioned by Shannon Homes Drogheda Ltd, to prepare an Environmental Impact Assessment Report (EIAR) for a proposed strategic housing development of 357 no. residential units consisting of 169 no. houses, 52 no. duplex units and 136 no. apartments, and a childcare facility on a site of c. 13.44 hectares at Colp West, Drogheda, Co. Meath. The development includes associated site and infrastructural works including all associated road infrastructure, new pedestrian bridge, foul and surface / storm water drainage, surface water management and storage features, car parking spaces, public open space including a linear park, bin and bike stores, substations, landscaping and boundary treatments and all ancillary works.

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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.

A full description of the proposed development lands together with a description of the proposed development is provided in Chapter 2 of this EIAR document.

This EIAR document has been prepared in accordance with the European Union EIA Directive 85/337/EC as amended by 97/11/EC, 2003/35/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 by the Department of Housing, Planning and Local Government in August 2018) and the 2017 Draft EIA Guidelines published by the EPA. The EIAR also takes account of the guidelines on Environmental Impact Assessment issued by the European Commission in 2017.

1.2 DEFINITION OF EIA AND EIAR

Directive 2014/52/EU 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 to provide reasoned conclusions following the examination of the EIAR and other relevant information.

Article 1(2)(g) 4 of Directive 2014/52/EU 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 amended Directive (Directive 2014/52/EU) uses the term environmental impact assessment report (EIAR) rather than environmental impact statement (EIS).

A definition of Environmental Impact Assessment Report (EIAR) has not been included in the revised directive however the EPA Guidelines (2017)¹ provide the following definition:

“A statement of the effects, if any, which proposed development, if carried out, would have on the environment.

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.

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”.

The Planning and Development Act 2000 include a definition of EIAR (as inserted by reg.6 of S.I. No.296 of 2018). Section 2 of the Act states that an “*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 summary, EIA is a process for anticipating the effects on the environment caused by development. An EIAR is the document produced as a result of that process and provides information which the competent/ consent authorities use in deciding whether or not to grant consent. Where significant and likely environmental effects are identified that are unacceptable; the EIA process aims to quantify and minimise the impact specified development projects have on the environment through appropriate mitigation measures. The preparation of an EIAR document requires site-specific consideration and the preparation of baseline assessment against which the likely impacts of a proposed development can be assessed by way of a concise, standardised 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

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

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 has brought forward amendments to the Planning and Development Act 2000, as amended, and the Planning and Development Regulations 2001-2018 to provide for the transposition of the Directive into the Irish planning code. To this effect, the European Union (Planning and Development)(Environmental Impact Assessment) Regulations 2018 have now transposed the 2014 Directive into Irish law insofar as the 2000 PDA and the Planning and Development Regulations.

The Department has also provided an updated to the 2018 “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 EIA Directive in 1985. Practice continues to evolve and takes 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 consultant.

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

Irish
<ul style="list-style-type: none"> • 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, 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)
<ul style="list-style-type: none"> • 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).

The most recent guidelines are the August 2018 EIA Guidelines for Planning Authorities and the Board.

The 2017 EPA draft guidelines were prepared to help practitioners interpret the amended EIA Directive and in advance of new regulations transposing Directive 2014/52/EU becoming available.

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. Updated Guidelines from the EPA will now be published following the transposition of the 2014 Directive via the European Union (Planning and Development)(Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018). Updated EPA guidance had not yet been published at time of writing.

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;
- Scoping;
- Assessing Alternatives; and
- Assessing and Evaluating.

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 non-statutory 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.

Assessing 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 – REQUIREMENT FOR AN 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 85/337/EC requires as mandatory the preparation of an EIA for all development projects listed therein.

Schedule 5 (Part 1) of the Planning & Development Regulations 2001-2018 transposes Annex 1 of the EIA Directive directly into Irish land use planning legislation. The 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 case-by-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 & Development Regulations 2001-2018 set mandatory thresholds for each project class. Sub-section 10(b) (iii) and (iv) addresses '*Infrastructure Projects*' and requires that the following class of project be subject to EIA:

(b) (iv) Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere.

The proposed Strategic Housing Development comprises of *inter alia* the provision of 357 no. residential units, a childcare facility and associated site and infrastructural works of c. 13.28 hectares.

An EIA is therefore mandatory, as the proposed SHD development at Colp West exceeds the relevant urban development area threshold of 10 hectares.

In relation to Screening, EIA Directive 2014/52/EU introduces a new mandatory section, Article 4(4). Article 4(4) introduces a new Annex IIA to be used in the case of a request for a screening determination for Annex II projects. This is information to be provided by the developer on the projects listed in Annex II.

1.6 SCOPING

The 2017 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 stated in the EC guidance² that:

'The Directive provides that Developers may request a Scoping Opinion from the Competent Authority which identifies the content and the extent of the assessment and specifies the information to be included in the EIA Report.'

The applicant is committed to ensuring that all of its developments are conducted in a responsible and sustainable manner. A scoping process to identify the issues that are likely to be most important during the Environmental Impact Assessment process was carried out by the applicant, design team and EIAR consultants and informed the format of this EIAR.

As set out within the 2018 EIA Guidelines published by the Department of Housing, Planning and Local Government, Section 7 of the Planning and Development (Housing) and Residential Tenancies Act 2016 and Planning and Development (Strategic Housing Development) Regulations 2017 allow for a prospective applicant to make a request to An Bord Pleanála for an EIA scoping opinion in regard to a proposed Strategic Housing Development (SHD). Such requests are discretionary.

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 2001-2018 and in recent guidance documents have been addressed in the EIAR.

² Guidance on EIA Scoping, EC, 2017

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 Examined,
- Population and Human Health,
- Archaeology and Cultural Heritage,
- Biodiversity,
- Landscape and Visual Impact,
- Land and Soils,
- Water,
- Air Quality and Climate,
- Noise and Vibration,
- Material Assets,
- Transportaion,
- Interactions,
- Principle 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. DBFL have prepared a Traffic and Transport Assessment Report. DBFL have prepared a Site-Specific Flood Risk Assessment for the site; and DBFL have also produced a Construction and Environmental Management Plan. BECL have produced a Construction and Operational Waste Management Plan. Openfield have also prepared a Natura Impact Statement which accompanies the application.

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 this 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 and Development Act, 2000, as amended, and Part 10 of the Planning & Development Regulations, 2001-2018;
- The requirements of the Meath County Development Plan 2013-2019;
- Regional and National Planning Policy Documents;
- 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; and,
- Available methods of reducing or eliminating undesirable impacts.

A series of meetings have taken place with the technical staff of Meath County Council and a consultation meeting has taken place between the Applicant, the Planning Authority and An Bord Pleanála under the strategic housing development (SHD) process which assisted in the preparation of this EIAR and planning application.

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;*
- (a) (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;*
- (b) (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;*
- (c) (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.*

2. 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.
5. 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 2017 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.

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.

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

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).

This EIAR documents the assessment process of the prescribed environmental factors in relation to the proposed SHD residential development at Colp West.

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

- Pursuing Preventative Action;
- Maintaining Environmental Focus and Scope;
- Informing the Decision; and
- 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. An assessment 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 amended EIA Directive, EIA guidance material and local precedents.

Avoidance of impacts has been principally achieved through the consideration of alternatives and through the review of the project design in light of identified key environmental constraints. This is outlined in greater detail in Chapter 2.

1.8.2 Maintain Environmental Scope and Focus

It is important that the EIAR document remains tightly focussed. This minimises expenses, 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 documentation and analysis are confined to those topics and issues which are explicitly described 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 project or development under consideration 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 document enables the competent/consenting 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.

Public participation and consultation is an integral part of the new Strategic Housing Development process as outlined in the Planning and Development (Housing) and Residential Tenancies Act 2016, as amended, and the Planning and Development (Strategic Housing Development) Regulations 2017.

The structure, presentation and the non-technical summary of the EIAR document, as well as the arrangements for public access, all facilitate the dissemination of the information contained in the EIAR. The 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 through pre-application meetings. Direct and formal public participation in the EIA process will be through the statutory planning application process under the Strategic Housing Development procedures.

The EIAR will also be made publicly available via the Department of Housing, Planning and Local Government EIA Portal.

1.9 FORMAT AND STRUCTURE OF THIS EIAR

The preparation of an EIAR document 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 document is set out in Table 1.2 below.

TABLE 1.2: STRUCTURE OF THIS EIAR

Chapter	Title	Content
1	Introduction and Methodology	Sets out the purpose, methodology and scope of the document.

³ In some instances similar environmental topics are grouped.

TABLE 1.2: STRUCTURE OF THIS EIAR

Chapter	Title	Content
2	Project Description and Alternatives Examined	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 & Visual Impact	Provides an overview of the baseline position, the potential impact of the proposed development on the landscape appearance and character and visual environment, and recommends mitigation measures.
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.
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, the vulnerability of the project to climate change, 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	Material Assets	Describes the existing built services and infrastructural service requirements of the proposed development and the likely impact of the proposed development on material assets.
12	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

TABLE 1.2: STRUCTURE OF THIS EIAR

Chapter	Title	Content
14	Summary of Mitigation and Monitoring Measures	Sets out the key mitigation and monitoring measures included in the EIAR Document for ease of reference.

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 consistently in each chapter 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.
- **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 proposed 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 landscape and visual impact addresses issues such as height and impact on the surrounding landscape.
- 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, transboundary, short, medium and long-term, permanent, temporary, positive and negative effects as well as impact interactions.
- **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, transboundary, 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.

1.10 EIA PROJECT TEAM

1.10.1 EIA Project Management

This EIA was project managed, co-ordinated and produced by John Spain Associates. 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. John Spain also assisted in directing consultants to a range of existing, permitted and proposed developments in the vicinity of the subject site, which could be relevant in the context of the cumulative assessments undertaken by the relevant specialists, while specialists could also examine other developments if considered relevant, this exercise helped to ensure a robust assessment of cumulative effects where relevant.

1.10.2 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 of the amended directive 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 1.4 below.

TABLE 1.4: EIAR SPECIALIST CONSULTANTS

Organisation	EIAR Specialist Topics / Inputs
<p>John Spain Associates 39 Fitzwilliam Place, Dublin 2. Ph: (01) 662 5803 Email: pturley@johnspainassociates.com</p> <p>Paul Turley - BA, MRUP, Dip Environmental & Planning Law, MIPI</p> <p>Luke Wymer – BA, MRUP, Adv. Dip. Planning & Environmental Law, Dip. Project Management, MIPI</p>	<ul style="list-style-type: none"> • Introduction and Methodology • Project Description and Alternatives Examined • Population and Human Health (with others) • Interactions of the Foregoing • Principle Mitigation and Monitoring Measures • Non-Technical Summary
<p>DDA Architects, DDA Architects Ltd. 62 Brighton Square, Dublin 6. Ph: +353 (0)1 490 0499 Email: pduignan@ddaarch.ie</p> <p>Paul Duignan – Dip Arch, B. Arch Sc., MRUP</p>	<ul style="list-style-type: none"> • Project Description and Alternatives Examined • Material Assets
<p>DBFL Ormond House, Upper Ormond Quay, Dublin 7. Tel: +353 1 400 4000 Email: dan.reilly@dbfl.ie</p> <p>Dan Reilly - BEng CEng FConsEI MIEI MIHT MCIWEM</p> <p>Deirdre Walsh BA BAI MSc, CEng, MIEI</p>	<ul style="list-style-type: none"> • Land and Soils • Water • Material Assets • Transportation

TABLE 1.4: EIAR SPECIALIST CONSULTANTS

Organisation	EIAR Specialist Topics / Inputs
<p>Dermot Grogan MEng MIEI.</p> <p>Aneta Smietana MEng MIEI.</p>	
<p>AWN, AWN Consulting, The Tecpro Building, IDA Business and Technology Park, Clonshaugh, Dublin 17 D17 XD90 Ph: +353.1.847.4220 Email: ciara.nolan@awnconsulting.com / mike.simms@awnconsulting.com</p> <p>Ciara Nolan – B. Eng, MSc Applied Environmental Science</p> <p>Mike Simms – B. Eng, MSc Engineering, Dip. Acoustics and Noise Control</p>	<ul style="list-style-type: none"> • Air Quality and Climate • Noise and Vibration
<p>Archer Heritage, Archer Heritage Planning, 8 Beat Centre Balbriggan Co. Dublin, Ph: 01 8020403 Email: ciaran@archerheritage.ie</p> <p>Ciaran Mc Guinness – BA MIAI</p>	<ul style="list-style-type: none"> • Archaeology and Cultural Heritage
<p>Dermot Foley Landscape Architects www.dermotfoley.com Argus House Blackpitts Dublin D08 DD56 Ph: +3531 4545148 Email:dermot@dermotfoley.com</p> <p>Dermot Foley - BAgSc, BA, MLA, MILI</p>	<ul style="list-style-type: none"> • Landscape and Visual Impact
<p>Modelworks The Old Courtyard, Newtownpark Avenue, Blackrock, Co. Dublin, Ireland Ph: +353 1 2899 039</p>	<ul style="list-style-type: none"> • Photomontages (Appendix 7.1)

TABLE 1.4: EIAR SPECIALIST CONSULTANTS

Organisation	EIAR Specialist Topics / Inputs
Michael Power – B. Eng	
OPENFIELD Ecological Services, OPENFIELD Ecological Services 12 Maple Ave, Carpenterstown, Dublin, D15 Ph: (01) 823 6145 Email: padraic@openfield.ie Padraic Fogarty – MSc, MIEMA	<ul style="list-style-type: none"> <li data-bbox="778 568 948 602">• Biodiversity

1.11 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.

1.12 LINKS BETWEEN EIA AND APPROPRIATE ASSESSMENT (AA)

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 Openfield 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 submitted with this application.

1.13 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 Meath 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 – www.colpwestshd.ie

1.14 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.

1.15 STATEMENT OF DIFFICULTIES ENCOUNTERED

No exceptional 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.

1.16 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.

1.17 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.

1.18 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.

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*

These typographical errors and/or minor inconsistencies are unlikely to have any material impact on the overall findings and assessment contained in this EIAR.