

Environmental Impact Assessment Screening Report

for proposed

Brine Saturation Plant in Palmerstown Salt Depot

by

CAAS Ltd

for

South Dublin County Council



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Document Control

	Author/Reviewer	Date
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1 Introduction

CAAS Ltd. has been appointed by South Dublin County Council (SDCC) to prepare this Environmental Impact Assessment Screening Report for the proposed Brine Saturation Plant in Palmerstown Salt Depot (the proposed development). This report has been prepared to form an opinion as to whether or not the proposed development should be subject to Environmental Impact Assessment (EIA) and if so, whether an Environmental Impact Assessment Report (EIAR) should be prepared in respect of it.

The screening assesses the proposed development with reference to the EIA legislation¹ including the EIA Directive, and Planning and Development legislation¹. It also has regard to relevant parts of:

- *EIA Guidance for Consent Authorities regarding sub-threshold development*, 2003, Department of the Environment, Heritage and Local Government
- *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*, 2018, Department of Housing, Planning and Local Government
- *OPR Practice Note PN02 Environmental Impact Assessment Screening*, 2021, Office of the Planning Regulator
- relevant EU Guidance including *Interpretation of definitions of project categories of annex I and II of the EIA Directive*, 2015, EU and *Environmental Impact Assessment of Projects - Guidance on Screening*, 2017, EU.

The first step involves a review of the characteristics of the development to find out if it corresponds to any type (class) which is subject to the EIA requirements as set out in the legislation. If it does correspond to any such type and does not equal or exceed a specified threshold (ref s5) then the second step is to carry out a 'preliminary examination' to establish the likelihood of significant effects on the environment arising from the proposed development. The outcome of the preliminary examination determines the subsequent steps of the screening process which may involve sub-threshold project considerations and review against prescribed criteria for determining whether the development should be subject to EIA.

The information on the proposed development, as used for purposes of this report, including a written description, was provided by SDCC.

The following sections of this report cover:

- The proposed development (s2)
- The legislative basis for EIA (s3)
- Project type (s4)
- Sub-threshold development (s5)
- Preliminary examination (s6)
- Conclusion (s7)

¹ see section 3 for details

An overview of the authors' competency is provided in Appendix II.

2 The proposed development

The proposed development comprises:

Construction of a concrete plinth and the installation of the following equipment;

- 50,000 l rainwater harvesting tank with back up mains feed (diameter: 3.5 m, height: 5 m)
- 40,000 l brine storage tank (diameter: 3 m, Height: 6 m)
- 40 t salt silo (diameter: 3 m, height: 10 m)
- brine saturator (width: 3 m, depth: 3 m, height: 2.5 m)

Brine will be a 23% salt, 77% water solution. The unit is to be a sealed unit with dry salt delivered and blown into the silo. The dry salt is fed into the saturator and mixed with water to create the brine and then pumped into the brine tank. The brine solution will be pumped from the storage tank to tanks on the side of an awaiting truck, which will then depart and spread the brine solution along roadways in winter weather to reduce ice as a traffic safety measure.

The total proposed site area is approximately 0.03 ha.



Figure 1 Site location map

Source: Google maps (site boundary is approximate)

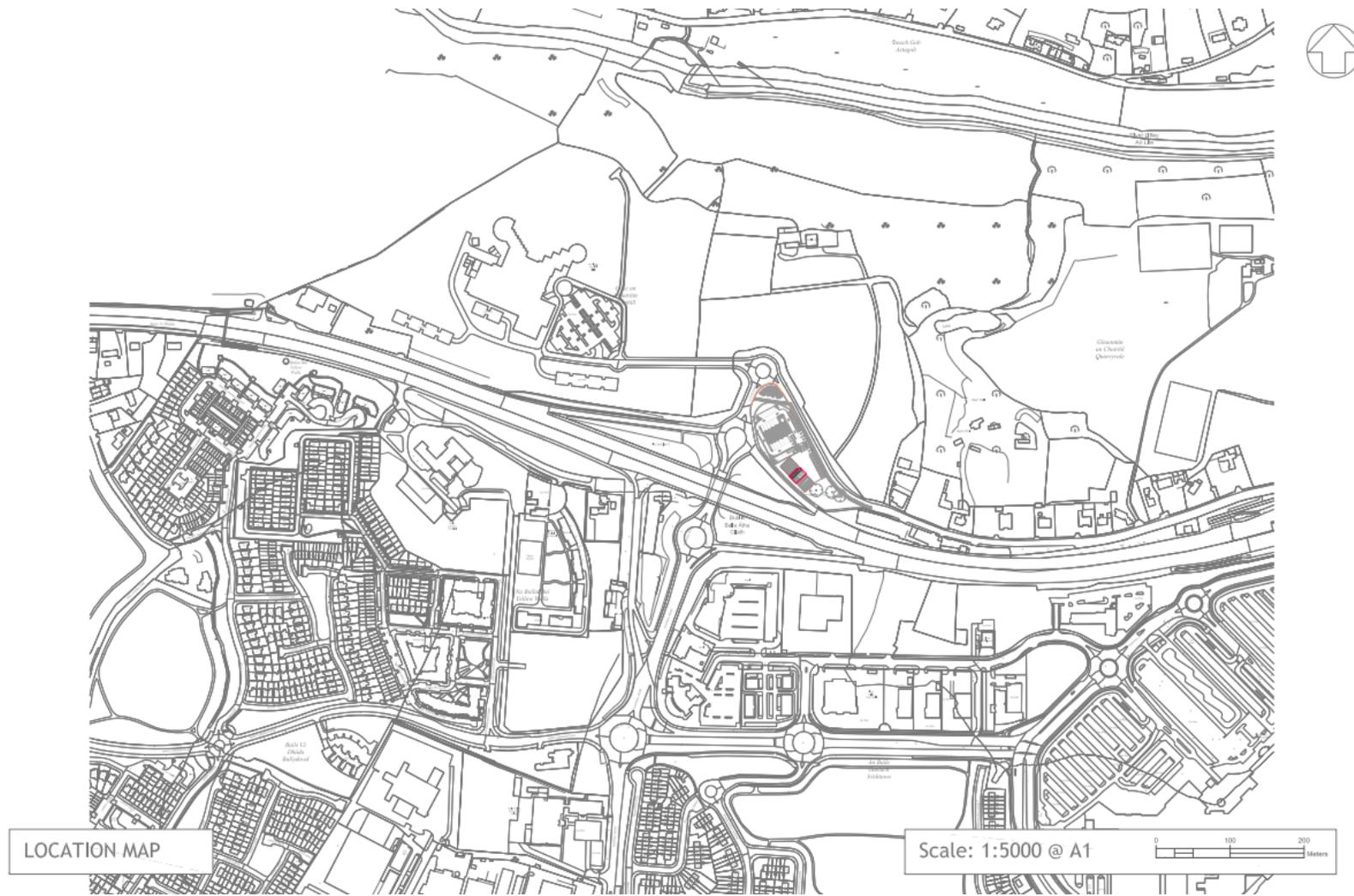


Figure 2 Site layout plan
Source: SDCC (See accompanying drawing set for full scaled versions of all drawings)

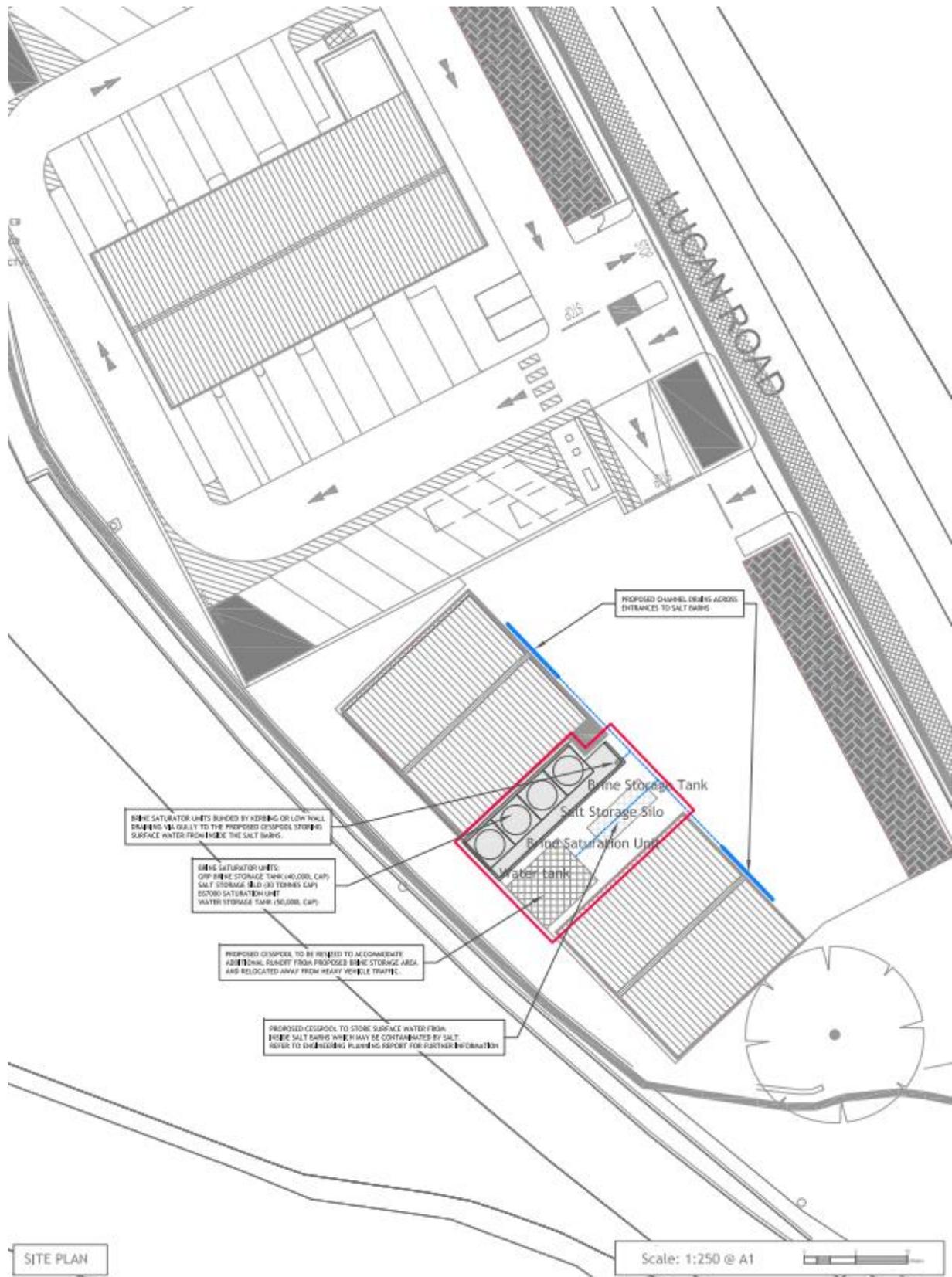


Figure 3 Plan of proposed works

Source: SDCC (See accompanying drawing set for full scaled versions of all drawings)

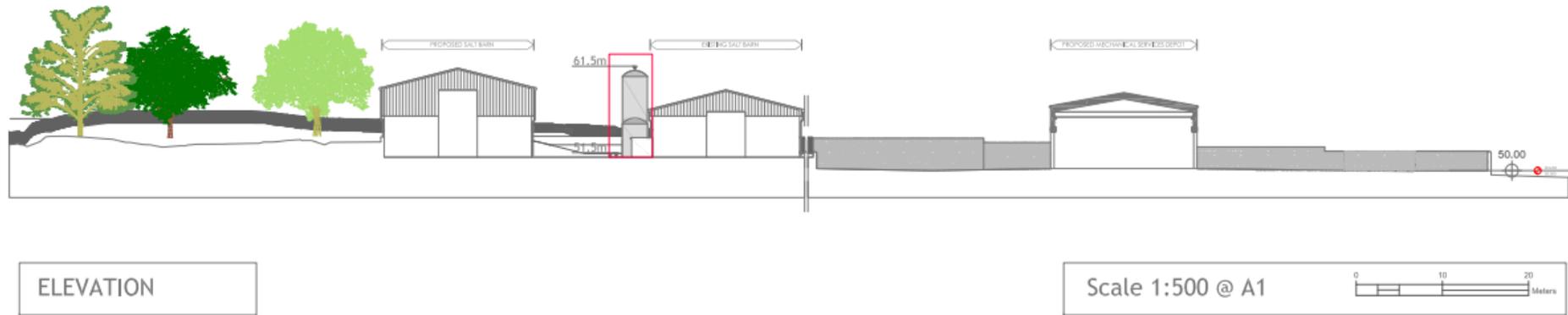


Figure 4 Elevation of proposed works

Source: SDCC (See accompanying drawing set for full scaled versions of all drawings)

3 Legislative basis for EIA

EIA requirements derive from EU Directive 2011/92/EU (as amended by Directive 2014/52/EU) on the assessment of the effects of certain public and private projects on the environment. The Directive has been transposed into various Irish legislation of which the following is the most relevant to this development.

- Planning and Development Acts 2000-2020 (Part X)
- Planning and Development Regulations 2001 (S.I. 600/2001) as amended
- European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. 296/2018)

Part 1 of Schedule 5 of the Planning and Development Regulations 2001, as amended, lists projects included in Annex I of the Directive which automatically require EIA. For projects included in Annex II of the Directive, Part 2 of Schedule 5 provides thresholds above which EIA is required.

4 Project type

In the first instance it is necessary to determine whether the proposed development corresponds to any project type that is subject to EIA requirements.

The prescribed classes of development for the purpose of Section 176 of the Planning and Development Act 2000 are set out in Schedule 5 of the Planning and Development Regulations 2001 as amended. The proposed development, which is a brine saturation plant, does not correspond to any class of development prescribed within Part 1 of Schedule 5, and so it is necessary to consider whether it corresponds to any class prescribed within Part 2 of Schedule 5.

Potentially relevant project types (or classes) prescribed for EIA purposes in Part 2 of Schedule 5, are listed in the table below, with commentaries of their applicability to the proposed development. Criteria prescribed in the legislation for changes or extensions are included.

Project type / threshold	Comment	Is EIA required on this basis?
Planning and Development legislation S.I. 600/2001, Schedule 5, Pt 2		
Project type 10. <i>Infrastructure projects (b)</i>		
<p><i>(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.</i></p> <p><i>(In this paragraph, “business district” means a district within a city or town in which the predominant land use is retail or commercial use.)</i></p>	<p>Commission guidance² lists a range of projects, stating that these or other projects with similar characteristics can be considered to be ‘urban development’. These include:</p> <ul style="list-style-type: none"> • Shopping centres • Bus garages • Train depots • Hospitals • Universities • Sports stadiums • Cinemas • Theatres • Concert halls • Other cultural centres • Sewerage or water supply networks <p>The proposed project does not correspond to or have similar characteristics to any of the above listed project types.</p> <p>On this basis it can be considered that this proposal does not fall into the ‘urban development’ project type (type 10(b)(iv)).</p> <p>. In this event, at 0.03 ha, the scale of the proposed development is below the applicable threshold (whether this is taken to be the 10 ha as would apply if the site was considered to be in a built-up area or 20 ha as would apply elsewhere).</p>	No
<i>Project type 13. Changes, extensions, development and testing</i>		
<p><i>(a) Any change or extension of development which would:-</i></p> <p><i>(i) result in the development being of a class listed in Part 1 or</i></p>	As the changes covered by the proposal can be considered not to result in the development being of a listed class, criterion (i) is not met. As they will not result in an increase in size of greater than 25	No

² Interpretation of definitions of project categories of annex I and II of the EIA Directive, 2015, EU

Project type / threshold	Comment	Is EIA required on this basis?
<p><i>paragraphs 1 to 12 of Part 2 of this Schedule, and</i></p> <p><i>(ii) result in an increase in size greater than-</i></p> <ul style="list-style-type: none"> - 25 per cent, or - an amount equal to 50 per cent of the appropriate threshold, whichever is the greater 	<p>per cent, criterion (ii) is also not met. On this basis project type 13(a) is not applicable.</p>	

The proposed development has been compared with the project types prescribed for EIA purposes under the Regulations which it may correspond to most and it is found that it can be considered as not corresponding to any specific type.

5 Sub-threshold development

Article 92 of the Regulations of 2001, as amended define: 'sub-threshold development' as:

development of a type set out in Part 2 of Schedule 5 which does not equal or exceed, as the case may be, a quantity, area or other limit specified in that Schedule in respect of the relevant class of development.

Annex III of the EIA Directive (2011/92/EU as amended) as transposed into Schedule 7 of the Planning and Development Regulations 2001 as amended - sets out criteria for review of sub-threshold projects to determine if they should be subject to EIA. These criteria include characteristics, location and potential impacts. As the proposal does not correspond to any type set out in Part 2 of Schedule 5, it is not a sub-threshold development.

6 Preliminary Examination

Article 120(a)(1) of the Planning and Development Regulations 2001, as amended, requires that -

- (a) Where a local authority proposes to carry out a sub-threshold development, the authority shall carry out a preliminary examination of, at the least, the nature, size or location of the development.*
- (b) Where the local authority concludes, based on such preliminary examination, that—*
 - (i) there is no real likelihood of significant effects on the environment arising from the proposed development, it shall conclude that an EIA is not required,*

- (ii) there is significant and realistic doubt in regard to the likelihood of significant effects on the environment arising from the proposed development, it shall prepare, or cause to be prepared, the information specified in Schedule 7A for the purposes of a screening determination, or*
- (iii) there is a real likelihood of significant effects on the environment arising from the proposed development, it shall—*
 - (I) conclude that the development would be likely to have such effects, and*
 - (II) prepare, or cause to be prepared, an EIAR in respect of the development.*

As the proposed development is not a sub-threshold development, the requirement to carry out a preliminary examination does not apply.

7 Conclusions

The proposed brine saturation Plant in Palmerstown Salt Depot does not correspond to any project type that is subject to EIA requirements. It is not a sub-threshold development and no preliminary examination or further stages of EIA screening are required to be followed for it. It does not need to be subject to Environmental Impact Assessment and no Environmental Impact Assessment Report is required for it.

This conclusion is based on an objective review of the characteristics of the proposed development against the requirements of the relevant legislation and has had due regard to the relevant guidance.

Appendix I – Standard Descriptions of Effects

(from *Guidelines on the information to be contained in Environmental Impact Assessment Reports*, EPA, 2022)

<p>Quality of Effects</p> <p>It is important to inform the non-specialist reader whether an effect is positive, negative or neutral</p>	<p>Positive Effects</p> <p>A change which improves the quality of the environment (for example, by increasing species diversity; or the improving reproductive capacity of an ecosystem, or by removing nuisances or improving amenities).</p>
	<p>Neutral Effects</p> <p>No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error.</p>
	<p>Negative/adverse Effects</p> <p>A change which reduces the quality of the environment (for example, lessening species diversity or diminishing the reproductive capacity of an ecosystem; or damaging health or property or by causing nuisance).</p>
<p>Describing the Significance of Effects</p> <p>“Significance” is a concept that can have different meanings for different topics – in the absence of specific definitions for different topics the following definitions may be useful (also see <i>Determining Significance</i> below.).</p>	<p>Imperceptible</p> <p>An effect capable of measurement but without significant consequences.</p>
	<p>Not significant</p> <p>An effect which causes noticeable² changes in the character of the environment but without significant consequences.</p>
	<p>Slight Effects</p> <p>An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.</p>
	<p>Moderate Effects</p> <p>An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.</p>
	<p>Significant Effects</p> <p>An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.</p>
	<p>Very Significant</p> <p>An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.</p>
	<p>Profound Effects</p> <p>An effect which obliterates sensitive characteristics</p>
<p>Describing the Extent and Context of Effects</p> <p>Context can affect the perception of significance. It is important to establish if the effect is unique or, perhaps, commonly or increasingly experienced.</p>	<p>Extent</p> <p>Describe the size of the area, the number of sites, and the proportion of a population affected by an effect.</p>
	<p>Context</p> <p>Describe whether the extent, duration, or frequency will conform or contrast with established (baseline) conditions (is it the biggest, longest effect ever?)</p>

<p>Describing the Probability of Effects</p> <p>Descriptions of effects should establish how likely it is that the predicted effects will occur – so that the CA can take a view of the balance of risk over advantage when making a decision.</p>	<p>Likely Effects</p> <p>The effects that can reasonably be expected to occur because of the planned project if all mitigation measures are properly implemented.</p> <p>Unlikely Effects</p> <p>The effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented.</p>
<p>Describing the Duration and Frequency of Effects</p> <p>'Duration' is a concept that can have different meanings for different topics – in the absence of specific definitions for different topics the following definitions may be useful.</p>	<p>Momentary Effects</p> <p>Effects lasting from seconds to minutes</p> <p>Brief Effects</p> <p>Effects lasting less than a day</p> <p>Temporary Effects</p> <p>Effects lasting less than a year</p> <p>Short-term Effects</p> <p>Effects lasting one to seven years.</p> <p>Medium-term Effects</p> <p>Effects lasting seven to fifteen years.</p> <p>Long-term Effects</p> <p>Effects lasting fifteen to sixty years.</p> <p>Permanent Effects</p> <p>Effects lasting over sixty years</p> <p>Reversible Effects</p> <p>Effects that can be undone, for example through remediation or restoration</p> <p>Frequency of Effects</p> <p>Describe how often the effect will occur. (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually)</p>
<p>Describing the Types of Effects</p>	<p>Indirect Effects (a.k.a. Secondary Effects)</p> <p>Impacts on the environment, which are not a direct result of the project, often produced away from the project site or because of a complex pathway.</p> <p>Cumulative Effects</p> <p>The addition of many minor or significant effects, including effects of other projects, to create larger, more significant effects.</p> <p>'Do-Nothing Effects'</p> <p>The environment as it would be in the future should the subject project not be carried out.</p> <p>'Worst case' Effects</p> <p>The effects arising from a project in the case where mitigation measures substantially fail.</p> <p>Indeterminable Effects</p> <p>When the full consequences of a change in the environment cannot be described.</p>

	<p>Irreversible Effects When the character, distinctiveness, diversity or reproductive capacity of an environment is permanently lost.</p> <p>Residual Effects The degree of environmental change that will occur after the proposed mitigation measures have taken effect.</p> <p>Synergistic Effects Where the resultant effect is of greater significance than the sum of its constituents, (e.g. combination of SO_x and NO_x to produce smog).</p>
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Appendix II - Competency of Authors

Paul Fingleton, the lead author, has an MSc in Rural and Regional Resources Planning (with specialisation in EIA) from the University of Aberdeen. Paul is a member of the International Association for Impact Assessment as well as the Institute of Environmental Management and Assessment. He has over twenty-five years' experience working in the area of Environmental Assessment. Over this period, he has been involved in a diverse range of projects including contributions to, and co-ordination of, numerous complex EIARs and EIA screening reports. He has also contributed to and supervised the preparation of numerous AAs and AA screenings.

Paul is the lead author of the current EPA Guidelines³ and accompanying Advice Notes⁴ on EIARs. He has been involved in all previous editions of these statutory guidelines. He also provides a range of other EIA related consultancy services to the EPA. Paul is regularly engaged by various planning authorities and other consent authorities to provide specialised EIA advice.

Clodagh Ryan, Environmental Assistant has a BSc in Environmental Management, Dublin Institute of Technology, 2021. Clodagh liaises with various government agencies and local authorities in order to assimilate the environmental baseline information that is used in EIAs and AAs and assists in the preparation of the various EIA and AA related documentation.

³ *Guidelines on the information to be contained in Environmental Impact Assessment Reports*, EPA, 2022

⁴ *Advice notes on current practice in the preparation of Environmental Impact Assessment Reports*, EPA, 2003