

1 Introduction

This Environmental Impact Assessment Report (EIAR) for the Proposed Parnell Square Cultural Quarter, including New City Library and Public Realm Works has been prepared on behalf of Dublin City Council & PSQ Developments Ltd (Joint Applicants). This EIAR accompanies a planning application made directly to An Bord Pleanála (ABP) under the provisions of Section 175 of the Planning and Development Act 2000, as amended (The Act).

1.1 A Note on Quotations

Environmental Impact Assessment Reports by their nature contain statements about the proposed development, some of which are positive and some less than positive. Selective quotation or quotations out of context can give a misleading impression of the findings of the study.

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

1.2 Aim of the EIAR

An EIAR is defined in the Draft Guidelines on the Information to be contained in Environmental Impact Statements (EPA, 2017) as:

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

The preparation of this EIAR is in accordance with Directive 2011/92/EU as amended by Directive 2014/52/EU as outlined under the Draft Guidelines on the Information to be contained in Environmental Impact Statements (EPA, 2017). Within these guidelines is a prescribed range of environmental factors as follows:

“The environmental impact assessment shall 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 following factors:

- 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 landscape;**
- e) the interaction between the factors referred to in points (a) to (d)“**

In addition, the guidelines quote Article 5(1) of the amending Directive when describing the contents of an EIAR, as follows:

“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.”

1.3 EIAR Guidance

This EIAR has been completed in accordance with the requirements as set out in the EIA Directive (2014/52/EU) and relevant guidelines and documentation, including:

- Draft Guidelines on the Information to be contained in Environmental Impact Statements (EPA, 2017)
- Advice Notes for Preparing Environmental Impact Statements Draft (EPA, 2015)
- Guidance on the preparation of Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU)

- EU Commission's SEA Implementation Guidance from 2003 (Paragraphs 5.25 and 5.26) refer to HH chapter
- Circular PL 1/2017 – Implementation of Directive 2014/52/EU on the effects of certain public and private projects on the environment (EIA Directive)
- Circular PL 8/2017 – Implementation of Directive 2014/52/EU – Advice on Electronic Notification Requirements.

1.4 The EIAR Process

1.4.1 Introduction

This section demonstrates the process that has been carried out by the Applicant and Design Team in the preparation of this EIAR. As described and shown Figure 1.1, the EIAR forms a part of the EIA process.

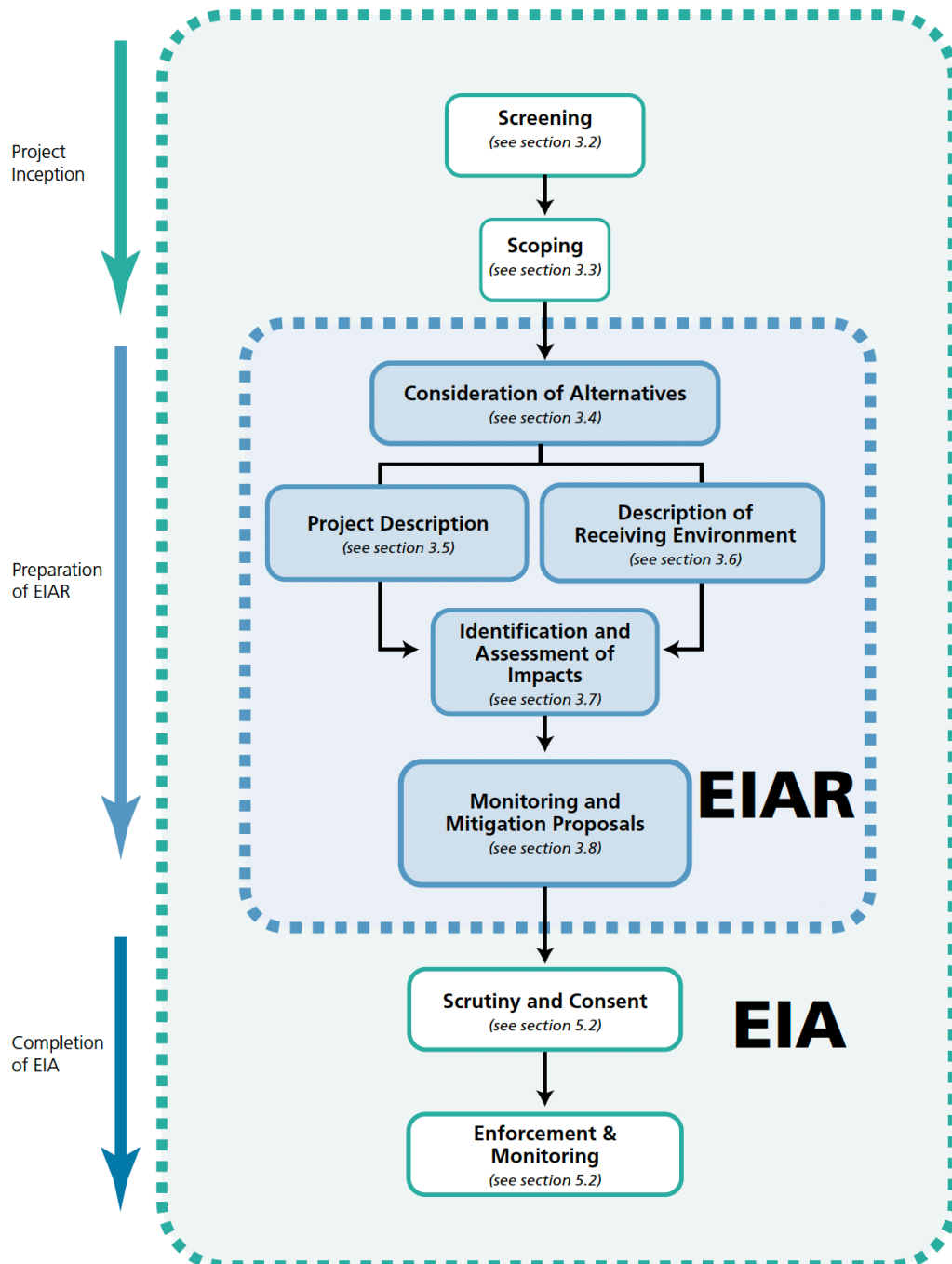


Figure 1.1: EIA Process - Extract taken from Figure 2.2, page 11 of the Draft EPA Guidelines 2017

Further explanation of the terms referred to in Figure 1.1 is provided below:

Screening:

"The process of assessing the requirement for a project to be subject to Impact Assessment based on project type and scale as well as the significance or environmental sensitivity of the receiving environment."

Scoping:

"The process of identifying the significant issues which should be addressed by a particular Impact Assessment as well as the means or methods of carrying out the assessment."

Environmental Impact Assessment Report (EIAR):

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

Environmental Impact Assessment - EIA

"The process of examining the anticipated environmental effects of proposed project - from consideration of environmental aspects at design stage, through consultation and preparation of an Environmental Impact Assessment Report (EIAR), evaluation of the EIAR by a Competent Authority, the subsequent decision as to whether the project should be permitted to proceed, encompassing public response to that decision."

Competent Authority Decision

The Competent Authority (CA) can make one of three decisions in respect of a planning application accompanied by an EIAR, namely to seek further information, grant or refuse the application. The CA in relation to the Section 175 approval is An Bord Pleanála.

If, during the review, the CA determines that the information presented in an EIAR is not sufficient for it to make a determination, then the developer may be asked to provide further information.

If granting permission, the CA may attach conditions to the consent. The conditions will typically seek to ensure adherence to mitigation and monitoring measures presented in the EIAR. These may be augmented and modified by the CA.

If refusing the CA may cite specific evidence from the EIAR such as the non-conformity of potential impacts with official standards, impractical mitigation measures or uncertainty about environmental interactions.

1.5 Summary of the Proposed Development

Chapter 3: Description of Proposed Development of this EIAR sets out the detailed description of the Proposed Development. The description of the development can be summarised as:

The proposed development of a new Dublin City Library and public realm works at Parnell Square North, Dublin 1, comprising in summary:

- The adaptive re-use of Nos. 20-21 & Nos. 23-28 Parnell Square North (all Protected Structures).
- The construction of a new 5-storey over basement extension, with roof gardens, for library and cultural use (c.5,720 sq m gross floor area, and associated demolition of existing 3-storey amharclann (theatre) building, single storey atrium and 2-storey return, to the rear of Nos. 23-28 Parnell Square North.
- The total Gross Floor Area (existing and new) of the proposed cultural use amounts to c.11,198 sq.m.
- Improvements to the public realm, including reconfiguration of vehicular roadway (2-lane), parking and set down areas, street furniture, street art and public lighting, widening of footpaths, and relocation of Dublin Bikes Station, at Parnell Square North, in the area between Parnell Square West and East and the Garden of Remembrance.
- Modifications to Bethesda Place and Frederick Lane North to facilitate access by service and emergency vehicles to Frederick Lane North.

The overall site area measures c.0.99ha, and includes Nos. 23 – 28 Parnell Square (former Scoil Mhuire school) and Nos. 20 – 21 Parnell Square (All Protected Structures). The Georgian houses are located either side of Hugh Lane Gallery (Protected Structure). The site is otherwise generally bounded by Parnell Square North, East & West, the Garden of Remembrance to the south, Bethesda Place, Frederick Lane North and the Sheridan Court Residential Apartments to the North.

It may be additionally noted that the existing library facility currently located at the Ilac Centre will be moved to this new City Library building, and the space at the Ilac Centre will become available for reuse subject of any necessary planning permission being granted.

1.6 Screening

Chapter 3: Description of Proposed Development, of this EIAR sets out the detailed description of the Proposed Development, which is briefly summarised in Section 1.5 above.

The process of assessing the requirement for a project to be subject to EIAR based on project type and scale as well as the significance or environmental sensitivity of the receiving environment was carried out by Dublin City Council (DCC).

On the 14th November 2013, DCC issued an Environmental Impact Statement (EIS) scoping request to An Bord Pleanála. In their submission to An Bord Pleanála, dated the 14 November 2013, document title "Scoping the content for an Environmental Impact Statement", DCC outlined the following:

"The proposed development (in terms of the site area and schedule of proposed uses) would be a sub threshold development for the purposes of Part 10 Environmental Impact Assessment, Schedule 5 of the Planning and Development Regulations 2001. However, having regard to the character of the proposed development which seeks the provision of a new city library and cultural facilities and the urban and cultural regeneration of a populated city centre location, in an area of significant architectural heritage, an EIS is considered justified and beneficial to guide the project. Dublin City Council will therefore seek a robust analysis of the proposed development and ensure that it integrates successfully with the significant site context and local environment. The decision to accompany the application with an EIS is in accordance with Article 120 and Schedule 7 of the Planning and Development Regulations 2001 as amended by the Planning and Development Regulations of 2008 & 2011."

As previously opined in the scoping request submitted by DCC (November 2013) and confirmed by the Board's Inspector's Report (29N.JS0012), the site area and proposed development is, by itself, sub threshold as per the provisions of Schedule 5 Part 2 of the Planning and Development Regulations 2001 (as amended).

However, having regard to the character and context of the proposed development, seeking the provision of a new city library, cultural facilities and public realm works, in a populated city centre location and area of significant architectural heritage, it has previously been determined that the decision to undertake an

Environmental Impact Assessment of the proposed development is in accordance with the requirements of Article 120 and Schedule 7 of the Planning and Development Regulations (as amended).

1.7 Scoping

1.7.1 EIS Scoping Carried out Prior to 16 May 2017

Due to the length of time since the initial scoping request for the proposed development, terminology of documents within the EIA process have been changed. With this, it should be noted that where reference is made to EIS, this now refers to preparation of an EIAR.

In the preparation of an EIAR, the applicant may wish to take the opportunity to formally request a CA to set out in detail the scope of an EIAR. This request is not mandatory in the preparation of an EIAR, however, the applicant at the time considered it prudent to formally request such a request as part of the EIA process of the proposed development.

Under the provisions of Section 173(3) of The Act, and in accordance with the provisions of Articles 95 and 117 of the Planning & Development Regulations 2001-2006 (The Regulations), Dublin City Council issued a request, dated 14 November 2013, seeking a written opinion from An Bord Pleanála on the information to be contained in an Environmental Impact Statement (EIS).

The request was made within the context of **Directive 2011/92/EU** concerning the environmental assessment of projects, and the associated **EPA 'Guidelines on Information to be Contained in Environmental Impact Statements', 2002.**

Possible effects on the environment were identified by the prospective applicant as including, in summary:

- Impact on Historic and Architectural heritage
- Impact of built form and height on historic streetscape and neighbouring Architectural Conservation Area.
- Impact on adjoining residential and commercial property during construction and operational phases.
- Impact on drainage and water infrastructure and other utilities
- Pedestrian and traffic generation and movement, and cumulative impact in the context of other significant public transport proposals in the city centre.
- Adequate provision of social infrastructure for existing and new communities.

- Preliminary EIS Chapter Headings were identified as including:
- Human Beings
- Traffic and Transportation
- Cultural Heritage (Archaeology)
- Cultural Heritage (Architectural Heritage)
- Flora & Fauna
- Landscape and Visual Impact
- Soil, Water and Geology
- Air Quality and Climate
- Noise and Vibration
- Daylight and Sunlight
- Material Assets

Within approximately 5 weeks of receipt of this request the Board issued a request for further information, dated 17 December 2013, seeking further clarification on the nature, scale and location/extent of the proposed development. In effect, the Board sought clarity on whether this was the same as or similar to development described in the 'Parnell Square Cultural Quarter: A Catalyst for Renewal and Growth along the Civic Spine, Vision Document 2013'.

DCC submitted its response on 17 January 2014. This confirmed that the project reflects that development described in the Vision Document. A site location plan was provided. It was clarified that the quantum of proposed new build was estimated at c.6,000 sq m. The extent of proposed public realm and traffic movement was also identified as being contained within the red line boundary. It was confirmed that design work had not begun at that point.

Following the submission of the DCC's Further Information response on 22 January 2014, the Board requested submissions from the following Prescribed Bodies, under the provisions of Article 95(2):

- The Minister for Arts, Heritage, Gaeltacht and the Islands
- An Chomhairle Ealaíon
- Bord Fáilte Éireann
- An Taisce
- The Heritage Council
- The Dublin Regional Authority
- The Irish Aviation Authority
- The Dublin Transportation Office (NTA)

Only one submission was received, by the IAA who confirmed that it had no observations at that time.

On 4 March 2014, the Board issued its scoping opinion on the information to be contained in the EIS. In relation to the specific environmental topics the proposed development is likely to impact upon, in summary, the Board identified that the following matters should be addressed in the EIS:

1.7.1.1 Human Beings

The likely effects on the health and safety of human beings during all phases of development, including persons who live and/or work in Parnell Square, visitors/patients/employees at the Rotunda Hospital or community, cultural and social facilities and residents in adjacent areas, particularly in terms of dust, noise, vibration and traffic.

The phasing of the development and the construction management details should be described and assessed in relation to impacts on existing residential, social, community and medical amenities, and economic activities.

1.7.1.2 Flora & Fauna

Description of the impacts - functional, physical and visual - deriving from any proposed open spaces, environmental and landscaping works. Particularly in relation to the works to the public realm between Parnell Square North and the Garden of Remembrance.

Impact on the protection of certain species and applications for derogation licenses. Particular attention to the possible presence of bats in any buildings to be demolished or modified, and any necessary mitigation measures.

Appropriate Assessment Stage 1 Screening. This can be a stand-alone document or included as a separate chapter within the EIS.

1.7.1.3 Soil:

Soil Quantum and description of materials disturbed or excavated on the site.

Proposals for the storage, reuse and disposal of material excavated or otherwise generated during the demolition

and construction phases. And notably, the identification, removal and management of any contaminated soil.

Impact of soil excavations or other ground disturbances on surface waters.

Description of the types and nature of materials imported to the site during construction. And, construction methods and measures to be employed to prevent the importation of Invasive species.

Mitigation measures to **prevent or minimize emissions** from the site during demolition and construction phases.

1.7.1.4 Water

Impact of material excavations or other ground disturbances on surface and ground waters in the area of the site. And by extension impact on the aquatic environment of rivers in the vicinity, in particular the River Liffey. Mitigation measures to be described.

Groundwater levels to be established and considered against proposed F.F.Ls of the proposed buildings. Impact of the development on the drainage, hydrological and hydrogeological regime of the overall area.

Potential flooding impacts and risks in accordance with the document "The Planning System and Flood Risk Management – Guidelines for Planning Authorities" published by the Office of Public Works in November 2009.

Water service issues and any potential impact on receiving waters to be addressed. The adequacy of water supply in the area in terms of fire-fighting purposes, as well as potable supplied to the development should be considered, taking into account the existing needs in the vicinity.

Information relating to the coordinated provision of physical infrastructure and services, in terms of the cumulative impact of any other proposals contained in the Parnell Square Cultural Quarter: A Catalyst for Renewal and Growth along the Civic Spine, Vision Document April 2013 for the surrounding area.

Adequate capacity existing in the foul and storm water sewer system is necessary to facilitate the proposed development.

Address the impacts, if any, to surface water and groundwater in accordance with S.I. No. 272 of 2009 and S.I. No. 9 of 2010.

1.7.1.5 Air

Particularly relevant during the demolition phase of development. Provide appropriate and up-to-date baseline data and describe any mitigation measures deemed necessary to minimize adverse impacts on air quality in the vicinity of the site and to mitigate dust and airborne pollution.

1.7.1.6 The Landscape

Impact on the receiving urban landscape. Address existing visually prominent and functional features in the urban landscape. Assess visual impact on the surrounding heritage areas in particular.

Photomontages or other forms of visual aid. Views should be taken to and from the most visually vulnerable locations in the vicinity of the site. Plans and sectional drawings should also be included to provide clarity.

The development should describe the nature and function of all aspects of landscaping, including landscaping that facilitates permeability with adjoining areas. Identify also if open space is to be graded.

1.7.1.7 Material Assets (Architectural and Archaeological Heritage, and Cultural Heritage)

Consultation with Dublin City Conservation Officers is advised.

The scale, design and height of the proposed development should be assessed in terms of:

- Existing Georgian terrace buildings of significant heritage value, and protection of this architectural sensitivity.
- Architectural impacts within the Parnell Square area.
- Architectural structures, including Protected Structures, in adjoining areas outside Parnell Square.
- Integration with the existing adjoining areas, particularly with regard to architectural character, including: Parnell Square East and West which are zoned Z8: "To protect and existing architectural and civic design character, to allow only for limited expansion consistent with the conservation objective" and nearby O'Connell Street Architectural Conservation Area.

- Structures of architectural merit which are at a remove from the site but which may be affected due to works associated with the proposed development. This to include consideration of:
 - Buildings that contribute to the character of the area and which may not be included in the RPS for Dublin City as yet (e.g. the Garden of Remembrance).
 - Existing surrounding building of architectural merit may assist in providing a scale, context and backdrop for the proposed new development.

The site comprises a 1960s amharclann (theatre) building located to the rear of Colaiste Mhuire and consideration shall be given to the preservation by record of this building, which is located within the curtilage of a Protected Structure, in the event of its possible demolition as part of the proposed development where exceptional circumstances are demonstrated.

Best conservation practice shall be employed in the adaptation of significant historic buildings for the new public cultural uses. Interventions in the historic fabric should adhere to accepted conservation principles such as those enshrined in the ICOMOS Charters. Restoration of specific elements, such as decorative plasterwork and joinery, may be desirable in the interest of achieving as satisfactory and enjoyable appreciation of the historic interiors, and a detailed conservation assessment and methodology shall be undertaken and prepared.

It is recommended that impact on archaeological heritage of the area is specifically investigated on the basis of the nature and location of the subject site in the centre of Dublin City.

Baseline archaeological data should be provided for the site including location, extent and nature of any existing archaeological finds. Proposed mitigation measures to be undertaken, where such archaeological remains will be affected, shall be described.

1.7.1.8 Traffic

Given the city centre location of the site, a description of the traffic impacts resulting from the proposed development shall be provided as well as a description of mitigation measures deemed necessary.

A full assessment of public transport services and linkages through the site shall be provided for within the EIS, particularly in relation to the works to the public realm. This should include mitigation measures to minimise the impact of the development, notably

during the demolition and construction phases. This Section should include an assessment of the impact of the proposed development on the Dublin Bus services that operate around Parnell Square.

Physical infrastructure provision should be co-ordinated to service the proposed new development including the proposal to run part of the LUAS line BXD along Parnell Street to the south. Traffic generation and movement should be assessed in the context of the Luas proposals along Parnell Street and the overall movement of traffic and public transport in the city centre.

The EIS should also address traffic generated by the development, during demolition, construction and operational phases of the development. It should include information on the volume and type of traffic (including details of any unusually heavy, high or wide loads) likely to be generated during these phases of the development.

The EIS should consider the environmental effects of such heavy traffic. It should clearly provide details regarding proposed routes to and from the site, in particular during the demolition and construction phases of the development.

In considering traffic-related issues, the EIS should address any cumulative issues which may/will arise in the overall development of Parnell Square, and should have regard to other major development in the vicinity of the site.

The development shall be described in terms of its permeability with surrounding areas, It should detail the traffic arrangements, which will facilitate such permeability, including pedestrian and cycle traffic.

1.7.1.9 Cumulative impacts

The EIS should consider the cumulative impact of the proposed development and any other proposals contained in the non-statutory 'Parnell Square Cultural Quarter: A Catalyst for Renewal and Growth along the Civic Spine, Vision Document 2013', in relation to the provision of physical infrastructure, including:

- All water services
- Drainage
- Utilities
- Layout of the proposed works to the public realm

The EIS shall demonstrate how the proposed uses are appropriate to this city centre location.

1.7.2 Requirement for further EIAR Scoping for Applications Made After 16 May 2017

On the 15 May 2017, the Department of Housing, Planning, Community and Local Government issued a Circular, entitled: 'Implementation of Directive 2014/52/EU on the effects of certain public and private projects on the environment (EIA Directive)' referenced as: Circular Letter PL 1/2017.

The Circular states (p.1) that Article 3 of Directive 2014/52/EU provides that where, before 16 May 2017, the following circumstances apply, the relevant provisions of Directive 2011/92/EU must be followed:

"In the case of projects requiring assessment and a request has been made, providing the information specified in Annex IV in an adequate and appropriate form, for an opinion under Article 5(2) of Directive 2011/92/EU as to the information to be provided by the developer and to be contained in an Environmental Impact Statement (request for scoping opinion)."

However, some ambiguity then arises in the next paragraph (p.2), which states:

"It will be noted that where the screening for EIA has commenced prior to 16 May 2017 and is carried out in accordance with Directive 2011/92/EU, but the application for planning permission or other development consent and accompanying EIS, where EIA is determined to be required, is submitted on or after 16 May 2017, the application will fall to be dealt with in accordance with Directive 2014/52/EU."

As highlighted in the section above an EIS scoping opinion has previously been sought and provided by the Board, before the relevant date of 16 May 2017, for the same project. Furthermore, EIAR scoping is not mandatory.

We would not expect that the Board's scoping opinion on the matters to be addressed in the EIAR to be materially different from the opinion which it issued in March 2014. The broad description of the proposed development does not change and thus the likely significant environmental impacts and information to be contained in the EIAR should remain consistent for the topics already considered by the Board.

We do note that there has been some further development in respect of existing and proposed strategic transportation infrastructure in the vicinity of Parnell Square since the previous

scoping opinion was issued. However, we do not consider that the advice of the Board with respect to the scoping of transportation impacts would fundamentally differ in this context.

However, in preparing this EIAR to accompany the S175 application to the Board, account has been taken of Directive 2014/52/EU, and the broader scope of topics to be assessed as identified in the draft 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports' (August 2017). The EIAR therefore considers the additional topics of:

- Human Health
- Biodiversity
- Climate Change
- Land

Arguably, the Board has already indicated a need to consider human health aspects, emissions, biodiversity and land use as part of its scoping assessment issued in March 2014.

An expert multi-disciplinary EIA team has been engaged to prepare this EIAR for the proposed development. In respect of the additional topics of 'Human Health', 'Biodiversity', 'Climate Change' and 'Land' the following is the advice of the EIA team:

1.7.2.1 Human Health:

The environmental factor of 'Human Health' will be examined together with 'Population' (or previously 'Human Beings') to identify the 'human health' profile for the relevant project catchment, the likely impacts and their significance. Any necessary mitigation measures and then the likely residual impacts of the proposed development on 'human health' will also be identified.

Based on the nature of the proposed scheme no specific health risk studies are proposed.

The impact on 'human health' in respect of land use (including amenity) will draw upon the specific landscape design and the EIAR Landscape and Visual Impact Assessment chapter.

The most likely impacts on human health are considered to arise from construction dust, noise and traffic, and during operation the provision of amenities. Thus, the potential for effects on human health will also be dealt with having regard to the impacts on air, water, noise, traffic, landscape and waste that may be identified in other EIAR chapters.

1.7.2.2 Biodiversity:

It has been advised that since 2015 there have been some changes to the reporting standards and scope of ecological/ biodiversity issues which raise some further minor implications for the scope of the 'Flora and Fauna' (now 'Biodiversity') chapter of the EIAR. For example, the key guidance document from CIEEM was updated in 2016 and there are concepts of 'no net biodiversity loss' from the EU Biodiversity Strategy (also a requirement of the revised EIA Directive) and a new Biodiversity Action Plan. The Biodiversity chapter will consider all the new assessment criteria relevant to the proposed development.

1.7.2.3 Climate Change:

Climate change will be covered in accordance with the 2014 EIA Directive in the Air Quality and Climate Chapter.

1.7.2.4 Land:

Land will be considered in the context of 'land take'. Site extraction or demolition works will be described as part of the proposed design, and then assessed under the Soil and Geology Chapter of the EIAR.

The issue of land will also be addressed indirectly under the 'Description of the Proposed Development and 'Population' chapter in respect of the landuse / activities and amenities/resources that will be altered, lost or delivered as part of the proposed development and any impacts for the resident, working or visiting population within the study catchment.

1.8 EIAR Layout & Structure

The composition of this EIAR has been prepared in the context of the EPA Draft Guidelines (2017) and the screening and scoping stages described above. The layout and structure of this EIAR is laid out under 3 volumes, each containing specific sections as follows:

Volume 1: Written Statement, including Non-Technical Summary

Volume 2: Written Statement - Text Appendices

Volume 3: Written Statement - Appendices Maps & Plans

Following on from the layout, the structure of the EIAR is shown in Table 1.1.

Table 1.1: Environmental Impact Assessment Chapters

Chapter No.	EIAR Chapter Name	Consultant
1	Introduction	Stephen Little & Associates
2	Non-Technical Summary	Stephen Little & Associates with input from the consultants outlined below.
3	Description of Proposed Development	Stephen Little & Associates with input from Grafton Shaffery Architects and BSLA
4	Consideration of Alternatives	Stephen Little & Associates
5.1	Population	Stephen Little & Associates
5.2	Human Health	AWN Consulting
5.3	Cultural Heritage – Architectural Heritage	Alistair Lindsay Conservation Architects
5.4	Cultural Heritage – Archaeology	IAC Archaeology
5.5	Material Assets - Transportation	Waterman Moylan
5.6	Landscape & Visual Impact Assessment	ARC Consulting
5.7	Biodiversity	Scott Cawley
5.8	Soils & Geology (Including 'Land')	Waterman Moylan
5.9	Water (Drainage, Supply, Flood Risk, & Ground water)	Waterman Moylan

Chapter No.	EIAR Chapter Name	Consultant
5.10	Air – Noise & Vibration	AWN Consulting
5.11	Climate & Climate Change – Air Quality	AWN Consulting
5.12	Climate – Sunlight Analysis	ARC Consulting
5.13	Climate – Daylight Analysis	ARC Consulting
5.14	Material Assets – Waste Management	AWN Consulting
6	Summary of Mitigation Measures	Stephen Little & Associates
7	Summary of Residual Impacts	Stephen Little & Associates
8	Interactions and Cumulative Impacts	Stephen Little & Associates
9	Difficulties encountered in compiling information	Stephen Little & Associates
10	Forecasting Methods Used	Stephen Little & Associates
11	Bibliography	Stephen Little & Associates
-	Overall Co-ordination and Management of the EIAR	Stephen Little & Associates

The relevant experts involved in the preparation of this EIAR can be found under Volume 2, Appendix 1.1: List of EIAR experts, of this EIAR.

1.9 Structure of each Environmental Topic

Each environmental topic within Chapter 5 of this EIAR has been structured in accordance to the EPA Draft Guidelines 2017, under the headings below.

1.9.1 Introduction

All of the relevant introductory text and descriptions for the Chapter are located under this Section.

1.9.2 Methodology

An outline of the methodology employed in the assessment, including where possible a reference to the EPA guidelines.

1.9.3 Receiving Environment (Baseline Situation)

Existing Environment relevant to the environmental factor being assessed for this project.

A dynamic description of the specific environment into which the proposal will fit, taking account of other developments likely to occur. The particular aspects of the environment, for each topic, are discussed in terms of their context, character, significance and sensitivity.

1.9.4 Characteristics of the Proposed Development

Characteristics relevant to the environmental factor being assessed for this project.

Detailed descriptions / descriptions outside the scope should be removed and referred to the main project description under Chapter 3: Description of Proposed Development. This should consider Demolition and Construction and Operational Phases.

1.9.5 Potential Impacts of the Proposed Development

The potential impact of the proposal includes a general description of the possible types of impacts which proposals of this kind would be likely to produce, for Demolition and Construction and Operational Phases.

This includes a consideration of the 'Do-Nothing' impact. The 'Do-Nothing' impact describes the environment, as it would be in the future if no development of any kind were carried out.

Potential impacts without mitigation measures are considered in this section.

- Demolition and Construction and Operational Phase Impacts
- Operational Phase Impacts
- Do-nothing impacts

1.9.6 Mitigation Measures

A description of any specified remedial or reductive measures considered necessary, resulting from the assessment of potential impacts described at 1.9.5 above.

A description of any post development monitoring of effects on the environment which might be necessary, covering the monitoring methods and the agencies responsible for their implementation.

Where required, a description of reinstatement measures and the agencies responsible for their implementation.

- Demolition and Construction Phase
- Operational Phase

All of the proposed mitigation measures of this EIAR are grouped into Chapter 6: Summary of Mitigation Measures.

1.9.7 Predicted Impact of the Proposed Development

An assessment of the specific impacts of the subject proposal on the environment, as found by expert analysis and judgment, having regard to the receiving environment, the characteristics of the proposal, the potential impacts and any mitigation measures.

The predicted impacts, for both demolition and construction and operational stages, are assessed having regard to their character, magnitude, duration, consequences and significance.

A '**Worst Case**' impact is also considered for both the construction and operational phases of the development.

- Demolition and Construction Phase
- Operational Phase
- Worst Case impact
- Interactions
- Cumulative

All of the Predicted Impacts measures of this EIAR are grouped into Chapter 6: Summary of Mitigation Measures.

Interactions and Cumulative Impacts are examined under Chapter 8: Interactions and Cumulative Impacts

1.9.8 Monitoring

Required where impact pre-mitigation is potentially significant.

Allows for assessment of effectiveness of mitigation measures.

1.9.9 Difficulties Encountered

Required where impact pre-mitigation is potentially significant.

1.9.10 Bibliography

A list of reference material used in compiling the chapter. This will feed into Chapter 9 'Bibliography'.

1.9.11 Consultations

A list of consultations held in the course of the preparation of the EIAR, including the following details:-

- Agency/Body
- Date of Consultation
- Nature of Consultation (i.e. meeting, email, phone call)

In addition to the EIAR consultation, the project Design Team have also engaged in consultation. The outcome of this engagement has been identified where relevant in the preparation of each EIAR Chapter.

Details regarding consultation during the preparation of the EIAR is outlined under Section 1.11: Consultation Process, of this Chapter.

1.10 Assessment of Impacts

Clarity of method, language and meaning are vital to accurately explain the full range of effects. Adherence to a systematic method of description can be of considerable assistance in this matter.

The relevant terms listed in the table below can be used to consistently describe specific effects. All categories of terms do not need to be used for every effect

1.10.1 Quality of Effects'

With regards to the 'Quality of Effects', it is crucial that any such effects are clearly identified, especially to non-specialist readers.

These effects which may occur can be characterised into 3 types: positive, negative or neutral.

Firstly, if the proposed element of the project improves the quality of the receiving environment it is seen as a Positive Effect;

Secondly, where such a change does not affect the quality of the receiving environment it can be described as a Neutral Effect and;

Finally, Negative /Adverse Effects can be described as a change, which reduces the quality of the environment.

1.10.2 Describing the Significance of Effects'

In terms of 'Describing the Significance of Effects', it is outlined under the EIAR Guidelines that such effects are specific to each different environmental topic.

The EIAR Guidelines state that in the absence of specific definitions, there are 7 potential useful definitions set out under Table 1.2.

Table 1.2: Describing the Significance of Effects

Type of Effects	Description of Effect
Imperceptible	An effect capable of measurement but without noticeable consequences.
Not significant	An effect which causes noticeable changes in the character of the environment but without noticeable consequences.

Slight Effects	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
Moderate Effects	An effect that alters the character of the environment in a manner that is consistent with existing and emerging trends.
Significant Effects	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.
Very Significant	An effect which, by its character, magnitude, duration or intensity alters the majority of a sensitive aspect of the environment.
Profound Effects	An effect which obliterates sensitive characteristics

1.10.3 Describing the Extent and Context of Effects'

When '**Describing the Magnitude of Effects**', the characteristics of which should address the: **Extent** (i.e Describe the size of the area, the number of sites, and the proportion of a population affected by an effect.), **Duration** (i.e time period, please refer to Section 5 below for more detail), **Frequency** (i.e its recurrence) and **Context** (i.e whether the foregoing magnitudes will conform or contrast with established baseline conditions).

1.10.4 Describing the Probability of Effects'

In '**Describing the Probability of Effects**', a clear description of effects as outlined above enables the Competent Authority (An Bord Pleanála) to decide the balance of risk over advantages when making a decision. The probability is broken into 2 no. types.

The **likely effects** in so far as: The effects can reasonably be expected to occur as a result of the planning project if all mitigation measures are properly implemented;

The **Unlikely Effects** in so far as: The effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented.

1.10.5 Describing the Duration and Frequency of Effects

In **Describing the Duration of Effects**, it is crucial to acknowledge that different environmental topics have varying concepts of 'Duration'. Therefore, it is acknowledged under EIAR Draft Guidelines 2017, that the following timescales as shown under table no. 2 provide a broad definition of useful times:

Table 1.3: Describing the Duration and Frequency of Effects

Description of Effect	Timescale for each effect
Momentary Effects	Seconds to Minutes
Brief Effects	Less than a day
Temporary Effects	Less than a year
Short-term Effects	Lasting 1 to 7 years
Medium-term Effects	Lasting 7 to 15 years
Long-term Effects	Lasting 15 to 60 years
Permanent Effects	Lasting over 60 years
Reversible Effects	Effects that can be undone, through remediation or restoration.
Frequency of Effects	Describe how often the effect will occur (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually)

For example, the demolition and construction phase of the proposed development will last 2 – 3 years. In relation to Table 1.3, this is a short-term period.

1.10.6 Describing the Types of Effects

Under the Guidelines, **Describing the Types of Effects** are identified into 8 different types of, and inter-related effects:

- **'Indirect Effects'** (also referred to as Secondary Effects) – 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.
- **Cumulative Effects** - The addition of many minor or significant effects of other projects, to create larger, more significant effects.
- **'Do Nothing Effects'** - The environment as it would be in the future should no project of any kind be carried out.
- **'Worst case' Effects** - The effects arising from a project in the case where mitigation measures substantially fail. It can also be a worst case assumption where there is uncertainty in the assessment or in the effectiveness of mitigation measures.
- **'Indeterminable Effects'** - When the full consequences of a change in the environment cannot be described.

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

1.10.7 Determining Significance

The above Sections 1.9.1 - 1.9.6 above set out 6 categories which provide a helpful guide in determination of the significance of the impact.

The language described in the above Sections has been used in the preparation of this EIAR.

Figure 1.2 taken, from the EPA Draft Guidelines (2017) illustrated how the character of a predicted impact to the sensitivity of the receiving environment can determine the significance of the impact.

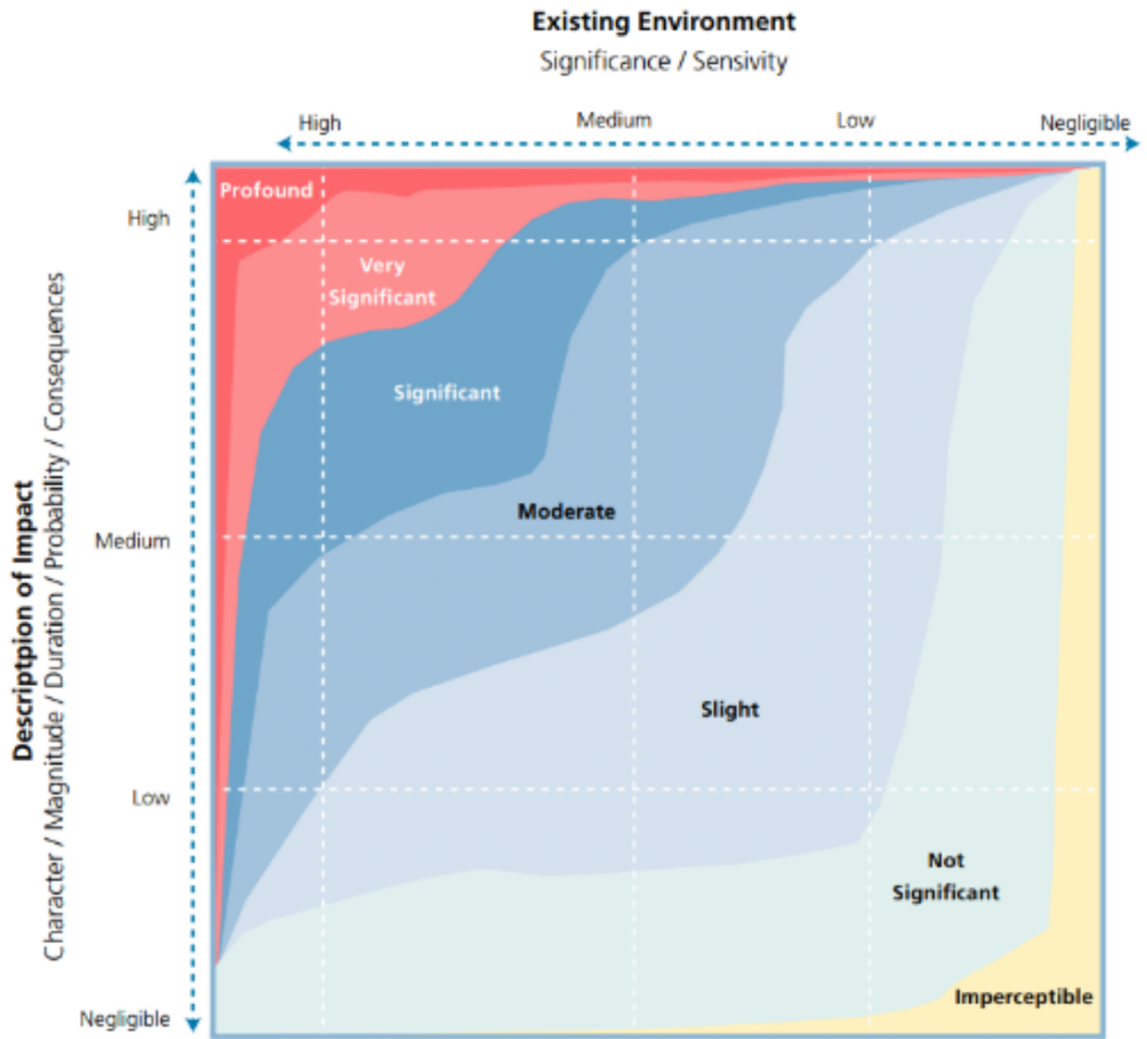


Figure 1.1: Chart showing typical classifications of the significance of impacts (Figure 3.5, Draft EPA Guidelines 2017, page 53)

1.11 Consultation Process

1.11.1 EIAR Consultation

In the preparation of the EIAR, specific consultation occurred in respect of Chapter 5.4: Cultural Heritage – Archaeology, outlined under 1.11.1.1 below.

Under each of the other environmental chapters, while there was no specific consultation carried out, feedback from design team consultation has been incorporated, where relevant to each chapter. These design team consultation meetings are outlined under Section 1.10.2 below.

1.11.1.1 Cultural Heritage - Archaeology

During scoping and research for the assessment and EIA a number of statutory and voluntary bodies were consulted to gain further insight into the cultural background of the receiving environment, as follows:

- Department of Arts, Heritage and the Gaeltacht – the Heritage Service and Policy Unit, National Monuments Section: Record of Monuments and Places; Sites and Monuments Record; Monuments in State Care Database; Preservation Orders and Register of Historic Monuments;
- National Museum of Ireland, Irish Antiquities Division: topographical files of Ireland; and
- Dublin City Council: Planning Section
- Dublin City Archaeologist: Consultation via phone and email regarding the strategy for and results of the test trench excavations and proposed mitigation strategies.

We refer the reader to Chapter 5.4: Cultural Heritage – Archaeology for further details in relation to Archaeology.

1.11.2 Design Team Consultation

1.11.2.1 Irish Water

Pre-planning consultation occurred between the Applicants Design Team and Irish Water as part of a pre-connection enquiry form. Feedback was received by Irish Water. Details of the pre-connection enquiry form is detailed in the accompanying Drainage & Watermains Planning Report, prepared by ARUP Consulting Engineers.

1.11.2.2 An Bord Pleanála

Under Section 175, there is no mechanism for the applicant to engage with An Bord Pleanála during the pre-application phase.

Notwithstanding this, An Bord Pleanála advised on the Scope of the EIAR. The contents of this have been discussed under Section 1.7.1 of this Chapter.

1.11.2.3 Dublin City Council

Pre-planning engagement took place between the Design Team and various departments at Dublin City Council. A summary list these meeting are outlined under Table 1.4 below.

Table 1.4: Summary list of meetings between the Design Team and Dublin City Council.

Department	Date	Topics Discussed
Planning, Transportation and Drainage Departments	30 July 2015	EIAR, Public Realm, Traffic, Planning Policy, Building Layout and Design.
Conservation, Planning and Parks Departments	17 August 2015	Conservation and landscaping
Planning & Conservation Departments	12 January 2016	Description of the Proposed Development, entrances, access, and associated impacts.
Conservation Department	15 March 2018	Protected Views
Transportation Department	22 March 2016	Public Realm, Road Design & Layout
Planning Department	29 March 2018	Protected Views
Roads & Traffic Department	10 April 2018	Public Realm, Road Design & Layout

Department	Date	Topics Discussed
Roads & Traffic Department	20 April 2018	Public Realm, Road Design & Layout
Roads & Traffic Department	24 April 2018	Public Realm, Road Design & Layout
Planning Department	30 April 2018	EIAR Procedure
Drainage Department	3 May 2018	Drainage
Roads & Traffic Department	9 May 2018	Public Realm, Road Design & Layout
Planning & Conservation Departments	10 May 2018	Conservation Planning
Planning & Conservation Departments	19 June 2018	Conservation Planning
Archaeology Department	12 September 2018	Archaeological finds
Drainage Department	12 September 2018	Drainage

1.11.2.4 Other Consultation meetings

The Design Team engaged in further consultation with individuals and bodies during this time. The following were consulted:

Table 1.5: Summary of further meetings between Design Team and other Bodies

Body	Date	Topics Discussed
National Transport Authority	30 April 2018	Public Realm, Road Design & Layout
The Department for Arts, Heritage, and the Gaeltacht	6 September 2018	Cultural Heritage, Design, Adaptive Re-use and management of the proposed development at Operational Phase
An Taisce, Irish Georgian Society	6 September 2018	Interaction with adjoining land uses. Entrance to No. 27, Interactions between new and old, the Regeneration potential of the proposed development. The design and materials of the new build.

Body	Date	Topics Discussed
Rotunda Hospital	September 2018	Impact on the existing IVF facility

Further to the consultation meetings outlined above, DCC Libraries have recorded the consultation process for the proposed development since late 2012. The document sets out the various dates, groups / organisations which were consulted during the design process of the scheme.

A copy of this consultation tracker is appended to the Planning Application Report.

1.11.3 Submissions in relation to the EIAR

1.11.3.1 Statutory / Public consultation

This EIAR and application will be available for inspection free of charge or purchased on payment of a specified fee (which fee shall not exceed the reasonable cost of making such a copy) during public opening hours excluding Bank Holidays at the following locations:

- The Offices of An Bord Pleanála, 64 Marlborough Street, Dublin 1,
- The Offices of Dublin City Council, Civic Offices, Wood Quay, Dublin 8

The application and EIAR may also be viewed at / downloaded from the following website:

<http://parnellsquare.ie/about-the-project/planning-application>

Submissions or observations may be made only to An Bord Pleanála ("the Board") 64 Marlborough Street, Dublin 1 must be received by no later than 5.30 pm on **18th December 2018**.

1.11.3.2 Prescribed Bodies

A number of Prescribed Bodies have been issued with a copy of the planning application prior to lodgement of the application with An Bord Pleanála. A list of such Bodies are outlined as follows:

- Minister for Housing, Planning & Local Government
- Minister for Communications, Climate Action and Environment
- Minister for Transport, Tourism and Sport
- Department of Culture, Heritage & the Gaeltacht, including the National Parks and Wildlife Services
- National Transportation Authority
- Transport Infrastructure Ireland
- CIE
- An Taisce – The National Trust of Ireland
- The Heritage Council
- Arts Council (An Chomhairle Ealaíon)
- Health Service Executive
- Health and Safety Authority
- Geological Survey of Ireland
- Environmental Protection Agency
- Fáilte Ireland
- Irish Water

A schedule list of the Prescribed bodies issued with a copy of the planning application and a copy of such letter is enclosed with the planning application documentation.

1.11.3.3 EIAR Portal

As of the 1st September 2018, there is an obligation on the applicant, where an EIAR has been prepared, to submit the relevant information to the EIA Portal.

The applicant has submitted an application form, a copy of the public notice and a site location plan to the Department of Housing Planning and Local Government.

A copy of this submission and acknowledgement receipt issued by the Department of Housing Planning and Local Government accompanies the planning application.