3.0 ALTERNATIVES

3.1 INTRODUCTION

The Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental impact Assessment (2018) – states:

"The Directive requires that information provided by the developer in an EIAR shall include a description of the reasonable alternatives studied by the developer. These are reasonable alternatives which are relevant to the project and its specific characteristics. The developer must also indicate the main reasons for the option chosen taking into account the effects of the project on the environment."

As such, the consideration and presentation of the reasonable alternatives studied by the project design team is an important requirement of the EIA process.

This section provides an outline of the main alternatives examined during the design phase. It sets out the main reasons for choosing the development as proposed, taking into account and providing a comparison on the environmental effects.

This section assesses the evolution of the proposed development and the alternatives examined by the Applicant relating to the location, size and scale and project design and technology of the proposed development. This section provides a full justification for the proposed development and provides a comparison of the environmental effects of each alternative option.

This section of the EIA Report has been prepared by John Spain Associates, Planning & Development Consultants, and provides details of the evolution of the scheme design through the reasonable alternatives examined. This chapter of the EIA Report was prepared by Blaine Cregan M.Sc. B.Sc. (hons) and BEng., Executive Director with John Spain Associates.

Blaine has acted as lead planning consultant on a range of high-quality complex planning applications across the country over an extended period. Blaine has wide-ranging experience in the management and review of Environmental Impact Assessment (EIA) Reports for major commercial and mixed-use development and redevelopment projects. Inputs to this chapter have also been provided by Henry J Lyons, CS Consulting Engineers, Byrne Environmental Consulting and PMEP Consulting Engineers.

It is a requirement of the EIA Directive (as amended) to present "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."

3.2 ALTERNATIVES EXAMINED

The EIA Directive (2014/52/EU) requires that Environmental Impact Assessment Reports include:

"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."

Article 94 and Schedule 6, paragraph 1(d) of the Planning and Development Regulations 2001, as amended, requires the following information to be furnished in relation to alternatives:

"(d) A description of the reasonable alternatives studied by the person or persons who prepared the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment."

The presentation and consideration of various alternatives investigated by the project design team is an important requirement of the EIA process. This section of the EIAR document provides:

"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."

This serves to indicate the main reasons for choosing the development proposed, taking into account and providing a comparison the environmental effects. Alternatives may be described at three levels

- Alternative Locations.
- Alternative Designs.
- Alternative Processes.

The DHPLG 2018 EIA Guidelines state:

** RED: 25/03/20* "Reasonable alternatives may relate to matters such as project design, technology, location, size and scale. The type of alternatives will depend on the nature of the project proposed and the characteristics of the receiving environment. For example, some projects may be site specific so the consideration of alternative sites may not be relevant. It is generally sufficient for the developer to provide a broad description of each main alternative studied and the key environmental issues associated with each. A 'mini- EIA' is not required for each alternative studied." (Emphasis added).

This approach above is reflected in section 3.4.1 of the EPA EIAR Guidelines 2022 which state:

"The alternatives should be described with 'an indication of the main reasons for selecting the chosen option'. It is generally sufficient to provide a broad description of each main alternative, and the key issues associated with each, showing how environmental considerations were taken into account in deciding on the selected option. A detailed assessment (or 'mini-EIA') of each alternative is not required."1

Pursuant to Section 3.4.1 of the EPA EIAR Guidelines 2022, the consideration of alternatives also needs to be cognisant of the fact that "Clearly, in some instances some of the alternatives described below will not be applicable - e.g. there may be no relevant 'alternative location' ..."

The EPA EIAR Guidelines 2022 are also instructive in stating:

"Analysis of high-level or sectoral strategic alternatives should not be expected within a project level EIAR... It should be borne in mind that the amended Directive refers to 'reasonable alternatives... which are relevant to the proposed project and its specific characteristics".

The consideration of the main alternatives in respect of the development of the subject lands was undertaken by the Design Team and has occurred throughout an extensive and coordinated decision-making process, over a considerable period of time. The main alternatives considered are identified below.

3.2.1 **Alternative Locations**

The application site is zoned for a mix of uses under the Dublin City Development Plan 2022-2028 (Z5 Zoning Objective - City Centre), and the proposed uses are permitted in principle with the land use zoning objectives pertaining to the project site.

The 2018 DHPLG Guidance on the preparation of EIARs notes specifically that the consideration of some types of alternatives, such as alternative locations, may not be appropriate in all cases. EIA is concerned with projects and the Environmental Protection Agency's guidelines (2022) state that, in some instances, neither the applicant nor the competent authority can realistically be expected to examine options that have already been previously determined by a higher authority, such as a national plan or regional programme for infrastructure which are examined by means of a Strategic Environmental Assessment (SEA), the higher tier form of environmental assessment. As the subject site has been identified to accommodate the uses proposed, it is not considered appropriate to evaluate alternative locations in the EIAR.

A "do-nothing" scenario was considered to represent an inappropriate, unsustainable, and inefficient use of these zoned lands; particularly having regard to the close proximity to a number of high-quality transport links in the city centre site. The suitability of the lands for development has been confirmed as it is located within an area identified for development under (Strategic Development Regeneration Area (SDRA) 6 - Docklands) under the Dublin City Development Plan 2022-2028.

¹ Ref CJEU Case 461/17

As noted in Section 4.13 of the 2018 Guidelines "some projects may be site specific so the consideration of alternative sites may not be relevant."

We also refer to the Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA 2020), which states that in some instances alternative locations may not be applicable or available for a specific project which is identified for a specific location.

In the first instance, the proposed development is in accordance with the zoning and other relevant policies and objectives of the Dublin City Development Plan 2022-2028). The site is zoned as 'Zone Z5' – "to consultate and facilitate the development of the central area, and to identify, reinforce, strengthen and protect its civic design character and dignity". The most recent use of the subject lands for car parking is included as a permissible use for Z5, however, the proposed development provides a more diverse mix of uses including office and arts and cultural spaces. Therefore, the proposed development represents a significant improvement in the alignment with the zoning objective of Z5 - City Centre.

The location of the proposed development was also chosen to complement the associated proximal developments as mentioned in Section 2.8 and other existing residential, commercial and amenity developments within the City Centre, the remainder of the Georges Quay area and the Dublin Docklands.

Furthermore, as identified in Chapter 11 of this EIA Report the current location for the proposed development is one is highly accessible in terms of provision of public transportation. It is an ideal location for the consolidation of employment opportunities for those residing within Dublin City centre and those living further afield enabling a significant switch to more sustainable modes of transportation.

Given the current zoning of the site, the surrounding land uses, the proximity to similar associated developments, the public transport connections, and the availability of necessary services and infrastructure, the current location of the proposed development is determined to be the most appropriate.

3.2.2 Alternative Uses

The subject site is zoned for a mix of uses which are compatible with the city centre location of the site. The subject site will provide new office accommodation, co-working space and community/arts/cultural spaces. In addition to these uses there are other land uses which are permitted in principle on these lands such as residential and retail etc. See Table 3.1 below for full list of permissible uses under Z5 zoning objective.

Table 3.1. Z5 - Permissible Uses

Amusement/ leisure complex, Beauty/grooming services, Bed and breakfast, Buildings for the health, safety and welfare of the public, Café/tearoom, Childcare facility, Civic offices, Community facility, Conference centre, Craft centre/craft shop, Creative artistic, recreational building and uses, Cultural, Delicatessen, Education, Embassy office, Enterprise centre, Financial institution, Funeral home, Guesthouse, Home-based economic activity, Hostel (Tourist), Hotel, Industry (Light), Internet café/call centre, Live-work units, Media-associated uses, Media and related consultants, Mobility hub, Nightclub, Office, Off-license, Off-license (part), Open space, Place of public worship, Primary health care centre, Public house, Public service installation, Recycling facility, Residential, Restaurant, Science and technology-based industry, Shop (District), Shop (Local), Shop (Major comparison), Shop (Neighbourhood), Sport facility and recreation uses, Student accommodation, Take-away, Training centre, Veterinary surgery, Warehousing (Retail/non-food/retail park)

It is not considered that an alternative use would result in the best use of these lands, particularly having regard to the requirement for office development in this area proximate a major transport hub and future interchange. The environs of the subject site comprise a mix of uses, with residential, offices, schools, place of worship and other local services. The provision of residential development would result in an underutilisation of the site, due to the narrow configuration of the site, as such uses would require additional stair cores and set backs from boundaries to allow for private amenity space. A mix of uses is provided in the scheme in line with the Z5 zoning objective which seeks a mix of uses both horizontally and vertically through a scheme. The public transport accessibility of the site warrants development of a higher density in line with compact settlement principles and therefore low density uses would not represent and efficient use of land resources or public transport utilities.

3.2.2.1 Description of Alternative Processes

The relevance of alternative processes and technologies is limited in the case of this EAR having regard to the nature of the proposed development, which is primarily for a commercial development. The Climate Action Energy Statement prepared by BPC Engineers identifies the energy standards with which the proposed development will have to comply and also sets out the overall strategy that will be adopted to achieve these energy efficiency targets.

The building fabric has been selected to meet the requirements of Part L Building Regulations. The incorporation of these elements and technologies into the scheme will ensure higher performance and improved building sustainability when compared to alternative out-dated, less energy efficient materials and technologies.

The proposed development will comply with non-residential Part L 2021 (Buildings other than dwellings) and target a BER of at least A2. The optimised approach is based on the Energy Hierarchy Plan – Be Mean, Be Lean, Be Green

- Be Mean: The façade performance specification has been optimised to limit heat loss in the winter, heat gain in the summer, improve airtightness and thermal transmittance, and maximise natural daylight.
- Be Lean: High efficiency plants will be specified to take advantage of the optimised façade design measures.
 Allow energy lighting design will be utilised to further reduce energy consumption and increase occupant thermal comfort. A building Management System (BMS) will ensure on-going efficiency in the operation of plant and prioritisation of energy reduction measures into the future.
- Be Green: Renewable energy technologies such as Air Source Heat Pumps (ASHP), mechanical heat recovery (MHVR), and Solar PV Panels are utilised. A number of sustainable design features have been considered within the design to achieve the sustainability targets of the proposed development. These include the proximity of the development to public transportation networks, water efficiency measures such as low consumption sanitary fittings, utilisation of captured rainwater for irrigation and greywater, and improved indoor environmental quality.

3.2.2.2 Alternative Design and Layouts

It must be noted that the subject lands are located in an urban/city centre context which poses tight limitations on layout options in comparison to a potential suburban or rural context on a significantly larger parcel of land.

The existing use of a vacant building and surface level car park is an under-utilisation of the land resource and the development of the site represents an opportunity to address this.

The subject lands form a key corner of the South Quays within the Custom House Setting. In light of existing, current and previously permitted development in the area the subject lands provide an opportunity to create a formal composition in response to the Custom House Setting.

In the interests of providing a strong urban design response, the building lines utilise the majority of the site, with localised increased in footpath widths at street level provided where appropriate. Providing further setbacks of building lines would not provide a satisfactory design response to the site.

3.2.2.2.1 George's Quay Local Area Plan

Figure 3.1 below showing Figure 30 and 31 of the now expired Georges Quay Local Area Plan (GQLAP) set out, what was in 2012 a desired plan for the subject lands to comprise active street frontage, a commercial or residential use and a maximum of 6 storeys (with provision for one setback storey) north of a line delineated by the Immaculate Heart of Mary Church, and a maximum of 9/10 storeys south of that line. There has been a significant change in National guidance on city planning policy since 2012 when the GQLAP was published, where a policy for greater height and density is now required for highly serviced urban locations. This policy has been accepted by Dublin City Council, as sites such as Tara Street and those developments contained within the Hawkins St./Tara St./Townsend St./Poolbeg St. block which have been granted permission for height and density in excess of the LAP guidance. Such a building form was not considered to be the most sustainable approach to developing the lands.

Figure 3.1. Extract from Geroge's Quay Local Area Plan



3.2.2.2.2 Reg. Ref. 4674/22; ABP-315053-22 - 24 no. storey development

A planning application was submitted to Dublin City Council in August 2022 for a 24 no. storey building on the subject lands. The proposals comprised office accommodation from 1st - 23rd floor, and an arts centre, auditorium and café at ground floor and lower ground floor levels. The application was refused by Dublin City Council in October 2022 due to concerns regarding visual impact on the Customs House and the inappropriate scale and height of the proposed building. The decision was appealed to An Bord Pleanála who refused planning permission and did not accept the Inspector's recommendation to grant permission. This decision is currently subject to legal challenge.

While it remains the opinion of the client/applicant, that there is significant merit to the layout and form proposed Reg. Ref. 4674/22; ABP-315053-22, the subject application provides an opportunity to consider an alternative building layout and form, i.e. in lieu of a tall slender building, shouldered by buildings of a height consistent with the surrounding area thus creating a local landmark.

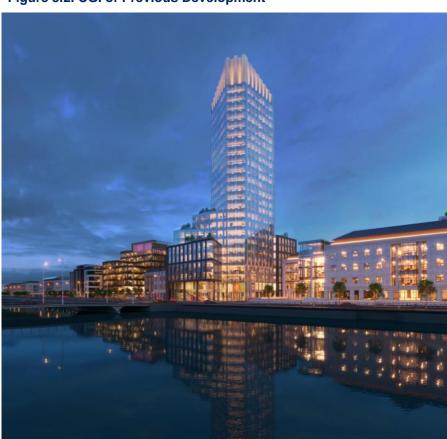


Figure 3.2. CGI of Previous Development

3.2.2.2.3 Proposed Development - 14 no. storey development

The height of the subject proposal has been designed to align with the specific objective for a locally higher building on the site; notwithstanding the provisions to make the case for a landmark building in the pevelopment Plan.

Figure 3.3. CGI of Proposed Development (Visual Lab)



The massing of the building is broken down by the articulation of the façades into a series of appropriately proportioned volumes defined by the different levels and setbacks. The carefully considered balancing of the building volumes informs the height and the overall massing of the building. This has been considered from each of the primary vistas.

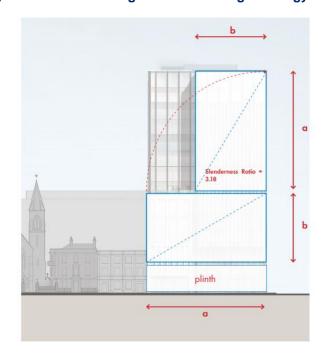
The reduced height of the current proposal may be more readily absorbed into the visual landscape.

Figure 3.4. Extracts from Design Statement showing the overall design strategy

Strategy:

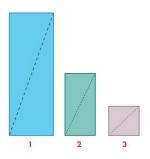
A plan driven design approach informed by the site and it's context.

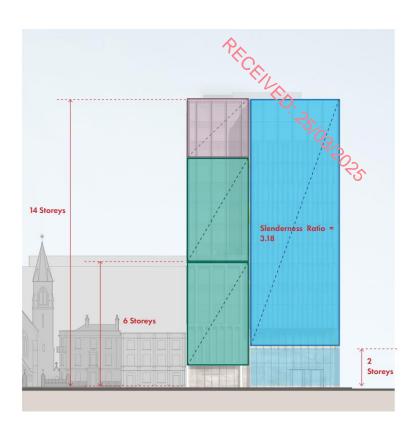
- Conceptual form represented by a simple diagram
- Derived from the rectangular shape of the site
- Building proportion drived from the width of the plot
- Taller corner element affresses the corer road junction
- Ground Level scale addressed by a plinth element.



Composition:

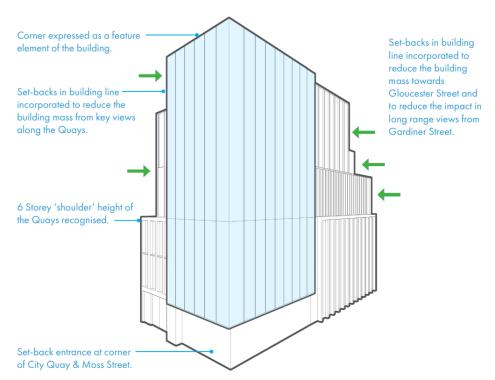
A composition of elegant individual geometric elements.





Form & Mass:

Sculpting the form & mass.



3.2.2.3 Alternative Mitigation

For each aspect of the environment, each specialist has considered the existing environment, likely impacts of the proposed development and reviewed feasible mitigation measures to identify the most suitable measures appropriate to the environmental setting of the proposed development. In making a decision on the most suitable mitigation measure the specialist has considered relevant guidance and legislation. In each case, a comparison of environmental effects was made, and the specialist has reviewed the possible mitigation measures available and

considered the use of the mitigation in terms of the likely residual impact on the environment. The four established strategies for mitigation of effects have been considered: avoidance, prevention, reduction and offsetting (not required in this development). Mitigation measures have also been considered based on the effect on quality, duration of impact, probability and significance of effects.

The selected mitigation measures are set out in each of the EIA Report Chapters 4-13 and Volume 3.

3.2.2.4 Conclusion on Alternatives

The proposed development was carefully designed, taking into consideration the site context, previous decisions by An Bord Pleanála and Dublin City Council, and the existing neighboring commercial, residential and educational properties and the local environmental conditions including air quality, noise and vibration, and visual impact.

The proposal will allow the development potential of the site to be maximised within the George's Quay area while improving visual impact and amenity through responsive architectural design, provision of public cultural space and mitigation measures to reduce the impact upon City Quay National School and the Immaculate Heart of Mary Church.

3.3 REFERENCES

- The Department Housing, Local Government and Heritage, 2018. Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment. Environmental Protection Agency. The Department Housing, Local Government and Heritage.
- Dublin City Council, 2022. Dublin City Development Plan 2022-2028. Dublin City Council.
- Environmental Protection Agency, 2022. Guidelines on the Information to be Contained in Environmental Impact Assessment Reports. Environmental Protection Agency.