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3 Alternatives Considered

3.1 Introduction

This chapter was prepared by Nathan Smith of McCutcheon Halley Chartered Planning Consultants, who graduated from Oxford Brookes University with a BA Hons in Planning Studies in 1997 and a Diploma in Planning in 1998. Nathan has over 20 years professional experience in the field of planning and development consultancy, which has included providing consultancy services in respect of several major urban regeneration projects including EIAR's. Nathan is currently a Senior Planning Consultant in the Practice of McCutcheon Halley Chartered Planning Consultants.

The requirement to consider alternatives within an EIAR is set out in Annex IV (2) of the EIA Directive (2014/52/EU) and in Schedule 6 of the Planning and Development Regulations, 2001, as amended, which state;

"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." (emp. added).

Reasonable alternatives may include project design proposals, location, size and scale, which are relevant to the proposed development and its specific characteristics. The Regulations require that an indication of the main reasons for selecting the preferred option, including a comparison of the environmental effects to be presented in the EIAR.

The Environmental Protection Agency (2017) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports - Draft states;

"The objective is for the developer to present a representative range of the practicable alternatives considered. 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 is deciding on the selected option. A detailed assessment (or 'mini-EIA')

of each alternative is not required."

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 chapter 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. For the purposes of the Regulations, alternatives may be described at three levels:

- i. Alternative Locations
- ii. Alternative Designs
- iii. Alternative Processes

Notwithstanding the above, pursuant to Section 3.4.1 of the Draft 2017 EPA Guidelines, the consideration of alternatives also needs to be cognisant of the fact that "in some instances some of the alternatives described below will not be applicable – e.g. there may be no relevant 'alternative location'…" The Draft 2017 Guidelines are also instructive in stating: "Analysis of high-level or sectoral strategic alternatives cannot reasonably 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".

3.2 Consideration of Alternatives

3.2.1 Alternative Locations

The site was acquired in 2014.. The decision to purchase the site was based on their proven track record of successfully delivering both residential schemes to the market.

The site represented a suitable site for development, being zoned for employment (Z6) and open space (Z9) in the Dublin City Development Plan (2016 – 2022) at the time of purchasing the site.

The variation to the employment land use zoning to residential land use by Dublin City Council in March 2018, means that residential development is listed as a 'Permitted in Principle' use in the land use zoning matrix.

Prior to the acquisition, the site's ability to satisfy environmental criteria was considered by the Applicant and it was found to offer the following attributes;

- The application area offered the opportunity to bring a previously developed brownfield, vacant industrial site within the Dublin Urban Area in close proximity to existing facilities and supporting infrastructure into productive use, thus promoting the principles of compact growth;
- The site's location within walking distance of public transport corridors and nodes would promote a modal shift from the private car to more sustainable forms of transport. This in turn would assist with achieving overarching environmental objectives such as improved air quality (CO₂, NO₂ and particulate emissions) and a reduction in noise pollution;
- The site is not subject to any statutory nature conservation designation;
- Given the site's context, its capacity to absorb development without significantly effecting the existing landscape and visual characteristics of the surrounding area is high; and
- The part of the site proposed for residential development is not located within an area identified as susceptible to flooding.

In light of the foregoing, it is considered that the application area is at a high level an appropriate site from an environmental perspective for the proposed Build to Rent residential led development.

3.2.2 Alternative Designs

The design approach for the proposed development is presented in the **Architectural Design Statement** prepared by the project architects, Plus Architecture.

In summary, the proposed layout is designed to function as a sustainable and successful residential neighbourhood.

The subject proposal has evolved during the design phase in response to input from the appointed EIAR team, advice received from Dublin City Council at pre-planning stage and direction provided by An Bord Pleanála at the pre-application consultation stage of the Strategic Housing Development (SHD) process.

This process highlighted environmental matters that informed the consideration of alternative layouts and designs including open space provision, permeability and connections, height of the proposed blocks, sunlight, daylight and overshadowing and transportation, up to the formalisation of the final scheme which is now being submitted to An Bord Pleanála for approval.



At the outset, the design team undertook a site appraisal to identify the key characteristics and constraints of the site. A meeting was held with Dublin City Council (DCC) on 10th April 2018 to discuss the layout set out in Figure 3.1.



FIGURE 3.1 INITIAL DESIGN PROPOSAL

At that meeting a number of matters were raised regarding the conceptual design. Issues highlighted that are relevant to the environmental performance of the scheme are set out in **Table 3.1.**

Issues with Initial Proposal	Design Response	Environmental Improvements
Too many road connections	A new entrance only road access was introduced from Coolock Drive which will prevent unwanted headlights beaming into the existing houses on the road. This one-way street will allow access to the commercial aspects of the development but will also provide a large amenity space in front of the ground/first floor duplex units.	Population & Human Health The subsequent design amendments resulted in; ✓ achievement of more economical parking designs and an increase in the amenity and quality of apartments ✓ Improved level of amenity for future residents.

On Street Parking too prevalent	There is a reduction in the amount of on- street parking	Population & Human Health The subsequent design amendments resulted in; ✓ Reduction on street provides the benefit of less cars on street, with more undercroft spaces are provided for residential and an underground carpark is proposed for the commercial buildings. ✓ Improved level of amenity for future residents.
Nature and scale of commercial element	A mixture of Regus-style office space, enterprise hub, incubator units, small scale retail, creche, gymnasium and owndoor office space is proposed throughout the scheme. This is not a location for a HQ building and as such we must design around multiple tenancies and maximum flexibility.	Population & Human Health The subsequent design amendments resulted in; ✓ The revised commercial development is designed around small and flexible spaces, given the nature of the neighbourhood and the challenges faced to achieve market rents for this type of building.
Future possible site connections	Future connections to the possible development sites to the south and the east are maintained, however the scheme is designed to stand by itself and is not dependant on them.	Population & Human Health The subsequent design amendments resulted in; ✓ if other surrounding lands are brought forward for development, whilst also ensuring the proposal layout meets the necessary guidelines on its own.
Ground level amenity space	Ground level amenity space, in particular in the residential blocks has been prioritised. Every effort has been made to accommodate a significant private outdoor space for the duplex units at street level which b. The duplex units will also have private outdoor space at the first floor podium gardens	Population & Human Health The subsequent design amendments resulted in; ✓ A softened the street edge and that creates a neighbourhood atmosphere whereby people will inhabit the spaces adjacent the public realm

TABLE 3.1 INITIAL DESIGN AMENDMENTS



Further pre-planning meetings were held with DCC in May 2018 and September 2018 and a meeting was held with An Bord Pleanála in November 2018, matters highlighted introduced the following considerations and subsequent amendments.

Issues with	Design Response	Environmental Improvements
Revised Proposals	Dedigit Reapolise	- Livilonnontal improvements
Excessive height onto parkland	Overall height of these blocks reduced by 2 storeys to mitigate impact of massing on to linear park. The development height strategy is related to the density strategy, where buildings of lower density - three/four storeys - are deemed an appropriate response to the fringe connection.	Landscape & Visual The subsequent design amendments resulted in; ✓ A move away from the established character, providing taller buildings that avoid undue impact upon adjacent existing residential amenity are planned. ✓ taller buildings providing architectural emphasis and expression on key routes and views through the site. ✓ The setback distances across the river and linear park allow the opportunity to rise to the proposed height of 10 storeys (approx. 31m) in this location. ✓ This is a reduction of two storeys from the original preapplication submission made in November 2018. ✓ The park elevation of the scheme has been further developed to provide a much enhanced visual and material appearance and to achieve the active frontage we are striving
Location and definition of communal residential amenity spaces to be clarified and improved -	normal home environment. These social spaces include: community group rooms function rooms games rooms education areas homework clubs café gym creche shared work hubs breakout dining spaces	for. Population & Human Health The subsequent design amendments resulted in; ✓ Many of these rooms will be located at the lower floors of the buildings to provide active frontage and to make them as visible within the scheme as possible. ✓ All of these rooms would be accessible to all residents of the developments and not just the residents of the particular block where it is housed.
Separation distance from	Overall distance of setback from eastern boundary increased from 5.6m to 11m. As part of the design	Landscape & Visual The subsequent design amendments resulted in;



Issues with Revised Proposals	Design Response	Environmental Improvements
eastern boundary	development we have undertaken following the feedback from An Bord Pleanala, the issue of site boundaries and setbacks was looked at again. The setbacks that had shown been at the pre-application stage were considered too tight to allow a fully realised site boundary condition and to allow for future development potential on the neighbouring site. Accordingly the setback has increased from the previous 5.8m to that proposed, which is 11.0m.	✓ A landscaped interface up to the site boundary which will allow any future development to the East without compromise.

TABLE 3.2 SUBSEQUENT DESIGN AMENDMENTS

The proposed scheme (**Figure 3.2**) subject to this application for permission has evolved from its original form and the consideration of alternative designs has resulted in significant environmental improvements in terms of the landscape and visual contribution that the proposed development will contribute to this area of Coolock.

The comprehensive landscape plan that is integrated with the surface water management system will contribute to improved biodiversity and mitigates against the effects of climate change. Human health will benefit from the prioritisation of pedestrian and cyclist facilities that link to the wider area and this will in turn promote a modal shift and reduce the need to travel by car.

The integration of the scheme with the heating system 'air source heat pumps' is a unique attribute and will contribute to reducing greenhouse gas emissions associated with conventional fossil fuel heating systems.





FIGURE 3.2 PROPOSED DESIGN

3.2.3 Alternative Processes

This is not considered relevant to this EIAR having regard to the nature of the proposed development which contains over 100 residential units and as such, it is mandatory that the planning application is submitted to An Bord Pleanála as a Strategic Housing Development under the Planning and Development (Housing) and Residential Tenancies Act 2016.