

4 EXAMINATION OF ALTERNATIVES

4.1 Introduction

This chapter of the EIAR sets out the reasonable alternatives that have been considered for the Proposed Development and provides an indication of the main reasons for the final scheme choice, taking into account the effects on the environment in the context of the characteristics of the site (receiving environment). Article 5(1)(d) of the EIA Directive requires EIAR to include the following: -

“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”.

Paragraph 2 of Annex IV elaborates the requirement, as follows: -

“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.”

Pursuant to Section 3.4.1 of the Environmental Protection Agency (EPA) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, 2022), 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’...”

In accordance with EPA Guidelines (EPA, 2022), different types of alternative may be considered at several key phases during the process. As environmental issues emerge during the preparation of the EIAR, alternative designs may need to be considered early on in the process or alternative mitigation options may need to be considered towards the end of the process.

The EPA Guidelines (EPA, 2022) state: -

“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 in deciding on the selected option. A detailed assessment (or ‘mini-EIA’) of each alternative is not required.”

Thus, the reasonable alternatives studied by the project design team and in the context of the associated Regulations, the alternatives of the Proposed Development in this EIAR Chapter as follows: -

- Alternative Locations.
- ‘Do Nothing’ Alternative.
- Alternative Processes.
- Alternative Mitigation Measures.
- Alternative Layouts & Designs.

This chapter has been prepared by Eleanor Mac Partlin, EIAR Manager, with assistance from Conor Owens, EIAR Co-ordinator and Ryan Cowan, EIAR Assistant, all at Stephen Little and Associates. Eleanor is the Associate Director of Stephen Little and Associates and has significant experience in the management and delivery of complex multidisciplinary projects, with particular experience in Town Planning and EIA. Conor has 4 years’ professional experience in the planning field and holds a MSc – Masters in Planning and Development. Ryan has 2 years’ professional experience in the planning field and has a Bachelor of Science (Honours) in Planning.

4.2 Development Rationale

The proposed development seeks to provide a residentially-led development on residentially zoned land within a Local Area Plan (LAP). The nature of the development proposed is actively promoted at this location by Fingal County Council (FCC) through the approved Kellystown Local Area Plan (2021), which forms part of the Fingal County Development Plan 2023-2029 (“the Development Plan”).

The assessment of the likely effects of proposed scheme on the environment, contained in this EIAR, has had regard to the detailed design and layout of the proposed development at the site location, as described and illustrated in the plans and particulars that accompany the planning application to the Planning Authority.

In the context of this Chapter of the EIAR, it is worth highlighting that by virtue of the project in question being located in the Kellystown LAP, the acceptability of the proposed development is determined by virtue of its compliance with the themes, fixed objectives and development parameters of the adopted Kellystown Local Area Plan.

4.3 Main Alternatives Studied

On the basis that the land is zoned for residential development, the main alternatives considered during the development of this project comprise alternative residential layout and design solutions at the subject site.

4.3.1 Alternative Locations

The adopted Kellystown Local Area Plan dictates the location, nature and extent of the proposed development at the application site. The site location for the proposed development is largely determined by the fact that these lands are in the ownership or control of Castlethorn Developments Luttrellstown Limited, as the applicant.

The Local Area Plan was prepared by FCC to identify and analyse the various issues affecting the area and then set principles and objectives for its future development. The Local Area Plan was subject to a screening for a Strategic Environmental Assessment (SEA), where it was concluded that a full Strategic Environmental Assessment was not required, given the nature and scale of development proposed and its potential impacts.

The subject sites are subject of Local Area Plan land use objectives, being ‘Residential Area’ and ‘Open Space’

Having regard to these land use designations, the application sites are considered to be entirely suitable for the uses proposed. Having been expressly identified for such use. It is not considered necessary to consider an alternative site location for the proposed development. The other chapters of this EIAR also demonstrate why there are no other reasons, based on likely environmental effects, to relocate the proposed development to an alternative site or sites (see Table 4.1 in Section 4.3.5.2 below).

4.3.2 ‘Do-Nothing’ Alternative

In the event of a ‘do-nothing’ scenario, the site would remain in its current undeveloped state or revert to its former agricultural use.

A do-nothing approach would be contrary to the Council’s objectives to promote residential land use at this site, in accordance with national, regional and local planning policy and guidance, including the Core Strategy and A2 land use zoning of the adopted statutory Development Plan. It would potentially result in a failure to appropriately meet of the identified housing needs of the County and in the site being identified as ‘vacant, or idle land’. An opportunity to achieve efficient and compact development, which benefits from proximity to the built up edge and amenities of Blanchardstown and supports investment in public transport and environmental infrastructure

serving the town and environs would also be undermined. A 'do-nothing' approach would be considered inappropriate and unsustainable from a planning and housing perspective.

From an environmental perspective, beyond impact on human health from a failure to deliver sustainable residential development to meet housing and community development needs and support further investment in sustainable transport alternatives to travel by private car, a 'do nothing' approach is otherwise likely to result in a neutral impact on the environment in respect of material assets, land, water, air, climate, cultural heritage, biodiversity and landscape.

4.3.3 Alternative Processes

Alternative processes for the proposed dwellings, supporting facilities, amenities and infrastructure, at Construction and Operational Phase of the development, are discussed below: -

- **Construction Phase:** The proposed construction works comprise relatively standard building construction processes. As such, there are no specific alternative construction processes identified in this EIAR.
- **Operational Phase:** No new, unusual or technically challenging operational techniques are required for the proposed residential-led development. As such, no alternative operational processes have been considered at this point.

4.3.4 Alternative Mitigation Measures

The mitigation measures as outlined in the various chapters of this EIAR are considered appropriate to the location, nature and extent of the project and its potential impacts. Consequently, no alternative mitigation measures have been considered.

4.3.5 Alternative Layouts & Designs

This section provides an overview of how the proposed development has evolved to date, by way of consideration of alternative residential design and layout, and how the final scheme proposed in the planning application has been reached.

Various design and layout options were considered as the residential development proposal progressed and the key design considerations and amendments were incorporated. A number of amendments have been made throughout the design and consultation process including:

Plot 1 (Luttrellstown Gate Phase 2):

- Consideration was given to an earlier layout which comprised c. 107 no houses, which included smaller dwelling types. However, it was agreed that the smaller house types would be more appropriate within the proposed residential development at St. Mochta's, as that is a higher density location, and that the subject site would be best suited to the typologies that are used in ABP-312318-21, in order to promote continuity between adjoining phases of the same development.

Plot 2 (St. Mochta's LRD):

- Consideration was given to a scheme of 289 no. units (179 apartments, 42 duplexes, 68 houses), which included houses with back gardens backing onto the traveller accommodation, and apartments concentrated in the northern corner of the site; However, it was agreed that the houses backing onto the traveller accommodation was not appropriate, and that this would be a more appropriate location for duplexes. (See Figure 4.1 below)

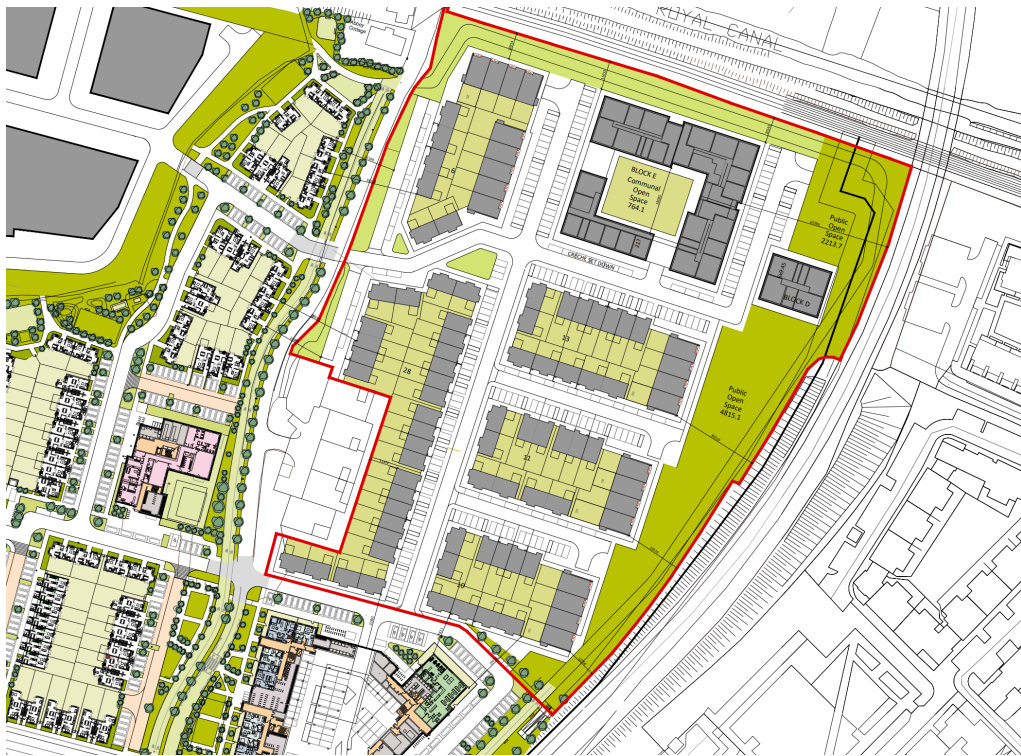


Figure 4-1 – Alternative 289no. dwelling scheme prepared by O'Mahony Pike Architects

- Consideration was given to a scheme of 266 no. units, comprising 142 apartments, 0 duplexes & 124 houses). However, the scheme included houses backing onto the traveller accommodation, which was agreed to be inappropriate. The apartments were provided in 5 separate small buildings, which was agreed to be inefficient, and likely to result in high costs for future residents. (See Figure 4.2 below)



Figure 4-2– Alternative 266no. dwelling scheme prepared by O'Mahony Pike Architects

- Consideration was given to a scheme of 317 no. units, comprising 220 apartments, 0 duplexes & 97 houses). However, the scheme included houses backing onto the traveller accommodation, which was agreed to be inappropriate. (See Figure 4.3 below)



Figure 4-3 – Alternative 317no. dwelling scheme prepared by O'Mahony Pike Architects

- Consideration was given to a scheme of 266 no. units, comprising 142 apartments, 0 duplexes & 124 houses). The scheme included duplexes backing onto the traveller accommodation, which was considered to be appropriate, but also contained 5 small apartment buildings, which was considered inefficient. (See Figure 4.4 below)

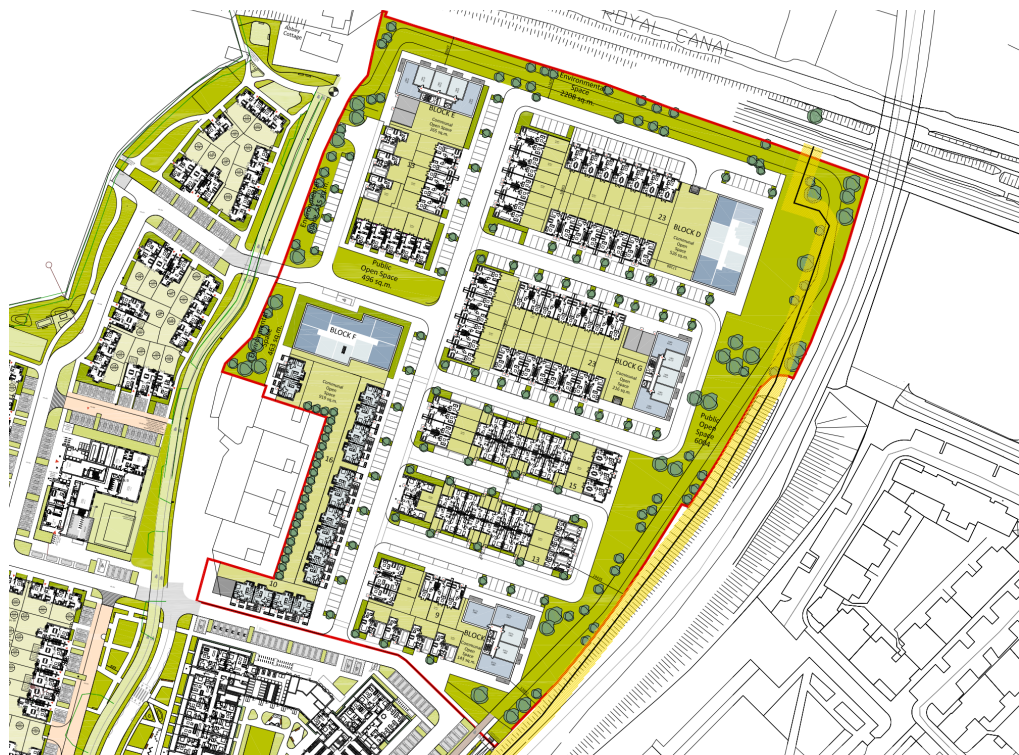


Figure 4-4 – Alternative 266no. dwelling scheme prepared by O'Mahony Pike Architects

4.3.5.1 Final Proposed Development

The development as now proposed is considered to have arrived at an optimal design solution in respect of making efficient use of zoned, serviceable lands and achieving the recommended residential density across the site, whilst also successfully mitigating potential environmental effect relating to residential, visual, natural and environmental amenities and infrastructure.

The Proposed Development subject of this planning application will generally comprise the residential development of three adjoining site areas, to include: -

Luttrellstown Gate Phase 2 (Plot 1)

Castlethorn Developments Luttrellstown Limited intends to apply for Permission for a development at a site (c. 3.72ha) at lands in the Townland of Kellystown.

The proposed development comprises 99no. residential units in a mix of houses and duplex units consisting of 71no. 2 storey houses (66no. 3-bedroom and 5no. 4-bedroom), 16no. 3 storey houses (16no. 4-bedroom), 4no. 1-bedroom duplex units and 8no. 2-bedroom duplex units and all associated and ancillary site development and infrastructural works, hard and soft landscaping and boundary treatment works, including public open space; public lighting; surface car parking spaces; bicycle parking spaces/stores for mid-terrace units; bin stores.

The proposed development includes a minor amendment to development permitted under Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3, with minor adjustment proposed to the permitted surface water attenuation pond. Vehicular access to the proposed development is provided by the road network permitted under Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3.

St Mochta's LRD (Plot 2)

Castlethorn Developments Luttrellstown Limited intends to apply for Permission for a development at a site (c. 4.38ha) at lands in the Townland of Porterstown.

The proposed development comprises 302no. residential units in a mix of houses, duplex and apartment units consisting of 62no. 2 storey, 3-bedroom houses and 35no. 3 storey, 4-bedroom houses; 205no. Duplex / Apartment Units (98no. 1-bed, 88no. 2-bed and 19no. 3-bed) across 4no. blocks comprising: Block D ranging in height from 5-7 storeys accommodating 57no. apartment units; Block E ranging in height from 5-7 storeys accommodating 77no. apartment units; Block F ranging in height from 4-5 storeys accommodating 39no. apartment and duplex units; Duplex Blocks G1, G2, G3 & G4 3 storeys in height accommodating 32no. apartment units; and all associated and ancillary site development and infrastructural works, hard and soft landscaping and boundary treatment works, including public open space; public lighting; surface car parking spaces; bicycle parking spaces/stores for mid-terrace units; bin stores. Vehicular access to the proposed development is provided by the road network permitted under Reg. Ref. ABP-312318-21, as amended by Reg. Ref. LRD0034-S3.



Figure 4.1: Extracts from Plot 1 & 2 Layout Plans, prepared by O'Mahony Pike Architects showing the outline of Plot 1 (Luttrellstown Gate Phase 2) and Plot 2 (St Mochta's LRD) combined in the context of the overall masterplan site.

Please refer to **Chapter 3: Description of Proposed Development** of this EIAR for further detailed description, and to the plans and particulars that accompany the application. The final design presents the most effective utilisation of these strategic development lands, which fulfils the Fingal County Development Plan objectives to deliver much-needed housing in a plan-led, high quality scheme. We refer to Table 4.1 below as a summary of environmental effects for each relevant factor, and to each of those chapters of the EIAR in respect of how the relevant environmental requirements and design standards are met.

To summarise it is considered that the final layout: -

- Advances the strategic and statutory objectives applicable to these lands and the wider area.
- Optimises development space within the overall site, in an efficient and sustainable manner.
- Enables extensive economic development through both employment created at Construction and Operational Phases, and also under development of a childcare facility on site.
- Avoids the necessity to utilise in a non-sustainable manner other greenfield lands.
- Affords excellent play opportunities and open space provision for the Proposed Development and to members of the public.
- Encourages the use of public transport and provides pedestrian and cycle links throughout to minimise car usage within the scheme.
- Avoids significant environmental impacts.

The final iteration of the Proposed Development is not considered to give rise to any significant adverse environmental impacts. Mitigation measures to be implemented at construction and operation stages of the project are summarised in Chapter 19: Summary of Mitigation Measures of the EIAR.

Environmental Effects of the Final Proposed Development compared to Preliminary Layout			
Environmental Factor	Headings Under which the Environmental	Topic	Comparative Effect of Preferred Option

	Factors were Assessed		
Population & Human Health		Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u> No perceived additional adverse effects during Construction / Operational Phase.
Biodiversity		Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u> No perceived additional adverse effects during Construction / Operational Phase. Overall, the impacts are reduced in the Final Proposed Development during the Operational Phase.
Land, Soil & Geology		Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u> No perceived additional adverse effects during Construction / Operational Phase.
Water	Surface Water	Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u> No perceived additional adverse effects during Construction / Operational Phase.
	Waste Water	Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u> No perceived additional adverse effects during Construction / Operational Phase.
	Water Supply	Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u> No perceived additional adverse effects during Construction / Operational Phase.
	Flood Risk	Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u> No perceived additional adverse effects during Construction / Operational Phase.
Climate	Air Quality	Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u> No perceived additional adverse effects during Construction / Operational Phase.
Climate	Climate Change	Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u> No perceived additional adverse effects during Construction / Operational Phase.
Climate	Sunlight	Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u> No perceived additional adverse effects during Construction / Operational Phase.
	Daylight	Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u> No perceived additional adverse effects during Construction / Operational Phase.
Air	Noise & Vibration	Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u> No perceived additional adverse effects during Construction / Operational Phase.
Material Assets	Traffic & Transport	Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u>

			No perceived additional adverse effects during Construction / Operational Phase.
	Waste	Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u> No perceived additional adverse effects during Construction / Operational Phase.
	Utilities	Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u> No perceived additional adverse effects during Construction / Operational Phase.
Landscape and Visual	Visual Impact	Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u> No perceived additional adverse effects during Construction / Operational Phase.
Cultural Heritage	Archaeological & Architectural	Construction Phase Operational Phase	<u>Neutral, imperceptible and permanent</u> No perceived additional adverse effects during construction/operational phase.

Table 4.1: Summary of Environmental Effects of the Preferred Development Option.