4.0 EXAMINATION OF ALTERNATIVES

4.1 Introduction

This chapter of the EIAR has been prepared by Derek Byrne and Sadhbh O'Connor.

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Annex IV (2) of the amended EIA Directive (2014/52/EU) notes that the following is required in relation to the consideration of alternatives in the preparation of an EIAR:

> *'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.'*

This chapter sets out the reasons why the proposed design and layout was chosen and provides details of alternative schemes considered throughout the design process. In addition, this chapter discusses alternative locations, alternative processes and alternative mitigation measures associated with the proposed development.

The project completes the remaining parcel of the partially completed Rockbrook development, on a 1.54 Ha site known as the former Aldi site, Carmanhall Road, Sandyford Business District, Dublin 18.

There is an extant planning permission on the subject site which was granted by An Bord Pleanála on 17th July 2018 (Reg. Ref.: ABP-301428-18), comprising 459 No. residential units and resident amenities across six blocks ranging in height from six to fourteen storeys above podium.

4.2 Justification for the Proposed Development

The Sandyford Central proposal is for the construction of 564 Build-to-Rent apartments, creche, cafe and ancillary resident amenities. A comprehensive description of the proposed development is presented in Chapter 3 of this EIAR.

The Sandyford Central site proposal will provide an exemplar high density residential development which fully accepts, embraces and capitalizes on the provisions of the *Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities,* which were published in March 2018 (after the design of the extant permission pertaining to the site had been completed), particularly in respect of design standards for apartments, urban development and building height.

4.3 The Height Strategy Proposed for the Subject Site is Fundamentally in Line with the Objectives Set Out in the *Urban Development and Building Heights Guidelines for Planning Authorities* Published in December 2018.

Designations Pertaining to the Subject Land

The subject lands are zoned Objective 'MIC' in the *Dún Laoghaire- Rathdown County Development Plan 2016-2022*, where the stated objective is *'to consolidate and complete the development of the mixed-use inner core to enhance and reinforce sustainable development'.* The lands zoned MIC form Zone 2 within the SUPF.

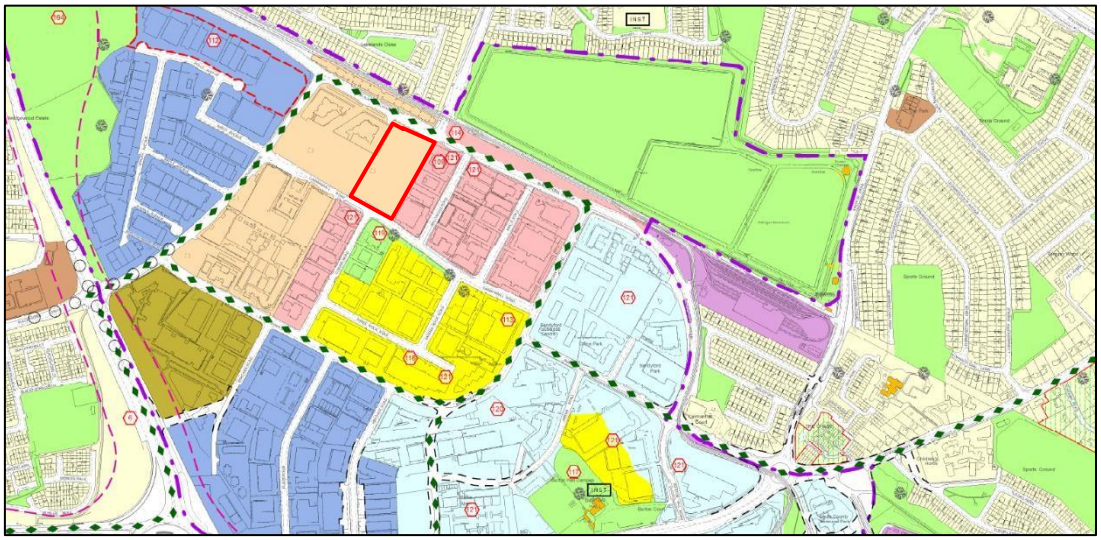


Figure 4.1: Zoning Map with Subject Site Outlined Indicatively in Red.

Source: Zoning Map Extract (Map No. 6) from *Dún Laoghaire-Rathdown County Development Plan 2016-2022.*

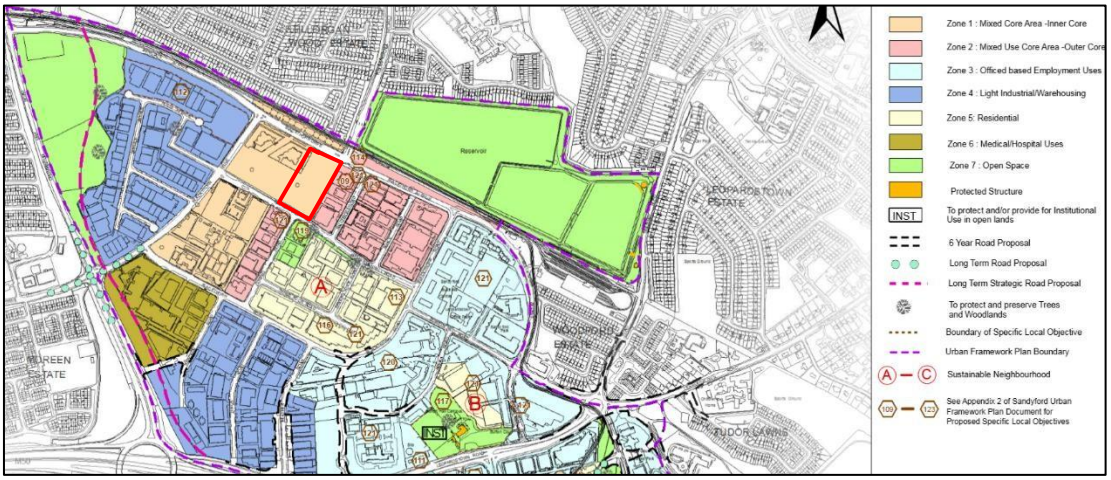


Figure 4.2: SUFP Zoning Map with Subject Site Outlined Indicatively in Red.

Source: Zoning Map Extract from Appendix 15 of the *Dún Laoghaire-Rathdown County Development Plan 2016-2022* - Sandyford Urban Framework.

The site does not contain any Protected Structures or any conservation designations. Blackthorn Avenue located to the north of the subject site is designated as a proposed quality bus/bus priority route.

The site is suitably and expressly designated for residential development and the scheme attempts to respond to the current housing demand context and shifts in planning policy. It is therefore considered that the proposed development is appropriate for the subject lands having regard to the zoning objective pertaining to the lands.

4.4 Do Nothing Alternative

In the event of a 'do nothing scenario' the site would continue to remain in a vacant state and would represent an inefficient use of scarce urban zoned land within an existing urban area proximate to high capacity public transport infrastructure. The current use of the site is likely to continue, whereby the lands would remain in a state of part-completion and abandonment, with continued deterioration likely. A do-nothing scenario would mean that this objective of the Development Plan would not be met.

In addition, the proposed pedestrian connections from the existing Rockbrook boulevard and its connection/entrance from the Luas Stop at Stillorgan would remain incomplete. As such, the direct pedestrian boulevard connecting Blackthorn Drive and Carmanhall Road would not be facilitated and the permeability of the area would not be improved if the development does not proceed, which is considered a slight negative impact. In addition, health and safety issues at the site would be likely due to potential for anti-social behaviour if the site in unmonitored. Public access to the site would continue to be restricted.

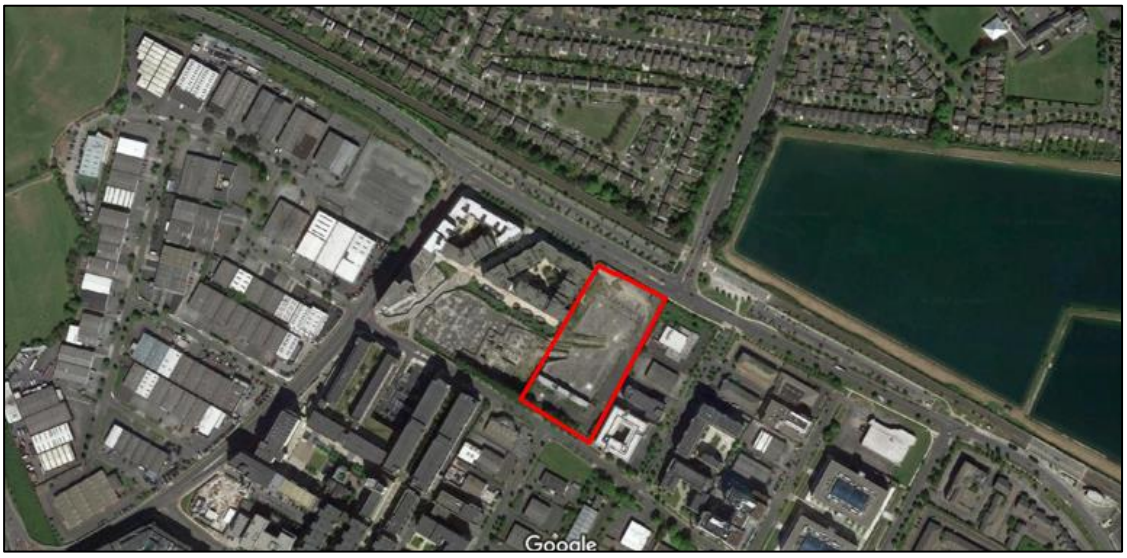


Figure 4.3: Aerial View of Subject Site and Context with Subject Site Outlined in Red.

Source: Google Maps Imagery 2017, Google Ireland.

In conclusion, the proposed development will be a positive addition to the area, providing much needed housing units in addition to a creche and cafe at an existing urban area that benefits from excellent public transport infrastructure. If the development does not proceed 564 No. households would not be provided.

4.5 Consideration of Alternative Locations

The overarching vision of the Applicant and Design Team since the outset of the project was to develop a high quality residential scheme on appropriately zoned lands. Having regard to the zoning objectives of the subject site, alternative locations were not considered. The Development Plan facilitates high-density development on the site, which accords with national policy. This form of development is considered appropriate for the site and its location.

4.6 Consideration of Alternative Design, Height and Layouts

The scheme has been designed by Henry J Lyons Architects and is presented in the Architectural Drawings and Design Statement which should be read in conjunction with this Chapter of the EIAR.

The proposed scheme which is guided by current national, regional and local policy will appropriately assimilate into the surrounding context to provide a sustainable residential and commercial development in close proximity to public transport, services, facilities and employment locations. In summary the proposed layout of the scheme has fully considered the site's surrounding context by positioning the highest form (16 to part 17 No. storeys) at the most appropriate location within the site, fronting Blackthorn Drive and the Green Luas Line and acting as a physical marker of the entrance to the Boulevard that connects the Luas via the subject lands to the Beacon South Quarter commercial core.

Having regard to the location of the lands in close proximity to public transport and a wide range of services and facilities in close proximity, it is considered that the design response provides a contemporary architectural solution that maximises the development potential of the subject lands in the interests of sustainable development.

The iterative design process has sought to respond to the locational characteristics of the site, in particular Rockbrook Phase I (constructed) and II (permitted) and the opportunities presented by a strategically located large underutilised plot.

Furthermore, the extant scheme (Reg. Ref. ABP-301428-18) was utilised as an initial design blueprint having regard to the many positive design parameters which were considered acceptable in the envelope and footprint of the permitted scheme.

Henry J Lyons Architects carried out preliminary massing and density studies in line with current design standards to increase the density of the scheme reflecting the Build to Rent nature of the development now proposed and having regard to the adopted planning policy documents which had been adopted since the previous scheme was designed, namely:

- *The Sustainable Urban Housing: Design Standards for New Apartments (2018); and*
- *The Urban Development and Building Height Guidelines for Planning Authorities (2018).*

It is noted that the Apartment Guidelines promote 'Build to Rent' as a new accommodation tenure, seeking to secure housing supply in highly accessible, sustainable sites and established urban areas.

The subject layout has also evolved since the initial design stage subsequent to a significant

number of design team meetings and in response to feedback received at pre-planning meetings with Dún Laoghaire – Rathdown County Council and An Bord Pleanála.

Please see below the design considerations prepared by Henry J Lyons Architects under the following headings:

- Masterplanning Considerations;
- Consideration of Layout;
- Consideration of Resident Amenity;
- Consideration of Height; and
- Consideration of Façade Treatment.

4.7.1 Masterplanning Considerations

The key objectives of the masterplan layout for the extant scheme have been retained as illustrated in Figure 4.4 below and explained further in the 'Key Design Driver' bullet points below.

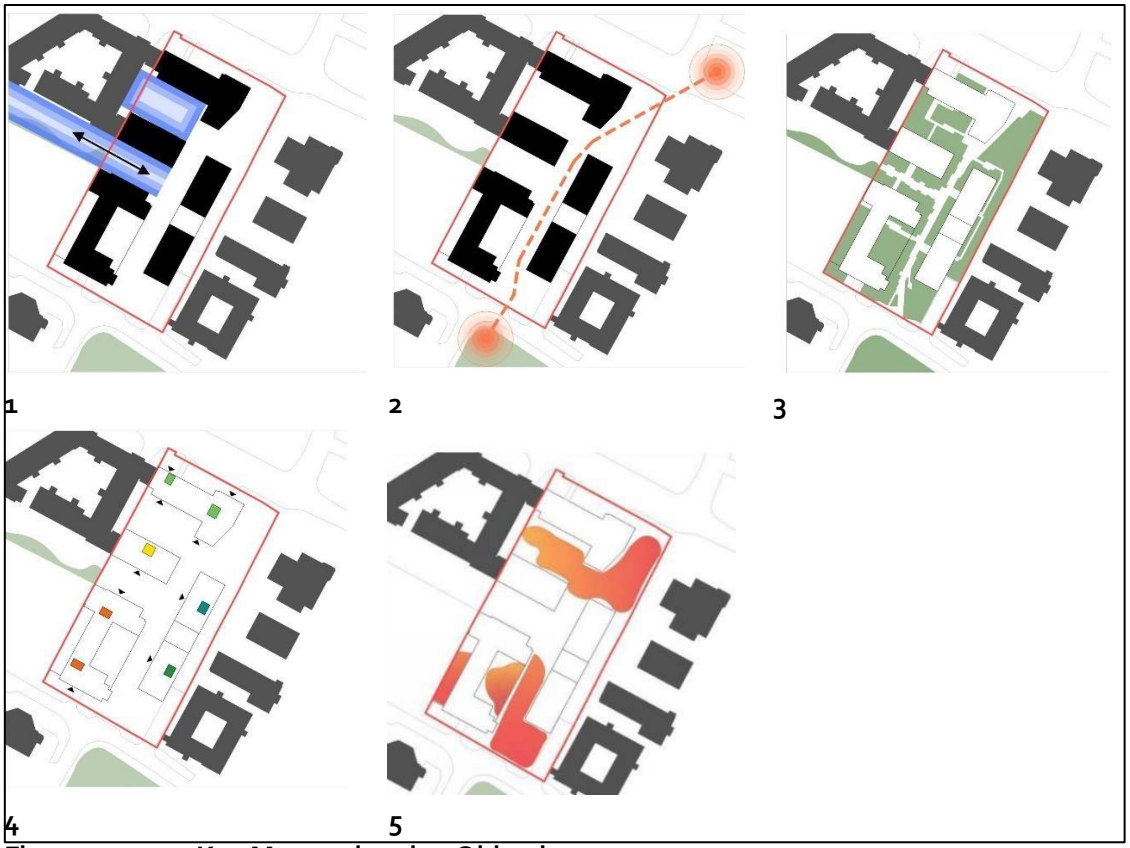


Figure 4.4: Key Masterplanning Objectives.

Source: Henry J Lyons, 2019.

Key Design Driver 1: To complete the Rockbrook Phase 1 residential development, finishing the existing 'Boulevard' with a connection through the subject site onto Blackthorn Drive, and to complete the courtyard commenced by the Rockbrook Block D, extending the truncated gables at the north eastern corner of this development in a manner that creates an appropriate context for both the established residential units and the new units.

Key Design Driver 2: To provide a strong pedestrian connection linking the proposed objectives of the *Sandyford Urban Framework Plan*, namely the transport hub at Blackthorn Drive and the proposed new Urban Park at the junction of Carmanhall Road and Corrig Road.

Key Design Driver 3: To balance the height and density allowances of the *Sandyford Urban Framework Plan* with an aspiration to maximise the quantity and quality of communal and public open space.

Key Design Driver 4: To maximise the efficiency of the development layout to meet a target of up to 12 No. units per core as set out in '*Sustainable Urban Housing: Design Standards for New Apartments, 2018*', thus reducing the overall building footprint.

Key Design Driver 5: To review the building mass distribution to increase solar penetration and maximise views whilst maximising the provision of dual aspect apartments.

4.7.2 Consideration of Layout

The scheme now proposed amends the footprint and layout of the extant permission pertaining to the site in an effort to provide an enhanced quality to the public realm. The layout of the extant scheme is indicated by an orange dashed line in Figure 4.5 below with the proposed scheme demonstrated by a black outline and infilled on grey.

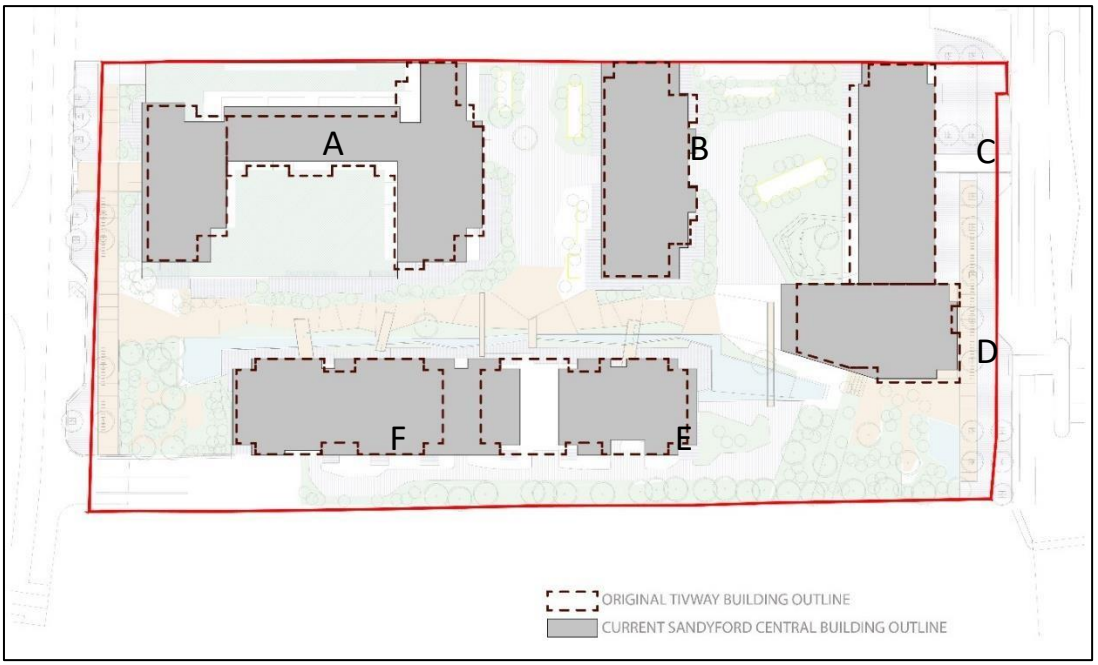


Figure 4.5: Layout of the Extant Scheme in Comparison to the Scheme Now Proposed.

Source: Henry J Lyons, 2019.

While the location and height of Blocks B and C was considered to be fixed in order to complete the gables of the existing Rockbrook development, the other blocks were subject to massing studies in an effort to balance the desired density and maximise the resident's amenity.

Initial studies proposing Block A opening towards the northwest and Blocks D, E and F as

tower elements along the eastern boundary (Figure 4.7) were considered early in the design process and discarded due to potential for overshadowing and segregation of the open amenity spaces and monotonous height of the tower blocks, as well as potentially unwanted wind side effects around the taller elements.

Figure 4.7: Site Massing Study 1 – Early Design Development.

Source: Henry J Lyons, 2018.

The form of the extant scheme (Figure 4.8) was the result of a series of massing iterations taking daylight, sunlight and wind studies into account. The shape of Block A with a southeast facing courtyard provided the opportunity to incorporate a tiered amenity open space for the residents at podium (Level 2) and increased the daylight and sunlight availability for the apartments. The position of Block E and F was largely determined by sunlight studies to reduce overshadowing to the amenity open spaces. Block F was set back from Carmanhall Road, creating a south facing amenity open space and reducing the risk of wind funnelling. A Daylight Sunlight Assessment was carried out by O'Connor Sutton Cronin Engineers and is enclosed as a separate document with the planning application.

The aspiration of the promoter is to recognise and retain the positive aspects of the extant scheme while overlaying the opportunities and directives of the latest guidelines introduced since the extant scheme was designed.

The 2018 update to the residential guidelines and the Height Guidelines for Planning Authorities also published in 2018 set the context for a revision of the permitted scheme, in particular the flexibility in respect of apartments per core and the changes introduced in respect of Build to Rent schemes. In this regard, it should be noted that the extant scheme was designed around the parameters set up in *Sustainable Urban Housing: Design Standards for New Apartments (2015)* which allowed up to 8 units per core.

Figure 4.8: Site Massing Study 2 (Extant Scheme).

Source: Henry J Lyons, 2018.

Early in the design process, the extant scheme was interrogated in order to incorporate the desired density and quantum and location of amenities, and a number of massing options were tested (Figure 4.9).

Option 1 proposed to maintain the heights of the extant scheme and extend the footprint of block E and F to include more apartments per floor plan as a response to the revised guidelines allowing up to 12 units per core. This option was deemed inappropriate as it would have overshadowed the open amenity spaces and compromised the amenity of the residents.

Option 2 proposed to maintain the footprint of the extant scheme with additional height to blocks F and consequentially to D. This option was deemed viable and further developed with revisions to the plan configuration of blocks E and F, so the gap between the blocks would be centred within the Boulevard.

Baseline 'as approved'

Option 1: Block F 12 storeys, Block E 10 storeys (no additional height and change of footprint)

Option 2: Same footprint for Block F with increased height 14 storeys and Block D to match height of Sentinel building

Figure 4.9: Massing Options – Early Studies.

Source: Henry J Lyons, 2019.

The proposed resulting massing (Figure 4.10) builds on the lessons learned from the previous design process and interrogates the optimum footprint and height of Blocks E and F within the aforementioned constraints.

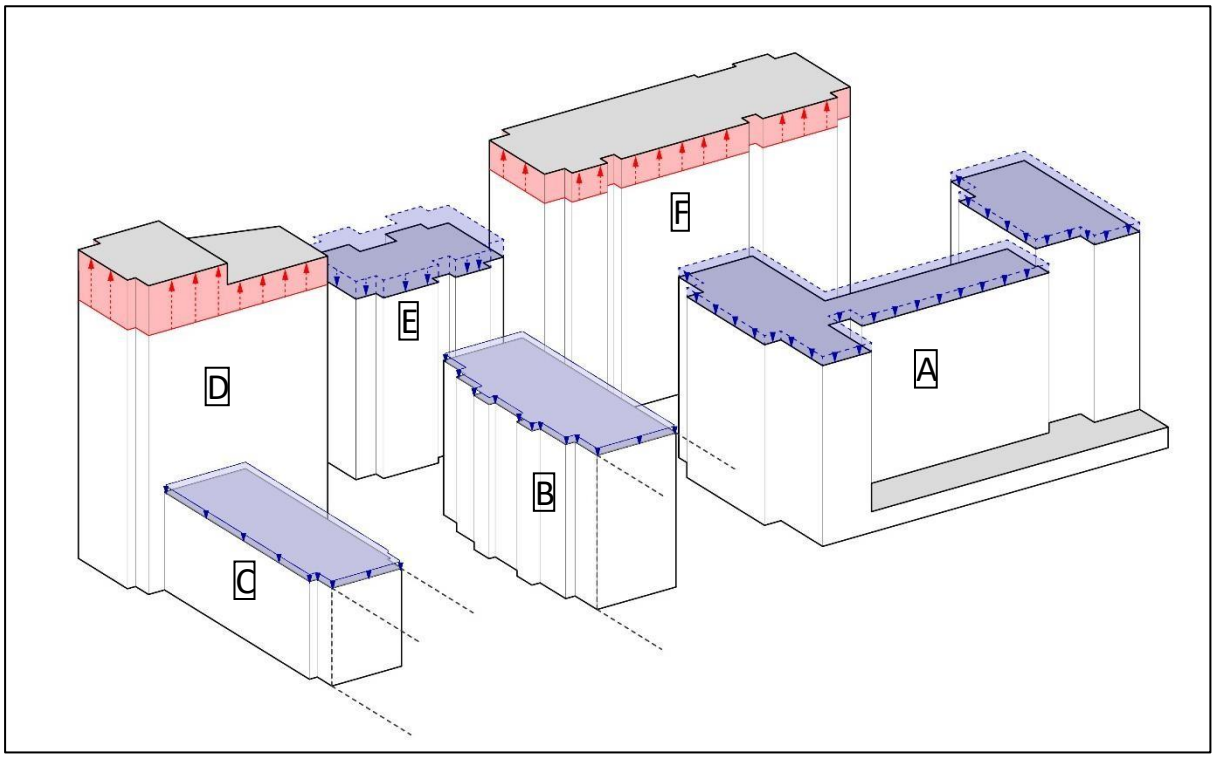
The plan configuration of Blocks E and F has been modified from the extant scheme arrangement of two symmetrical blocks to a new arrangement where the gap between the two blocks has been aligned centrally on axis with the east / west Boulevard, providing a superior relationship between the blocks and the boulevard and improving the daylight and sunlight penetration into the amenity spaces within the proposed development.

Figure 4.10: Site Massing Study 3 (Proposed Scheme).

Source: Henry J Lyons, 2019.

The proposed massing revisions also include a height increase to Blocks D and F and a height decrease in Blocks A and E as a result of the substitution of a 1.1m deep transfer slab with a 250mm floor slab and the reduction of all floor to floor heights by 50mm in the new proposal.

It is important to note that the height increase on Blocks D and F does not equal to two full stories over the previously approved height as the overall reduction in floor to floor height will mitigate against the overall height impact (Figure 4.11).



Height comparison

Block	Extant scheme		Sandyford Central		Height difference
	Storeys	Parapet height (mm)	Storeys	Parapet height (mm)	(mm)
A	11	121,000	11	119,925	**-1,075**
	10	117,950	10	116,925	**-1,025**
B	8	111,300	8	110,925	**-375**
C	5	102,500	5	101,925	**-575**
D	14	132,000	16	134,925	**2,925**
			17	137,682	**5,682**
E	10	117,400	10	116,925	**-475**
F	12	123,500	14	128,925	**5,425**

Figure 4.11: Proposed Height Variations Compared to Extant Scheme.

Source: Henry J Lyons, 2019.

As demonstrated in the Daylight Sunlight Report provided by O'Connor Sutton Cronin Consulting Engineers (enclosed as a separate document), the reconfiguration of height does not result in adverse daylight and sunlight results when compared with the extant scheme (Figure 4.12).

Furthermore, the inclusion of a rooftop open amenity space increases the available sunlit open spaces for the residents' benefit.

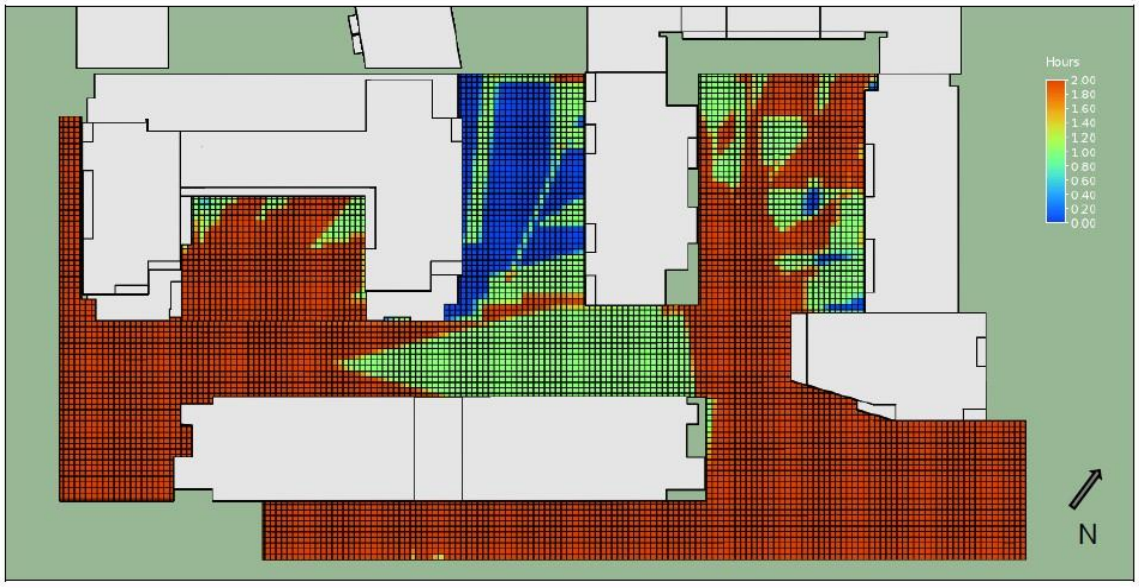


Figure 22 – Communal Amenity Spaces - Hours of Sunlight on March 21st – Permitted Development

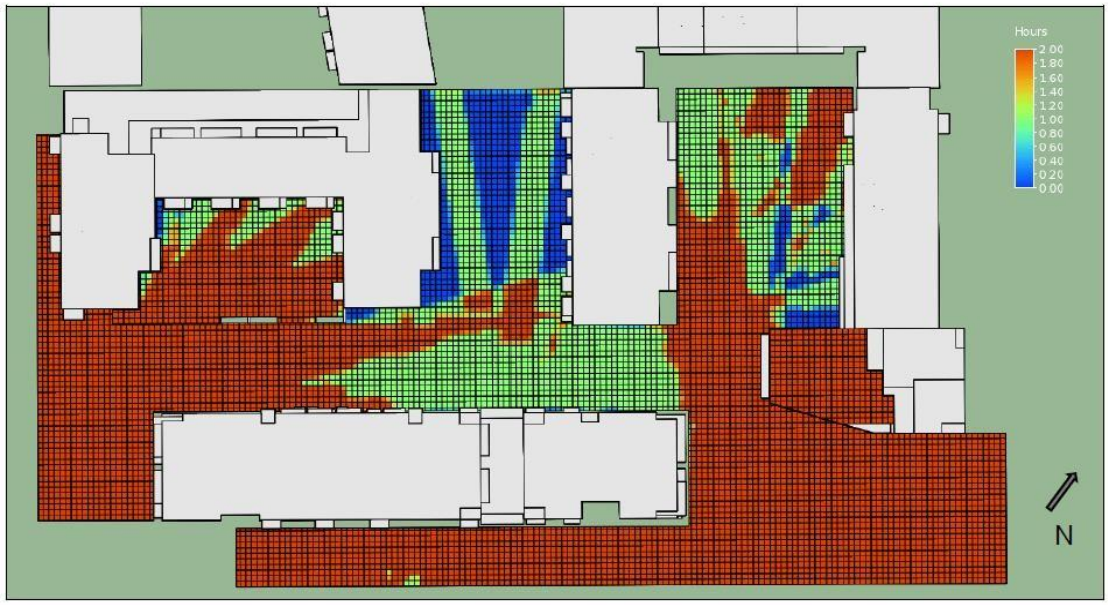


Figure 21 – Communal Amenity Spaces - Hours of Sunlight on March 21st – Proposed Development

Figure 4.12: Hours of Sunlight on March 21st – Comparison with Extant Scheme.

Source: Figures 21 and 22 of Daylight Sunlight Report prepared by O'Connor Sutton Cronin, 2019.

Wind studies presented in Chapter 13 demonstrate that the additional height in Block F affects the wind pattern in a positive way when compared with the extant permission, indeed the difference in height will be reduced between the two blocks and some shielding is further provided by the increasing of Block F height which overall reduces the risk of downdraft effects along the face of Block D.

The wind study carried out shows that the development, implemented with the suggested mitigation measures, is designed to be a high-quality environment for the scope of use intended of each areas / building (i.e. comfortable and pleasant for potential pedestrian), and does not introduce any critical impact on the surrounding areas and on the existing buildings even when considering the adjacent future construction of the Rockbrook Phase 2 development.

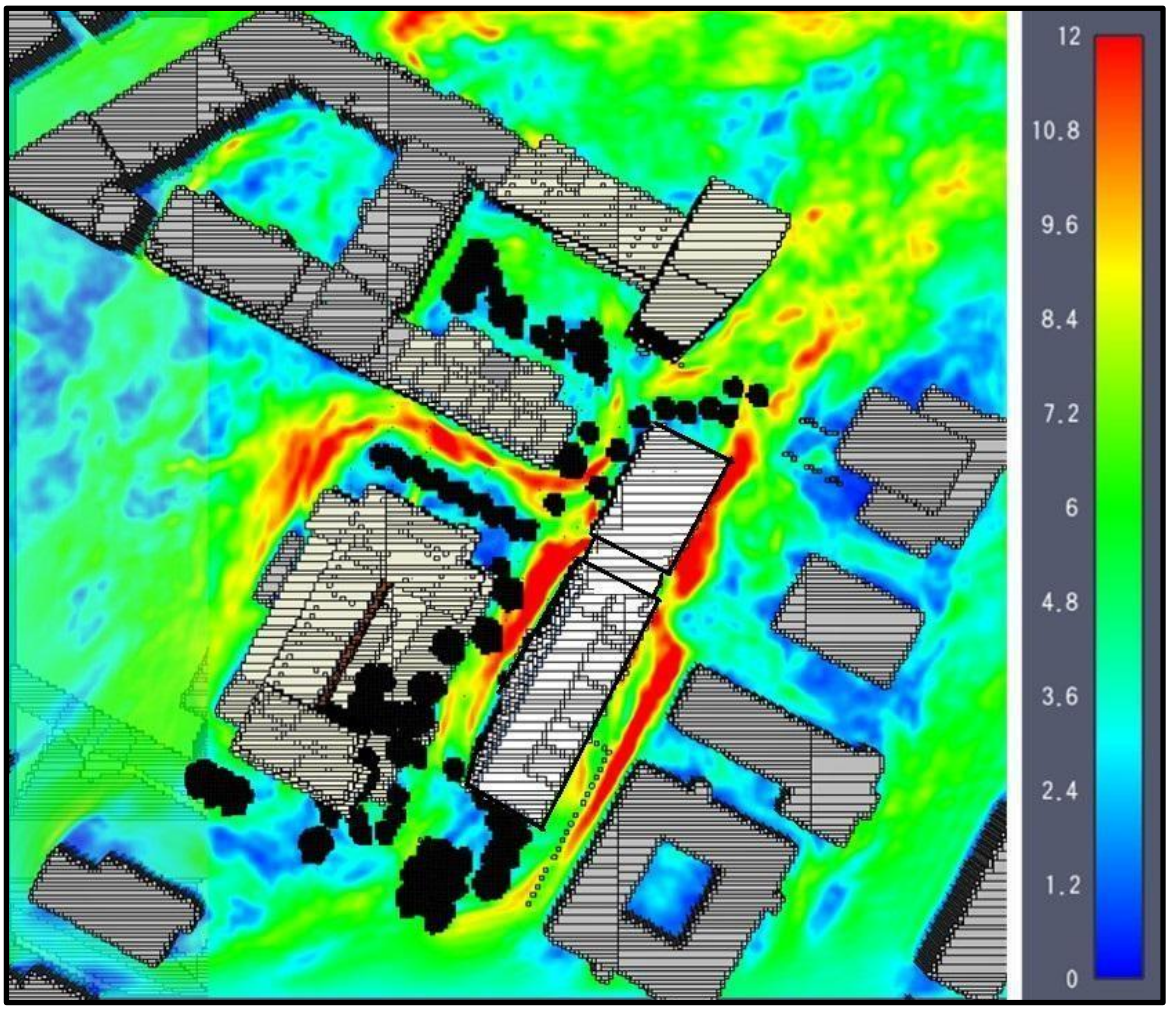


Figure 4.13: CFD Results - Flow around the Buildings at Sandyford Central Development for Wind from South-West - Slice at 1.5m.

Source: B-Fluid, Wind Microclimate Report, 2019.

4.7.3 Consideration of Resident Amenity

The extant scheme, designed as a Build-to-Sell scheme, included a number of resident amenities such as a gym, lounge, crèche and concierge in Blocks C and D.

The development now proposed is a Build-to-Rent development and thus is required to include communal amenity and support facilities for residents. The new scheme proposes to relocate the amenities into two clusters at either end of the development.

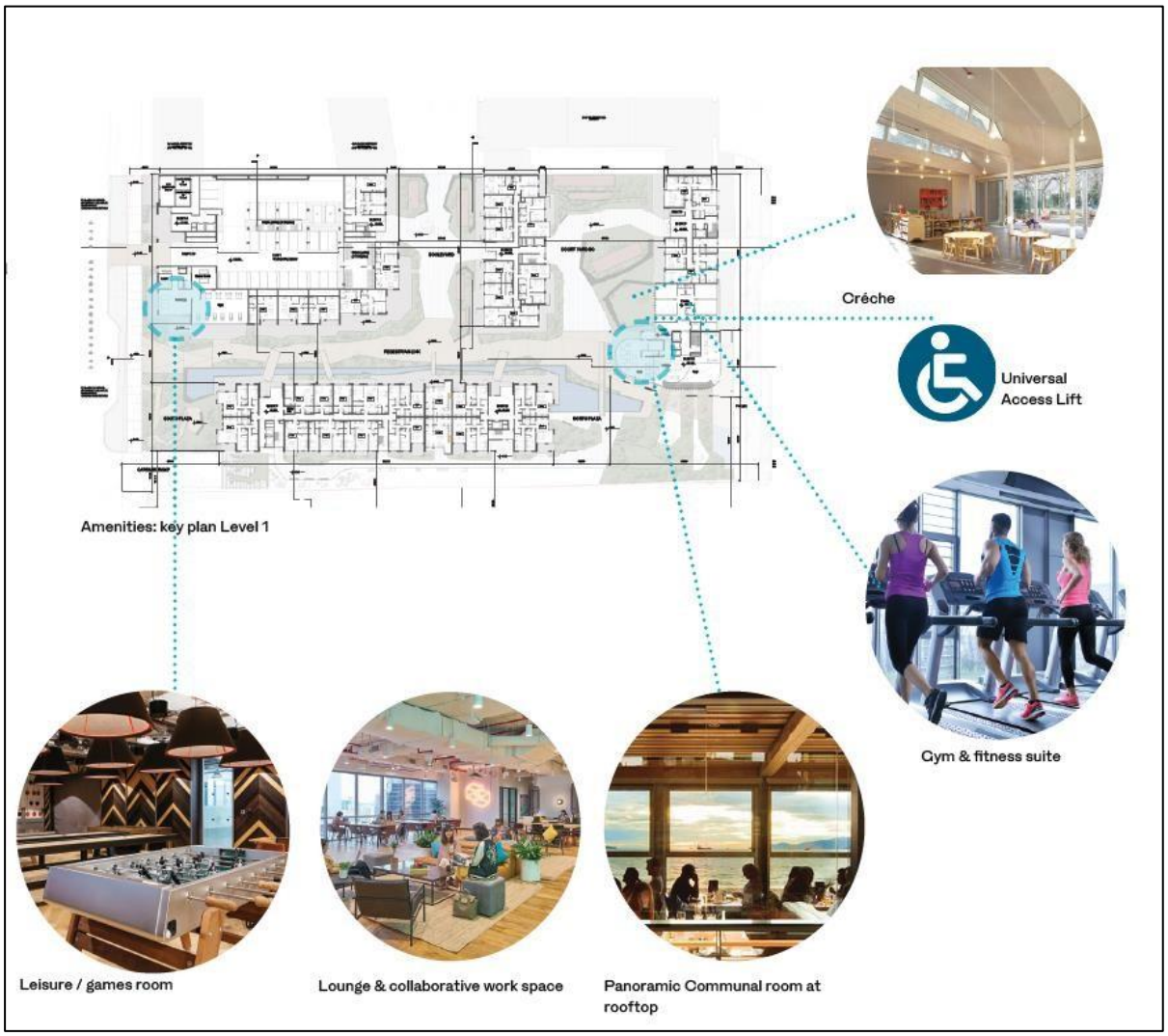


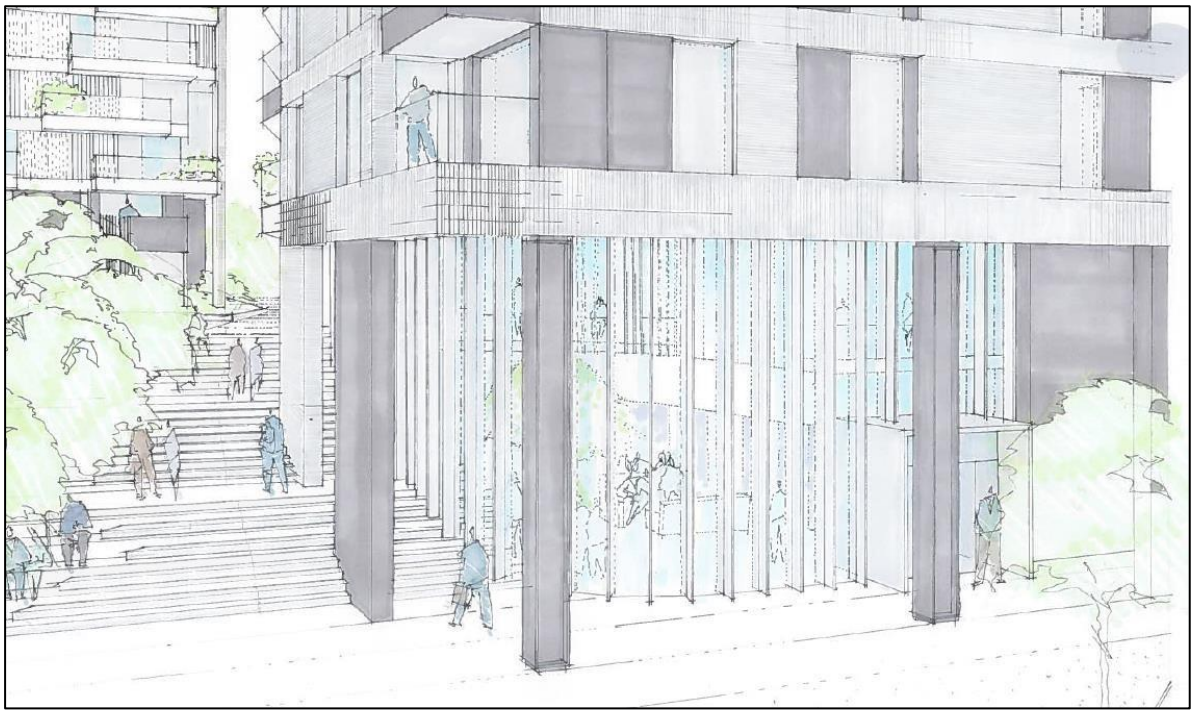
Figure 4.14: Communal Facilities - Key Plan.

Source: Henry J Lyons, 2019.

The current proposal includes a concierge & reception area, crèche, café, gymnasium, games rooms, lounge spaces and communal function rooms to support the residential community.

The communal facilities are strategically located (Figure 4.14) at the ground floor level of Block A, Block C and Block D, marking the focal points of the scheme and providing a welcoming face at either end of the pedestrian link where the scheme meets the road, creating an entry point to each 'neighbourhood' within the Sandyford Central 'village'. Conceptual sketch drawings of Block A and D Communal facilities entrance spaces are illustrated in Figure 4.15 below.

Block A Communal Facilities



Block D Communal Facilities

Figure 4.15: Communal Facilities Sketch Studies

Source: Henry J Lyons, 2019

4.7.4 Consideration of Height – Block D

The provision of an appropriate height to Block D has been an important consideration throughout the design development stages. It is desired to provide a slender vertical structure at this location which 'announces' the urban quarter from the Luas Station and complements and counterbalances the presence of height at the Sentinel Building which is located at the other side of the zone. The consideration of alternative height strategies for Block D are detailed below:

Option No. 1 – 14 No. storey at Block D

An option with Block D with 14 storeys (which directly complies with the recommended height as provided in the *Sandyford Urban Framework Plan 2016*) was initially analysed by Henry J Lyons but was later discarded as a fundamental principle of the renewed design approach is to provide architectural interest and an exciting entry to the scheme. It was considered that providing a 14 No. storey building at Block D would result in relatively monotonous building heights across the scheme which would fail to avail of the opportunity to appropriately announce the main access point to the urban quarter from the high capacity public transport interchange at the Luas.

As a result of this study it was decided to increase the height to 16 levels of residential accommodation and a multi-function room with roof garden on Level 17, creating a major entry point into the neighbourhood and providing a strong urban edge on Blackthorn Drive (Figure 4.16).

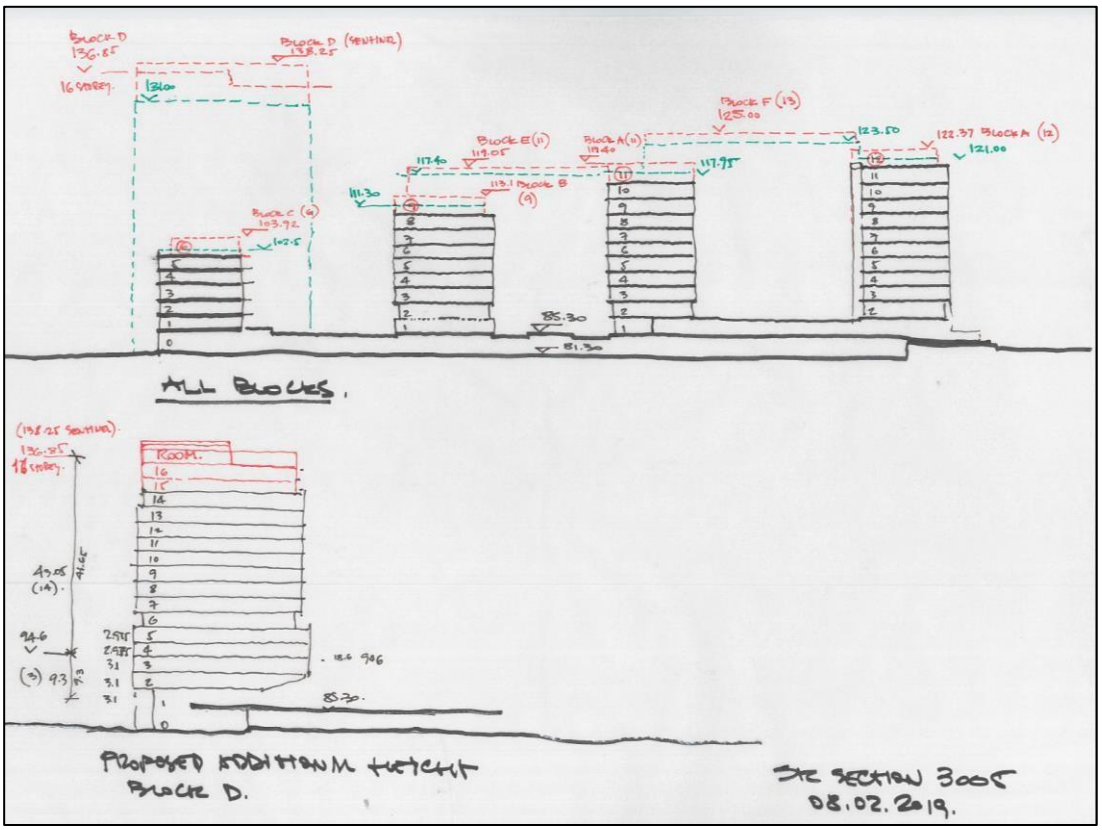


Figure 4.16: Additional Height – Initial Studies

Source: Henry J Lyons, 2019

Wind analysis was continually carried out by B-Fluid throughout the design stages to make sure that the changes in heights across the entire site wouldn't have a negative impact on the surrounding areas, the boulevard and of course within the proposed scheme. Wind is discussed further in Chapter 13 of this document.

Option No.2 – Part 16, Part 17 No. storeys (as discussed at Section 247 meetings with Dun Laoghaire Rathdown County Council)

The Design Team met with Dún Laoghaire – Rathdown County Council on the 30th April 2019 and 18th June 2019 (Section 247 meetings). At the pre-planning meetings with Dún Laoghaire – Rathdown County Council, the Design Team presented the following scheme with increased heights (beyond the extant permission) of 16 No. storeys at Block D (presented at the first Section 247 pre-planning meeting) and later to part 17 No. storeys at Block D with the addition of the multi-function space (presented at the second Section 247 pre-planning meeting).

The decision to increase the height to part 17 No. storeys was informed by the relationship with the (unfinished) Sentinel building located diagonally opposite at the south western extreme corner of the Rockbrook neighbourhood, which marks the entrance to the Beacon South Quarter retail core.

From an urban design point of view, it was considered appropriate to match the height of the Sentinel building with a similar structure at the other end of the pedestrian thoroughfare.

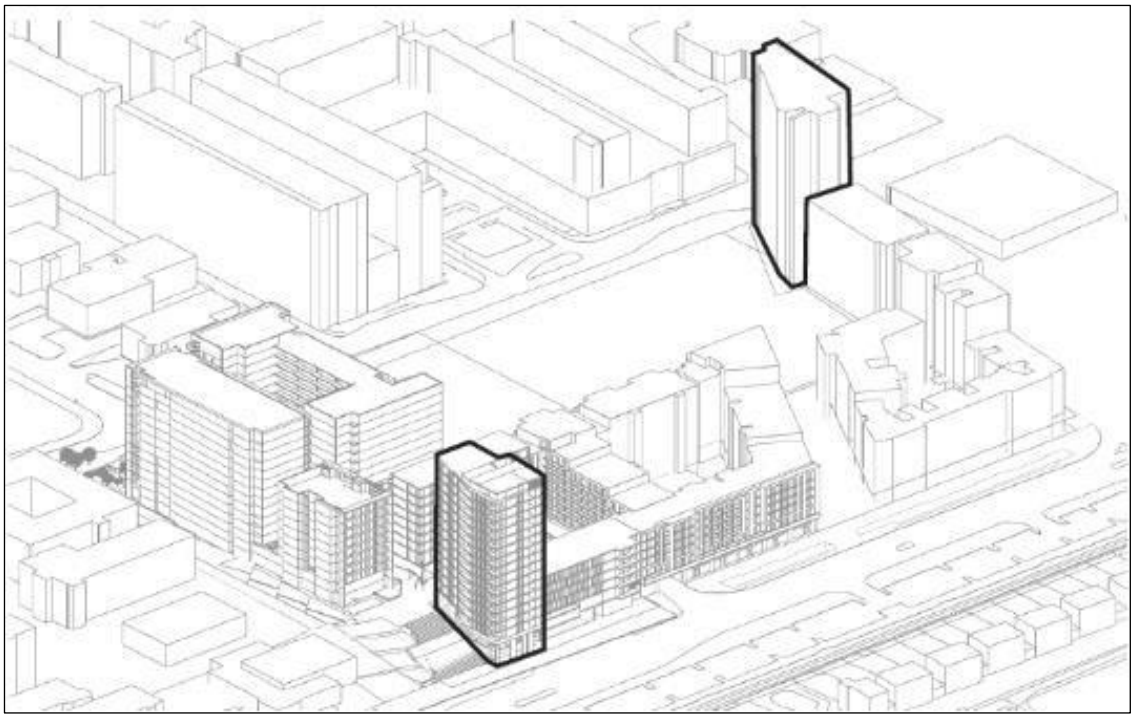


Figure 4.17: Block D – Relationship with Sentinel Building.

Source: Henry J Lyons, 2019.

These 'beacon' blocks impart a character and identity to the neighbourhood which is appropriate to the scale and density aspired to in the SUFP and assists with orientation and place making by marking major entry points and routes into and through the neighbourhood. (Figure 4.17).

The proposed height increase at Block D provides an appropriate scale and identity to mark the main access point to Sandyford Central. It is located at the furthest point from Lakelands Close, and, by virtue of its location, orientation and distance from this established suburban estate, the proposal substantially avoids impact on the privacy and daylight amenity of the existing residents (Figure 4.18).

Figure 4.18: Analysis of Block D in Relation to Lakelands Estate.

Source: Henry J Lyons, 2019

The taller element of the proposed scheme also appropriately marks the location of the transport hub on Blackthorn Drive envisaged in the *Sandyford Urban Framework Plan 2016*, and the access locations at street level of the scheme's communal amenities block.

A Landscape and Visual Impact Assessment has been carried out by Mitchell + Associates and is enclosed at Chapter 8 of this EIAR.

4.7.5 Consideration of Façade Design

The extant scheme was the initial starting point when considering the elevational treatment. Designed with a different mix of units and based on a limited material palette, the extant scheme relied on the provision of colour for identity and wayfinding to the different building blocks (Figure 4.19).

Figure 4.19: View from Carmanhall Road - Extant Scheme

Source: Henry J Lyons, 2018

The elevational treatment of the extant scheme was completely revised in responding to the changes introduced to the public realm, apartment layouts, the relocation of the resident amenities and generally, a vision to provide development of a perceived superior quality development, an opportunity arose to review and redesign the façades.

The initial step was defining an elevational treatment strategy (Figure 4.20), to include:

- Brick walls in a variety of shades for the different buildings (see colour palette);
- Brick would become the material for the most public frontages on the boulevard and the north south route;

- Gables to Blocks E & F would be framed and treated as 'special' gables, marking the entrance off Carmanhall Road as well as the entrance from Blackthorn Drive;

- A contrasting material would be used within the courtyards (between Blocks A & B, and C & D);

- At ground floor level of Blocks E & F, the water-based landscape proposal together with pergolas "popping out" and defining the open private space for ground floor apartments would be treated in a rainscreen cladding with a contrasting colour;

- Amenities which are located at ground level of Blocks A and Block D would be treated as clearly legible objects.

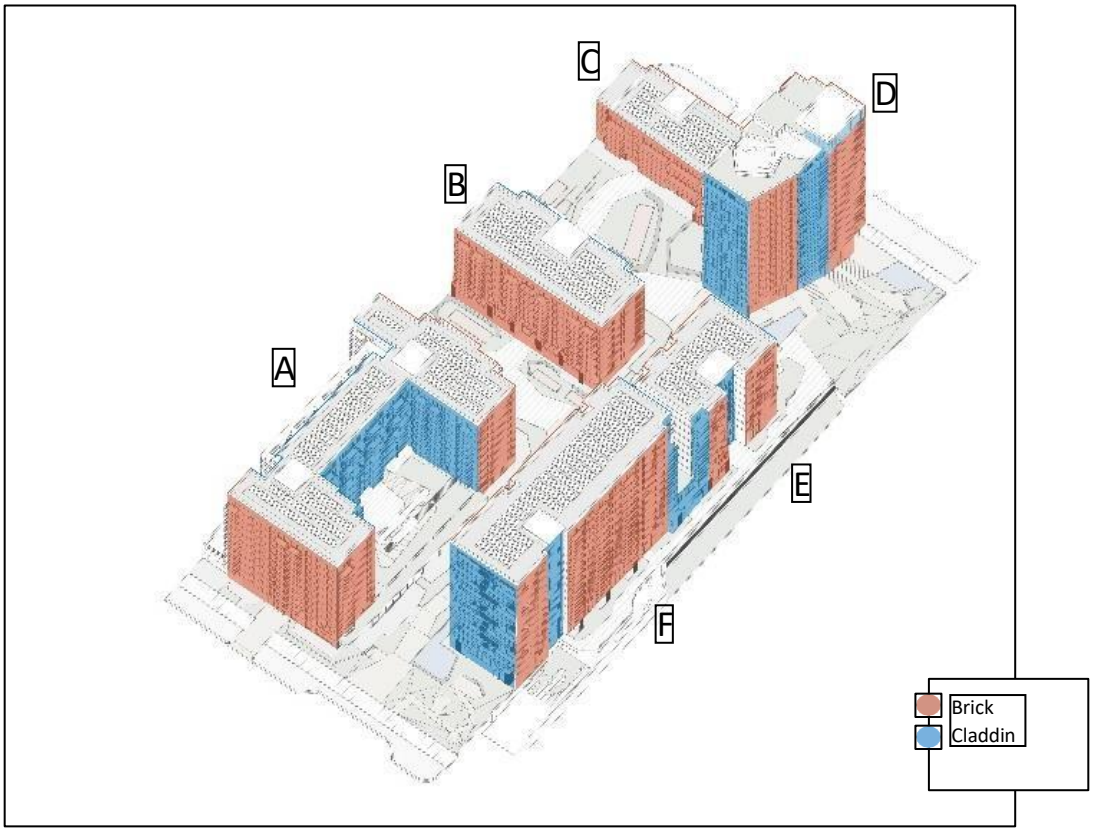


Figure 4.20: Elevational Treatment – Initial Strategy.

Source: Henry J Lyons, 2019.

As part of the design development several solid/void and window fenestration studies were carried out. Options for Block E & F and for Block D are presented below.

Block E & F

The overall length and proportions of Block F suggest that the facade treatment for block E and F should avoid a repetitive horizontal composition and be expressed as a solid wall framing the distinctive gables, as described in the figure 4.21 below.

Balconies are grouped and displaced in some locations, and framed at the gables. Design options also included the consideration of Juliette balconies for studio units to maintain a flat

façade, but these were later deemed inappropriate as they would not provide the required private amenity space for the studio units.

The ground floor level presents an opportunity to 'stitch' the blocks together, introducing a different materiality. The resulting elevational treatment incorporates some elements of the different iterations presented below.

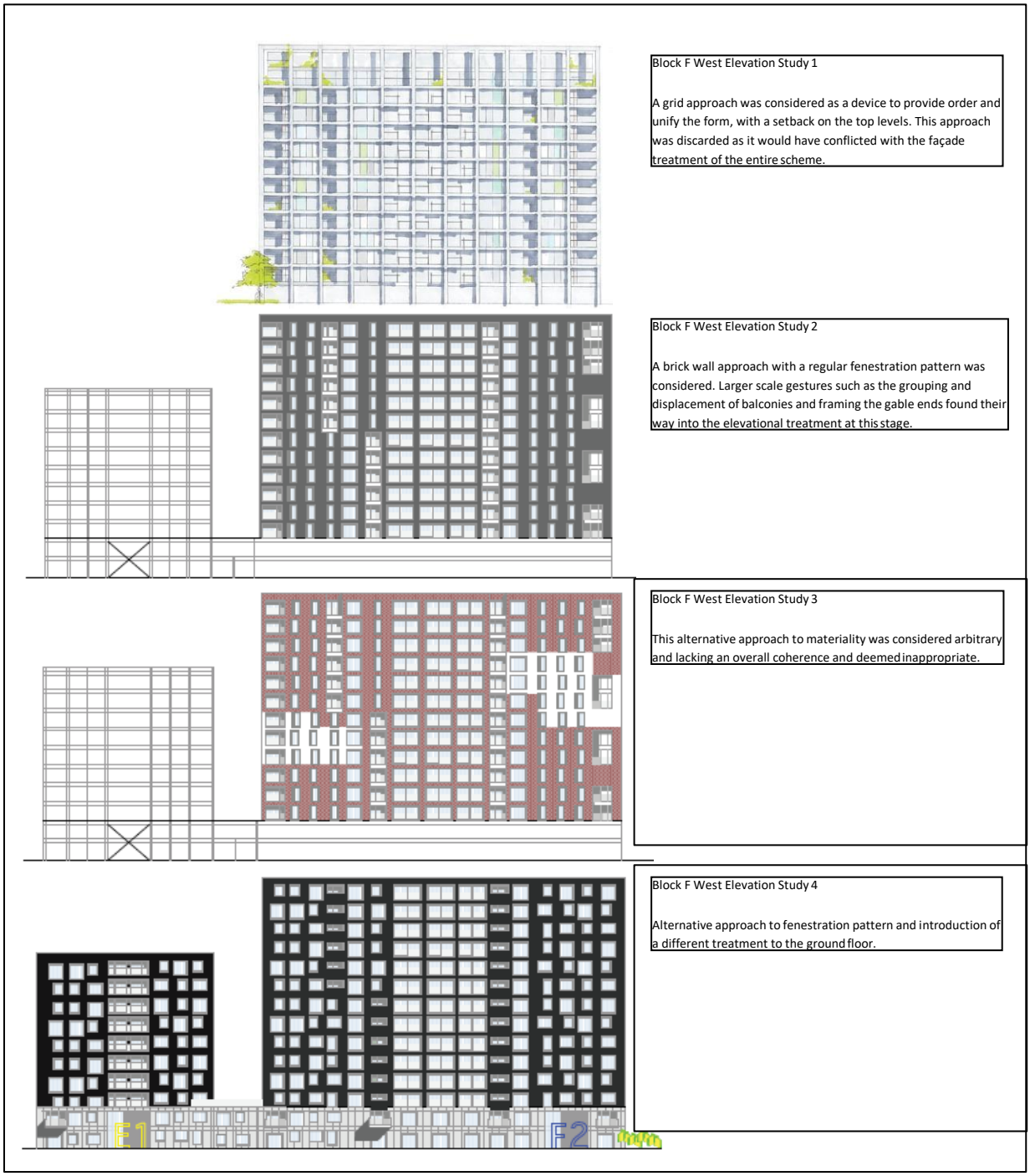


Figure 4.21: Block E & F Elevational Studies – Design Development.

Source: Henry J Lyons, 2019.

The design approach to the gable elevations on Blocks E and F, as part of the overall design strategy, arises from the need for contrast within the overall design strategy at key points on the site.

The heavier character of the standard brick wall sides to Blocks E and F rely on the play of solid to void to provide visual interest including the treatment of the recessed and external balconies. In contrast, the approach to the gable ends is an opportunity for a 'special' facade treatment as a reflection of a softer inner core with freedom of expression of elements such as the use of lighter materials, glazed balcony design and a lighter gauze-like treatment over the windows so that the gables frame and announce the entry points to the scheme. Iterations of the gable studies are shown in the accompanying Figure 4.22.

Figure 4.22: Block E & F Gable Studies – Design Development.

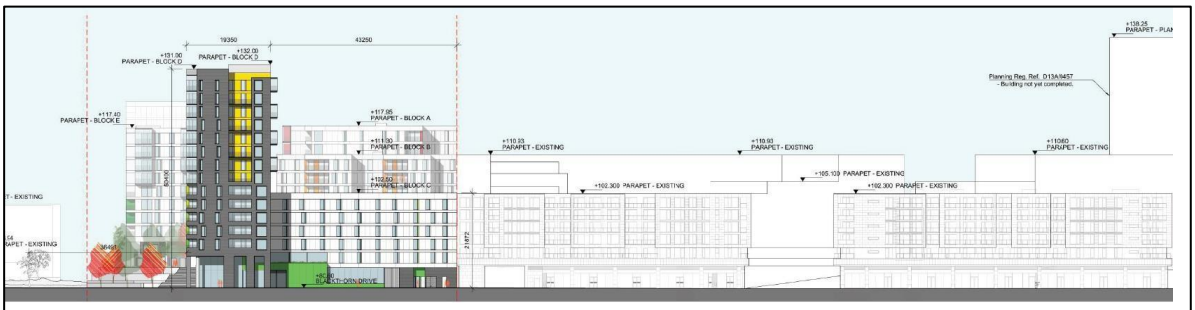
Source: Henry J Lyons, 2019.

Block C & D

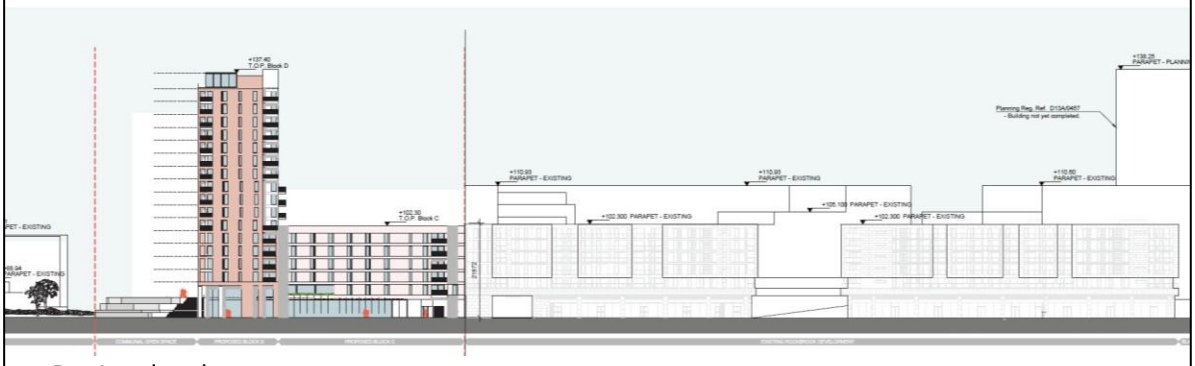
While Block C is designed to match the height of the existing Rockbrook development as a continuation of the urban scale along Blackthorn Drive, Block D on the other hand provides a bookend and presents itself as the dominant structure of the scheme, marking the main entrance to Sandyford Central.

The width of Blackthorn Drive, the reservoir and the Stillorgan Luas stop provide an appropriate receiving environment for a large scale building (Figure 4.23).

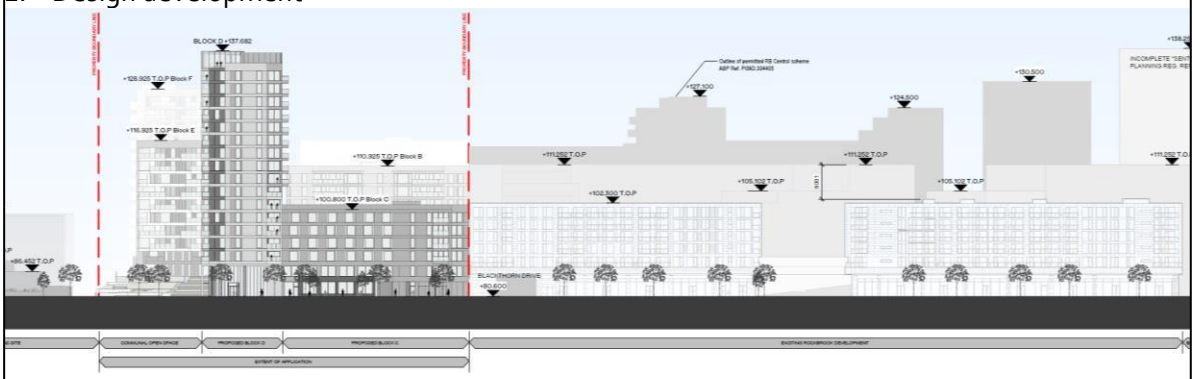
Different height, proportion and materiality studies were carried out to inform the design of Block D elevation as the dominant structure in the scheme.



1. Extant scheme



2. Design development

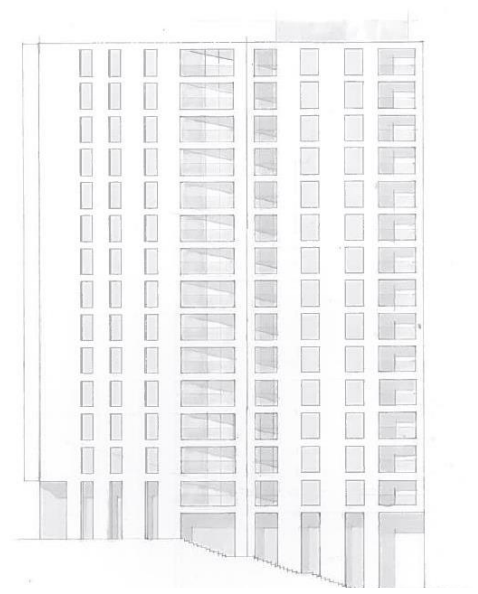


3. Proposed scheme

Figure 4.23: Block D Contextual Elevational Studies.

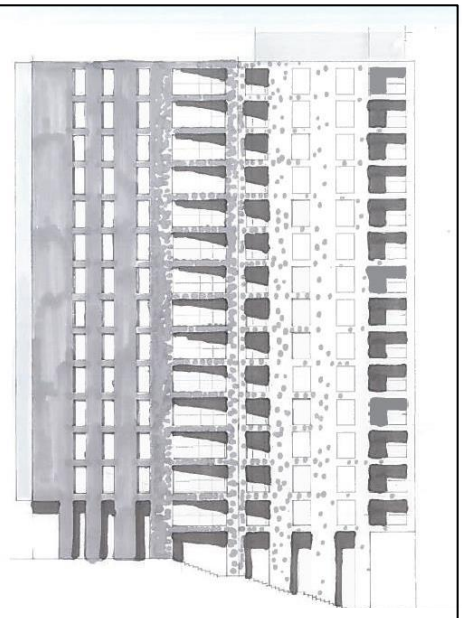
Source: Henry J Lyons, 2019.

Initial massing and proportion studies are shown in the accompanying figures. While the northern elevation along Blackthorn Drive has a tall and elegant proportion, the east elevation is longer and suggests that some articulation is required to emphasize its verticality



East Elevation Study 1

Initial form study – solid and void



East Elevation Study 2

Initial form study – solid and void – dark wall approach

East Elevation Study 3

Balconies and rooftop communal room unified in their material treatment to articulate the brick walls in 2 sections. The wall continuity is accentuated by displacing the windows on the different levels so it is read as a continuous plane rather than horizontal strips.

East Elevation Study 4

Variation with aligned windows. The central element containing the balconies and rooftop communal room is treated with a contrasting material to provide a break between the 2 brick walls. The multifunction room on Level 17 is used as a device to 'crown' the building.

Figure 4.24: Block D Massing and Proportion Studies.

Source: Henry J Lyons, 2019.

Different options were studied including the use of darker and lighter brick and the break-up of the massing with the introduction of spandrel panels as shown in the accompanying design development images.

Block D study 1

Early studies showing an elevational treatment consisting of dark brick walls and columns in the corners . The communal multi function room at the top is set back. This option was discarded in favour of the approach shown in study 2.

Block D study 2

Further design development studies showing light coloured brick walls, with the communal room crowning the building at its corner.

Balconies are used as a device to make the corners lighter, thus increasing the perception of slenderness.

Figure 4.25: Block D Conceptual Images.

Source: Henry J Lyons, 2019.

As seen in the images on Figure 4.26, the use of a light coloured brick together with the inclusion of the multi-purpose room as a crowning device emphasises the presence of Block D and arguably provides it with a sense of more slenderness, providing a more elegant solution.

The façades of the proposed buildings have been carefully selected to promote a sense of brightness and light. The proposed Sandyford Central façades are composed of brick in different shades and textures, with rainscreen cladding in selected locations such as the gable ends to articulate and/or accentuate special "events".

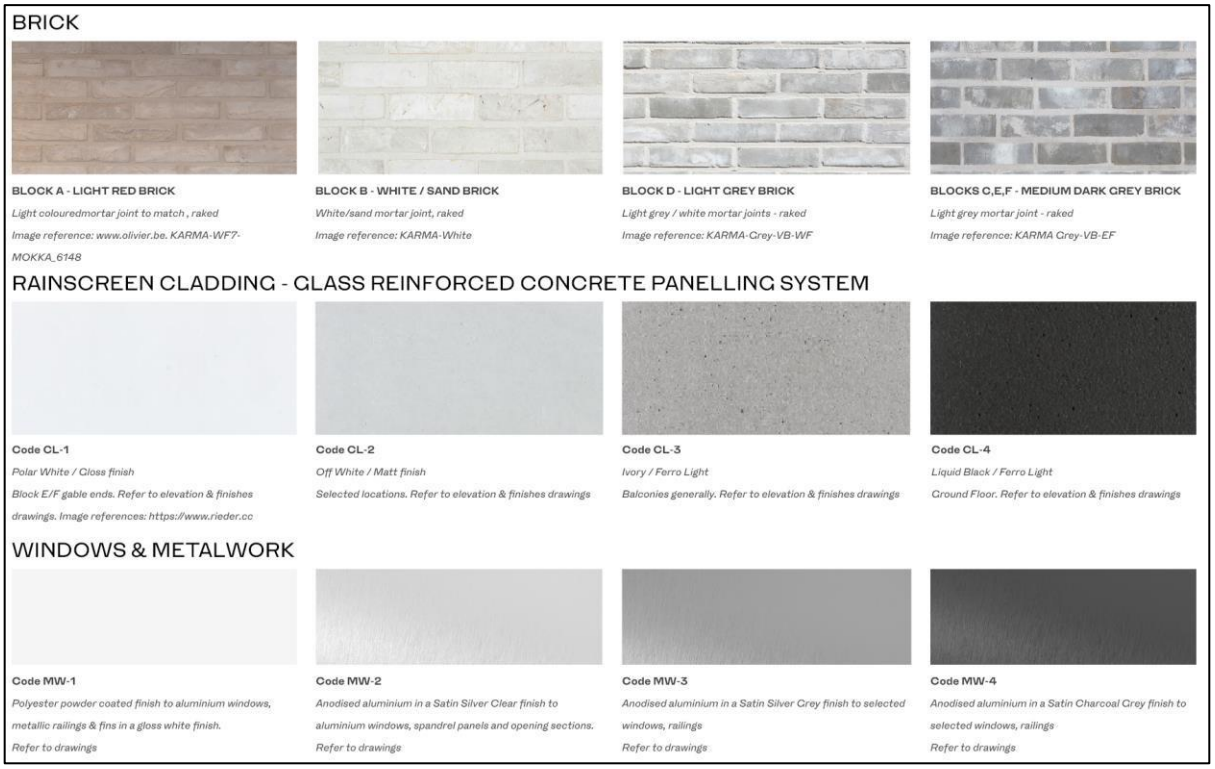


Figure 4.26: Proposed Material Palette.

Source: Henry J Lyons, 2019.

4.7 Alternative Processes

The proposed development comprises the development of 564 No. Build-to Rent residential units, café, creche and ancillary resident facilities. Therefore, as the development proposes in excess of 100 No. residential units, it is mandatory that the planning application is lodged as a Strategic Housing Development Planning Application to An Bord Pleanála, under the *Planning and Development (Housing) and Residential Tenancies Act 2016.*

4.8 Alternative Mitigation Measures

The mitigation measures outlined throughout the various EIAR chapters are considered appropriate for the proposed development therefore no alternative mitigation measures were considered in the preparation of this chapter.

4.9 Cumulative Impacts

In assessing the cumulative impact of the Alternative Designs considered, all of the designs detailed above had regard to the permission granted at the adjacent Rockbrook Phase II site (Ref.: ABP 304405-19) as from an urban design and pedestrian permeability perspective it is essential that these two developments interact and connect. It was not considered appropriate to provide a design schematic that does not interrelate at street level with the adjacent permitted scheme.

4.10 Conclusion

As a result of a detailed design process involving a number of design iterations, a significant number of design team meetings and subsequent feedback from Dún Laoghaire - Rathdown County Council and An Bord Pleanála, it is considered that the proposed design, layout and height are the optimum arrangement in terms of appropriately densifying the subject lands with an exciting and high quality design solution while also protecting the residential amenity of the neighbouring Rockbrook development.

As noted previously, the proposed layout locates the highest forms at the least sensitive positions within the site fronting Blackthorn Drive and the Green Luas Line. Block D will with its volume and height impart character and identity to the scheme and will assist with orientation and place making by marking a major entry point into and through the neighbourhood. The scheme also provides a substantial quantum of open space providing a high quality living environment for residents in addition to the provision of a café and creche. The facilitation of a north – south pedestrian link from Carmanhall Road to Blackthorn Drive will also encourage permeability through the site. It is the opinion of the design team that the new scheme will bring a superior quality new urban edge to the inner core in Sandyford. We re-iterate that Mitchell + Associates have carried out a Landscape and Visual Impact Assessment which is enclosed at Chapter 8 of this EIAR.

Having examined various alternative designs, the proposed scheme is the preferred option to increase the density of the site to 564 units, while maintaining a good balance between height and density, maintaining a human scale and providing strong and intimate community with focus on consolidating social interaction and integration among the residents.