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CORNELSCOURT RESIDENTIAL DEVELOPMENT

CORNEL LIVING LTD.

Building Height Report



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INTRODUCTION





1.1 Introduction / Policy Background

This Building Height Report has been prepared in support of an application submitted on behalf of Cornel Living Ltd (the applicant) for a new Strategic Housing Development at Cornelscourt Village off the N11. The proposal comprises 6 principal buildings (N11 finger buildings (Blocks A, B and C), 'L' shaped building (Block D), pavilion building along Old Bray Road (Block E) and the terraced housing adjacent to Willow Crove). These buildings range in height from 4 to 12 storeys and are situated over a basement/podium across the sloping site.

The proposed massing is the result of detailed design consideration and the analysis of the site and surrounding context and opportunities and constraints.

This report is a response to An Bord Pleanala's (ABP) specific information request:

Item 2; "Further consideration and/or justification of the documents as they relate to the height, density and design strategy proposed."

The Urban Development and Building Height Guidelines for Planning Authorities are issued by the Minister for Housing, Planning and Local Covernment. Planning Authorities and An Bord Pleanála are required to have regard to the guidelines and apply any specific planning policy requirements (SPPRs) of the guidelines, within the meaning of Section 28 (1C) of the Planning and Development Act 2000 (as amended), in carrying out their functions.

SPPR 3 (A) states:

"It is a specific planning policy requirement that where;

(A) 1. An applicant for planning permission sets out how a development proposal complies with the criteria above;

2. The assessment of the planning authority concurs, taking account of the wider strategic and national policy parameters set out in the National Planning Framework and these guidelines; then the planning authority may approve such development, even where specific objectives of the relevant development plan or local area plan may indicate otherwise."

This Report has been prepared to demonstrate how the development proposal complies with SPPR 3 and the criteria required by the Urban Development and Building Height Guidelines for Planning Authorities. It will establish that the scheme performs exceptionally well when tested against the criteria.

The enclosed Planning Reports outlines how the delivery of quality residential development on this prime, infill, underutilised site in a compact form, is wholly consistent with the policies and intentions of the National Planning Framework, Rebuilding Ireland and Regional Spatial and Economic Strategy.

There are limited sites in the Dun Laoghaire Rathdown functional area that can accommodate development of the scale proposed in this case. It is critically important that this valuable land is developed to maximise the efficiency of the site and contribute positively to housing supply.

The Urban Development and Building Height Guidelines for Planning Authorities state that in relation to the assessment of individual planning applications and appeals, it is Government policy that building heights must be generally increased in appropriate urban locations. There is therefore a presumption in favour of buildings of increased height in our town/city cores and in other urban locations with good public transport accessibility. Planning Authorities must apply the following broad principles in considering development proposals for buildings taller than prevailing building heights in urban areas in pursuit of these guidelines:

- Does the proposal positively assist in securing National Planning Framework objectives of focusing development in key urban centres and in particular, fulfilling targets related to brownfield, infill development and in particular, effectively supporting the National Strategic Objective to deliver compact growth in our urban centres?
- Is the proposal in line with the requirements of the development plan in force and which plan has taken clear account of the requirements set out in Chapter 2 of these guidelines?
- Where the relevant development plan or local area plan pre-dates these guidelines, can it be demonstrated that implementation of the pre-existing policies and objectives of the relevant plan or planning scheme does not align with and support the objectives and policies of the National Planning Framework?

As a response to the above criteria, we note the following:

- Framework.
- the Guidelines.

This document describe the design respose to the Development Management Criteria outlined in Section 3.2 of the Urban Development and Building Height Guidelines for Planning Authorities.

In addition to this report comprehensive Specific Assements have been undertaken by the client team.

- such micro-climatic effects.
- lighting to impact flight lines and / or collision.

· An assessment that the proposal allows for the retention of important telecommunication channels, such as microwave links was undertaken by OCSC. Their report indicates that the proposal allows for the retention of telecommunications channels.

any impact on air navigation..

• An urban design statement forming part of the Architectural Design Report by Henry J Lyons.

 Relevant environmental assessment requirements, including SEA, EIA, AA and Ecological Impact Assessment, contained in the Natura Impact Statement by Biosphere and the Environmetal Impact Assessment Report compiled by DBCL, Planning Consultants.

As set out in the accompanying planning report, the proposal secures the relevant objectives of the National Planning

As set out in the Material Contravention Statement the Councils Development Plan is not consistent with SPPR 1 of

• Specific impact assessment of the micro-climatic effects such as downdraft. This assessment includesmeasures to avoid/ mitigate

· In development locations in proximity to sensitive bird and / or bat areas, proposed developments need to consider the potential interaction of the building location, building materials and artificial

• An assessment that the proposal maintains safe air navigation indicates that this development does not pose a risk. Both the DAA and the IAA confirmed that the scheme originally proposed under ABP Ref. 306225-19 would not have any impact on air navigation. Civen there has been no material change in the heights proposed, it is considered that the proposed development will not give rise to



and the state

Section 3.2 of the Urban Development and Building Height Guidelines, Development Management Criteria requires the applicant to demonstrate to the satisfaction of the Planning Authority/ An Bord Pleanála, that the proposed development satisfies various design criteria describing how the proposed development is acceptable at the scale of the relevant city/town.

"The site is well served by public transport with high capacity, frequent service and good links to other modes of public transport."

The N11 Corridor is a key access and transit route (Fig. 2.1.1) in and out of the city. The site is situated immediately adjacent to this well served public bus transport infrastructure with high capacity and is within walking distance (i.e. up to 3 minutes or 200m) to and from this high capacity urban mode of public transport.

There are alternative high capacity public transport infrastructures such as DART and LUAS within 30 - 40 minute walk from the location of the proposed development..

There are several tall buildings located along this important public transport corridor and the proposed development is in keeping with both the prevailing heights of existing developments along the N11 and the nature of the topography of site. We note specifically the following developments:

- Thornwood
- Booterstown Wood
- Merrion Hall Apartments
- Beechwood Court
- The Grange Apartments
- Blakes Development

The residential development at Cornelscourt seeks to respond to this nature of development along the N11 corridor; establishing an attractive landmark to Cornelscourt and enhancing the character of the area.



Dún Laoghaire Rathdown County Development Plan - Proposed Bus Priority Network & Key Employment Centres / Towns

Development proposals incorporating increased building height, including proposals within architecturally sensitive areas, should successfully integrate into/ enhance the character and public realm of the area, having regard to topography, its cultural context, setting of key landmarks, protection of key views. Such development proposals shall undertake a landscape and visual assessment, by a suitably qualified practitioner such as a chartered landscape architect.

The development plan precedes the Guidance for Planning Authorities on Urban Development and Building Heights (2018) however the use, open space requirements, space standards etc are in line with the aspirations of the development plan. Early in the design stage, the requirement for a comprehensive building height strategy appropriate to the site was identified.

The nature of south Dublin and the area administered by Dún Laoghaire-Rathdown County Council has been traditionally low-rise in character. The prevailing building height in the mature suburban areas seldom exceeds two or three storeys. The established residential areas in the vicinity of the site include Kerrymount, The Park and South Park across the N11 corridor. These estates are low density in character, with 2 storey dwellings located on generous plots of land. In response to Government policy, there is a clear requirement to increase the density of development in areas such as Cornelscourt, which are established as low density but have easy access to quality public transport. The subject site is a rare opportunity to deliver high quality, high density development of a comprehensive scale that will accord with all strategic planning policies.

Recent developments in the wider area have tended to be higher, in response to an evolution of national planning policy and Guidelines. In the larger development sites of Carrickmines, Cherrywood, Sandyford and along the N11 corridor (Fig. 2.1.2) heights greater than six storeys have been permitted. The recently granted Golf Lane comproses a development of 6-22 storeys at a prominent corner located along the M50 in Carrickmines.

This trend reflects the change in national policy, driven by the Residential Density Guidelines (1999) and the subsequent Sustainable Residential Development in Urban Areas (2008) which required local authorities to promote higher residential densities in appropriate locations.

The development is consistent with to the Guidance for Planning Authorities on Urban Development and Building Heights (2018)

A thorough Visual Impact Assessment has been undertaken by MItchell Associates and accompanies this application supporting the proposed building forms.





Map extract showing buildings along the N11 Corridor taller than 6 Stories

"On larger urban redevelopment sites, proposed developments should make a positive contribution to place-making, incorporating new streets and public spaces, using massing and height to achieve the required densities but with sufficient variety in scale and form to respond to the scale of adjoining developments and create visual interest in the streetscape."

Careful consideration has been given to the successful integration of the scheme into the existing character and topography of the site and area. The additional height is only proposed along the N11; ascending in height the development will establish a distinctive identity along the N11 Corridor and provide a visual landmark. Elsewhere in the site the development's height is intentionally sensitive at locations adjacent to the existing Willow Grove and the cottages along Old Bray Road.

While acknowledging the scale of the city and the immediate context of the N11 Corridor, the proposed residential development also makes a positive contribution to place-making. The scheme incorporates a sequence of central garden spaces and pedestrian streets which are defined by a series of apartment buildings. These apartment buildings are carefully considered in terms of massing and orientation to provide 'people friendly' external spaces; emphasising one of the proposal's key design concepts; place making.

The proposal offers the potential to complete street frontage along Old Bray Road. The addition of a café and tenant amenities at this location will deliver activity at street level and will encourage pedestrian footfall both towards the N11 via the new development and to Cornelscourt village from this new development and beyond.



Proposed Residential Development at Cornelscourt - View along the N11 Corridor



External Route Buffer To Existing Residential Building Outline Interface with Gardens Interface with Village

The Development Management Criteria requires the applicant to demonstrate how the proposed development is acceptable at the scale of district/ neighbourhood/ street

"The proposal responds to its overall natural and built environment and makes a positive contribution to the urban neighbourhood and streetscape. "

The site is located between two defining contexts: the N11 Corridor to the north and the village of Cornelscourt to the south.

Beginning with the village of Cornelscourt, the proposed residential development responds to the low-rise nature of Old Bray Road with the introduction and integration of a four storey structure (Fig. 2.2.1) containing a mix of uses; a cafe/retail space, flexible tenant amenity spaces and residential accommodation above.

The introduction of a high quality palette of durable materials and the articulation of the form establishes an appropriate and considerate connection within the fabric of the village of Cornelscourt.

Along the eastern boundary (Fig. 2.2.2) of the proposed residential development, two storey dwellings have been introduced to present an appropriate transitional scale towards the houses of Willow Grove. Their scale, massing and composition positively integrate to the scale of the suburban neighbourhood.

Building D (Fig. 2.2.3) ascends in scale carefully considering distance and height to allow light and ventilation into the central garden space and considerately responding to the scale and privacy of the neighbouring dwellings. The southern portion of the block has been setback at the top floor in response to consultation with ABP.



Proposed Residential Development at Cornelscourt - Cafe and Concierge Along Old Bray Road



Proposed Residential Development at Cornelscourt - Scale and Massing of Building D indicating Interaction Between Proposed Site and Old Bray Road Properties

'The proposal is not monolithic and avoids long, uninterrupted walls of building in the form of slab blocks with materials / building fabric well considered.'

The previous scheme conceived for this site sought to create a strong building line to the N11 by introducing 23-storey connecting blocks between the main north-south blocks A, B & C. Upon reflection of the scheme submitted, these connecting elements did not successfully create a separate legible identity for each of the taller blocks and when viewed along the N11 presented an uninterrupted view for the extent of the site.

The revised proposal for the site specifically sought to address this concern by removing the connector blocks, orientating Block A towards the North-West, complimented by a splayed strong gable end addressing the N11. Alongside these changes, the southern half of the taller Block A has been reduced in scale to improve the proportions of increased height element when viewed from the periphery of the site.



Proposed Residential Development at Cornelscourt - Building Heights Section



Proposed Residential Development at Cornelscourt - CourtyardBetween Building A and Building B

BUILDING HEIGHT REPORT

Approx. 42m Distance Proposed Transition Zone

"The proposal enhances the urban design context for public spaces and key thoroughfares and inland waterway/ marine frontage, thereby enabling additional height in development form to be favourably considered in terms of enhancing a sense of scale and enclosure while being in line with the requirements of "The Planning System and Flood Risk Management – Guidelines for Planning Authorities" (2009). "

One of the key concepts to the development is the creation of a clearly defined hierarchy of public, semi-public, and private spaces which provide legibility, permeability, and connectivity and make it easy for residents and visitors to find their way around and enjoy the significant open spaces contained within the scheme (Fig. 2.2.6).

Along the Old Bray Road, a tenant amenity/cafe is introduced, linking the new development with the existing context through the use of common materials found in the existing village and at a scale appropriate to the village setting. Within the scheme, a central tenant amenity provides areas for relaxation and socialising between tenants, the amenity space is integrated within the central garden and acts as a point of focus within the courtyard.

The scheme is exemplary in minimising the need for cars by providing attractive paths and cycle routes that facilitate safe access by users of all ages and degrees of personal mobility. The proposed layout has been developed to encourage permeability within site, providing pedestrian and bicycle path routes from the Central Garden Space and Linear Park. These routes could further enhance the permeability and connectivity within the scheme.

There is no inland waterway or marine frontage within the current proposal. We can confirm that a **Flood Risk Assessment** prepared by DBFL Consulting Engineers has been prepared. This document concludes that the proposal is appropriate for the site's flood zone category C.





Proposed Residential Development at Cornelscourt - Pedestrian Permeability Extracted from Landscaping Design Statement by Cameo and Partners



'The proposal makes a positive contribution to the improvement of legibility through the site or wider urban area within which the development is situated and integrates in a cohesive manner.'

Rising away from the suburban context that defines the village of Cornelscourt the proposed residential development ascends in scale to appropriately respond to the context of the N11 Corridor. The taller elements of the scheme are kept to the N11 edge rather than the village and residential interfaces with heights falling from this datum to 4 storeys toward the rear of the site and 2 storeys to the existing Willow Grove to avoid excessive visual impact on the neighbouring residential properties and adjoining streetscapes. Buildings C, B and A range from six storeys to twelve storeys.

Their heights ascend in multiples of three to establish a distinctive identity; contributing positively to the existing trend of taller buildings along the N11 Corridor.

'The proposal positively contributes to the mix of uses and/ or building/ dwelling typologies available in the neighbourhood.'

A broad mix of 1, 2 and 3 bed apartments together with terraced houses are delivered within this scheme. As set out in the Planning Reports, the applicant has undertaken significant research into the national demographic profile and the mix delivered is a direct reflection of current and future forecast market demands. Consideration has been given to the size of the units delivered, all in excess of the minimum standards to facilitate a future permanent shift towards work from home arrangements.



Proposed Residential Development at Cornelscourt - Cafe and Tenant Amenity Along Old Bray Road

2.3 At The Scale of The Site/Building

"The form, massing and height of proposed developments should be carefully modulated so as to maximise access to natural daylight, ventilation and views and minimise overshadowing and loss of light."

The proposed residential development at Cornelscourt is informed by careful analysis of the context and consideration of natural daylight, ventilation, views and minimising loss of light. The analysis has informed:

- Arranging buildings to give structure and form to the principal spaces and vistas.
- Modulation of the building forms to take maximum advantage of the views and orientation
- Using variety and distinctiveness in the architecture to create a sense of place by means of a range of building sizes, shapes, heights, materials and character.
- Providing appropriately scaled, well orientated and 'people friendly' external spaces including landscaped streets, courtyards, gardens and pedestrian streets.
- Creating a clearly defined hierarchy of public, semi-public and private spaces which provide legibility, permeability and connectivity and make it easy for residents and visitors to find their way around. Giving priority to walking, cycling and public transport, minimising the need for cars by providing attractive paths and cycle routes which facilitate safe access by users of all ages and degrees of personal mobility

The driving factor in the revised layout of the buildings has been daylight and dual aspect, with increased amenity afforded to the future residents through an increased number of corner and through aspect apartments with a resultant dual aspect ratio of 54%. There are no single aspect North-facing units being proposed within the proposed design. The **Dual Aspect Analysis Report** prepred by Henry J Lyons Architects contained within the appendix sets out which units are considered dual aspect and how they comply with these parameters.



Proposed Residential Development at Cornelscourt - View Indicating Play Space and Houses



Proposed Residential Development at Cornelscourt - View Along HOuses Willow Grove Boundary

BUILDING HEIGHT REPORT

"Appropriate and reasonable regard should be taken of quantitative performance approaches to daylight provision outlined in guides like the Building Research Establishment's 'Site Layout Planning for Daylight and Sunlight' (2nd edition) or BS 8206-2: 2008 – 'Lighting for Buildings - Part 2: Code of Practice for Daylighting'. "

"Where a proposal may not be able to fully meet all the requirements of the daylight provisions above, this must be clearly identified and a rationale for any alternative, compensatory design solutions must be set out, in respect of which the planning authority or An Bord Pleanála should apply their discretion, having regard to local factors including specific site constraints and the balancing of that assessment against the desirability of achieving wider planning objectives. Such objectives might include securing comprehensive urban regeneration and or an effective urban design and streetscape solution."

This application is accompanied by a **Daylight and Sunlight Analysis Report**, which confirms that there are exemplary levels of access to natural daylight and that overshadowing is minimised.

The height, scale, and massing of each building have been carefully designed to correspond with the orientation of the site. By leaving taller elements of the development to the north adjacent the N11, with low-level units to the south, daylight and sunlight are invited into the courtyards and public amenity spaces. As a result of this design strategy, the level of daylight access to apartments has achieved a 97% pass rate which is significantly well above the required criteria.

The composition and articulation of the proposed development has also ensured that there is no significant overshadowing to existing adjoining properties or internally within the scheme.

On the 21st March, the existing amenity rear gardens of properties at Willow Grove and Bray Road currently receiving 2 hours of sunlight for over half their area, will continue to do so with the proposed development operational. With regard to proposed amenity spaces, the analysis confirms that over half of the amenity spaces would receive at least 2 hours sunlight in line with BRE recommendations on 21st March.



Proposed Residential Development at Cornelscourt - Central Garden







Typical 1 Bed UnitTypical 2 Bed UnitProposed Residential Development at Cornelscourt - Typical Open Plan Units

3 Bed Unit House





2.3 At The Scale of The Site / Building

With regard to daylight factors, 97% of the rooms tested in the new development are achieving Average Daylight Factor above BRE guidelines. The Daylight and Sunlight Assessment Results Report by 3DDB deomonstrate the compliance testing methodology and describe compensatroy methods employed to achieve compliance. It is evident therefore from the above that there are no significant issues with overshadowing associated with the proposal and the compensatory design solutions emplyed as part of the design development process are satisfactory.

For further information on the architectural design of the proposal please refer to the attached Architectural Design Report by Henry J Lyons.

All apartments comply with Sustainable Urban Housing: Design Standards for New Apartments - Guidelines for Planning Authorities (2018). All units meet or exceed minimum standards. The majority of units are approximately 10% larger than the required standards.

As stated within the "Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities (2020)"; " it is an objective that there shall be a minimum of 50% dual aspect apartments."

The design of the scheme has sought to maximise the quantity of Dual Aspect units; achieving 54% Dual Aspect Units. Naturally high density multi-storey development with perimeter block patterns partially curtails the quantity of dual aspect units that can be achieved. In an attempt to maximise the provision, we have employed a variety of mechanisms including;

- Provision of Dual Aspect Units at all corners of the built form;
- Providing large rebates, in particular along north facing facades in order to activate dual aspect views.

A key feature to the design concept is to provide open living units where living room and kitchens are contiguous, connected and sometimes tied in with the foyer. This approach allows for larger spaces and the possibility for natural light and views to stretch in to internal spaces like kitchens. Kitchen islands reinforce this layout strategy - placing common and active design elements in a central location.

The current proposal is accompanied by a **Daylight and Sunlight** Assessment Results Report, which confirms levels of natural daylight and that overshadowing is minimised. In this regard, appropriate consideration has been given to the relevant guidance documents and specifically 'Site Layout Planning for Daylight and Sunlight' (2nd edition) or BS 8206-2: 2008 'Lighting for Buildings -Part 2: Code of Practice for Daylighting'.

The accompanying Daylight and Sunlight Assessment Results Report prepared by 3DDB which includes an assessment of daylight, sunlight, shadow and light effluence effects, submitted with this application.

For further information on the architectural design of the proposal please refer to the attached Architectural Design Report by Henry J Lyons.







Inspirational Reference of Open Plan Apartment



CONCLUSION





4.1 Conclusion

This Report has demonstrated that the development proposal complies with the performance criteria contained in the Guidelines. The scheme has been designed by award winning architects to respond to the site context, national policy and international examples of BTR developments.

The issue of appropriate building height has been carefully considered from the outset of the design process, with increased heights being carefully modulated and tested for impact. The result is a scheme that offers an exceptional level of residential amenity and an attractive visual landmark for Cornelscourt.



Proposed Residential Development at Cornelscourt - Vista

HJL