

ARCHITECTURAL + URBAN DESIGN STATEMENT
Leydens Wholesalers \& Distributors Dublin, No.158a Richmond Road Mixed-Use Development (Richmond Road Phase 2)

## Executive Summary

This Architectural and Urban Design Report has been prepared by RKD Architects on behalf of the applicant to outline the concepts behind the design proposal - a mixed-use development on lands at Leydens Wholesalers \& Distributors Dublin, 158a Richmond Road, Dublin 3.

The proposed scheme is a mixed used development of $1331 \& 2$ bed apartments, commercial spaces including crèche, gym and retail, artist studios and high quality public and communal landscaping at ground, podium, and terrace levels. It is designed to create an inclusive and sustainable community, promote active transport, and offer cultural space in this important site between the established communities of Fairview and Drumcondra.

The development also includes proposed upgrades to Richmond Road including the widening of the vehicular carriageway, the provision of dedicated cycle lanes and upgraded and widened footpaths.

The proposed development forms Phase 2 of a larger overall scheme which includes the adjacent lands at 146-148 Richmond Road. Planning Permission for Phase 1 is Pending (ABP Reg. Ref. TA29N.312352).

This design statement has been structured with reference to the Urban Design Manual - A Best Practice Guide. Sections have been merged or rearranged slightly where the nature of the scheme demands it.

## PROJECT TEAM

MALKEY
LIMITED
Developer - Malkey Limited

- W D

Architect - RKD Architects
T C Planning Consultant - Thornton O'Connor Town Planning
I- Civil, Structural, Transportation - DBFL Consulting Engineers
axiseng Mechanical \& Electrical - Axiseng Consulting Engineers
Mitchell + Associates Landscape Architects - Mitchell + Associates
Fire Safety Consultants - GSP Fire
OHAC
Accessibility Consultants - OHAC
(11) Daylight / Sunlight Consultants - 3DDB


MAKE SPACE FOR ENRICHED BIODIVERSITY and nature in the city
 ESTABLISHED COMMUNITIES


PROVIDE SPACE FOR ART AND CULTURE


DESIGN PUBLIC SPACES THAT ENCOURAGE INTERACTION BETWEEN NEIGHBOURS PRINCIPLES


INCORPORATE HUMAN-CENTRIC DESIGN

PROMOTE ACTIVE
TRANSPORT BY SUSTAINABLE MEANS


ENCOURAGE MIXED-USE AND 15 MINUTE CITY LIVING


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Malkey Limited intend to apply for permission for development (Large-scale Residential Development (LRD)) at this c. 0.55 hectare site atthe former Leydens Wholesalers \& Distributors Dublin, No. 158A Richmond Road, Dublin 3, D03 YK12. The site is bounded to the north-east by Richmond Road, to the west/south-west by No. 146A and Nos. 148148A Richmond Road (pending application ABP Reg. Ref. TA29N.312352), to the south/ south-west by a residential and commercial development (Distillery Lofts) and to the east/south-east by the Former Distillery Warehouse (derelict brick and stone building). Improvement works to Richmond Road are also proposed including carriageway widening up to c .6 metres in width, the addition of a c. 1.5 metre wide one-way cycle track/lane in both directions, the widening of the northern footpath on Richmond Road to a minimum of c. 1.8 metres and the widening of the southern footpath along the site frontage which varies from c. 2.2 metres to c. 7.87 metres, in addition to a new signal controlled pedestrian crossing facility, on an area of c. 0.29 hectares. The development site area and road works area will provide a total application site area of c. 0.83 hectares.

The proposed development will principally consist of: a Large-scale Residential Development (LRD) comprising the demolition of existing structures on site (c. $3,359 \mathrm{sq} \mathrm{m}$ ) and the construction of a mixed-use development including artist studios (c. 749 sq m ), a creche ( c . 156 sq m ), retail unit ( c .335 sq m ), and a gym (c. 262 sq m ), and 133 No . residential units ( 65 No. one bed units and 68 No. two bed units). The development will be provided in 3 No. blocks ranging in height from part 1 No. to part 10 No. storeys as follows: Block A will be part 1 No. storey to part 4 No. storeys in height, Block $B$ will be part 1 No. storeys to part 10 No. storeys in height (including podium) and Block C will be part 1 No. storeys to part 9 No. storeys in height (including podium). The proposed development has a gross floor area of c . $14,590 \mathrm{sq} \mathrm{m}$ and a gross floor space of $\mathrm{c} .13,715 \mathrm{sq} \mathrm{m}$.

The development also proposes the construction of: a new c. 204 No. metre long flood wall along the western, southern and south-eastern boundaries of the proposed development with a top of wall level of c. 6.4 metres AOD to c. 7.15 metres AOD (typically c. 1.25 metres to c. 2.3 metres in height) if required; and new telecommunications infrastructure at roof level of Block B including shrouds, antennas and microwave link dishes ( 18 No. antennas enclosed in 9 No. shrouds and 6 No. transmission dishes, together with all associated equipment) if required. A flood wall and telecommunications infrastructure are also proposed in the adjoining Strategic Housing Development (SHD) application (pending decision ABP Reg. Ref. TA29N.312352) under the control of the Applicant. If that SHD application is granted and first implemented, no flood wall or telecommunications infrastructure will be required under this application for LRD permission (with soft landscaping provided instead of the flood wall). If the SHD application is refused permission or not first implemented, the proposed flood wall and telecommunications infrastructure in the LRD application will be constructed.

The proposed development also provides ancillary residential amenities and facilities; 25 No . car parking spaces including 13 No. electric vehicle parking spaces, 2 No. mobility impaired spaces and 3 No. car share spaces; 2 No. loading bays; bicycle parking spaces; motorcycle parking spaces; electric scooter storage; balconies and terraces facing all directions; public and communal open space; hard and soft landscaping; roof gardens; green roofs; boundary treatments; lighting; ESB substation; switchroom; meter room; comms rooms; generator; stores; plant; lift overruns; and all associated works above and below ground.


Site Location Map, see drawing number 22001-RKD-ZZ-ZZ-DR-A-1000 for more details

Legend
$\square$ Phase 1
Phase 2

Introduction and Vision
Response to Best Practice Urban Design Guidelines

The proposed development follows the key principles of the Best Practice Urban Design Manual from the Department of Housing, Local Government and Heritage. Below is a summary of the key design responses to each topic from the manual. More detail on each of these criteria responses is set out throughout this document.

| CRITERA | COMMENT | DFSICN R=SPONSE |
| :---: | :---: | :---: |
| 01 Context | How does the development respond to its surroundings? | - The proposed development is envisaged as a sensitive and appropriate intensification of this important brownfield site within the inner suburbs of Dublin. It comprises of a mix of residential, commercial and community uses including apartments, retail space, artist studios, creche, gym and support facilities. Its construction will enable the creation of a new live/work destination for Fairview and the wider area, while providing badly needed residential accommodation and studio space for local artists and designers. <br> - The site layout concentrates the commercial and community uses along Richmond Road, while the residential elements are situated above. <br> - This will enable the creation of a lively and dynamic street while maximising privacy and amenity for residents. <br> - The scheme is split into 3 no. blocks which vary from 1-10 storeys. The buildings step down towards the existing lower-rise houses across Richmond Road and in response to the orientation. This stepping allows for the creation of a series of accessible roof gardens and terraces provided for the enjoyment of the residents. <br> - Improvement works to Richmond Road are also proposed, including the provision of dedicated cycle lanes and footpaths. |
| 02 Connections | How well is the new neighbourhood / site connected? | - The site is well connected, lying within the inner suburban location of Fairview. <br> - The proposal includes works to Richmond Road including road widening, the provision of new footpaths and cycle paths. <br> - The site lies within walking distance of several QBC's. <br> - The location of this site is within walking distance of Drumcondra train station and several Dublin Bus stops served by multiple routes on the Drumcondra, Ballybough and North Strand Roads. <br> - The Drumcondra Road QBC is within a $10-$ minute walk of the site. <br> - The proposed extension to the Tolka River Greenway included in Phase 1 of the development will allow Drumcondra Train station to access by foot within 13 minutes. |
| 03 Inclusivity | How easily can people use and access the development? | - All external and internal spaces are universally accessible. <br> - The publicly accessible spaces are permeable and the site layout and mix of active uses on the ground floor ensures passive surveillance of these spaces. <br> - The proposed development offers a range of 1- \& 2-bedroom apartments of various sizes and configurations to accommodate the needs of a variety of households. |
| 04 Variety | How does the development promote a good mix of activities? | - The proposed development includes a variety of uses across the site including several different apartment typologies, retail space, creche, gym and artist studios. <br> - This contrasts with the current single, low intensity use of the site. <br> - A variety of high quality public and communal semi-private spaces are provided which include areas to sit, play and meet. <br> - There is a severe shortage of artist studios in Dublin. By providing space for culture and creativity the proposal will enhance and contribute to the life of the wider community. |
| 05 Efficiency | How does the development make appropriate use of resources, including land? | - The proposed development achieves a high density whilst ensuring the provision of high-quality residential, commercial and community spaces. <br> - Minimal car parking is provided on site and large amounts of attractive and user-friendly bicycle parking is provided, encouraging reduced car use. <br> - Sustainability principles have been central to the design of the proposal since its inception. |
| 06 Distinctiveness | How do the proposals create a Sense of Place? | - The proposed mix of materials and forms will provide a varied roofscape, dynamic street character and sense of place. Setbacks at various levels create roof terraces allowing the residents to benefit from the light and views at these levels. <br> - The proposed material choices are inspired by the local area but will be used in a modern and contemporary way. <br> - The proposed exhibition space on the ground floor of Block A will provide a focal point for the wider area, greatly enhancing the experience of the public moving along Richmond Road. <br> - A new, strong street edge to Richmond Road help to create a more urban feel, enhancing the general local environment. <br> - A new creche facility is proposed as part of the development which will serve the local area as well as emerging context. |

Introduction and Vision
Response to Best Practice Urban Design Guidelines

| CRITERA | COMMENT | DESIGN RESPONSE |
| :---: | :---: | :---: |
| 07 Layout | How does the proposal create people-friendly streets and spaces? | - The proposal is conceived as a 'people first' development, pedestrian and cyclist permeability is maximised, as there are limited vehicular routes around the area. <br> - Carefully designed public open space provides safe, accessible, and inviting places for everyone to use. <br> - The proposal forms part of a wider masterplan which includes access to a proposed pedestrian and cyclist route along the River Tolka from Richmond Road through Phase 1 for the public. Residents of the proposed development will also have access to the communal ground floor open space from the proposed development to the River Tolka. |
| 08 Public Realm | How safe, secure and enjoyable are the public areas? | - The centrally located Public Plaza is overlooked by residential units in Blocks A and B, as well as the gym and creche at ground floor, resulting in passive surveillance throughout the day. <br> - Multiple entrances are provided to the various uses along Richmond Road, this will increase activity along this stretch of the road and is in sharp contrast to the current blank concrete wall. <br> - The communal open spaces at podium level and roof terraces at third and fifth floor levels are overlooked by the surrounding residential units. |
| 09 Adaptability | How will the buildings cope with change? | - The proposed development is based on principles aligned to UN's Sustainable Development Goals as well as the ambitions of Ireland 2040 and the Climate Action Plan. <br> - The site layout considers orientation and optimises energy performance. <br> - Building envelopes and landscaping are designed for resilience to future climate change impacts. <br> - High quality, durable materials are proposed throughout the development. |
| 10 Privacy/Amenity | How do the buildings provide a high quality amenity? | - High quality public open space is proposed which will integrate into a larger masterplan with Phase 1 , and create a positive human friendly public realm along the widened Richmond Road. <br> - All residential units are provided with private outdoor space either in the form of terraces or balconies. <br> - A large communal open space is provided on podiums of the blocks. <br> - Storage requirements as set out in the Design Guidelines for new apartments are met in all units. <br> - Appropriate buffers are provided between the private terraces of the units located at first, third and fifth floor levels and the communal open spaces. <br> - There are no residential units located at ground floor level, minimising the impact of passers-by on residents' privacy. <br> - Back of house areas including deliveries, bin stores and plant rooms are mostly concentrated away from the street, minimising the negative impact of deliveries and servicing on the development and on the wider Richmond Road area. |
| 11 Car Parking | How will the parking be secure and attractive? | - Car parking is minimised, and located on grade at the rear of the site underneath the podium <br> - Assess to the car park will be access controlled. <br> - Secure bicycle parking is provided with separate areas for residents, commercial retail staff, artist studios and visitors. <br> - Easy to access short term visitor bicycle parking is distributed throughout the site. <br> - The residential bicycle store includes space for cargo bikes and e-scooters, and an area for basic maintenance. |
| 12 Detailed Design | How well thought through is the building and landscape design? | - The individual residential units are designed to the highest quality with open plan concepts and ample storage to suit modern living. <br> - The retail space, gym and creche are designed to be flexible to meet a variety of potential uses. <br> - The creche has a separate outdoor area which is located within the central plaza but carefully screened, and separated for security. <br> - The architectural approach is informed by local context and a keen sense of identity. The building facade palette is modern and durable, with a variety of materials and forms breaking down the mass of the blocks and offering visual identity and distinctiveness. The material choices are inspired by the existing local residential and industrial context. |

Introduction and Vision
Dublin City Council Development Plan

DCC Development Plan 2022-2028

## Zoning

14.7.10 Inner Suburban and Inner City Sustainable Mixed-Uses Zone Z10

Land-Use Zoning Objective Z10: To consolidate and facilitate the development of inner city and inner suburban sites for mixed-uses.

The purpose of this zoning is to promote mixed-use in order to deliver sustainable patterns of development in line with the principles of the 15-minute city. The concept of mixed-use will be central to the development or redevelopment of these sites and mono uses, either all residential or all employment/office use, shall not generally be permitted.

In order to ensure that a mixed-use philosophy is adhered to on Z10 zoned lands, the focus will be on delivering a mix of residential and commercial uses. There will be a requirement that a range of $30 \%$ to $70 \%$ of the area of $\mathrm{Z10}$ zoned lands can be given to one particular
use, with the remaining portion of the lands to be given over to another use or uses (e.g. residential or office/employment). For very small sites, typically less than 0.5ha, flexibility on mix requirement may be considered on a case-by-case basis, where it can be demonstrated that the proposal would not result in an undue concentration of one particular land-use on the Z10 landholding as a whole

The primary uses supported in this zone are residential, office and retail, with ancillary uses also facilitated where they deliver on the overall zoning objective.

There will be a requirement that for any significant scheme (on Z10 zoned lands greater than 0.5 ha in size) seeking to increase densities and/or height, a masterplan is prepared (see also Appendix 3: Achieving Sustainable Compact Growth). The requirement to prepare a masterplan in respect of future development will also specifically apply to Z 10 zoned lands at Malahide Road, Harmonstown Road, Goldenbridge Industrial Estate, 110-114 Cork Street, Glenview Industrial Estate and Brickfield

House/ Sunshine Estate.
Z10 - Permissible Uses
Amusement/leisure complex, assisted living/retirement home, beauty/ grooming services, bed and breakfast, buildings for the health, safety and welfare of the public, café/ tearoom, childcare facility, civic offices, civic and amenity/recycling centre, community facility craft centre/craft shop, creative and artistic enterprises and uses cultural/recreational building and uses, cultural, delicatessen, education, mbassy office, embassy residential, enterprise centre, financial institution, guesthouse, halting site, homebased economic activity, hostel (tourist), hotel, internet café/call centre, live-work units, media-associated uses, medical and related consultants, mobility hub, motor sales showroom, off-licence, off-licence (part), office, open space, place of public worship, primary health care centre, public house, public service installation, residential, restaurant, shop (local), shop (neighbourhood), sports facility and recreational uses, training centre veterinary surgery.


PRIMARY LAND USE ZONING CATEGORIES ${ }^{4}$


Guidelines the DCC Development Plan References include:

Sustainable Urban Housing: Design Standards for New Apartments December 2020, Department of Housing, Local Government and Heritage

Urban Design Manual: A best practice guide
May 2009, Department of Environment, Heritage and Local Government December 2020, Department of Housing, Local Government and Heritage 2022, Department of Housing, Local Government and Heritage Quality Housing for Sustainable Communities (QHfSC) (2007)

Design Manual for Urban Roads and Streets (DMURS) (2019)
Sustaina'ble Residential Development in Urban Areas (SRDUA) (2009)

$\theta=$ National Planning


National Planning Framework - Ireland 2040 Our Plan (NPF) (2018) Design Standards for New Apartments (DSfNA) (2018)

Urban Development and Building Height Guidelines (UDBHG) (2018)

## NATIONAL

National Planning Framework 2040

National Climate Action Plan (CAP) 2021 and sectoral adaptation plans
Construction 2020: A Strategy for a Renewed Construction Sector

Housing for All
National Development Plan 2021-2030

Project Ireland 2040 National Marine Planning Framework
The Whole of Government Circular Economy Strategy 2022-2023
Government's Waste Action Plan for a Circular Economy 2020-2025

REGIONAL

Eastern and Midland
Regional Assembly; Regional Strategy 2019-2031

Dublin Metropolitan Area Strategic Plan
NTA Transport Strategy for the Greater Dublin Area 2022. 2042

River Basin Management Plan 2018-2021
Eastern-Midlands Regional Waste Management Plan 2015-2021

Dublin Agglomeration Environmental Noise Action Plan 2018-2023

## LOCAL

Development Plan
Local Area Plans
Strategic Development Zones
The Heart of Dublin: City Centre Public Realm
Masterplan
Docklands Public Realm Masterplan
Local Environmenta
Improvement Plans
Dublin City Council Litter Management Plan 2020-2022
DCC Climate Change Action Plan 2019

## SECTION 28

 GUIDELINESUrban Development and Building Height Guidelines 2018

Sustainable Urban Housing: Design Standards for New Apartments 2020
maxamanamvasen
Richmond Road Area Action Plan 2007

Richmond Road Area Action Plan 2007

The Richmond Road Area has been covered by the Richmond Road Area Action Plan since 2007 which aims to enhance and coordinate development along this important link road within the inner suburbs of Dublin and which identifies several key issues which directly affect the proposed development

| Existing nodes / Local Centres................. |  |
| :---: | :---: |
| Staggered and discontinuous frontage....... |  |
| Edges.... | WW |
| Constricted road / pavement widths.......... | ------- |
| Inactive frontages............................. |  |
| Landmarks.......................................... | $\bigcirc$ |
| Vacant / underutilised sites... |  |



Richmond Road Area Action Plan 2007

## Movement \& Connectivity

Richmond Road is a minor orbital route, running parallel to the River Tolka and acting as an east-west connection between the main radial routes and Quality Bus Corridors (QBC) at Drumcondra Road to the west and Fairview Strand Road to the east.

The Action Plan lays out a clear set of objectives for the area regarding movement and connectivity, the aim being to achieve a better balance between vehicular, pedestrian and cycle movements within the area. The plan highlights a number of pinch points where Richmond Road is particularly narrow and which require widening or other works to achieve a safe and coherent street corridor.

## The objectives are:

a. "To provide additional linkages throughout the area by providing public access routes from the existing roads to the redevelopment and within the site to facilitate the movement of pedestrians and cyclists.
b. To improve/facilitate vehicular access to the institutional lands and development sites on and in the vicinity of Richmond Road.
c. To establish a coherent road and footpath alignment along Richmond Road between the junction with Grace Park Road and Philipsburgh Avenue, while having regard to the significance of the istorical alignment of the road, by upgrading the road and, where easible, to achieve a minimum width of a 7.5 metres carriageway with advisory cycle lanes and pavements on either side."

The proposal directly addresses the objectives of the Action Plan by:

1. Improvement works to Richmond Road proposed include carriageway widening up to $c .6$ metres in width, the addition f a c. 1.5 metre wide one-way cycle track/lane in both directions, the widening of the northern footpath on Richmond Road to a minimum of c. 1.8 metres and the widening of the southern footpath along the site frontage which varies from c. 2.2 metres to c. 4.9 metres, in addition to a new signal controlled pedestrian crossing facility. This will greatly enhance pedestrian and cyclist safety while easing traffic movements on Richmond Road.
2. There is a proposed pedestrian link for residents from Phase 1 to the River Tolka through Phase 2. Additionally, there is a public pedestrian and cyclist link to the River Tolka Corridor as part of the Phase 1 proposal, pending a decision (ABP Reg Ref. TA29N.312352)


Proposed Movement Framework Map - Richmond Road Area Action Plan 2007

1 rasatom mavisen
Richmond Road Area Action Plan 2007

## Urban Analysis \& Building Lines

Challenges identified in the urban context include the staggered and discontinuous street frontage along Richmond Road which includes several long, inactive, and hostile frontages and vacant or underutilised sites.
"Another physical characteristic of the road is the building line which is staggered and discontinuous, reflecting the historical evolution of the area. There are a number of inactive frontages, such as, at Tolka Park Stadium, Leydens cash and carry, the builder's providers and Ergo."

The Action Plan specifically calls up the development site as having an inactive frontage, and for its staggered and discontinuous nature. The proposal overcomes these issues by proposing a strong and active street edge. The mixed-use character of the proposed scheme, which proposes a mix of artist studios and exhibition space, retail units, and multiple residential entrances, will help to create life and activity throughout the day and into the evening.
"Building lines need to be established, especially along the southern side of Richmond Road. Map 10 illustrates the building lines for Richmond Road, Esmond Avenue and Clonliffe Road in the case of redevelopment. Active frontages (doors and windows) should connect to the public street."

The proposed scheme is set back from Richmond Road to allow for road widening including the provision of dedicated cycle lanes and widened footpaths. The proposed buildings follow this setback to create a continuous building line along the southern edge of Richmond Road.


Issues \& Urban Analysis Map - Richmond Road LAP 2007

## PROPOSED BUILDING LINES

Proposed Building Lines $\qquad$
$\qquad$


## Site History

The site's location proximate to the River Tolka has resulted in a long industrial history. While there are no protected structures on the site itself, the old Jones Road Dublin Whiskey Distillery sits directly to the south. Originally built in the 1890s, the building has since been converted into offices and loft apartments and is now known as 'Distillery Lofts' The structure is mostly constructed of red brick with stone detailing, the modern additions are primarily glass and metal.

Another formerly industrial protected structure is located to the southeast of the site fronting on to Richmond Road. This structure is currently vacant and derelict with only the external walls remaining.



Introduction and Vision

Existing Buildings
 Introduction and Vision
Site History

## Existing Condition

The site is currently in use as Leydens Wholesalers and Distributors Dublin and is made up mostly of several large warehouse / shed units and a large delivery and loading area. There is a long blank wall and fence to Richmond Road along the length of the site. The existing condition is generally hostile and unwelcoming. Richmond Road is constricted in this location and where footpaths exist, they are very narrow or blocked by illegal parking

The immediate area of Richmond Road is a mixture of older 2 and 3 storey houses, several newer apartment developments, and some industrial units. The area is transitioning away from industrial and towards a more residential character


1 - View From Richmond Road


3 - View From Richmond Road


2 - View From Richmond Road


4 - View From Richmond Road


5 - View From Richmond Road of Distillery Lofts


8 - View From Richmond Road of Richmond Hall Apartments


6 - View From Richmond Road Of Protected Structure Adjacent To Site


9 - View From Distillery Road of Distillery Lofts


7 - View From Richmond Road Of Protected Structure Adjacent To Site


10 - View From Distillery Road of River Tolka


Dublin City Council Policy SC8
Development of the Inner Suburbs
To support the development of the inner suburbs and outer city in accordance with the strategic development areas and corridors set out under the Dublin Metropolitan Area Strategic Plan and fully maximise opportunities for intensification of infill, brownfield and underutilised land where it aligns with existing and pipeline public transport services and enhanced walking and cycling infrastructure.

Approach to the Inner Suburbs and Outer City as Part of the Metropolitan Area

The site is located just outside the canal belt between Drumcondra and Fairview. The surrounding context comprises of existing residential and brownfield industrial sites. The proposal will integrate into the structure of the city and metropolitan area. The higher density on the site will align with the strategic development and corridors as set out under the Dublin Metropolitan Area Spatial Plan (MASP) as an opportunity for intensification of infill, brownfield and underutilised land.


Core Strategy Map (DCC
Development Plan 2022-2028)

Dublin MASP (DCC Development Plan 2022-2028)


Urban Design Rationale
Site Connectivity

The proposed development is located on Richmond Road, Dublin 3, just north of Dublin City Centre. The site is well serviced by public transport and other infrastructure lying within the catchment area of the Drumcondra Road and Fairview Strand QBC's, Drumcondra Train Station and with easy walking and cycling distance of many amenities.

The high-density employment areas of Dublin City Centre and Docklands green spaces including the National Botanic Gardens, Fairview Park and Clontarf Promenade; and a large number of health, educational and cultural facilities, are all within easy reach of the site.

Connectivity to the Site
The proposed development is very well served by existing public transport, lying within the catchment areas of both the Drumcondra Road and Fairview Strand QBC's as well as Drumcondra Train Station. The area is set to benefit from future improvements including the ongoing Clontarf to City Centre Cycle \& Bus Priority Project (C2CC Project) and Bus Connects. Two Dublin Bus stops and Drumcondra Train Station are located within 1.3 km walking distance of the site, offering regular, high quality, public transport options.

The location and proximity of the proposed scheme to the City Centre means that walking and cycling are both excellent options for any future residents and users. The improvements to Richmond Road proposed, the future development of the River Tolka Corridor and recent improvements and additions to the Royal Canal Walking and Cycling route will all enhance the future viability of car free living in this location



Urban Design Rationale
Block Layout and Design

## Site Masterplan

The proposed development forms part of a larger overall scheme which includes the adjacent lands at 146-148 Richmond Road. Planning Permission for Phase 1 is Pending (ABP Reg. Ref. TA29N.312352)

Phase 1 is a primarily residential scheme with a café/retail unit. A new pedestrian and cycle route along the River Tolka is proposed as part of Phase 1, along with a new public access route from Richmond Road, creating a new connection from Richmond Road along the river to Distillery Road as envisioned in the Richmond Road Action Plan 2007.

Access to the new riverside corridor and connection to Distillery Road through Phase 1 is proposed for the residents of Phase 2 (this application), allowing the two phases to form a single whole and share the high-quality and extensive communal open space.

DCC Opinion Comment 3xxi
It is recommended that a further setback of blocks should be considered, having regard to the close proximity of the building edge to the proposed public footpath. No element of the development including terraces and balconies should encroach across or overhang public lands and/or lands to be taken in charge.

## RKD Response

The road alignment has been adjusted since the Pre Application Meeting to ensure that there are sufficient minimum footpath widths along Richmond Road, see engineers drawings. No element of the development including terraces or balconies encroach or overhang public lands or lands to be taken in charge. See Taken in Charge drawing.



Block Layout and Design of Phase 1 and Phase 2

Urban Design Rationale
Site Connectivity and Permeability

## DCC Opinion Comment 3iii

Demonstrate the connectivity of the public footpath on Richmond Road and surrounding public realm with the neighbouring sites east and west of the subject site.

DCC Opinion Comment 3xxiii
Clarify and demonstrate the connectivity between the proposed LRD and the adjoining proposed SHD development to the west and southwest.

## Pedestrian and Bicycle Access

The proposed roadworks to Richmond Road will greatly enhance both pedestrian and cyclist connectivity. Safe, continuous footpaths and cycle lanes are proposed along the full length of Richmond Road associated with the site. Pockets of public open space at the Artist's Plaza and Central Plaza are accessed from Richmond Road. A continuous high quality public realm is proposed along Richmond Road and past Phase 1 to the River Tolka. New connections for residents are possible through Phase 1 of the development to link to the proposed River Tolka Corridor.

Multiple pedestrian access points are proposed, enhancing connectivity. A mixture of long-term and short-term bicycle parking is distributed across the site. High Quality materials and new street trees are proposed, enhancing the pedestrian experience.

## Vehicular Access

A single vehicular access point is proposed at the south eastern end of the site. This will minimise potential conflicts between pedestrians and cyclists along Richmond Road, and improve the current condition that is dominated by cars and trucks.

Servicing and deliveries for the development, including the retails units is all from the car park, reducing the impact on the public road.

## Legend <br> - • • - Pedestrian Access

-     - Bicycle Access


Vehicle Access Phase 1
Vehicle Access Phase 2
$\bigcirc$ Residents' Gate Between Phase 1 and Phase 2
$\bigcirc$ Residents' Gate Phase 1

Residents' Gate Phase 2


Urban Design Rationale
Site Opportunities and Challenges

## Site Opportunities

- Create an active building line with street frontage to Richmond Road
- Create connectivity across the public realm from the street, through the Phase 1 route to the River pedestrian and cycle route.
- Connect the amenity spaces between both phases with a series of softer landscaped spaces.
- Concentrate the height and density to the centre of the site.
- Create a prominent corner on the bend of the road.
- Respond to the adjacent context which has a mix of height and scale.


## Site Challenges

- High density development on an irregular shaped site.
- Aim to minimise the daylight and sunlight impact on the existing buildings.
- Setback on Richmond Road is required for the road widening.
- The massing should be carefully designed with setbacks and stepping heights to minimise overbearing and overshadowing.
- Adjacent protected historic structures


Site Challenges

Urban Design Rationale
Design Evolution / Alternatives Considered


## Early Feasibility Study

Mixed Use Scheme with predominately residential uses. Blocks Varying from 6-8 storeys throughout the scheme
Area: 13,365 sqm
No. Units:


## Pre Planning Stage

Mixed Use Scheme with 30\% Commercial and 70\% Residential Total Area: $\quad 14,374 \mathrm{sqm}$ Commercial GIA: $\quad 4,333 \mathrm{sqm}$ Residential GIA. No. Units:
$4,333 \mathrm{sqm}$
$10,041 \mathrm{sqm}$
111 (residential)
42 (Aparthotel)


## Submission Stage

Mixed Use Scheme with 30\% Mixed Use and 70\% Residential Total Area:
Mixed Use GFA: $\quad 14,590 \mathrm{sqm}$
$\begin{array}{ll}\text { Mixed Use GFA: } & 1,704 \mathrm{sqm} \\ \text { Residential GFA: } & 12,886 \mathrm{sqm}\end{array}$
$\begin{array}{ll}\text { Residential GFA: } & 12,886 \\ \text { No. Units: } & 133\end{array}$

## $\underline{02}$ <br> Urban Design Rationale <br> Block Layout and Design



Axonometric view of the proposal with Phase 1 Included
Plan view of the Scheme with Phase 1 included

Urban Design Rationale

## Creating a Streetscape

A strong, active, and varied streetscape is proposed along the southern edge of Richmond Road, one of the key objectives of the Richmond Road Area Action Plan. Multiple residential entrances, retail spaces, gym creche and the artist exhibition space will generate activity throughout the day and into the evening, promoting passive surveillance and generally enhancing the local environment.

The current layout and condition of this stretch of Richmond Road is particularly hostile to pedestrians who must contend with narrow footpaths, illegal parking and long stretches of inactive frontage. In contrast, the proposed widened footpaths, high quality surfaces, tree planting and carefully considered street furniture give space to the general public to pause and enjoy the area. Larger areas of public space are provided in the centre and northern ends of the site.


A new, active street edge is provided to Richmond Road


Creating a Streetscape

## 02 Urban Design Rationale <br> Healthy Placemaking

The vision of the proposed development is to create a sense of place on Richmond Road by creating an active and human centred public realm. The proposed widened footpaths, and segregated cycle paths promote active transport strategies.

The scheme has been designed using the principles of the ' 15 -Minutes City'. The use of active and public transport is encouraged by minimising car parking providing generous and attractive cycle parking, and by greatly enhancing pedestrian permeability, improving access to existing, under construction and proposed public transport routes and pedestrian and cycle infrastructure

The future of the mobility of the city is considered in this scheme with low car parking numbers and a good provision of bicycle parking, as well as e scooter and e-bicycle charging stations.

This mixed use scheme offers community spaces in the form of artists studios, and other amenities including retail space, crèche and gym to the wider Richmond Road Community

The proposed new public realm is overlooked by the artist studios and commercial units, as well as the residential units above. The building and landscape design have been carefully considered to provide a scheme focused on sustainability and adaptability to protect the health and wellbeing of the future community. It is a place for people which will improve and integrate with the existing establish local communities.

The generous communal open areas for residents of Phase 1 and Phase 2 are envisioned as a single contiguous space providing access through the entire site from Richmond Road to the proposed riverside public route and on to Distillery Road.

The proposal is broken down into three blocks of various heights, massing, and materials, adding visual interest and reducing the bulk of the blocks while maintaining a consistent and coherent architectura vocabulary. The buildings step back in response to the context, down towards Richmond Road, reducing overshadowing on the surrounding existing buildings and creating a more human scale. These setbacks are used as communal terraces for the residents which benefit from excellent light and views.

The proposed new landscapes are designed to support the existing biodiversity in the area by including native plants in the landscape design. Nonaccessible roofs are designed to be green roofs. The façades have incorporated swift bricks and bat boxes to support the existing fauna in the area.

The residential design of the proposal ensures inclusivity and accessibility. $50 \%$ of the oversized residential units ( $26 \%$ overall) are designed according to the Universal Design Guidelines for Homes in Ireland. This ensure that this new development will be accessible to all and create an age friendly environment.


## Urban Design Rationale

Sustainable and Resilient Development

## DCC Opinion Comment 4(4)

Green Roof
A green roof or green/ blue plan shall be provided. The applicant shall note the requirement of section 15.6.3 of the new city development plan.

DCC Opinion Comment 4(5)
Biodiversity
A biodiversity enhancement plan will be produced for the scheme. This A bill combine ecology, landscape and architecture to implement measures will combine ecology, landscape and architecture to implement measures
that will provide new urban habitat. Measures may include installing bat, swift and bird boxes on buildings, mitigating lighting to minimise impact on commuting/foraging bats and providing suitable planting types, in particular on green roofs.

## Project goals for a Sustainable and Resilient

 DevelopmentGood design has a key role to play in both reducing waste and emissions as well as creating a more sustainable environment for all. From the outset of the project design, the proposal has been developed and based on six key principles to ensure a holistic approach to sustainability and resilience. These goals focus on optimising the social, environmental, and economic performance of the project.

The principles align to the UN's Sustainable Development Goals, as well as the ambitions of Ireland 2040 and the Climate Action Plan.

The proposal aims to create places and spaces for people to thrive, now and into the future. The design focuses on optimising building performance to proactively address the global climate and biodiversity emergencies and to provide healthy, enjoyable and high quality spaces for people. See adjacent matrix of key issues and how the proposal addresses these.


## Sustainable Goals

Performance \& Delivery
Health \& Well Being

## People \& Places

Circular \& Efficient Resources

Efficient Ecosystems

Whole Life Carbon

## Integrated Design Response

- Sustainability principles have been discussed and applied from the project inception
- Healthy Design is embedded in the scheme via careful consideration of building heights and orientation.
- Daylight analysis has been undertaken to assess daylight/sunlight levels into all proposed residential units.
- Pedestrian permeability is prioritised, and car parking minimised and bicycle parking is maximised to promote active travel.
- A 'people first' approach has been taken towards the design of the proposed public spaces and the Richmond Road improvement works.
- The proposed Artist studios and exhibition spaces provides space for culture and creativity.
- The proposed creche will serve both the existing local context as well as the emerging and proposed developments.
- Sustainable development densities for the efficient land use of this underutilised brown field site.
- The existing warehouse building is not fit for repurposing, and does not lend itself to conversion. The existing building edges are closed off to the street and do not contribute to a healthy streetscape. Furthermore, the existing building materials are poor quality and not sustainable.
- A basement level has not been included to avoid unnecessary excavation and waste generation. Due to the site's proximity to the River Tolka, the exclusion of a basement reduces flood risk.
- Building and façade designs have been considered in the context of modular construction and prefabrication to reduce material usage and wastage.
- The current site use and layout does not offer space for green infrastructure, nature, or biodiversity.
- The new public and communal open spaces offer much needed space for nature and biodiversity to this area of the city. They will strengthen and enhance the existing 'green infrastructure' of the River Tolka corridor.
- A sustainable urban drainage strategy which has been integrated with the landscape design.
- New green spaces shall create a new wildlife habitat, enhancing the overall sense of well being and strengthening existing local habitats.
- Swift bricks and bat boxes are integrated into the facade of the proposed development to support existing wildlife.
- Green roofs are provided on all roofscapes which are not accessible to the residents, as per requirements in the DCC Development Plan 2022-2028.
- Early design stage discussions have considered building structure and fabric to deliver low embodied carbon construction opportunities including prefabrication and off site construction.
- Renewable energy systems have been considered.
- Options considered for low embodied carbon landscaping and public spaces.
- Landscaping and tree planting is arranged to offer solar shading, wind protection and privacy.

The existing buildings on the site consist of a series of single storey sheds, occupied by Leydens Wholesalers \& Distributors Dublin. The existing structures are of poor architectural quality, and constructed from poor quality materials. The low density building is not fit for repurposing and does not lend itself to renovation for a mixed-use development

The existing condition offers no frontage to Richmond Road, and turns it's back to the street, adding to the poor quality streetscape in this area. There is a high concrete wall fronting most of the road. The entire site is made up of hard surface and there is minimal to no soft landscaping features

The building materials from the existing building are not of sufficient quality to be resused in any meaningful or sustainable way in the proposed development.

The proposed scheme will create a dense, urban, human friendly environment, based on the 15-Minute City Principles. The scheme will integrate soft landscaping and biodiversity features that will create a more sustainable environment than the existing condition.


Aerial View of Existing Site Condition

Urban Design Rationale
Historic Protected Structure

The subject site does not have any protected structures within it. The site is adjacent to the old Jones Road Dublin Whiskey Distillery built in the 1890's. The building has since been converted into offices and apartments. The character of the industrial red brick has been retained

The proposal carefully considers the protected structure. The stepped massing ensures that the proposed buildings do not overbear the existing structure, particularly when viewed from Distillery Road and the River Tolka. Appropriate distances between the proposed buildings and the protected structure are maintained.

See extracts from verified views to the right, refer to full verified views report for more information.


1 - Verified View of Proposal beside Distillery Lofts


2 - Verified View of proposal beside Distillery Lofts


1 - Verified View of Proposal with Phase 1 beside Distillery Lofts


2 - Verified View of proposal including Phase 1 beside Distillery Lofts


All areas of the proposed development are designed to be universally accessible. The proposal has been designed with reference to best practice guidelines including 'Building for Everyone: A Universal Design Approach' and 'Universal Design Guidelines for Homes in Ireland'.

The public spaces are open and accessible, with level changes minimised and barriers to movement eliminated to the greatest extent possible. The aim is to create an inclusive environment for everyone, meeting the needs of a wide range of users and being sufficiently flexible to be able to adapt changing needs.

Narrow, or non-existent footpaths on Richmond Road are replaced with wide, level and inviting spaces finished with high-quality materials. Street furniture is carefully considered with seating provided in key locations. Level access to all public, communal, and private, indoor, and outdoor space is provided. All main entrances are marked with canopies, providing shelter from the weather, giving each building its open identity and making them easy to identify for everyone.

Of the 25 car parking spaces proposed, 2 are accessible spaces, above the required ratio of $5 \%$. The residential bicycle store includes space for larger cargo bicycles or mobility scooters.

All aspects of the proposal is designed according to Part M or the Building Regulations. As well as this, all cores, corridors and access onto communal open space has been designed according to the Universal Design Guidelines for Homes, Section 2 - Entering and Moving Around, to ensure all aspects of the residential amenities are accessible to all.

All residential units are designed to be visitable with particular consideration given to hallways and bathrooms. Level access is provided to the generously sized private outdoor spaces. $51 \%$ the oversized residential units ( $26 \%$ of total) are designed according to the Universal Design Guidelines for Homes in Ireland, encouraging an inclusive and age friendly development.

The Artist Studios are universally accessible and inviting, with accessible showers and WCs provided. Generous circulation spaces allow for easy access and the moving and transporting of art and materials.


Block B Residential Entrance. Entrances are inviting and easily identified.

It is an Objective of Dublin City Council:

## Universal Design

To ensure that $50 \%$ of apartments in any development that are required to be in excess of minimum sizes should be designed to be suitable for older people/mobility impaired people, people living with dementia and people with disabilities in accordance with the guidelines set out in the Universal Design Guidelines for Homes in Ireland 2015, the DHLG\&H's Design Manual for Quality Housing 2022 and the DHP\&LG \& DH's Housing Options for Our Ageing Population Policy Statement 2019.

5 apartment unit types are designed according to the Universal Design Guidelines for Homes in Ireland. The Universal Design apartment types are spread out throughout the proposed scheme, and there are units within Block A, Block B and Block C.

All circulation throughout all apartment blocks is designed according to the Universal Design Guidelines for Homes in Ireland. This means that all residents who will need the extra space which these guidelines call for, are accommodated throughout the scheme, including all communal spaces.

Universal Design Apartment Types have flexibility designed into them. Some unit types have a UD option, and a standard option. The only difference is the bathroom layout. The units are designed so that these standard bathrooms can be converted into a universal design bathroom in the future if required.

Refer to unit typology sheets for further details, '22001-RKD-ZZ-ZZ-DR-A-1500’ --- '22001-RKD-ZZ-ZZ-DR-A-1502’.

$C=$ non
$C=$

## Entering and Moving Around 02 <br> 온 <br> 





Inclusivity and Variety
Use Mix

The proposed development offers a variety of uses across the site to encourage a diverse and inclusive community. It consists of:

- 133 Residential Units
- 3 Commercial with total GFA of 955 sqm

Crèche $=156$ sqm
Gym = 261 sqm
Retail $=335 \mathrm{sqm}$

- 17 artist studios of various sizes with associated exhibition and support spaces.

The residential units are a mixture of 1 and 2 Bed apartments. There are a variety of sizes and layouts to suit a range of households. All residential units are provided with private open space in the form of terraces or balconies. A large amount of communal open space is proposed. This is provided at first, third and fifth floors in the form of roof terraces. 59\% of the proposed units are over $10 \%$ larger than the minimum standards outlined the Design Guidelines for New Apartments. 51\% these oversized units ( $26 \%$ of total) are designed according to the Universal Design Guidelines for Homes in Ireland, encouraging an inclusive and age friendly development. $70 \%$ of the proposed units are dual aspect.

The Z10 zoning calls for a minimum of $30 \%$ of the site area to be of the non-dominant use, in this case residential. The non-residential elements of the proposed development, the commercial retail spaces, and cultural artist studios, comprise approximately $31 \%$ of the site area.

The presence of the artist studios adds an additional cultural and community use to the scheme, on top of the standard residential and retail/commercial mix. There is a shortage of appropriate and affordable studio space for artists in Dublin. The proposal includes a large dedicated, and flexible, exhibition space, increasing opportunities for integration with and involvement with the wider community, adding to the life and dynamism of Fairview and Drumcondra.


 Efficiency and Distinctiveness
Height, Scale and Massing

> It is a policy of Dublin City Council Development Plan $2022-2028$


04Efficiency and Distinctiveness
Height, Scale and Massing

## Building Height

The building heights have been carefully considered within the existing urban context and the proposed form and height is achieving:

- Urban comfort - creating a street edge at a human scale
- Optimization of height and density - scaling up within the site
- Maximum viability for this important location
- Lower volumes towards the street
- Variety and integration with context

Particular consideration has been given to the impact of the proposa on Richmond Road and the existing residential development. The scheme generally steps down towards the road and the existing low-rise residential developments to the north of the site.

Two taller blocks of 9 and 10 storeys have been proposed on the site. The 9-storey block (Block C) sits in a prominent location as the road turns on Richmond Road.

The 10-storey block (Block B) matches the height of the Phase 1 development with views looking out the River Tolka. This block steps back from Richmond Road, minimising its impact on the existing 2 and 3 storey houses on the far side of the road

Block A is lower that the other two blocks at 4-storeys at it's tallest point The height of this block was designed to respond to the existing and emerging context with regard to daylight / sunlight analysis. Furthermore it responds to the existing low-rise context in the area.

The position of this site at a central point along Richmond Road offers the opportunity to step up to a high point of 10 storeys, adding variety to the roofscape but with a natural progression from the adjacent buildings while offering a sense of enclosure to the street.

Consideration has been given to the impact of the proposal on the protected Distillery Lofts building located to the south east. Block C, located adjacent to Distillery Lofts steps down towards the protected structure, respecting this important local landmark.



A local building height assessment has been undertaken to determine an appropriate building height in order to compliment the local and wider context and to inform the best strategy for densification and height in this important location.

The study found that there are multiple developments of similar height in existing and emerging local context. In particular the permitted development at the Holy Cross College site to the south and east. This development was granted permission on 4th November 2021 (ABP Ref ABP-310860-21) with blocks ranging in height from 6 to 18 storeys.

## Building

The Stables/Distillery Lofts
Richmond Hall
The Corn Mill
Croke Park

| No. <br> Storeys | Building <br> Height <br> 7 | Sea Level <br> Datum |
| :---: | :---: | :---: |
| 6 | 21 m | 24.410 m |
| 6 | 15 m | 19.935 m |
| N/A | 18 m | 24.075 m |
| 8 | 33 m | 39.228 m |
| 7 | 25 m | 33.610 m |
| 8 | 22 m | 31.200 m |
| 13 | 25 m | 33.720 m |
| 6 | 43 m | 51.325 m |
| 8 | 17 m | 33.180 m |
| 6 | 25 m | 35.830 m |
| 8 | 19 m | 29.680 m |
| 7 | 25 m | 35.630 m |
| 18 | 22 m | 30.680 m |
| 8 | 62 m | 70.975 m |
| 10 | 25 m | 35.830 m |
| 10 | 35 m | 39.990 m |
|  | 35 m | 39.875 m |



Existing and emerging local height study Efficiency and Distinctiveness
Response to DCC Development Plan

The DCC Development Plan states it is "planning policy at both national and regional level to promote compact growth and provide for increased density and height on underutilised lands within core urban areas.'

The proposed scheme looks to develop an underutilised site on Richmond Road, providing the area with a mixed-use scheme comprising of commercial, cultural, and residential uses.
"The main determining factor in considering appropriate heights is the need to create exemplar urban development with attractive streets, spaces and public areas that integrate successfully with the surrounding area. The key factors that will determine height will be the impact on adjacent residential amenities, the proportions of the building in relation to the street, the creation of appropriate enclosure and surveillance, the provision of active ground floor uses and a legible, permeable and sustainable layout."

The proposed scheme will create an active street front with multiple uses to Richmond Road; enclosed but permeable public and semi-public spaces with passive surveillance provided by the surrounding buildings; and a varied but coherent cluster of buildings of a variety of materials, form, and height, with active ground floor uses provided.
"At a European level, best practice examples indicate that appropriate density and layouts that create appropriate street scale and enclosure are achieved with mid-rise typologies of buildings 4 to 8 storeys in height."

A variety of heights are proposed throughout the blocks to break up the massing, and to increase visual interest. The buildings range from 1 to 10 storeys in height, with a mixture of private and communal open spaces provided at the setback levels.



Efficiency and Distinctiveness
Response to DCC Development Plan

DCC Opinion Comment 6(2)
Blocks Design and Materials
Justify why Block C does not maintain the shoulder height onto Richmond Road established by blocks A \& B and adjacent developments. Furthermore, to also provide a rationale for the significant step up in height of block $B$ above the shoulder height of the block onto Richmond Road.

Block $B$ and $C$ massing is designed as a courtyard block on podium. Opposite corners are taller to increase the density and maximise the daylight / sunlight quality in the courtyard and for the units. This form also ensures that the taller facades are not directly facing each other. The Richmond Road corner of Block C is a prominent corner on the bend road and there is a big set back and car park to the day care centre across the road. This corner of the block is taller and expressed vertically marking the bend in the road. The massing along Richmond Road creates a strong building line and street edge. The massing is broken up with a variety of heights to respond to the existing and emerging context.


Efficiency and Distinctiveness
Plot Ratio and Site Coverage

Higher plot ratios are key to achieving compact urban growth as envisioned in the DCC Development Plan 2022-2028, outlined in 4.5.3 Urban Density. Mixed-Use and higher density development allows more people to live, work and play within their local area, reduces reliance on cars and makes the city more inclusive.

The plot ratio and site coverage for the proposal are outlined below:

|  | Plot Ratio | Site Coverage <br> (including <br> podium) | Site Coverage <br> (excluding <br> podium) |
| :--- | :---: | :---: | :---: |
| Proposed | 2.65 | $73 \%$ | $59 \%$ |

Higher plot ratios and site coverage are justified by the site's well connected location and the mixed-use nature of the development with residential, cultural and commercial space proposed.

The proposed plot ratio and site coverage area are also justified by the high quality streetscape and public amenities the development proposes. As well as large amount of high quality public, communal and private open space.

This development proposes compact urban growth, through attractive mixed-use neighbourhoods, combining residential, commercial and community uses within one site. In order to achieve a compact city denser developments are required to create a sustainable city, based on 15 minute city principles.
 Efficiency and Distinctiveness Plot Ratio and Site Coverage

Appendix 3 Height Strategy in the Dublin City Development Plan 20222028 does not provide density, plot ratio or site coverage guidance for Z10, inner suburb areas. The proposed development proposes a high quality mixed use development, located close to major public transport corridors, in close proximity to the city centre. The development would be a catalyst project for much needed regeneration in the area, and therefore has a strong argument for proposing high, city centre densities for the site. Please see Architect's response to Appendix 3 Height Strategy in Appendix D of this Architectural + Urban Design Statement.

This is an urban design and quality-led approach to creating urban densities, where the focus is on creating a sustainable, compact and urban community on Richmond Road.

## Proposed Net Density $=133$ units $/ \mathbf{0 . 5 5 h a}=\mathbf{2 4 1 . 8 2}$ uph

| Location | Net Density Range (units per ha) |
| :--- | :--- |
| City Centre and Canal Belt | $100-250$ |
| SDRA | $100-250$ |
| SDZ/LAP | As per SDZ Planning Scheme/LAP |
| Key Urban Village | $60-150$ |
| Former Z6 | $100-150$ |
| Outer Suburbs | $60-120$ |

DCC Development Plan 2022-2028 Appendix 3 Table 1 Density Ranges
The subject site does not naturally fit into these categories provided for density ranges as there is no "Inner Suburb" standard, especially having regard to the zoning objective pertaining to the lands in the Development Plan, which is Z10 'Inner Suburban and Inner City Sustainable MixedUses'

The site is not defined as the City Centre, Canal Belt, or within a SDRA, SDZ, LAP or Key Urban Village and was not formally zoned Z6 Therefore, the only remaining density range that can apply to the site is "Outer Suburbs", which sets out a range of 60-120 units per hectare.

The proposed development provides a residential density of 242 No. units per hectare which is considered consistent with the guidance set out in national planning policy for intermediate urban locations such as the subject site. In addition, we reiterate that this designation conflicts with the "Inner Suburban and Inner City Sustainable Mixed-Uses" designation pertaining to the site under the Z10 zoning. It should be noted that the provision of 1 No. bedroom units and 2 No . bedroom units within the subject scheme also disproportionately inflates the density figure and should be considered in this context.


| Area | Indicative Plot Ratio | Indicative Site Cover- <br> age |
| :--- | :---: | :---: |
| Central Area | $2.5-3.0$ | $80-90 \%$ |
| Regeneration Area | $1.5-3.0$ | $50-60 \%$ |
| Conservation Area | $1.5-2.0$ | $45-50 \%$ |
| Outer Employment <br> and Residential Area | $1.0-2.5$ | $45-60 \%$ |

DCC Development Plan 2022-2028 Appendix 3 Table 2 Indicative Plot Ratio and Site Coverage
Again, the subject site does not naturally fit into these categories provided for density ranges as there is no "Inner Suburb" standard, especially having regard to the zoning objective pertaining to the lands in the Development Plan, which is Z10 'Inner Suburban and Inner City Sustainable Mixed-Uses'.

The site is not defined as by the Development Plan as a Central Area, Regeneration Area or Conservation Area. Therefore, the only remaining plot ratio/site coverage range that can apply to the site is "Outer Employment and Residential Area".

The site coverage of $73 \%$ and plot ratio of 2.65 is considered consistent with the guidance set out in national planning policy for intermediate urban locations such as the subject site. In addition, we reiterate that this "Outer" designation conflicts with the "Inner Suburban and Inner City Sustainable Mixed-Uses" designation pertaining to the site under the Z 10 zoning. We further note that the standards are noted as "indicative "in the Development Plan. The site coverage and plot ratio of the subject scheme slightly exceeds these indicative "Outer" standards, however we consider these figures be acceptable at the subject site having regard to the highquality scheme proposed on underutilised sustainably located lands, which will provide a mix of uses for the area.

## Block Proportionality

The height of the proposed development is carefully considered. The taller elevations of the development, particularly the Richmond Road elevations of Block B and $C$ are all designed to have a 1:1.5-1:3 building height ratio relationship with the street.


Efficiency and Distinctiveness
Materials and Finishes

## Materiality

Richmond Road, and the surrounding areas of Fairview and Drumcondra have a rich built heritage, mostly made up of brick and stone of a variety of colours, textures and scale. The material choice for the proposed development has been inspired by this heritage. A variety of high quality materials are used. The ground floor of all the proposed blocks, which contain the commercial and community uses, are stone, inspired by the surrounding former industrial buildings. The residential buildings above are finished in bricks of various colours which compliment the surrounding Georgian and Victorian architecture. Stone details in contrasting colours are inspired by the detailed brickwork of the surrounding architecture.

Block B, the tallest building in the proposed development is clad in a distinctive dark buff stone, marking this landmark building out as unique while complimenting the brick buildings around.

See Chapter 07 of Design Statement, Detail Design - Facade Section for more details on materials.

## Legend

$\square$


Red Brick

Grey Brick

Dark Buff Brick


Light Buff Brick
$\square$ Buff Stone


A variety of materials add interest while creating a cohesive whole that sits comfortably in its context.
$\underline{04}$

Local materials in Richmond Road.


The proposed material palette is inspired by the local context
$\underline{04}$ Efficiency and Distinctiveness Materials and Finishes

## Dublin Whiskey Distillery

The Dublin Whiskey Distillery (DWD) was located on the Distillery Lofts site, adjacent to the proposed development. It is described as a "great powerhouse a the centre of the golden age of Irish Whiskey. The original distillery was founded by John Brannick on the banks of the River Tolka. In 1926 the Whiskey industry was in decline, and in 1941 DWD was in great financial difficulty. By 1946 the distillery gates had closed and would not open again. By October of 1946 all the remaining Whiskey had been sold, and the distillery site was auctioned. In 2010 the rare DWD Whiskey was rediscovered, and in 2016 it was revived, not longer on the banks of the River Tolka, but with the same character

To honour and celebrate the rich industrial history of the site, the proposed development takes the historic Whiskey Bottle and has incorporated this into the facade design. Detailed facade panels incorporate three dimensional life size whiskey bottle imprints. These stone feature panels can be found predominately on ground level along Richmond Road, allowing passers-by to engage and remember the rich industrial history of the area.
reference: dwdwhikey.com


Current photo of Distillery Lofts, formerly DWD Distillery



## $\underline{04}$ Efficiency and Distinctiveness

Inset Stone Whiskey Bottle Panel Design Development


STONE INSET BOTTLE DETAIL



Elevation Detail



Detail view of proposed inset stone detail panel in the facade

$\underline{04}$Efficiency and Distinctiveness Materials and Finishes

## Distillery Heritage

The Distillery Lofts facades were studied to reveal the quality and distinctive characters that relate to the industrial heritage of the area. The facade has dark beige brickwork and semi-circle arched windows on the first floor. There are more squared arches on the second floors. The orange oak coloured windows sit within the brick openings and are carefully crafted with spandrel panels.

The proposed building facade facing Richmond Road makes an ode to the historic building by creating a contemporary stone arcaded streetscape. The street front windows sit within the stone openings to create an active streetscape with an industrial heritage characteristics. The residential windows above are squared with stone panels on the side. Stone panels with a ribbed pattern are inset into the brick openings and central window spandrels.

The architectural features of the proposed facade takes inspiration from the historic distillery to make a distinct and recognisable new place that is respectful to the history of the area



Site Layout and Public Realm

## Open Space Strategy

The following strategy is in response to DCC Opinion 4(1)a-d regarding
Public Open Space (POS)
The proposed development has developed two public open space strategies based on two scenarios.


Scenario A - Phase 1 + Phase 2 Granted
Scenario A is if Phase 1 (ABP Reg. Ref. TA29N.312352) is granted planning permission and is integrated into the overall masterplan of the proposed development. In this scenario the proposed development does not need to provide a floodwall at the perimeter of the site as this is provided at the river Tolka in Phase 1. The public spaces between phase 1 and 2 flow between each other, and the wider public realm along Richmond Road, and the communal open spaces are accessible between the two phases.


Scenario B assumes the proposed development is not integrated with phase 1. This means that the proposed the development stands up by itself. The proposed development provides its own flood defenses in the form of a floodwall at the boundary of the site, and the $10 \%$ public open space requirement is achieved in both scenarios within the development area of the development, creating a high quality public space off Richmond Road. Connections are still possible in the future between the two sites in scenario B.

Site Layout and Public Realm
Open Space Strategy

## Public Realm Contribution

The design strategy for the proposed development takes careful consideration of creating a high quality, safe and functional public realm using attractive, durable, and sustainable materials. The proposal replaces a hostile and unwelcoming environment dominated by cars with one that prioritises people and will bring great benefits not just to the proposal but to the wider area. A greatly enhanced public realm along Richmond Road is proposed including new, wider footpaths and cycle lanes, tree planting and larger areas of public open space.

The site is laid out to be easily understood and navigable by residents, customers, staff, and visitors. All entrances are easily identified. Service areas are concentrated in the rear of the site minimising the negative impact of deliveries, bin collection and other requirements on the public realm.

## Public Open Space

The proposed public space is divided into two primary areas, the 'Central Plaza' area with a sunny aspect and a smaller area to the northwest corner of the site, the 'Artists Plaza'. This space is contiguous with part of the Phase 1 Public Open Space in scenario A. A mix of high-quality materials, biodiverse planting and carefully considered street furniture is proposed, providing benefits beyond the proposed development to the wider area. See Landscape Planning Report for full details on proposed planting, materials, and layouts.

The Central Plaza is enclosed, with high levels of passive surveillance provided by the crèche, artist studios and apartments. The primary residential entrance to Block B is accessed via this area, ensuring activity throughout the day. In scenario A future residents will be able to acces the communal open space of Phase 1 via the Central Plaza which provide further access to the proposed River Tolka pedestrian and cycle route.

The Artist Plaza is overlooked by and provides access to the artist studios in Block A. It provides outdoor seating, or spill out space to the artist exhibition space. These two areas provide a pocket of sheltered public space off Richmond Road which is overlooked throughout the day by apartments, the studios.

Along with the high quality Public Open Space, significant improvements are proposed to the public realm along Richmond Road, with widened footpaths, areas for street trees and other biodiverse planting, and cycle parking proposed. These improves will provide visual amenity to the residents and users of the proposed development and well as generally enhancing the local environment. These 'additional public realm' areas are in addition to proposed footpaths and cycle lanes associated with the proposed improvements to Richmond Road.


Site Layout and Public Realm
Open Space Strategy

## Communal Open Space

Communal Open Space is key to achieving sustainable communities as it provides locations for neighbours to meet, play and relax in a safe and secure location. Generous amounts of communal open space is provided to all residential blocks.

Block A has a large area of communal open space at first floor level above the artist studios.
Blocks B and C share a large area of communal open space at podium level above the commercial units and under croft car park. Additional areas of communal open space are provided as roof terraces at fifth floor level in both blocks. The communal open space areas provided within Block B are also accessible to Block A residents.

Providing all communal open space above ground floor level increases security and safety for residents, in particular children. There is a safe play space integrated into the podium level open space. All of these spaces are overlooked by the surrounding apartments and their balconies. The amount of communal open space provided well over the minimum required under the Design Standards for New Apartments (2022).

These areas have been carefully designed with areas for play, gathering and with a high level of planting. Additional screening and buffer areas are proposed to ensure adequate privacy and amenity for all units located on these levels. See Landscape Planning Report for full details of planting and layouts.

| Block | Level | Name | Area |  |
| :---: | :---: | :---: | :---: | :---: |
| Block A | Level 01 | Residential Communal Podium | 223.0 sqm |  |
| Block B + C | Level 01 | Residential Communal Podium | 785.3 sqm |  |
| Total |  | Residential Communal Podium | 1,008.3 sqm |  |
| Block B | Level 05 | Residential Communal Roof Terrace | 150.7 sqm |  |
| Block C | Level 05 | Residential Communal Roof Terrace | 207.5 sqm |  |
| Block C | Level 05 | Residential Communal Roof Terrace | 113.9 sqm | Legend |
| Total |  | Residential Communal Roof Terrace | 472.1 sqm |  |
| Total Reside (Including roo | Communa races within | en Space in Phase 2 Development Area) | 1,480.4 sqm | Podium Communal Open Space within Development |
| Scenario A - | idential Co | nal Open Space Accessible within Phase 1 | 2,074 sqm | Roof Terrace Communal Open Space within Development |
| OTHER USE | MMMUNAL | N SPACE SUMMARY |  | Outdoor Area - Artist |
| Block A | Level 00 | Artist's Communal Outdoor Area | 173 sqm | Studio |
| Block B | Level 00 | Crèche Outdoor Space | 43 sqm | Outdoor Area - Crèche |

## Legend


 Site Layout and Public Realm
Safety and Security

| It is an Objective of Dublin city Council: |
| :--- | :--- |
| Community Safety Strategy |
| QHSNO15 |
| That all housing developments over 100 units shall include a community <br> safety strategy for implementation. |

## Community Safety Strategy

The proposed development design creates a sense of personal safety and design through appropriate passive surveillance and high quality public realm.

Passive surveillance to Richmond Road and the public open spaces around the scheme is maximised eliminating blank façades and leftover pockets of land with no clear purposes. All public open spaces are activated by placing entrances off these public spaces, ensuring foot traffic throughout the day.

Balconies and main windows in living spaces are orientated towards the public streets and public open spaces as much as possible. This also allows residents to watch over the entrances of the buildings which reduces the risk of anti-social behaviour.

The scheme is human focused and has one access point for vehicular traffic. The street frontage is made up of active uses to encourage passive surveillance and creates safe public spaces. All public spaces are well lit.

The materials chosen for this development, especially a ground level are brick and stone, both robust materials.

The communal open spaces are all located at podium level and upper roof terraces giving residents an extra layer of security. The communal open spaces are overlooked by apartments, but also create sufficien privacy for apartments through planting buffering on podium level.

The communal play area is located in the middle of the podium terrace between Block $B$ and $C$. The play area is overlooked by both blocks and gives a sense of safety through passive surveillance.

## Legend

Public Realm Overlooked through
Passive SurveillanceCommunal Open Space on
Podium Overlooked through
Passive Surveillance


## Car Parking

In line with the principles of sustainability and the 15-minute city, car parking is minimised. A total of 25 no . car parking spaces are proposed. Of these spaces, 2 no. are accessible ( $8 \%$ of the total). The car park is located to the rear of the site and is covered, but not enclosed. A single vehicular access point minimises potential conflict with pedestrians and cyclists and reduces the proposal's impact on Richmond Road. 7no motorbike spaces are proposed.

There are two loading bays accommodated in the scheme, one in the undercroft parking area, and one off Richmond Road between Block A and $B$.

See Traffic and Transport Report and Outline Servicing and Operations Management Plan Report for more detail

## Bicycle Parking

Bicycle parking is provided in accordance with the requirements of the Dublin City Development Plan 2022-2028. A total of 424 no. bicycle parking spaces (including cargo bike spaces) are proposed as follows:

The long stay storage is separated into separate uses, with secure residential bicycle storage areas provided in Block A and Block B/C. The larger storage area in Block B/C includes provision for electric scooters, larger cargo bicycles and a pump and repair station. Longer term parking for commercial staff is provide separately. A third area of long term covered bicycle parking is proposed to serve the artist studios.

Short term bicycle parking to serve all uses is provide in the form of Sheffield stands and is distributed throughout the public open space of the site with locations convenient to all block entrances.

See DBFL Mobility Management Plan for more detail.

## Legend

Secure Enclosed Long Term Residential Bicycle ParkingBicycle Parking Long TermSheltered Long Term Artist'sShort Term Bicycle Parking

Car Park


## 06 Adaptability, Privacy and Ame Residential Design <br> Residential Private Open Space and Amenity

All apartments are provided with private open space. For most units this takes the form of balconies. Some units are provided with generous private terraces at podium level. These terraces are appropriately screened from the communal open space to maintain privacy.

Balconies are positioned to reduce overshadowing of apartments on the floor below and stagger or turn corners to ensure adequate daylight penetration into all residential units.

The balconies are sized to meet the minimum standards outlined in the Design Standards for New Apartments and cantilever from the outside of the building with full height glazed doors providing access from living areas. Level access is provided to all private open space


First Floor Plan showing Boundary Treatment

Private Amenity Space Overlooking the Communal Podium


All apartments are provided with private outdoor space

Adaptability, Privacy and Amenity
Residential Design

DCC Opinion Comment 2vii
The applicant is requested to detail how the privacy of units and attendant private open space across the scheme and in relation to adjoining potential redevelopment sites can be maximised. Sample treatments/sections should be provided. The applicant is requested to consider how apartment units and their attendant private open space can be best screened where they are in proximity to external circulation areas, entrance zones and open space

## Boundary Screening Private Terrace to Communal Podium

There is a minimum of 1.5 m of tall buffer planting which screens the private terrace and apartment, while maintaining overlooking and passive surveillance onto the communal podium outdoor space.

## Boundary Screening In Relation to Adjoining Potential Redevelopment Sites

The scheme has been designed with maximising the potential of adjoining potential redevelopment sites.

Phase 1 is currently awaiting planning approval. This scheme is designed with the assumption that phase 1 will be built, therefore the appropriate setbacks have been achieved to ensure appropriate distances between private balconies (a minimum of 22 m ). At podium level, the private terraces which adjoin the communal open space of the proposal is further screened with planting.

The site to the southeast of the subject site along Richmond Road is currently derelict. The proposed development is set back 12 m from the centreline of the road into the Distillery Lofts. This means that any proposed development on this adjacent site could use the same strategy to achieve a 22 m set back between two developments.

Extract from RIC0001-MA-XX XX-DR-L-201, Section Drawings -andscape Drawing Set, Mitchell + Associates, highlighting the buffer planting screening providing privacy for private open space.

Plan of 1 bedroom apartment on first floor podium level with rivate outdoor space facing onto the communal open space


C




A Section exploring the proposed relationship between the proposed site.

Adaptability, Privacy and Amenity
Daylight Sunlight

## Overlooking, Overbearing, Overshadowing

At LRD Opinion Meeting with DCC the site massing was distributed across the site differently:

## Block A = 5-storeys

Block $B=10$-storeys
Block $\mathrm{C}=8$-storeys
After daylight / sunlight report at pre-planning stage the design was re-assessed and Block $C$ was reduced in height, while Block $C$ was increased to minimise overshadowing and overbearing on the existing and emerging context.

In the Daylight Sunlight Report by 3D Design Bureau prepared for the original scheme submitted to DCC at the LRD Opinion Meeting, the proposed development was having minor adverse and moderate adverse effects on sunlight levels of some residential houses on across the Road, on Richmond Road. The massing of the scheme was re-assessed at this point in the development. To remove these adverse impacts on the existing context of the area, Block A was reduced by 1 -storey, and this storey was added onto Block C.

Please see Daylight Sunlight Assessment Report prepared by 3D Design Bureau for further details regarding overshadowing, and overbearing on the existing and emerging context.


Site massing at DCC LRD Opinion Meeting Stage - Block A $=5$-storeys Block $B=10$-Storeys and Block $C=8$-Storeys


Current Site Massing, one storey removed from Block A, and one storey added to Block C - Block A = 4-Storeys, Block B = 10-storeys and Block C = 9 =9-Storeys

- Existing context for which adverse impacts have


Extract from DCC LRD Opinion Meeting Daylight Sunlight Report analysing the impact of the proposed development on the Sunlight of the Existing Context.


Baseline Figure A.27: False colour plans. White area indicates the area capable of receiving 2 hours of sunlight on March 21 st.

Extract from Current Proposal's Daylight Sunlight Report analysing the impact of the proposed development on the Sunlight of the Existing Context.
$\underline{06}$

| It is the | of Dublin City Council: |
| :---: | :---: |
| QHSN55 | Childcare Facilities <br> To facilitate the provision of appropriately designed and sized fit-for-purpose affordable childcare facilities as an integral part of proposals for new residential and mixed-use developments, subject to an analysis of demographic and geographic need undertaken by the applicant in consultation with the Dublin City Council Childcare Committee, in order to ensure that their provision and location is in keeping with areas of population and employment growth. |

Crèche - Childcare Facility
DCC Development Plan 2022-2028 outlines in 15.8.4 Childcare that,
Dublin City Council seeks to ensure that an adequate number of childcare facilities are provided to serve the city's growing population. In order to meet this objective, one childcare facility (equivalent to a minimum of 20 child spaces) for every 75 dwellings units, shall be provided in all new mixed use and residential schemes.

This development has incorporated a crèche of 156 sqm GFA which is an appropriate size for a development of the size it is. The crèche is located on the ground floor and accessed from the central plaza. A designated outdoor space specifically for the crèche is located outside.



## $\underline{06}$ <br> Adaptability, Privacy and Amenity <br> Mixed-Use Amenities

Retail and Gym Amenities
There are two commercial units proposed as part of the scheme, additionally to the creche:

- Gym $=261$ sqm GFA
- Retail $=335$ sqm GFA

These two uses will provide mixed-use amenity on Richmond Road, and be a high quality commercial addition to the neighbourhood. The 15-Minute city principles are further integrated into these facilities by encouraging people to use active transport opposed to cars. There are many conveniently located bicycle stands.

These busy commercial uses which are active throughout the day activate the streetscape due to their direct access onto Richmond Road.


## 06 <br> Adaptability, Privacy and Amenity <br> Mixed-Use Amenities

## Artist Studios - Community Use

| Artist Studio GFA | 749 | sqm |
| :--- | :--- | :--- |
| Exhibition Space GIA | 174 | sqm |
| Studio Units GIA | 291 | sqm |
| No. Studio Units | 17 | no. |

## SDRAs and large Scale Developments

All new regeneration areas (SDRAs) and large scale developments above 10,000 sq. m. in total area* must provide at a minimum for $5 \%$ community, arts and culture spaces including exhibition, performance, and artist
workspaces predominantly internal floorspace as part of their development at the design stage. The option of relocating a portion (no more than half of this figure) of this to a site immediately adjacent to the area can be
accommodated where it is demonstrated to be the better outcome and that it can be a contribution to an existing project in the immediate vicinity. The balance of space between cultural and community use can be decided at application stage, from an evidence base/audit of the area. Such spaces must be designed to meet the identified need.
*Such developments shall incorporate both cultural/arts and community uses individually or in combination unless there is an evidence base to justify the $5 \%$ going to one sector.

## Exhibition Space

The proposed artist studios are provided with a dedicated and flexible exhibition space which can be used to engage with the public.

The exhibition space fronts onto Richmond Road and the Public Open Space and is provided with large windows with display windows which can be used for displaying the work of the resident artists, increasing their exposure and activating the street.

## Studio Light and Privacy

The individual studios are fitted with opaque glazing up to a height of 2.2 m with clear glazing and operable sections above. This allowed the studios to be filled with natural light while maintaining privacy and security for the artists. Additionally, the studios can be naturally ventilated.

## Studio Variety and Amenity

The majority of the studios are for single artists; however, a number are larger to allow for larger or collaborative work.

The studios are provided with high quality amenity areas including spacious common areas, dedicated wash-up areas, shower and changing facilities and sheltered bicycle storage.


Typical studio facade treatment. The low wall create a display window for the artists which maintaining privacy and passive surveillance

Front Elevation of Block A with Artist Studios


Access and Passive Surveillance
The artist studios provide active frontage and passive surveillance to Richmond Road. The exhibition space is located the prominent corner of Block which activates the Artist's Plaza

The artist studios themselves have glazing towards the public realm with display windows set behind them to provide a sense of privacy for the artists themselves.

On the eastern corner of Block A, along Richmond Road, the large corner studio could be used as a workshop space for the artists, and this use activates this corner of the street, as well as the central plaza, and surrounding public realm.

Access to the Artist Studios is mainly from the western corner of Block A at the exhibition space. There are further fire escape exits located on Richmond Road and onto the Central Plaza. The Artist Refuge Store has access directly onto the Central Plaza for ease of removal.

## Private Open Space

Private open space is provided to the artist studio at the rear of Block A, beside the secure sheltered bicycle parking provided for the artists. This space is secured with fencing.

## Legend



Access points for
Artists Studios
Outdoor Space Assigned to Artist Studio ResidentsFrontage onto Public Realm



View from Richmond Road

Detail Design - Facade

## Facade Design

DCC Opinion Comment 6(2)
Block Design and Materials
While the external finishes and materials are acceptable it is considered that a greater variety in textural finish is required, particularly on the Richmond Road elevation such as set in and step out of brick courses, recessed/projecting window reveals or other means of enlivening the facades and providing a strong vertical emphasis.

The elevations along Richmond Road have been carefully considered with regard to creating a beautiful and vibrant environment, along with the scale of the facades.

The verticality of the design is highlighted through the use of double modules within the facade. Brick and stone as are tactile textural materials which ground us.

To enliven the facade further stone detail panels are introduced where windows cannot be placed. These details come in the form of zig zag panels, and the inset whiskey bottle pattern referencing the industrial history of the site.


South East Elevation Along Richmond Road



Front Elevation Along Richmond Road


Front Elevation Along Richmond Road at LRD Meeting Stage


Front Elevation Along Richmond Road (CGI)

$\underline{07}$ Detail Design - Facade Facade Design location per floor giving the facade a playful movement aspect.


View from Tolka River (pre-planning)


$\underline{07}$


## Block A

Refer to Architectural Drawing for full details
Gross Floor Area 2,249 sqm
Storeys
4

Block A is a 4-storey building with artist studios at ground floor level and three storeys of apartments above with communal podium garden at first floor level. It is the lowest and smallest of the three proposed blocks.

The artist studios are accessed from the north west corner through a large exhibition space which addresses a proposed public open space and Richmond Road. The individual studios wrap the edge of the ground floor, ensuring excellent levels of natural light and natural ventilation into these spaces. Common and services spaces such as WCs, washup areas and kitchens are concentrated in the centre of the plan. The artist studios have bin store, and fire exit access onto the central plaza.

The apartments are served by a single core and the main entrance is located on Richmond Road. There are 16no. apartments in this block, the majority of which are dual aspect. Common areas are provided with natural light at the end of corridors and in the stair core.

The future residents have a secure bicycle storage area located in the ground floor of Block A, accessed off the Central Plaza. The residents of Block A will have access to the communal open spaces within Block B.

The massing of the block is broken down using multiple set backs at several levels. The ground floor is clad in a light buff stone with the individual artist studios framed and articulated. The primary entrances are marked using canopies, which provide shelter from the rain and help orientate residents and visitors


Detail Design - Facade

## Block A

## Block A Material Palette



Walls


Light Buff Feature Stone
(4)

Light Buff Brick Soldier Course guff Stone Panel


Richmond Road Elevation of Block A

## Block B

Refer to Architectural Drawing for full details
Gross Floor Area $\quad 6,109$ sqm
Storeys
10
Block $B$ is a 10 -story building located in the centre of the site and occupies an important corner on Richmond Road and the proposed central plaza public open space. The ground floor contains commercial units facing Richmond Road and the central plaza. There are multiple entrances into the commercial spaces allowing flexibility for future occupants. The main residential entrance to Block B is accessed from the central plaza. This entrance takes the form of a double height lobby with a feature staircase providing direct access to the first floor common terrace shared by Block B and Block C. The main entrance is further emphasised by a large canopy which provides shelter and visually orientates people coming into the building

Services areas for the residential and retail elements of the building are located to the rear and accessed via the shared car park. Block $B$ houses the central bicycle store for all apartments in the proposed development.

Block B contains 61 no. apartments which are served by a single centrally located core. Common areas are provided with natural light at the end of corridors and in the stair core. Communal open space is provided on the podium between Block B and C and communal roof terraces are provided at fifth floor level.

The block is broken down into two primary forms, a smaller 5 story element facing Richmond Road and a taller 10 storey element to the rear of the site. The block is linked by a single storey podium to Block C . The lower element is clad in a dark buff stone on the ground floor and the retail windows take the form of arches, inspired by the nearby Distillery Lofts. The upper floors are clad in grey brick with stone and metal highlights and features.

The taller element is clad in the same dark buff stone as the retail podium with strong articulation and depth. Balconies and other metal features are in a dark gold and areas of feature stone provide further visual interest. The multiple forms, materials and set backs reduce the bulk of the block, bringing it down to a human scale towards Richmond Road and preventing it from overbearing the existing two and three storey houses to the north.


Block B Material Palette


## Block C

Refer to Architectural Drawing for full details

| Gross Floor Area | 6,232 sqm |
| :--- | :--- |
| Storeys | 9 |

Block $C$ is an 9-storey, L-shaped, building located at the southern end of the site. It is linked to Block B by a 1 -storey podium. The ground floor contains retail space facing onto Richmond Road with multiple entrances. Vehicular access to the car park and for deliveries is located to the south of Block C. The main residential entrance is located in the centre of the block and is accessed from Richmond Road. As with Blocks A and B this entrance has a canopy to mark its position and provide shelter from the elements.

Block $C$ contains 56 no. apartments which are served by a primary centra core, and an additional escape core. Common areas are provided with natural light at the end of corridors. Communal open space is provided on the podium between Block B and C and communal roof terraces are provided at fifth floor level. The car park access route is covered with a podium which reduces visual and noise issues for the apartments above and acts as extra-large private terraces for the units at this level

The block has a varied material palette which compliments the other blocks. The ground floor is primarily a dark buff stone and matches Block B. Gates and screening to the car park are a feature red metal. The residential element above the ground floor retail is broken down into separate volumes and the building steps down towards the site edges.

Three different bricks are used with accompanying metalwork and feature stone panels. The central, tallest part of the block is red brick with dark red metalwork and a pick stone. A dark buff brick volume with dark gold metalwork and dark buff stone steps forward from this following the line of Richmond Road, ensuring a strong street edge. Finally, the two lower volumes are clad in a light buff brick with light gold metalwork and light stone panels. Communal terraces are provided for the block on top of these lower elements.


Block C Material Palette
Walls


Detailing



Red Metalwork








## 07 Detail Design - Residential Design Standards <br> Unit Layouts

Compliance with Internal Design Standards Refer to Architectural Drawing for full details
The residential units are designed to be adaptable and flexible to meet the requirements of modern living. All units are sprinklered which allow for open plan layouts. A mix of unit sizes and layouts are designed to meet a range of household types. As well as typical 1 Bed 2 Person and 2 Bed 4 Person units, $7 \%$ of the proposed units are 2 Bed 3 Person units

All apartments are fully compliant with the minimum standards set out in the 'Design Standards for New Apartments'. See Appendix B for full detailed Housing Quality Assessment.
$26 \%$ of all the units are compliant with the Universal Design Guidelines for Homes in Ireland. More are adaptable to be Universal Design Compliant allowing for adaptation in the future.

## Floor to Ceiling Heights

All units exceed the 2400 mm minimum required under the 'Design Standards for New Apartments'. Typical floors achieve a 2650 mm high internal floor to ceiling. There are no residential units located at ground floor level.

At ground floor, the commercial floor to floor is 4 m , this will ensure adequate floor to ceiling height for mixed uses.

## Dual Aspect Residential Units

The buildings have been designed to maximise and optimise dual aspect orientation. $70 \%$ of the proposed units are dual aspect.

## Oversized Apartments

All apartments meet the minimum areas specified in the Design Standards for New Apartments.
$59 \%$ of the apartments are more than $10 \%$ of the minimum required area, providing additional living space and greater flexibility and amenity to future residents. Of this $59 \%$ oversized units, $51 \%$ are designed according to the Universal Design Guidelines for Homes in Ireland (26\% total).

## Privacy

No apartment is located at ground floor level, ensuring privacy and security for residents. Additional privacy is provided by avoiding directly facing primary windows.

## Residential Storage

All apartments are provided with the minimum storage requirement within the units

## Acoustic Insulation

Internal walls are designed to meet the requirements of TGD Part E, as such there will be no noise transference between apartments and between rooms within apartments

|  | 65 | $49 \%$ |
| :--- | ---: | ---: |
| Total 1B2P Units | 9 | $7 \%$ |
| Total 2B3P Units | 59 | $44 \%$ |
| Total 2B4P Units | 133 | $\mathbf{1 0 0 \%}$ |
| Total Units | 78 | $59 \%$ |
| No. of Oversized Units | 93 | $70 \%$ |
| No. of Dual Aspect Units | 34 | $26 \%$ |


niv. ..... Typical Apartment Floor to Ceiling Heights


LegendDual Aspect Apartment 1 Bed 2 Person Unit

- $10 \%$ Oversized Apartmen2 Bed 3 Person Unit

Private Residential Balcony 2 bed 4 Person Unit

Detail Design - Residential Design Standards
Unit Layouts


Typical 1 Bed 2 Person Single Aspect Unit


Typical 1 Bed 2 Person Dual Aspect Unit


Typical 2 Bed 3 Person Unit


Typical 2 Bed 4 Person Dual Aspect Unit

_arger 2 Bed 4 Person Dual Aspect Unit


Appendices
Appendix A - Area Schedules


| GROSS FLOOR AREA (GFA) SCHEDULE |  |  |  |
| :---: | :---: | :---: | :---: |
| Block | Level | Name | GFA ${ }^{\text {Use }}$ |
|  | Level00-Ground Foor | AARTITT stuolos | $1 \mathrm{~m}^{\text {a coommuntr }}$ CSE |
|  | Levelo 0 - Giound Fior | BIKE ST | $26.7 \mathrm{~m}^{2}$ |
|  | Leveloo |  | ${ }_{4}^{4}$. |
|  | Level 0 - - iround fior | ${ }_{\text {Residental Lobir }}^{\text {Pat }}$ |  |
|  |  |  |  |
| BLOCK A <br> BLOCK A <br> BLOCK A | Level 11 - Fist flor | circulaton | IDEN |
|  | Len | ${ }_{\text {ReSIOENTAL }}$ |  |
|  |  |  |  |
| BLOCK A | Level 2 2-Seorond For | Circulation | SIDENTAL |
| Blocka | Level 2 2-s |  |  |
|  | Leever | Resionial |  |
|  | Level 03 - Third Foor | CIRCOUATION | $53.6 \mathrm{~m}^{2}$ RESIDENTAL |
|  | Level ${ }^{\text {Les - Thid flor }}$ | ${ }_{\text {CoRE }}^{\text {ReSIDENTAL }}$ | 271 |
|  |  |  |  |
|  |  |  | ${ }^{3.2486 .6 \mathrm{~m}^{2}}$ |
|  | Level00 - Giound fior | IKE STOR | $229.9 \mathrm{~m}^{2}$ RESSEENTAL |
|  | Level $00-\mathrm{Granoud}$ | Boh circulation | $48.6 \mathrm{~m}^{\text {m Commercial }}$ |
|  |  | Coreh |  |
|  |  | sym | 261.5 m C Commercail |
|  | 00- Grund Floor |  |  |
|  | Level00- Griound fior | RESIDENTALLOBBY | 62.8 mPRESIDENTAL |
| $\begin{array}{\|l} \hline \text { BLOCK B } \\ \hline \text { BLOCK B } \\ \hline \end{array}$ |  | Incuation |  |
|  | Level1- - Fistiols |  |  |
|  | Level 01 - Fist F Foor | RESIDENTAL | $462.0 \mathrm{~m}^{4}$ R RSSEENTAL |
| $\begin{array}{\|l\|} \hline \text { BLOCK B } \\ \hline \text { BLOCK B } \\ \hline \end{array}$ | Isithor | Circulation | ${ }^{638.7 \mathrm{~m}^{2}}$ |
|  |  |  |  |
|  | Levelo2-Sesoond Flor | RESIDENTAL |  |
|  | seornd | Toution | ${ }^{664.1 \mathrm{~m}^{\text {m }}}$ |
| BLOCK B L <br> BLOCK B L | Leve | coin | S.6m. |
|  | Level 3 3 - Third Fior | RESIDENTIAL | $5494 \mathrm{~m}^{\text {m R RESIDENTIAL }}$ |
|  |  |  |  |
| $\begin{array}{\|l} \hline \text { BLOCK B } \\ \hline \text { BLOCK B } \\ \hline \end{array}$ | Levelot- Fournfoor | cution |  |
|  | Level 144 - Fount foor | RESIDENTAL |  |
| $\frac{\text { Block }}{\text { Level } 04}$ | fouth |  | $674.0 \mathrm{~m}^{2}$ |
| Block | Leve $05 .-\mathrm{FHfh}$ For | Circulation | 65.9 meresionilal |
|  | Level 5 S - Fith foor | ResIo |  |
|  |  |  |  |
| BLOCK B <br> BLOCK B <br> BLOCK B | Level 06 - Sxxh floor | Circulation |  |
|  |  | ${ }_{\text {Corse }}^{\text {ReSDENTIAL }}$ |  |
|  | Kxt Foor |  | $\frac{40.3}{5102 \mathrm{~m}^{2}}$ |
|  | Leveiol - Seventh Fior | Circulation | 65.9 m R RESIIENTITL |
| BLOCK B <br> BLOCK B | Leval 7 Sevent foor | Core |  |
|  |  |  |  |
|  | evel08-Eghth Fior | CIIRCUATION | 65.9 m P RESIEENTAL |
| Block | Level 08 - Eight Foor | CORE | $41.0 \mathrm{~m}^{2}$ |
|  | Ioght Foor | ReSSDENTAL |  |
| $\begin{array}{\|l\|l\|} \hline \text { BLOCK B } \\ \hline \text { BLOCK B } \\ \hline \end{array}$ | Sterele | circulation | ${ }_{6} 6.5 \mathrm{~m}^{2}$ R ESSIENTIAL |
|  | Level09- Ninth Foor |  | 41.0 m |
|  |  |  | 403.3 m R RESIIENTIAL |
|  |  |  | ${ }_{\text {che }}^{510.2 \mathrm{~m}^{2}}$ |
| BLOCKC L Leveloo- Ground flor |  | IOHCRCL | $25.2 \mathrm{~m}^{2}$ COMMM ECCILIL |
|  |  |  |  |
| ${ }^{\text {Biock }}$ Bock Blockc BLOCK C | L |  | 79.9 m Resiliental |
|  | Level 0 O-Gound F |  |  |
|  | Level 00 - Ground Flo | ANT | ${ }^{231.22^{2} \text { Residental }}$ |
|  | Leveloo- Ground Fao | den | 427 mm |
|  | Level 0 - Goround fioor |  | 334.5m² CoMMERCAL |
|  | Level01 - First Foor | ICriculation | $10700^{2}$ R RESIDENTAL |
| BLOCK C BLOCK | Level01- - Fist flior | CORE | $80.1 \mathrm{~m}^{4}$ RESSDEN |
|  | evel 1 - First Fioor | RESIEENTAL | $652 . \mathrm{m}$ RESIDENTAL |
| Level 01- First flor |  | Circulation | Esidental |
|  | Level 12 - Second Flor |  | 80.1 $\mathrm{m}^{2}$ R RESIDE |
|  | Level 02 - Seoond Floor | RESIO | RESIDEE |
|  |  |  | ${ }^{839.1 / \mathrm{m}^{2}}$ esment |
|  | Leve 03. -hirif foor | Circulation | RESIDNTAL |
|  | Lex | Resioental |  |
|  |  |  |  |
|  | Levelo4- Fount Foor | CIRCULATION | $107.0 \mathrm{~m}^{2}$ R RESIENTIAL |
|  | Level 0 - Fourn F Foor | ${ }_{\text {Corst }}^{\text {RSSONTIAL }}$ |  |
|  |  |  |  |
| $\begin{array}{\|l\|} \hline \text { BLOCK C } \\ \hline \text { BLOCK C } \\ \hline \end{array}$ | Level 105 - Fith Fioor | CIfrculation | 68.1 m R ESILENTIAL |
|  | Levol 05 - Fith F | RESENTM |  |
| Blockc | S5-Frin foor | ReSIDENTAL | IAL |
| Beockc | Level 06 - Skxt Floor | CIIRCUATION | $68.1 \mathrm{~m}^{2}$ RESIDENTAL |
| BLOCKC <br> BLOCKC | evel 06 - Sxath Foor |  | ${ }^{54.9 \text { m }{ }^{\text {R RESII }} \text { d }}$ |
|  | 106-Sxkh Foor | RESIDENTAL |  |
| ${ }_{\text {Level }}^{\text {Leve }}$ Sxitil | 㑑 | (0) | Sesm |
|  |  |  |  |
|  | Level 77 - Seventh Fioor | RESIDENTAL | ${ }^{372.1 m^{2} \text { R } \text { ESSIDENTAL }}$ |
| Beock |  | Ircuatov | Sen |
| BLOCK C |  | , |  |
|  | Level 18 - EGght foor | RESIDENTIAL | ESSDENTAL |
| $\begin{gathered} \text { Levelo } 08 \\ \text { Blocco } \\ \hline \end{gathered}$ |  |  |  |
|  |  |  |  |


| TOTAL GROSS FLOOR AREA (GFA) SCHEDULE |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Block | Level | GFA |  |  |  |  |  |  |



COMMUNAL OPEN SPACE




 total communal open space | $321.4 \mathrm{~m}^{2}$ |
| :---: |
| $1480.4 \mathrm{~m}^{2}$ |

$\qquad$ TOTAL AREA SCHEDULE | TOTAL GROSS FLOOR AREA (GFA) | $14,589.9 \mathrm{~m}^{2}$ |
| :--- | :--- | | TOTAL GROSS FLOOR SPACE | $13,715.3 \mathrm{~m}^{2}$ |
| :--- | :--- | | TOTAL APARTMENT FLOOR AREA | $8,628.4 \mathrm{~m}^{2}$ |
| :--- | :--- | :--- | TOOAL RESIDENTAL UNITS



TOTAL UNIT MIX SCHEDULE

|  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Unit Type | Count | Perecentage | Aporataneat |





| Net Internal Areas |  |
| :---: | :---: |
| Use | NA |
| Creeche | 148.8 m2 |
| Com | ${ }^{252.7}{ }^{232} \times 2$ |
| Realal |  |
| Commercial Total | ${ }^{221.7}{ }^{\text {m }}$ m |
| Residential | $8.6828 .4{ }^{\text {m2 }}$ |
| Total (Commercial + Residential) | 9,350.1 m2 |
| 5\% oftoal | 487.5 m 2 |
| Artist Studio (NA) | ${ }^{670.1}$ m2 |
| Artist Studio (GFA) | $749.1{ }^{\text {m }}$ |

$\underline{09}$

| liock Name | LEVEL | UNTT | unt | UNTT |  | UNT AREA REQuRED | $\underset{\substack{\text { Bedroom } \\ \text { AREA }}}{ }$ | $\begin{aligned} & \text { BEDROOM } \\ & 1 \text { AREA } \\ & \text { REQUIRED } \end{aligned}$ | BEDROOM |  |  | $\begin{array}{\|c\|} \hline \text { AGG. BED } \\ \text { AREA } \\ \text { REQUIRED } \\ \hline \end{array}$ |  | $\begin{gathered} \text { AGGG } \\ \text { RECURTV } \end{gathered}$ | ${ }_{\text {a }}^{\text {SToRAGE }}$ | Stiorag | El Pivatio | $\begin{gathered} \text { PRIVATE } \\ \text { AMENITY } \\ \text { REQUIRED } \end{gathered}$ | （ebpoom | $1 \begin{gathered} \text { BEDROOM } \\ 1 \text { WIDTH } \\ \text { REQUIRED } \end{gathered}$ | BEDROOM | $\begin{aligned} & 2 \text { WIDTH } \\ & \text { REQUIRED } \end{aligned}$ | $\begin{aligned} & \text { Lunce } \\ & \text { Woit } \end{aligned}$ | $\begin{gathered} \text { LIVING } \\ \text { WIDTH } \\ \text { REQUIRED } \\ \hline \end{gathered}$ |  | AsPECT | ${ }_{\text {ASPECT }}^{\text {Duat }}$ | Univesal |  | ${ }_{\text {PaRtV }}^{\substack{\text { UNT }}}$ | SEROOOMS |  | $\begin{aligned} & \text { No. OOF } \\ & \text { SPCAGE } \\ & \text { SPACS } \end{aligned}$ | $\begin{aligned} & \text { Noior } \\ & \text { Noick } \\ & \text { Sractect } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BlOCKA | Level01－Fist FFor | 1264 | ${ }^{284 P}$ ． 05 | ${ }^{\text {A1．01 }}$ | ${ }^{77.8 .8 \mathrm{~m}^{2}}$ | $73.0 \mathrm{~m}^{2}$ | ${ }^{13,1 \mathrm{~m}^{2}}$ | $113.0 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ |  |  | 23 | $30.0 \mathrm{~m}^{2}$ | ${ }^{6.7 \mathrm{~m}}$ | ${ }^{6.0 \mathrm{~m}^{2}}$ | $27.8 \mathrm{~m}^{2}$ | $7.0 \mathrm{~m}^{2}$ | 12880 | 200 | 3330 | 2800 | 4165 | 33600 | 43350 | NESE |  | No |  |  |  |  |  |  |
| Blocka | ${ }^{\text {Level } 01-\text {－fist }}$ Floor | ${ }^{1822}$ | ${ }^{1322}{ }^{1234.02}$ | ${ }^{\text {A1．02 }}$ | $\frac{50.5 \mathrm{~m}^{2}}{785 \mathrm{~m}^{2}}$ | ${ }^{450.0{ }^{2}}$ | ${ }^{\frac{13.30 .02}{}} 1$ | ${ }^{11.4 \mathrm{~m}^{2}} 1$ | ${ }^{123 \mathrm{~m}^{2}}$ | $114 \mathrm{~m}^{2}$ | ${ }^{13.0 \mathrm{~m}^{2}}$ | ${ }^{11.4 \mathrm{~m}^{2}}$ | ${ }_{3129 \mathrm{~m}^{2}}^{2}$ | 230．02 ${ }^{2}$ | ${ }^{3.3 \mathrm{~m}^{2}}$ | ${ }^{3.0 m^{2}}$ | ${ }^{14.8 \mathrm{~m}^{2}}$ | ${ }^{5.0 \mathrm{~m}^{2}}$ |  |  | 2800 | 2800 | ${ }^{38525}$ | ${ }^{3300}$ |  | SESW |  | No |  |  |  |  |  |  |
| Blocka | ${ }^{\text {Level } 01-1-\text {－rist froor }}$ | $1182{ }^{\circ}$ | 1822 Pob U0 | A1．04 | $5.0 .8 \mathrm{~m}^{2}$ | $45.0 \mathrm{~m}^{2}$ |  | ${ }^{\frac{13.0 .0 ~}{\text { m }}}$ |  |  | ${ }^{26.12 . \mathrm{m}^{2}}$ | ${ }^{13.3 .0 \mathrm{~m}^{2}}$ | $24.3 \mathrm{~m}^{2}$ | ${ }^{23.0 \mathrm{~m}^{2}}$ | $3.0 \mathrm{~m}^{2}$ | ${ }^{3.0 \mathrm{~m}^{2}}$ | $46.2 \mathrm{~m}^{2}$ | $5.0 \mathrm{~m}^{2}$ | 2850 | 2800 |  |  | ${ }_{325} 305$ | 3300 | 2300 mm | SENE | es | Yes | Ves | yes |  | ${ }^{2}$ |  | ${ }_{0}^{0.5}$ |
| Blocka | Level－－ List Foor | ${ }_{1182 P}^{182}$ | ${ }^{\substack{1825 \\ 182 P \\ \hline 105}}$ | ${ }_{\text {A1．06 }}^{\text {A1．05 }}$ | ${ }_{\substack{50.5 \mathrm{~m}^{2} \\ 48.5 \mathrm{~m}^{2}}}^{\text {a }}$ | ${ }_{4}^{45.0 \mathrm{~m}^{2}} 4$ | ${ }_{\text {che }}^{13.0 \mathrm{~m}^{2}} 1$ | ${ }^{11.4 \mathrm{~m}^{2}} 1$ |  |  | ${ }_{\text {cel }}^{\substack{13.0 \mathrm{~m}^{2} \\ 11.4 \mathrm{~m}^{2}}}$ | ${ }^{11.4 \mathrm{~m}^{2}}$ | ${ }_{24,}^{24 . \mathrm{m}^{2}}$ | ${ }_{23,0 \mathrm{~m}^{2}}$ | ${ }_{3}^{3.7 \mathrm{~m}^{2}}$ | $\frac{3.0 \mathrm{~m}^{2}}{3.0 \mathrm{~m}^{2}}$ | 9．1．${ }^{\text {a }}$ m ${ }^{2}$ | $\frac{5.0 \mathrm{~m}^{2}}{5.0 \mathrm{~m}^{2}}$ | ${ }^{2350}$ | ${ }_{2}^{2800}$ |  |  | ${ }_{3350}$ | ${ }^{33300} 3$ | ${ }^{1} 12150 \mathrm{~mm}$ | NENW | Yes | No | Yes | Yes |  |  |  | ${ }_{0}^{0.5}$ |
| Levelol－ | Forer 6 |  |  |  | ${ }^{365.6 \mathrm{~m}^{2}}$ | $326.0 \mathrm{~m}^{2}$ |  |  |  |  |  |  |  |  |  |  | ${ }^{122.5 \mathrm{~m}^{2}}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6 |  |  |
| Biocka | ${ }^{\text {Level }}$ Levo－Second foor | ${ }_{182 P}^{284 P}$ | ${ }_{1}^{2842}$ | ${ }_{\text {A2．}}^{120}$ |  | ${ }^{173.0 \mathrm{~m}^{2}}$ | ${ }^{13.19 \mathrm{~m}^{2}}$ | ${ }^{13.0 \mathrm{~m}^{2}}$ |  |  | $24.5{ }^{2}$ | ${ }^{\frac{2}{14.4 .4 m^{2}}}$ | ${ }^{323 m^{2}}$ | 30．0．${ }^{2}$ | 6，${ }^{\text {m }}$ | $6.0 \mathrm{~m}^{2}$ | ${ }_{5}^{12.2 .1 m^{2}}$ | $\frac{7.0 \mathrm{~m}^{2}}{}$ | ${ }^{2980}$ | 2800 |  | 2800 | ${ }^{4165}$ | 3600 | ${ }_{1}^{15550 \mathrm{~mm}}$ | NESE | ${ }_{\text {Yes }}^{\text {Yes }}$ | $\stackrel{\text { No }}{\text { No }}$ | ${ }_{\text {Ves }}^{\text {Nos }}$ | Yes |  | ， |  | ${ }_{0}^{0.5}$ |
| Biocka | Levele2－seocond forr | ${ }^{2848}$ |  | ${ }^{\text {A2，}} 1$ | $78.5 \mathrm{~m}^{2}$ | $73.0 \mathrm{~m}^{2}$ | $13.8 \mathrm{~m}^{2}$ | 13．0．02 | $12.3 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $26.1 \mathrm{~m}^{2}$ | $24.4 \mathrm{~m}^{2}$ | $31.9 \mathrm{~m}^{2}$ | 30．0．${ }^{2}$ | ${ }_{6}^{6.0 \mathrm{~m}^{2}}$ | $6.0 \mathrm{~m}^{2}$ | $7.2 \mathrm{~m}^{2}$ | $7.0 \mathrm{~m}^{2}$ | ${ }^{31350}$ | ${ }^{2300}$ | 2800 | 2800 | ${ }^{4650}$ | ${ }^{33000}$ | ${ }^{115550 \mathrm{~mm}}$ | SENE | No | No | No | Yes | ${ }_{2}$ | ${ }^{4}$ |  | ${ }_{0}^{0.5}$ |
| Blocka | ${ }^{\text {Levere } 22}$－seocond filior | ${ }_{182}^{182}$ | ${ }_{1822}^{182}$ | ${ }_{\text {A2 } 2.05}$ | ${ }_{\text {cosem }} 50.0 \mathrm{~m}^{2}$ | ${ }^{4.50 .0 \mathrm{~m}^{2}}$ |  | ${ }^{1.14 .4 \mathrm{~m}^{2}}$ |  |  |  | ${ }^{1.14 .4 \mathrm{~m}^{2}}$ | ${ }_{24.2 \mathrm{~m}^{2}}$ | ${ }^{23.0 \mathrm{~m}^{2}}$ | ${ }^{3.3 .3 \mathrm{~m}^{2}}$ | ${ }^{3.0 \mathrm{~m}^{2}}$ | ${ }_{5}^{5.1 \mathrm{~m}^{2}}$ | $5.0 \mathrm{~m}^{2}$ | 2250 | 2800 |  |  | ${ }_{3825}$ | 3300 | ${ }_{1}^{15550} \mathrm{~mm}$ | NENW | Yes | No | Yes | yes |  |  |  | ${ }_{0.5}^{0.5}$ |
| Blocka | Level 12 －Second Floor | 1828 | 1822 ．05 | A206 |  |  | $11.4 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ |  |  | $11.4 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $24.1 \mathrm{~m}^{2}$ | $23.0 \mathrm{~m}^{2}$ | $3.7 \mathrm{~m}^{2}$ | 3．0 $\mathrm{m}^{2}$ |  | $5.0 \mathrm{~m}^{2}$ | 3300 | 280 |  |  |  | 3300 | 11550 mm | NENW | Ves | No | No | ves |  |  |  |  |
|  | ${ }^{\text {Level } 03.3 \text {－Thid floor }}$ | ${ }^{284 P}$ |  | ${ }^{\text {A30 }} 1$ | ${ }^{365.6 \mathrm{~m}^{2}}$ | ${ }^{323.0 \mathrm{~m}^{2}}$ |  |  |  |  |  |  |  |  |  |  | ${ }^{\frac{3}{72} \cdot \mathrm{~m}^{2}}$ | $7.0 \mathrm{~m}^{2}$ | 12980 | 2200 | 13430 | 12000 | 4165 | 3600 | 1550 mm | NESE | Yes | No | No |  |  | ${ }^{16}$ |  | ${ }_{0.5}^{0.5}$ |
| Blocka | Level 13 －Thid flior | 284 P | ${ }^{284 P} 0^{03}$ | A3，${ }^{2}$ | $78.5 \mathrm{~m}^{2}$ | $73.0 \mathrm{~m}^{2}$ | $13.8 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $123 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | ${ }^{26.1 \mathrm{~m}^{2}}$ | $24.4 \mathrm{~m}^{2}$ | ${ }^{31.9 m^{2}}$ | 30．0．${ }^{2}$ | ${ }^{6.0 \mathrm{~m}^{2}}$ | $6.0 \mathrm{~m}^{2}$ | $7.2 \mathrm{~m}^{2}$ | $7.0{ }^{2}$ | ${ }^{31550}$ | 2380 | 2800 | 2800 | ${ }^{4650}$ | 3300 | ${ }^{1.5550 \mathrm{~mm}}$ |  | No | ${ }^{\text {No }}$ | No |  | 2 |  |  |  |
| Blocka |  | ${ }_{11822}^{182}$ | ${ }_{1}^{1822}$ | ${ }_{\text {A3，}}^{\text {Aad }}$ |  | ${ }^{45.0 .0 \mathrm{~m}^{2}} 4$ | ${ }^{\frac{132.2 .22^{2}}{11.4 m^{2}}}$ | ${ }^{\frac{13,0.02}{}} 1.14 \mathrm{~m}^{2}$ |  |  | ${ }^{\frac{13,2.2 m^{2}}{11.4 \mathrm{~m}^{2}}}$ | $\frac{13.0 \mathrm{~m}^{2}}{11.4 \mathrm{~m}^{2}}$ | ${ }_{24.1}^{\frac{1}{\text { m }}}$ | ${ }^{23.0 .0 \mathrm{~m}^{2}}$ | ${ }_{3.7}{ }^{\text {m }}$ | ${ }^{3} .0 \mathrm{~m}^{2}$ | $5_{5.1 \mathrm{~m}^{2}}$ | $5.0 \mathrm{~m}^{2}$ | 13300 | 2800 |  |  | ${ }_{3350}$ | ${ }_{3300}$ | 11550 mm | NENW | Yes | No | Nos | ¢es |  | 2 |  | 0.5 |
|  |  |  |  |  | ${ }_{968.8 \mathrm{~mm}}{ }^{25.6 \mathrm{~m}^{2}}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 22 | ${ }_{44}^{12}$ | ${ }_{22}$ | ${ }_{8}^{2}$ |


| Housing qualitr Assessment（HaA）－block c |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Block Name | Level | UnT <br> NAME | UNTT TPE | NUNEER |  | UnT AREA REOURED | BEDROOM |  | BEDROOM 2 AREA | $\begin{gathered} \text { Bedroom } \\ \text { REQuIRED } \end{gathered}$ |  | $\left.c_{A}^{A G G, \text { BED }} \begin{gathered} \text { AREA } \\ \text { REQURED } \end{gathered} \right\rvert\,$ |  |  | Storace | $\underset{\text { StoraEs }}{\text { ReQuikel }}$ |  |  | （8eproom |  | BEDROOM |  | $\begin{aligned} & \text { LunNe } \\ & \text { Woon } \end{aligned}$ | $\begin{gathered} \text { Livinc } \\ \text { Revirup } \end{gathered}$ |  | Aspect | ASUACT | Uniesal |  | ${ }_{\text {Partiv }}^{\text {UNIT }}$ | $\underset{\text { nebrooms }}{\text { NoF }}$ |  | $\begin{aligned} & \text { No. or } \\ & \text { croc } \\ & \text { Shactec } \end{aligned}$ |  |
| Blockc | Level 01 －First Froor | ${ }^{284 P}$ |  | ${ }^{1} 101$ | $180.5 \mathrm{~m}^{2}$ | $73.0 \mathrm{~m}^{2}$ | ${ }^{13,1 m^{2}}$ | $113.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $\underline{26.0 \mathrm{~m}^{2}}$ | 23 | ${ }^{33.3 \mathrm{~m}^{2}}$ | $30.0 \mathrm{~m}^{2}$ | ${ }^{6.0 \mathrm{~m}^{2}}$ | $6.0 \mathrm{~m}^{2}$ | ${ }^{21.7 \mathrm{~m}^{2}}$ | $7.0 \mathrm{~m}^{2}$ | ${ }^{3000}$ | 200 |  | 200 | \％ | ${ }^{3600}$ | 200 | sww |  | Yes |  |  |  |  |  | S |
| ${ }_{\text {Block }}^{\text {Blockc }}$ | ${ }_{\text {Level }}^{\text {Level } 10 \text {－} \text {－} \text {－Fist fif foor }}$ | ${ }_{182}^{182}$ |  | 1．02 | ${ }^{50.5 \mathrm{~m}^{2}} 5$ | ${ }^{4.5 .0 \mathrm{~m}^{2}} 4$ | ${ }^{13,0 m^{2}} 1$ | ${ }^{\frac{13,0.02}{}} 1.0 \mathrm{~m}^{2}$ |  |  | ${ }^{\frac{13,0.0}{}{ }^{2}} 1$ | ${ }^{13,0 m^{2}} 1$ | ${ }_{242}^{24.2 m^{2}}$ | ${ }^{23.0 \mathrm{~m}^{2}}$ | ${ }^{3.3 \mathrm{~m}^{2}}{ }^{\text {a }}$ | ${ }_{3.0 \mathrm{~m}^{2}}^{3.0}$ | ${ }^{35.0 \mathrm{~m}^{2}} 1$ | 5．0．${ }^{50}{ }^{2}$ | ${ }_{2250}^{250}$ | ${ }_{2}^{2800}$ |  | ${ }_{2}^{2800}$ | ${ }_{3}^{3825}$ | ${ }^{33300}$ | ${ }_{2}^{21000} \mathrm{~mm}$ | $\frac{\text { SWNW }}{\text { NWNE }}$ | Yes | Yes | Yes | No |  |  |  | ${ }^{0.5}$ |
|  | Level 19 －First fior | 1248 | ${ }^{2349} 00400$ | c1．04 | $84.6 \mathrm{~m}^{2}$ | $73.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $26.0 \mathrm{~m}^{2}$ | $244 \mathrm{~m}^{2}$ | $30.8 \mathrm{~m}^{2}$ | $30.0 \mathrm{~m}^{2}$ | $6.1 \mathrm{~m}^{2}$ | $6.0 \mathrm{~m}^{2}$ | $7.2 \mathrm{~m}^{2}$ | $7.0 \mathrm{~m}^{2}$ | 2900 | 2800 | ${ }^{3450}$ | 2800 | 3385 | 3800 | ${ }_{1}^{1550 \mathrm{~mm}}$ | SENE | yes | es | Yes | No |  |  |  |  |
| ${ }^{\text {Blockc }}$ | Level 01 －First fipor | ${ }^{284 P}$ | ${ }^{284 P}$ | ${ }^{\text {c1．05 }}$ | 9m ${ }^{2}$ | 73．0．02 | $1 \mathrm{~m}^{2}$ | ${ }^{13.0 m^{2}}$ | $\mathrm{m}^{2}$ | ${ }^{\text {m }}$ | ${ }^{24.5}{ }^{\text {m }}$ | $4.4 \mathrm{~m}^{3}$ | $2.3 \mathrm{~m}^{2}$ | 30．0．${ }^{2}$ | 6．7．${ }^{2}$ | $6.0 \mathrm{~m}^{2}$ | 49．0．${ }^{2}$ | $7.0 \mathrm{~m}^{2}$ | ${ }^{2980}$ | 2380 | ${ }^{3430}$ |  | 4165 |  | ${ }^{6} 150 \mathrm{~mm}$ | swnw |  |  |  | \％ |  |  |  |  |
| Block | evel01－Efist floor | ${ }_{182} 18$ | 1822 P 0 | ci．07 | 2m² | $45.0 \mathrm{~m}^{2}$ | ${ }^{11.8 \mathrm{~m}^{2}}$ | ${ }^{11,4 \mathrm{~m}^{2}}$ |  |  |  |  |  | $23.0 \mathrm{~m}^{2}$ |  | $3.0 \mathrm{~m}^{2}$ | ${ }_{352 \mathrm{~m}}$ | ${ }_{5.0} \mathrm{~m}^{2}$ | 2800 | ${ }_{280}^{2800}$ |  |  | 3850 |  | ${ }_{6}^{6150} \mathrm{~mm}$ | S | ${ }^{\text {No }}$ | No | Yes | No |  |  |  |  |
| Blockc | Level01－－Fist Floor | ${ }^{284}$ | ${ }^{2845} .01$ | ${ }^{1.1 .08}$ | $79.9 \mathrm{~m}^{2}$ | $73.0 \mathrm{~m}^{2}$ | $13.1 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | ${ }^{11.4 \mathrm{~m}^{2}}$ | $11.4 \mathrm{~m}^{2}$ | $24.5 \mathrm{~m}^{2}$ | $4 \mathrm{~m}^{2}$ | 323 m | $30.0 \mathrm{~m}^{2}$ | ${ }^{6.7 \mathrm{~m}^{2}}$ | $6.0 \mathrm{~m}^{2}$ | $51.3 \mathrm{~m}^{2}$ | $7.0 \mathrm{~m}^{2}$ | 2980 |  | 130 |  |  |  | 6150 mm | SWISE |  |  |  |  |  |  |  | 0.5 |
| Block | Level 19 －Fist floor | 284 P | $1284{ }^{\text {a }}$－1 | c1．09 | $\frac{79.9{ }^{2}}{}$ | $\frac{73.0 \mathrm{~m}^{2}}{\substack{\text { a }}}$ | $13.1 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $24.5 \mathrm{~m}^{2}$ | ${ }^{244 \mathrm{~m}^{2}}$ | $323 \mathrm{~m}^{2}$ | $30.0 \mathrm{~m}^{2}$ | m² | ${ }^{6.0 \mathrm{~m}^{2}} \quad \stackrel{2}{2}$ | $21.9 \mathrm{~m}^{2}$ | $7.0 \mathrm{~m}^{2}$ | 2980 | 2800 | ${ }_{3430}$ | 2800 | 4165 | 3600 | 2200 mm | swi | Yes | No | No No | No | ${ }_{14}^{2}$ | ${ }_{28}^{48}$ | 14 | ${ }_{4.5}^{0.5}$ |
|  | Leverel 2 －Seocond Fior | 1284 P | ${ }^{284 P}$ | ${ }^{\text {c201 }}$ |  | 73．0．${ }^{2}$ | ${ }^{13,1 \mathrm{~m}^{2}}$ | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $\mathrm{om}^{\text {m }}$ | $126.0 \mathrm{~m}^{2}$ | $124.4 \mathrm{~m}^{2}$ | ${ }^{33.3 \mathrm{~m}^{2}}$ | $30.0 \mathrm{~m}^{2}$ | $16.0 \mathrm{~m}^{2}$ | $16.0 \mathrm{~m}^{2}$ | $\mathrm{m}^{2}$ | $7.0 \mathrm{~m}^{2}$ | 1300 | ${ }^{2800}$ | 2295 | ${ }^{2800}$ | 5715 | 1360 | 1.550 mm | swnw | Ves | ${ }^{\text {Yes }}$ | Ves | No | ${ }^{2}$ |  |  | ${ }^{0.5}$ |
| ${ }^{\text {Blockc }}$ | Levele 2 －Seocond forr | 1822 |  | ${ }^{\text {c202 }}$ |  | ${ }_{\text {c }}^{45.0 \mathrm{~m}^{2}} 4$. | ${ }^{13,0 \mathrm{~m}^{2}} 1$ | ${ }^{11.4 \mathrm{~m}^{2}} 1.1 \mathrm{~m}^{2}$ |  |  | ${ }^{\text {O }}$ | ${ }^{13.30 m^{2}}$ | ${ }^{242 . m^{2}}$ | ${ }_{23,0 \mathrm{~m}^{2}}^{23.0}$ |  | $\mathrm{om}^{\text {om }}$ | ${ }^{\frac{5.4}{5} \mathrm{~m}^{2}}$ | ${ }_{5.0}^{50 \mathrm{~m}}$ | ${ }_{2}^{2950}$ | 2200 |  |  |  |  | ${ }^{15500 \mathrm{~mm}}$ | SWNW |  |  |  |  |  |  |  |  |
| Blockc | Level 2 2－Seoond Flor | 284 P | ${ }^{284 P} 0400$ | c2．04 | $84.6 \mathrm{~m}^{2}$ | $73.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $26.0 \mathrm{~m}^{2}$ | $24.4 \mathrm{~m}^{2}$ | $324 \mathrm{~m}^{2}$ | $30.0 \mathrm{~m}^{2}$ | $6.1 \mathrm{~m}^{2}$ | $6.0 \mathrm{~m}^{2}$ | m² | $7.0 \mathrm{~m}^{2}$ | 2900 | 2800 | 3450 | 200 | 3885 | ${ }_{3600}$ | 1550 mm | SENE | ves | ves | ves | No | 2 |  |  |  |
| ${ }_{\text {Blockc }}^{\text {Biockc }}$ | Level 2 2－Seoend fior | ${ }^{28129}$ | ${ }^{23452} 5$ | ${ }^{\text {c20 }}$ | $79.9{ }^{2}$ | ${ }^{73.0 .0 m^{2}}$ | 13．192m | ${ }^{13.0 m^{2}}$ |  |  | $5{ }^{5}$ | ${ }^{244 \mathrm{~m}^{2}}$ | 323 m² | ${ }^{30.0 \mathrm{~m}^{2}}$ | ${ }^{6.7 \mathrm{C}^{2} \mathrm{~m}^{2}}$ | 6．0．${ }^{2}$ | ${ }^{7.2 \mathrm{~m}^{2}}$ | ${ }^{7} .0 \mathrm{~m}^{2}$ | ${ }^{2380}$ | ${ }^{2300}$ |  | ${ }_{2000}^{2000}$ | ${ }^{41655}$ |  | ${ }^{1550 \mathrm{~mm}}$ | SENE |  | No |  | ， |  |  |  |  |
| Block | Level 12 2－Seocond fior | 1182 | 1832.01 | ${ }_{\text {c207 }}$ | $492 . \mathrm{m}^{2}$ | $45.0 \mathrm{~m}^{2}$ | ${ }^{11.8 .8 \mathrm{~m}^{2}}$ | $11.4 \mathrm{~m}^{2}$ |  |  | $\mathrm{m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $234 \mathrm{~m}^{2}$ | $23.0 \mathrm{~m}^{2}$ | $5.1 \mathrm{~m}^{2}$ | $3.0 \mathrm{~m}^{2}$ | $5.1 \mathrm{~m}^{2}$ | $5.0 \mathrm{~m}^{2}$ | 2800 | 2800 |  | 2800 | ${ }_{3850}$ | 3300 | ${ }_{1550 \mathrm{~mm}}$ | ${ }_{\text {SE }}$ | No | No | Yes | No |  |  |  | ${ }_{0}^{0.5}$ |
| Blo | vela |  |  | 08 | $\mathrm{P}^{\text {m }}$ | 73．0 ${ }^{2}$ | $13.1 \mathrm{~m}^{2}$ | m | ${ }^{4} \mathrm{~m}^{2}$ | ${ }^{4} \mathrm{~m}^{2}$ |  |  | $\mathrm{m}^{2}$ | $\mathrm{mm}^{2}$ | ${ }^{6.7 \mathrm{~m}}{ }^{\text {a }}$ | $6.0 \mathrm{~m}^{2}$ | 7．2 $\mathrm{m}^{2}$ |  | 2980 |  | 3430 |  |  |  |  | SENE |  |  |  |  |  |  |  |  |
| $\frac{\text { Bloca }}{}$ | Level2－－5 | 284 P | 1284 P ． 0 | c2．09 | $\frac{7.9 .9 m^{2}}{604 \mathrm{~m}^{2}}$ | ${ }_{\substack{73.0 m^{2} \\ 5450 \mathrm{~m}^{2}}}$ | $13.1 \mathrm{~m}^{2}$ | Om² | $11.4 \mathrm{~m}^{2}$ |  | $24.5 \mathrm{~m}^{2}$ | $24.4 \mathrm{~m}^{2}$ | $323 \mathrm{~m}^{2}$ | $\mathrm{m}^{2}$ | $6.7 \mathrm{~m}^{2}$ | $6.0 \mathrm{~m}^{2}$ | ${ }^{\text {ma}}$ | $7.0 \mathrm{~m}^{2}$ | 2980 | 2800 | ${ }_{3430}$ |  | 4165 |  | 11550 mm |  |  | No | No No | No | ${ }_{14}$ | ${ }_{28}$ | 14 | 4.5 |
| EBOCKC | Level0 3 －－Third Floor | ${ }^{284 P}$ | ${ }^{2884 P \cdot 0200}$ | ${ }^{\text {c3，01 }}$ | ${ }^{800.5 \mathrm{~m}^{2}}$ | ${ }^{53,0.0 \mathrm{~m}^{2}}$ | ${ }^{13,1 \mathrm{~m}^{2}}$ | $113.0 \mathrm{~m}^{2}$ | $113.0 \mathrm{~m}^{2}$ | $0 \mathrm{~m}^{2}$ | $126.0 \mathrm{~m}^{2}$ | $24.4 \mathrm{~m}^{2}$ | $134.6 \mathrm{~m}^{2}$ | $130.0 \mathrm{~m}^{2}$ | $16.0 \mathrm{~m}^{2}$ | ${ }^{6.0 \mathrm{~m}^{2}}$ |  | $7.0 \mathrm{~m}^{2}$ | 13000 | ${ }^{2800}$ | ${ }^{2225}$ | 2280 | 5715 | 13600 | 1550 mm | swww | Ves | Ves | Yes | No |  |  |  |  |
| Blockc | 03－Third Flor |  | 1828.02 O | c3．02 |  | $45.0 \mathrm{~m}^{2}$ |  |  |  |  |  |  |  |  |  |  |  | 5.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| block | evel 03 －Thirct Flor | 1828 |  | ${ }^{\text {c3，}} 3$ | 50．5 m2 | $45.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ |  |  | $13.0 \mathrm{~m}^{2}$ | $3.0 \mathrm{~m}^{2}$ | 24.2 m² | 23．0 ${ }^{2}$ | ${ }^{3.3}{ }^{\text {m }}$ | $3.0 \mathrm{~m}^{2}$ | $5.1 \mathrm{~m}^{2}$ | 5.0 m | ${ }^{2950}$ | 2800 |  | 2800 | 3325 | 3300 | 1550 mm | NWNE |  |  |  |  |  |  |  |  |
| ${ }_{\text {Block }}$ Block | Level 103 －hidr foor | ${ }_{284}^{284}$ |  |  | ${ }_{\text {cha }}^{89.6 \mathrm{~m}^{2}}$ |  | ${ }_{\text {chem }}^{13.0 \mathrm{~m}^{2}}$ | ${ }^{1330 \mathrm{~m}^{2}}$ | ${ }^{\frac{1300 m}{} 11.4 \mathrm{~m}^{2}}$ |  | ${ }_{24,5 \mathrm{~m}^{2}}^{26.0}$ | ${ }_{244 \mathrm{~m}^{2}}$ | ${ }^{324 m^{2}}$ | ${ }^{30.0 \mathrm{~m}^{2}}$ | ${ }^{6.1 \mathrm{~m}^{2}}$ | ${ }^{6.0 .0 \mathrm{~m}^{2}}$ | $\frac{72 \mathrm{~m}^{2}}{72 \mathrm{~m}^{2}}$ | ${ }_{7}^{7} 7.0 \mathrm{~m}^{2}$ | ${ }_{2}^{2980}$ | ${ }_{2800}^{2000}$ | ${ }^{34350}$ | ${ }_{2}^{2000}$ | ${ }_{41965}^{3985}$ | ${ }_{\text {a }}^{3600}$ | ${ }^{1} 15050 \mathrm{~mm}$ | SENE | ¢es |  | Yos | No | ${ }_{2}$ |  |  | ${ }_{0}^{0.5}$ |
| Blockc | evelo 3 －－Third Floor | 1829 | 182 P .01 | c3．06 |  | 45．0m² |  | ${ }^{11.4} \mathrm{~m}^{2}$ |  |  |  |  |  | $23.0 \mathrm{~m}^{2}$ |  | $3.0 \mathrm{~m}^{2}$ | $5.1 \mathrm{~m}^{2}$ | 5.0 |  |  |  |  |  |  | 1550 mm |  |  |  |  |  |  |  |  |  |
| Block | Third Flor |  | $182 \mathrm{P}=01$ |  | ${ }^{492}$ | $45.0 \mathrm{~m}^{2}$ | ${ }^{11.8 .8 m^{2}}$ | $11.4 \mathrm{~m}^{2}$ |  |  | ${ }^{\text {m }}{ }^{2}$ | ${ }^{4} \mathrm{~m}^{2}$ | 234．42 | 3，0 $\mathrm{m}^{2}$ | $5.1 \mathrm{~m}^{2}$ | $3.0 \mathrm{~m}^{2}$ | $5.1 \mathrm{~m}^{2}$ | $5.0 \mathrm{~m}^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Block | Level 103 －hird foor | ${ }_{\text {284P }}^{284}$ | ${ }_{20}^{284 P \cdot 000}$ | ${ }^{\text {c3，}}$ C38 | ${ }^{7} 7.9 .9 \mathrm{~m}^{2}$ | ${ }^{\frac{7300}{}{ }^{70} \mathrm{~m}^{2}}$ | ${ }^{\frac{13,1.1}{}{ }^{13} \mathrm{~m}^{2}}$ | ${ }_{\text {cosem }}^{13.0 \mathrm{~m}^{2}}$ | ${ }^{11.4 \mathrm{~m}^{2}} 1.1 \mathrm{~m}^{2}$ | ${ }^{1,4.4 m^{2}} 1.14 m^{2}$ | ${ }_{24.5}^{24.5 \mathrm{~m}^{2}}$ | ${ }_{244 \mathrm{~m}^{2}}{ }^{2}$ | ${ }_{323}^{323 m^{2}}$ |  | ${ }^{6.7 \mathrm{~m}^{2}}$ | ${ }^{6.0 \mathrm{~m}^{2}}$ | $\frac{72 \mathrm{~m}^{2}}{72 \mathrm{~m}^{2}}$ | ${ }_{7}^{700^{2}}$ | ${ }_{2}^{2980}$ | ${ }_{2}^{2800}$ | ${ }_{3430}^{3430}$ | ${ }_{2800}^{2800}$ | ${ }_{4165}^{4165}$ | 退3000 | ${ }^{\substack{1550 \mathrm{~mm} \\ .150 \mathrm{~mm}}}$ | SWWEE | Yes | No | No | $\xrightarrow{\text { No }}$ |  |  |  |  |
| Lever 03 － |  |  |  |  | ${ }_{6042 \mathrm{~m}^{2}}$ | $545.0 \mathrm{~m}^{2}$ |  |  |  |  |  |  |  |  |  |  | ${ }^{1264 \mathrm{~m}^{2}}$ |  |  |  |  |  |  |  |  |  |  |  |  |  | ${ }_{14}$ | ${ }^{28}$ | 14 | ${ }_{4.5}^{0.5}$ |
| Block | Level 04 －Fourt Fior | ${ }^{2849}$ | ${ }_{2849}^{284 P} 0^{012}$ | ${ }^{\text {co．46 }}$ | ${ }^{179.9 m^{2}}$ | ${ }^{73.0 \mathrm{~m}^{2}}$ | ${ }^{13,1 / m^{2}}$ | ${ }^{130 \mathrm{~m}^{2}}$ | ${ }^{11,4 m^{2}}$ | ${ }^{11.4 m^{2}} 1$ | ${ }^{24.5 \mathrm{~m}^{2}}$ | ${ }_{2}^{244 \mathrm{~m}^{2}}$ | ${ }^{323 \mathrm{~m}^{2}}$ | ${ }^{30.0 \mathrm{~m}^{2}}$ | ${ }^{6.7 \mathrm{~m}^{2}}$ | ${ }^{6.0 \mathrm{~m}^{2}}$ | $\frac{72 \mathrm{~m}^{2}}{72 \mathrm{~m}^{2}}$ | ${ }_{7}^{7.0 m^{2}}$ | ${ }^{2080}$ | ${ }_{2300}^{2200}$ | ${ }_{2025}^{3430}$ | ${ }_{2}^{22000}$ | ${ }_{4}^{4165}$ | ${ }_{\text {l }}^{3600}$ | ${ }^{1} 1550 \mathrm{~mm}$ | SENE | ${ }_{\text {res }}^{\text {Veses }}$ | No | ${ }_{\text {No }}^{\text {Nose }}$ | No |  |  |  | ${ }^{0.5}$ |
| Block c | Level 04 －Fourth Foor | ${ }^{182}$ | $1122 P^{02}$ U0 | C4，02 | $50.5 \mathrm{~m}^{2}$ | $45.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ |  |  | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $24.2 \mathrm{~m}^{2}$ | 23．0m² | $3.3 \mathrm{~m}^{2}$ | $3.0 \mathrm{~m}^{2}$ | $5.1 \mathrm{~m}^{2}$ | $5.0 \mathrm{~m}^{2}$ | 2950 | 2800 |  | 2800 | 3325 | ${ }^{3300}$ | ${ }^{1550 \mathrm{~mm}}$ | swnw | Yes | Yes | Yes | No | 1 |  |  | 0.5 |
| ${ }^{\text {Blockc }}$ | evele | ${ }_{\text {238P }}^{1182}$ |  | ${ }_{\text {ctas }}^{\text {ctas }}$ |  | ${ }^{4.50 \mathrm{~m}^{2}}$ | ${ }_{\text {che }}^{13.0 \mathrm{~m}^{2}}$ | ${ }^{13.00^{2}} 1$ | $13.0 \mathrm{~m}^{2}$ | $130 \mathrm{~m}^{2}$ | ${ }_{\text {che }}^{13.0 \mathrm{~m}^{2}}$ | ${ }^{13.0}$ | ${ }_{324}^{24.2 m^{2}}$ | ${ }^{23.0 \mathrm{~m}^{2}}$ | ${ }^{3.3 \mathrm{~m}^{2}} \mathrm{Cl}^{\text {a }}$ | ${ }^{3.0 m^{2}}$ | ${ }_{\text {che }}^{5.1 \mathrm{~m}^{2}}$ | ${ }_{7}^{50.0}$ | ${ }_{2250}^{2300}$ | ${ }_{2}^{2800}$ | 3450 | ${ }_{2800}^{2800}$ |  |  | －1550 mm <br> 150 mm | ${ }_{\text {NWNE }}^{\text {NENE }}$ |  |  | Yes |  |  |  |  |  |
| ${ }^{\text {BLOCKC }}$ | ， 04 －Fouth Fiorr |  | 1832 P 01 | ${ }^{4} 409$ | $492 \mathrm{~m}^{2}$ | $450 \mathrm{~m}^{2}$ |  |  |  |  |  |  |  | 330 | ${ }_{51}{ }^{\text {m }}$ | 30 |  | 50 |  |  |  |  |  |  | ${ }^{1550 \mathrm{~mm}}$ |  |  |  |  |  |  |  |  |  |
| Blockc | Level 04 －Fourt Fior | ${ }^{182}$ | 1822 －01 | c4，07 | $492 . \mathrm{m}^{2}$ | $45.0 \mathrm{~m}^{2}$ | $11.8 \mathrm{~m}^{2}$ | ${ }^{11.4 \mathrm{~m}^{2}}$ |  |  | $11.8 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $234 \mathrm{~m}^{2}$ | $23.0 \mathrm{~m}^{2}$ | $5.1 \mathrm{~m}^{2}$ | $3.0 \mathrm{~m}^{2}$ | $5.1 \mathrm{~m}^{2}$ | $5.0 \mathrm{~m}^{2}$ | 2800 | 2800 |  | 2800 | ${ }_{3850}$ | 3300 | 1550 mm |  | No | No | Yes | No | 1 |  |  | 0.5 |
| ${ }^{\text {Blockc }}$ Brac | Level 4 －Fount Fior | ${ }^{2884}$ | ${ }_{2848}^{284 \rho .01}$ | ${ }_{\text {cta }}^{\text {c．0．}}$ | ${ }^{179.9 .9 m^{2}}$ | ${ }^{73.0 \mathrm{~m}^{2}}$ |  |  | ${ }^{11.4 .4 m^{2}} 1.1 \mathrm{~m}^{2}$ | ${ }_{4}^{4 \mathrm{~m}^{\text {m }}}$ | ${ }_{24,5 \mathrm{~m}^{2}}^{24.5{ }^{\text {m }}}$ |  | ${ }^{3233^{2}}$ | ${ }^{\frac{30.0}{}{ }^{\text {a }} \text { a }}$ | ${ }^{6.7 \mathrm{~m}^{2}}$ | ${ }^{6.0 .0 m^{2}}$ | $\frac{\mathrm{T}, 2 \mathrm{~m}}{7.2 \mathrm{~m}^{2}}$ | $\frac{7.0 \mathrm{~m}^{2}}{7.0 \mathrm{~m}^{2}}$ | ${ }_{22880}^{2980}$ | ${ }_{2800}^{2800}$ | ${ }_{3}^{34380}$ | 2800 | ${ }_{41465}^{4165}$ | ${ }_{3}^{3600}$ |  | sWWEE | ¢ | No | No | No | $\frac{2}{2}$ |  |  | ${ }^{0.5}$ |
| Level 04 －Fouth | flor 9 |  |  |  | ${ }^{604.2 \mathrm{~m}^{2}}$ | ${ }_{545.0 \mathrm{~m}^{2}}$ |  |  |  |  |  |  |  |  |  |  | $56.4 \mathrm{~m}^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  | 14 | ${ }^{28}$ | ${ }^{14}$ | 4.5 |
| ${ }^{\text {Blockec }}$ |  | ${ }^{2889}$ | ${ }_{2}^{2844}+0.02000$ | C5．022 | ${ }^{80.54 .5 \mathrm{~m}^{2}}$ | ${ }^{\frac{17.0 .0 .0 ~}{\text { m }}}$ | ${ }^{13.3 .1 \mathrm{~m}^{2}}$ | ${ }^{13,0.0 \mathrm{~m}^{2}}$ | ${ }^{13,0.0 \mathrm{~m}^{2}}$ | ${ }^{13,0.0 \mathrm{~m}^{2}}$ | 26．0．${ }^{2}$ | ${ }^{2444 \mathrm{~m}^{2}}$ | ${ }^{3424 \mathrm{~m}^{2}}$ | ${ }^{30.0 .0 m^{2}}$ | ${ }^{6.1} 1 \mathrm{~m}^{2}$ | $6.0 \mathrm{~m}^{2}$ | $\frac{1.2 \mathrm{~m}^{2}}{7.2 \mathrm{~m}^{2}}$ | ${ }_{7} 7.0 \mathrm{~m}^{2}$ | ${ }^{3000}$ | ${ }_{2800}^{2800}$ | ${ }_{3450}^{2325}$ | ${ }_{2800}^{2800}$ | ${ }_{3985}^{5985}$ | ${ }_{3600}^{3600}$ | ${ }^{1} 15550 \mathrm{~mm}$ | SENE | Ves | ${ }_{\text {Ves }}^{\text {ves }}$ | ${ }_{\text {ves }}^{\text {ves }}$ | ${ }_{\text {No }}^{\text {No }}$ | 2 |  | 2 | ${ }_{0}^{0.5}$ |
| ${ }^{\text {Blockc }}$ |  | ${ }^{2849}$ |  | C5 | $9{ }^{9} \mathrm{~m}^{2}$ | $\mathrm{m}^{2}$ | 13，1．192 | ${ }^{13.0 \mathrm{~m}^{2}}$ |  |  | 24．5m² | $244 \mathrm{~m}^{2}$ | 323．32 | ${ }^{20.0 m^{2}}$ | ${ }^{6.7 m^{2}}$ | 6．0．${ }^{2}$ |  | ${ }_{5}^{7.0 \mathrm{~m}^{2}}$ | 2980 |  | 3430 |  | ${ }^{4165}$ |  | ${ }^{1550 \mathrm{~mm}}$ | ENE |  |  |  |  |  |  |  | ${ }_{0}^{0.5}$ |
| Block | Level 05 － Fifth F Foor | $1182{ }^{\circ}$ | $1182 \mathrm{P}^{122}$ | c5．05 | $50.5 \mathrm{~m}^{2}$ | $45.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ |  |  | $13.0 \mathrm{~m}^{2}$ | ${ }^{1.4 .4 \mathrm{~m}^{2}}$ | ${ }_{242} \mathrm{~m}^{2}$ | $23.0 \mathrm{~m}^{2}$ | ${ }^{3.3}{ }^{\text {m }}$ | ${ }_{3.0} .0{ }^{2}$ | ${ }^{5.1 \mathrm{~m}^{2}}$ | ${ }_{50} 5 \mathrm{~m}^{2}$ | 2250 | 2800 |  | ${ }_{1200}^{200}$ | ${ }_{3825}$ | 3300 | 11550 mm | swISE | yes | No | Yes | No | 1 |  |  | ${ }_{0} 0.5$ |
| Levelos－Fift file | ${ }^{\text {Fior }}$ S |  |  |  | ${ }^{34.7}{ }^{\text {mam }}$ | $\mathrm{m}^{2}$ |  |  |  |  |  |  |  |  |  |  | ${ }^{31.8 m^{2}} 7$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Blockc | Level06 Soskt Foor | ${ }^{284}$ | ${ }^{2845}$ | ${ }_{\text {coiol }}$ | ${ }_{8}^{80.5 \mathrm{~m}^{2}}$ | $73.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $26.0 \mathrm{~m}^{2}$ | $244 \mathrm{~m}^{2}$ | $324 \mathrm{~m}^{2}$ | $30.0 \mathrm{~m}^{2}$ | $6.1 \mathrm{~m}^{2}$ | $6.0 \mathrm{~m}^{2}$ | $7.2 \mathrm{~m}^{2}$ | $7.0 \mathrm{~m}^{2}$ | 2900 | 2800 | ${ }^{3450}$ | 2800 | 3985 | S000 | ${ }_{1} 1500 \mathrm{~mm}$ | SENE | ves | ves | Ves | No | 2 | 4 | ${ }^{2}$ | 0．5 |
| ${ }^{\text {BLockc }}$ |  | 284 | ${ }_{182}^{2845}$ | ${ }_{\text {c6，}}^{60.0}$ | ${ }^{199.9 m^{2}} 4$ | ${ }^{13.0 .0 m^{2}} 4$ |  |  |  |  |  |  | ${ }^{323.4 \mathrm{~m}^{\text {m }}}$ | ${ }^{330.0}{ }^{3}{ }^{2} \mathrm{~m}^{2}$ | ${ }_{5}^{5.1 \mathrm{~m}^{2}}$ | 30．0．0 ${ }^{60}$ |  |  | ${ }_{2800}^{2980}$ | ${ }_{2800}^{2800}$ | ${ }^{3430}$ | ${ }_{2800}^{2000}$ | ${ }_{3}^{1465}$ |  | ${ }_{1}^{1550}$ |  |  |  | Nos | No |  |  |  | ${ }_{0}^{0.5}$ |
| Blockc | evel06－Sxht Fior | 1182 | 1832 P02 | c6．05 | ${ }^{0.5} \mathrm{~m}^{2}$ | $45.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ |  |  | $13.0 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $24.2 \mathrm{~m}^{2}$ | $123.0 \mathrm{~m}^{2}$ | $3.3 \mathrm{~m}^{2}$ | $3.0 \mathrm{~m}^{2}$ | $5.1 \mathrm{~m}^{\text {² }}$ | ${ }_{5}^{5.0 \mathrm{~m}^{2}}$ | 2950 | 2800 |  | 2800 | ${ }_{3825}$ | 3300 | ${ }_{1}^{1550} \mathbf{~ m m}$ | sWISE | Ves | No | Ves | No | 1 |  | 1 | 0.5 |
| ${ }^{\text {Levelob }}$ Sxixh | Florr 5 Severement foor |  |  |  |  | ${ }^{3090.0{ }^{\text {m }}}$ |  |  |  |  |  |  |  |  |  |  | ${ }_{\text {che }}^{31.8 \mathrm{~m}^{2}} 1$ |  |  |  |  |  |  |  |  | SNW |  |  |  |  | ${ }^{8}$ |  |  | 2．5 |
| Blockc | Level 07 －Soventh Fior | ${ }^{284 P}$ | ${ }^{2845}$ | c7，02 | $84.6 \mathrm{~m}^{2}$ | $73.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | ${ }^{13.0 \mathrm{~m}^{2}}$ | $13.0 \mathrm{~m}^{2}$ | $26.0 \mathrm{~m}^{2}$ | $24.4 \mathrm{~m}^{2}$ | 324m² | 30．0 ${ }^{2}$ | $6.1 \mathrm{~m}^{2}$ | $6.0 \mathrm{~m}^{2}$ | $7.2 \mathrm{~m}^{2}$ | $7.0 \mathrm{~m}^{2}$ | 2900 | ${ }^{2800}$ | ${ }^{3450}$ | 2800 | ${ }^{3985}$ | 3600 | ${ }^{15550 \mathrm{~mm}}$ | SENE | ves | Yes | Yes | No | ${ }^{2}$ | ${ }^{4}$ | ${ }^{2}$ | 0.5 |
| ${ }^{\text {BLOCKCc }}$ |  | ${ }_{18}^{2818 P}$ | ${ }_{1}^{2842 P_{0}+1}$ | ${ }_{\text {che }}^{\text {c．7．03 }}$ |  | ${ }^{\frac{1}{4} .0 .0 \mathrm{~m}^{2}}$ | ${ }^{\frac{13.1 .19 m^{2}}{11.8 m^{2}}}$ |  |  |  | ${ }^{\frac{24.5}{1.8 m^{2}}}$ | ${ }^{\frac{24.4 .4 m^{2}}{11.4}}$ | ${ }^{3234 \mathrm{~mm}^{2}}$ | ${ }^{30.0 \mathrm{~m}^{2}}$ |  | ${ }^{6.0 \mathrm{~m}^{2}}$ | ${ }_{\text {l }}^{\text {l2，}}$ | ${ }_{5}{ }_{5}^{1.0 \mathrm{~m}^{2}}$ | ${ }_{2}^{2880}$ | ${ }_{2800}^{2800}$ |  | ${ }_{2}^{2800}$ | ${ }_{3385}^{465}$ | ${ }^{33000}$ | ${ }^{1} 15550 \mathrm{~mm}$ |  | 号边 | $\xrightarrow{\text { No }}$ | ${ }_{\text {Nos }}$ | No | ${ }_{1}^{2}$ |  | \％ | ${ }_{0}^{0.5}$ |
| ${ }_{\text {Block }}^{\text {Leol }}$ | Level 77 －Seventh Fior | 1182 | 11822.02 | c7．05 |  |  | $13.0 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ |  |  | $13.0 \mathrm{~m}^{2}$ | $1.4 \mathrm{~m}^{2}$ | $24.2 \mathrm{~m}^{2}$ | $23.0 \mathrm{~m}^{2}$ | ${ }_{3} 3 . \mathrm{m}^{2}$ | $3.0 \mathrm{~m}^{2}$ | ${ }_{\text {che }}^{5.1 \mathrm{~m}^{2}}$ | 5．0．0 ${ }^{2}$ | 2950 | 2800 |  |  | ${ }_{3825}$ | 3300 | 1550 mm |  | Yes | No | Yes No |  | $\frac{1}{8}$ |  |  | ${ }_{2}^{0.5}$ |
| ${ }^{\text {Blockc }}$ | Levelo－Eight Foor | ${ }^{2849}$ | ${ }^{28440.0200}$ | ${ }^{\text {c8．01 }}$ | ${ }^{800.5 \mathrm{~m}^{2}}$ | $\frac{73.0 \mathrm{~m}^{2}}{730 \mathrm{~m}^{2}}$ | ${ }^{131.1 m^{2}}$ |  | ${ }^{13.0 m^{2}}$ | $\frac{130.0{ }^{2}}{130 \mathrm{~m}^{2}}$ | $\frac{128.0{ }^{2}}{28.0}$ | ${ }^{2444 m^{2}}$ | ${ }^{3426 \mathrm{~m}^{2}}$ | ${ }^{30.0 \mathrm{~m}^{2}}$ | ${ }^{6.6 \mathrm{~m}^{2}}$ | $6.0 \mathrm{~m}^{2}$ | $\frac{7.2 \mathrm{~m}^{2}}{7 \mathrm{~m}^{2}}$ | ${ }^{7.0 \mathrm{~m}^{2}}$ | ${ }^{3000}$ | ${ }^{22800}$ | ${ }^{22925}$ | 12800 | ${ }^{5515}$ | ${ }^{33000}$ | ${ }^{11550 \mathrm{~mm}}$ | swnw | ${ }_{\text {Yess }}$ | Vese | Vese | ${ }^{\text {No }}$ | 2 |  | ${ }_{2}$ | ${ }^{0.5}$ |
| Block | Levelos8 E－Eightr foor | ${ }_{289}^{284}$ | ${ }_{28 \mathrm{P}}^{24}$ | ${ }_{\text {cos，}}$ | ${ }^{\text {7 }} 9.9 .9 \mathrm{~m}^{2}$ | $73.0 \mathrm{~m}^{2}$ | $13.1 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $24.5 \mathrm{~m}^{2}$ | ${ }_{244 \mathrm{~m}^{2}}$ | 323 m² | 30．0 m² | ${ }^{6.7 \mathrm{~m}^{2}}$ | $6.0 \mathrm{~m}^{2}$ | $7.2 \mathrm{~m}^{2}$ | $7.0 \mathrm{~m}^{2}$ | 2880 | 2800 | 3380 | 2800 | ${ }_{4165}$ | ${ }_{3600}$ | ${ }_{1}^{1550} \mathbf{~ m m}$ | swnw | Ves | No | No | ${ }_{\text {No }}$ | 2 | 4 | ${ }^{2}$ | 0.5 |
| Block | $\xrightarrow{\text { Level } 0 \text {－Eight }}$ Levor | ${ }_{1822}^{1828}$ | ${ }_{1822}^{182 P .02}$ |  | ${ }_{\text {che }}^{49.2 \mathrm{~m}^{2}}$ | ${ }_{\text {4 }}^{4.0 .0 \mathrm{~m}^{2}} 4{ }^{\text {a }}$ | ${ }^{\frac{11.8 .82}{}} 1.3 \mathrm{~m}^{2}$ | ${ }^{1} 4 \mathrm{~m}^{2}$ |  |  | ${ }_{\text {chem }}^{11.8 .0 \mathrm{~m}^{2}}$ | ${ }^{4 \mathrm{~mm}}$ | ${ }_{\text {23，}}^{234 \mathrm{~m}^{2}}$ | （3．0．${ }^{2}$ | ${ }^{\frac{5}{3.1 .1 m^{2}}}$ | $\frac{3.0 \mathrm{~m}^{2}}{3.0 \mathrm{~m}^{2}}$ | ${ }_{\text {5，}}^{5.1 \mathrm{~m}^{2}}$ | ${ }_{\text {a }}^{5.0 \mathrm{~m}^{2}} 5$ | ${ }_{2}^{2000}$ | ${ }_{2}^{2800}$ |  |  | ${ }_{\substack{3350 \\ 3825}}$ | ${ }_{\substack{3300 \\ 3300}}$ | ${ }_{1}^{15550 \mathrm{~mm}}$ | ${ }_{\text {sE }}^{\text {swise }}$ | No | No | Yes | $\xrightarrow{\text { No }}$ No | 1 |  |  | ${ }_{0}^{0.5}$ |
| coile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ${ }_{88}$ | ${ }_{176}^{176}$ | ${ }_{88}^{88}$ | 25 28 |

Appendices
Appendix B - Housing Quality Audit

Housing Quality assessment (HaA) - block

| Block Name | Level | ${ }_{\text {UNT }}^{\text {UNME }}$ | UNTT TYE | UNTET |  | Untarea | BEDROOM 1 AREA |  |  | $\begin{aligned} & \text { BEDRoom } \\ & \text { BROURED } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { AGG. } \\ \text { BEDROOM } \\ \text { AREA } \end{gathered}$ |  | $\begin{aligned} & \text { Hag } \\ & \text { AREA } \end{aligned}$ | $\begin{gathered} \text { AGG } \\ \text { HEGUGED } \end{gathered}$ | Storat | Torat |  |  | \% Wooth | $\left\lvert\, \begin{gathered} \text { BEDROOM } \\ 1 \text { WIDTH } \\ \text { REQUIRED } \end{gathered}\right.$ |  | $\begin{array}{\|c} \text { Reproom } \\ \text { Remuin } \\ \text { Reureo } \end{array}$ | $\begin{aligned} & \text { Runnco } \\ & \text { Woipt } \end{aligned}$ | $\begin{gathered} \text { LIVING } \\ \text { WIDTH } \\ \text { REQUIRED } \end{gathered}$ |  | Aspect | ASUAL | gn | $\begin{gathered} 10,0 \\ \text { SIER } \\ \text { ITE APT } \end{gathered}$ | PaRtV | NEROROOMS | $;$ | $\begin{array}{\|l\|l\|} \substack{\mathrm{NOOO} \\ \text { Srot } \\ \text { SPACES }} \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ¢LOCKB | Level 01 - First Floor | ${ }^{1822}$ | $1182 P^{-0}$ | ${ }^{81,01}$ | $49.2 \mathrm{~m}^{2}$ | $14.0 \mathrm{~m}^{2}$ | ${ }^{11.8 .8 \mathrm{~m}^{2}}$ | ${ }^{11.4 \mathrm{~m}^{2}}$ |  |  | ${ }^{11.8 .8 m^{2}}$ | ${ }^{11.4 .4 \mathrm{~m}^{2}}$ | ${ }^{23.4 \mathrm{~m}^{2}}$ | ${ }^{23.0 m^{2}}$ | ${ }^{5.1 \mathrm{~m}^{2}}$ | $3.0 \mathrm{~m}^{2}$ | $13.5 \mathrm{~m}^{2}$ | $5.0 \mathrm{~m}^{2}$ | 12800 | ${ }^{2300}$ |  | ${ }^{2800}$ | ${ }^{3350}$ | 13300 | ${ }^{2300} \mathrm{~mm}$ |  | No | ${ }^{\text {No }}$ | ${ }^{\text {res }}$ |  |  |  |  |  |
|  | Level 1 - Frist Foor | ${ }_{2829}^{1829}$ | ${ }^{1822+503000}$ | ${ }_{8}^{81.02}$ | ${ }_{\text {che }}^{56.5 \mathrm{~m}^{2}}$ | ${ }^{450.0 \mathrm{~m}^{2}}$ | ${ }_{\text {cke }}^{14.4 \mathrm{~m}^{2}}$ | ${ }^{130.0{ }^{2}}$ | ${ }^{114 \mathrm{~m}^{2}}$ | $114 \mathrm{~m}^{2}$ | ${ }^{4}{ }^{\text {m }}$ | $\frac{130.0{ }^{2}}{24 \mathrm{~m}^{2}}$ | ${ }^{253 \mathrm{~m}^{2}}$ | ${ }^{2300 \mathrm{~m}^{2}}$ | ${ }^{47 \mathrm{~m}^{2}}$ | 3.0. ${ }^{2}$ | ${ }^{152.9 \mathrm{~m}^{2}}$ | $50 \mathrm{~m}^{2}$ | 3250 | 2800 | ${ }^{430}$ | 2800 | ${ }^{4375}$ | ${ }^{330}$ | $\xrightarrow{2300 \mathrm{~mm}}$ | $\frac{\text { SENE }}{\text { NWNE }}$ | ves | Yes | Yes | Ves |  |  |  |  |
| BLOCK | Level 01 - Firstiflior | ${ }^{2838}$ | ${ }^{2388}$ | 81.04 | $9 \mathrm{~m}^{2}$ | $\mathrm{m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ |  |  | $20.1 \mathrm{~m}^{2}$ | $20.1 \mathrm{~m}^{2}$ | $30.4 \mathrm{~m}^{2}$ | $28.0 \mathrm{~m}^{2}$ | ${ }_{5.8} .8{ }^{\text {m }}$ | $5.0 \mathrm{~m}^{2}$ | 6.1 $\mathrm{m}^{2}$ | 6.0. $\mathrm{m}^{2}$ |  | ${ }_{2800}^{2000}$ | 3 350 | 2100 |  | 500 | ${ }_{1}^{15500 \mathrm{~mm}}$ |  | vos | ${ }_{\text {No }}$ | No | es |  |  |  | ${ }_{\text {P }}^{\text {P }}$. 5 |
| ${ }^{\text {Block }}$ | Level 1 - Fist Foor | ${ }_{1829}^{282}$ |  | 81.05 | 79.9.92 | ${ }^{73.0 \mathrm{~m}^{2}}$ | ${ }^{13,1 \mathrm{~m}^{2}}$ | $\mathrm{m}^{2}$ | $1.4 \mathrm{~m}^{2}$ | $1.14 \mathrm{~m}^{2}$ |  | ${ }^{24.4 \mathrm{~m}^{2}}$ | 323 ${ }^{2}$ | 30.0.02 | ${ }^{6.7 \mathrm{~m}^{2}}$ | $6.0{ }^{6}$ | ${ }^{12 \mathrm{~mm}}$ |  | 2980 |  |  |  |  |  | ${ }^{1550}$ | swnw |  |  |  | S |  |  |  |  |
| Block | Level 19 - -irst fiol ior | $1182{ }^{1}$ | 1825 | 81.07 | ${ }_{49,2 \mathrm{~m}^{2}}$ | $45.0 \mathrm{~m}^{2}$ | $11.8 \mathrm{~m}^{2}$ | ${ }^{11.4 .4 m^{2}}$ |  |  | ${ }_{\text {c }}^{\text {m }}$ m ${ }^{\text {m }}$ | ${ }^{11.4 .4 \mathrm{~m}^{2}}$ | ${ }_{234 \mathrm{~m}^{2}}$ | $23.0 \mathrm{~m}^{2}$ | ${ }_{5.19} 5$ | $3.0 \mathrm{~m}^{2}$ | ${ }_{13,5 \mathrm{~mm}} \mathrm{~m}^{1.12 \mathrm{~m}^{2}}$ | ${ }^{5.0 \mathrm{~m}^{2}}$ | ${ }_{2280}^{250}$ | ${ }^{2800}$ |  | ${ }_{2800}^{2800}$ | ${ }_{3880} 8$ | ${ }_{3300}^{300}{ }_{2}^{20}$ | 300 ${ }^{30} \mathrm{~mm}$ | ${ }_{\text {SE }}$ | $\xrightarrow{\text { yos }}$ No | No | ves | ¢es |  |  |  | ${ }_{0.5}^{0.5}$ |
| Level 1 - -rin |  |  |  |  | $433.1 \mathrm{~m}^{\text {m }}$ | $389.0 \mathrm{~m}^{2}$ |  |  |  |  |  |  |  |  |  |  | $74.6 \mathrm{~m}^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  | 10 | 19 |  | 3.5 |
| ${ }^{\text {Blocke }}$ | Level 2 2-Seocond | ${ }_{1822}^{1828}$ |  | ${ }_{82202}^{1820}$ | ${ }_{565}^{49.2 \mathrm{~m}^{2}}$ |  | ${ }_{\text {l }}^{11.8 \mathrm{~m}^{2}} 1 \mathrm{~m}^{2}$ | ${ }^{111.4 m^{2}} 1$ |  |  | ${ }^{11.8 \mathrm{~m}^{2}} 1$ | ${ }^{11.4 \mathrm{~m}^{2}} 1$ | ${ }_{234.3 \mathrm{~m}^{2}}^{2}$ | ${ }_{23,0 \mathrm{~m}^{2}}^{23.0}$ | ${ }^{5.1 m^{2}} 4$ | ${ }_{30}^{3.0 \mathrm{~m}^{2}}$ | ${ }_{5}^{5.1 \mathrm{~m}^{2}}$ | ${ }_{50}^{50 \mathrm{~m}^{2}}$ | ${ }_{3250}^{1280}$ | ${ }_{2280}^{2200}$ |  | ${ }_{2800}^{2800}$ | ${ }_{43350}^{3350}$ | ${ }_{3300}^{3300}$ |  | ${ }_{\text {SENE }}^{\text {SE }}$ | ${ }_{\text {Nos }}^{\text {Nos }}$ | ${ }_{\text {Nos }}^{\text {Nos }}$ | $\left.\right\|_{\text {Ves }} ^{\text {Ves }}$ | $\frac{\text { Yes }}{\text { No }}$ |  |  |  | 0.5 0.5 |
| BLOCK ${ }^{\text {b }}$ | Level 2 2- Secoond | 2848 |  | 8203 | $\mathrm{m}^{2}$ | $73.0 \mathrm{~m}^{2}$ | , | ${ }^{13,3.0 \mathrm{~m}^{2}}$ | ${ }^{11.4 \mathrm{~m}^{2}}$ | ${ }^{11.4 \mathrm{~m}^{2}}$ | $24.5 \mathrm{~m}^{2}$ | $24.4 \mathrm{~m}^{2}$ | $323 \mathrm{~m}^{2}$ | $30.0{ }^{2}$ | ${ }^{6} .7 \mathrm{~m}^{2}$ | ${ }^{6.0 .0}{ }^{2}$ | ${ }_{2} \mathrm{~m}^{2}$ | (0)2 | ${ }^{2980}$ | 2800 | ${ }^{3430}$ |  |  |  | ${ }^{1550}$ m | ${ }^{\text {NW }}$ | es |  |  |  |  |  |  |  |
|  | Seornd | ${ }^{2335}$ | 2335 | ${ }^{8204}$ | 9m² | $6.30 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | ${ }^{13.0 \mathrm{~m}^{2}}$ | ${ }^{7.1 \mathrm{~m}^{2}}$ | $\mathrm{m}^{2}$ | $0.1 \mathrm{~m}^{2}$ | $20.1 \mathrm{~m}^{2}$ | 30.4 $\mathrm{m}^{2}$ | $28.0{ }^{2}$ | ${ }^{5.8 \mathrm{~m}^{2}}$ | 5.0 ${ }^{2}$ | ${ }^{6.1 \mathrm{~m}^{2}}$ | \%ome | ${ }^{2350}$ | ${ }_{2800}^{280}$ | 2100 | 20 |  |  | ${ }^{1550 \mathrm{~mm}}$ | ${ }^{\text {NW }}$ |  |  |  | es |  |  |  |  |
| ${ }^{\text {Bocke }}$ |  | ${ }^{1829}$ |  | ${ }_{8206}^{8205}$ |  |  | ${ }^{1.1 .8 \mathrm{~m}^{2}}$ |  |  |  |  |  | ${ }^{2323 \mathrm{~m}^{2}}$ | 230. ${ }^{2}$ | 5.1. ${ }^{\text {ma}}$ | 3.0m² | ${ }^{512 \mathrm{~m}^{2}}$ | 7.0 |  | 2800 |  | ${ }_{2}^{280}$ | 4165 | 3300 |  | swow | $\xrightarrow[\text { vos }]{\substack{\text { vos }}}$ | No | ves | ${ }^{\text {Nos }}$ |  |  |  |  |
| BLOCKB | Leveel 02 - seocond F | ${ }^{284 P}$ | ${ }^{284 P}$ - 01 | 8207 | ${ }_{7} 7.9 .9 \mathrm{~m}^{2}$ | $\frac{730 m^{2}}{}$ | ${ }_{13.15 \mathrm{~m}^{2}}^{151}$ | ${ }^{1.3 .0 \mathrm{~m}^{2}}$ | ${ }^{14 \mathrm{~m}^{2}}$ | ${ }_{44 \mathrm{~m}^{2}}$ | ${ }_{24.5}^{24.5 \mathrm{~m}^{2}}$ |  | ${ }_{323}{ }^{323}{ }^{2}$ | 30.0 ${ }^{2}$ | ${ }_{6.7}^{6.7 \mathrm{~m}^{2}}$ | $6.0 \mathrm{~m}^{2}$ |  |  |  |  |  |  |  |  | 11550 | sENE |  |  |  |  |  |  |  |  |
| Block | Level02- Seoond F | 1828 | $1822 \mathrm{P}, 04$ | 208 | $\frac{50.8 \mathrm{~m}^{2}}{\substack{13 \mathrm{~m}^{2}}}$ | 455.0 ${ }^{\text {m }}$ | $4 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ |  |  | $1.4 \mathrm{~m}^{2}$ | ${ }^{4} \mathrm{~m}^{2}$ | $\mathrm{m}^{2}$ | $23.0 \mathrm{~m}^{2}$ | $4.1 \mathrm{~m}^{2}$ | 3.0 m | ${ }^{5.14 \mathrm{~m}^{2}}$ | $5.0 \mathrm{~m}^{2}$ | 2250 | 2800 |  | 2800 | 3500 | 3300 | 1550 mm |  | No | No | yes | Yes | 12 |  |  |  |
| Block | Level 103 - Thid floor | $1182{ }^{2}$ | 11822 | ${ }^{83} 0.01$ | ${ }^{4992.2 m^{2}}$ | $45.0 \mathrm{~m}^{2}$ | ${ }^{11.8 .8 \mathrm{~m}^{2}}$ | ${ }^{11.4 m^{2}}$ |  |  | ${ }^{1,1.8 m^{2}}$ | ${ }^{11.4 .4 m^{2}}$ | $23.4{ }^{2}$ | ${ }^{23.0 m^{2}}$ | ${ }^{51.1 \mathrm{~m}^{2}}$ | $3.0 \mathrm{~m}^{2}$ | $5.1 \mathrm{~m}^{2}$ | $5.0 \mathrm{~m}^{2}$ | 12800 | ${ }^{2300}$ |  | ${ }^{2300}$ | ${ }^{3350}$ | 13300 | ${ }^{1550 \mathrm{~mm}}$ | SE | No | ${ }^{\text {No }}$ | ${ }^{\text {Yes }}$ | No |  |  |  | ${ }^{0.5}$ |
| ${ }^{\text {Block }}$ |  | ${ }_{\text {28PP }}^{182}$ |  | ${ }_{83,03}^{83,02}$ | ${ }_{7}^{56.5 \mathrm{~m}^{2}}$ | ${ }^{455.0 \mathrm{~m}^{2}}$ | ${ }_{\text {che }}^{14.4 . \mathrm{m}^{2}} 1$ | ${ }^{13.0 \mathrm{~m}^{2}} 1$ | $11.4 \mathrm{~m}^{2}$ | ${ }^{11.4 \mathrm{~m}^{2}}$ | ${ }^{14.4 \mathrm{~m}^{2}}$ | $244 \mathrm{~m}^{2}$ | ${ }^{253.3 \mathrm{~m}^{2}} 3$ | ${ }^{23.0 \mathrm{~m}^{2}}$ | ${ }^{4.7 \mathrm{~m}^{2}} \mathbf{6}$ | ${ }_{6}^{3.0 \mathrm{~m}^{2}}$ | ${ }_{7.2 \mathrm{~m}}$ |  | ${ }^{32350}$ | ${ }_{22800}^{2800}$ | 130 | 2800 | ${ }_{4185}^{4375}$ | - | ${ }_{\substack{1550 \mathrm{~mm} \\ 1 \\ 1 \\ 1550 \mathrm{~mm}}}$ | SENE NWNE Nomen | ${ }_{\text {ves }}^{\text {ves }}$ | Yes No No |  | No | , |  |  | 0.5 <br> 0.5 |
| воскв | Level 03 - Third Floor |  | 2335 P 01 | 83.04 | $\mathrm{m}^{2}$ | $\mathrm{m}^{2}$ | $\mathrm{m}^{\text {m }}$ | $13.0 \mathrm{~m}^{2}$ | $7.1 \mathrm{~m}^{2}$ | $\mathrm{m}^{2}$ |  | $1 \mathrm{~m}^{2}$ | $30.4 \mathrm{~m}^{2}$ | $28.0 \mathrm{~m}^{2}$ | ${ }^{5.8 \mathrm{~m}^{2}}$ | $5.0 \mathrm{~m}^{2}$ | 6.1 $\mathrm{m}^{2}$ | ${ }^{6.0 \mathrm{~m}^{2}} \quad 2$ |  | 2800 | ${ }^{2100}$ | 2100 |  |  | ${ }_{1550 \mathrm{~mm}}$ |  | No |  | No | No |  |  |  |  |
| восскв | evel 03 - - hinic Foor |  | 1822 |  |  | m² | ${ }_{8}{ }^{\text {m }}$ | ${ }^{11.4 n}$ |  |  |  | 11.4 ${ }^{\text {m}}$ | 23.4 ${ }^{2}$ | 23.0 | 5.1 | 3.0 ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }_{\text {Block }}^{\text {Block }}$ | Levo ${ }^{\text {Le3 }}$ - Thirif foor | ${ }_{2048}^{2844^{2}}$ | ${ }_{2}^{284 P \cdot 000}$ | ${ }_{\text {b3, }}^{83}{ }^{8,06}$ | ${ }^{79.99 m^{2}}$ | ${ }^{730.0{ }^{2}}$ |  |  | ${ }^{11,4 m^{2}} 1$ | ${ }^{\frac{1,14.4 m^{2}}{114 \mathrm{~m}^{2}} \text { 2 }}$ | ${ }_{24.5 \mathrm{~m}^{2}}^{24.5}$ |  | ${ }^{323 \mathrm{~m}^{2}}$ | ${ }^{30.00^{2}}$ | ${ }^{6.7 \mathrm{~m}^{2}}$ | ${ }^{6.0 m^{2}}$ | ${ }_{7}^{1,2 m^{2}}$ | ${ }^{1.00 m^{2}}$ | ${ }^{2980}$ | ${ }_{2800}^{2800}$ | ${ }_{\text {3430 }}^{3430}$ | ${ }_{2}^{2800}$ | ${ }_{4165}^{4165}$ | ${ }_{3}^{3600}$ | ${ }^{1.550 \mathrm{~mm}}$ | SWNW | , es | $\xrightarrow{\text { No }}$ | No | $\xrightarrow{\text { No }}$ | 2 |  |  | ${ }_{0}^{0.5}$ |
| восок女 | Level 13 - Thid F Fior | $182{ }^{\text {P }}$ | 1182 - 04 | 183.08 | ${ }_{5008} \mathrm{~m}^{2}$ | $45.0 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $4 \mathrm{~m}^{2}$ |  |  | $4 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $\mathrm{m}^{2}$ | $0 \mathrm{~m}^{2}$ | $1 \mathrm{~m}^{2}$ | $3.0 \mathrm{~m}^{2}$ | $5.1 \mathrm{~m}^{2}$ | $5.0 \mathrm{~m}^{2} \quad 2$ | 2250 | 2800 |  | 2800 | 3500 | ${ }_{3300}$ | 1550 mm | SE | No | No | ves | No | 1 |  |  | 0.5 |
| EBlock | Libereve 0 - Fouth floor | ${ }_{1122 P}$ | ${ }_{1822}$-01 | 84.01 |  | ${ }^{465.0 \mathrm{~m}^{2}}$ | ${ }^{11.1 .8 \mathrm{~m}^{2}}$ | ${ }^{11.4 .4 \mathrm{~m}^{2}}$ |  |  | $1.18 \mathrm{~m}^{2}$ | ${ }^{11.4 .4 \mathrm{~m}^{2}}$ | ${ }^{23.4 \mathrm{~m}^{2}}$ | 23.0 m² | ${ }^{51.1 \mathrm{~m}^{2}}$ | $13.0 \mathrm{~m}^{2}$ | ${ }^{48.1 \mathrm{~m}^{2}}$ | $5.0 \mathrm{~m}^{2}$ | ${ }^{2800}$ | 12800 |  | 12800 | ${ }^{3350}$ | ${ }^{13300}$ | 1550 mm | SE | No | No | Yes | [No |  |  |  |  |
| ${ }^{\text {Blockb }}$ | Level 04 - -urth forr | ${ }^{2848}$ | ${ }^{1822 P} 030 \mathrm{OLD}$ | ${ }_{88402}^{8402}$ | ${ }_{7}^{56.5 \mathrm{~m}^{2}}$ |  | ${ }^{4.4 \mathrm{~m}^{2}}$ | ${ }^{13.0 m^{2}}$ | $14 \mathrm{~m}^{2}$ |  |  | $24.4 \mathrm{~m}^{2}$ | ${ }^{253, \mathrm{~m}^{2}}$ | $330.0{ }^{2}$ | ${ }^{4.7 \mathrm{~m}^{2}}$ | $3.0{ }^{2}$ | ${ }^{5.0 \mathrm{~m}^{2}}$ | ${ }^{5.0 \mathrm{~m}^{2}}$ |  |  |  |  |  |  | ${ }^{1550}$ | SENE | Ves | ves | Ves | No |  |  |  |  |
| BLOCKB | Leveve 04 - Fouth Fioor |  | ${ }_{23} 28 \mathrm{P}$ | 84.04 | ${ }_{679} 6.9{ }^{2}$ | $6.30 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | . $1 \mathrm{~m}^{\text {m }}$ | ${ }^{1.1 \mathrm{~m}^{2}}$ | $20.1 \mathrm{~m}^{2}$ | $20.1 \mathrm{~m}^{2}$ | $304 \mathrm{~m}^{2}$ | $28.0 \mathrm{~m}^{2}$ | $5.8 \mathrm{~m}^{2}$ | ${ }_{5.0}^{6.0 \mathrm{~m}^{2}}$ | ${ }^{6.1 \mathrm{~m}^{2}}$ | $6.0 \mathrm{~m}^{2}$ | 250 | ${ }_{2280}^{2800}$ | ${ }^{3} 1200$ | ${ }_{21200}^{2000}$ | ${ }_{3955}^{4935}$ | ${ }_{3}^{3000}$ | ${ }_{1}^{1550 \mathrm{~mm}}$ | Nw | , | No | No | No | ${ }_{2}$ |  |  | ${ }_{0}^{0.5}$ |
| воСскв | Evel 4 4-Founth Foor | ${ }^{182 P}$ | $182 \mathrm{P}-01$ | 84.05 | 2m² | $45.0 \mathrm{~m}{ }^{2}$ | ${ }^{11.8 .8 \mathrm{~m}^{2}}$ | $11.4 \mathrm{~m}^{2}$ |  |  | $1.8 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $23.4 \mathrm{~m}^{2}$ | $23.0 \mathrm{~m}^{2}$ | 5.1. $\mathrm{m}^{2}$ | $3.0 \mathrm{~m}^{2}$ | 5. $1 \mathrm{~m}^{2}$ | $5.0 \mathrm{~m}^{2}$ | 2800 |  |  |  |  |  | 1550 | Nw |  |  | Yes | No |  |  |  |  |
|  | Level 04 - Fourn hoor | 284P | ${ }^{234}$ | 84.06 | 9 ${ }^{\text {a }}$ |  | ${ }^{13.1 m^{2}}$ | 13. |  | ${ }^{1.4 .4 \mathrm{~m}^{2}}$ |  |  | $323 \mathrm{~m}^{2}$ | 30.0 ${ }^{2}$ | 6.7m ${ }^{\text {m }}$ | 0.0m² |  | $7.0 \mathrm{~m}^{2}$ | ${ }^{2880}$ | 2800 |  | 2800 | 4165 | 3600 | m | wnw |  |  |  |  |  |  |  |  |
| ${ }^{\text {BLOCCK }}$ B | Level 0 - Fourn t Foor | ${ }_{18}^{2848}$ |  | ${ }_{84,08}^{84,07}$ | ${ }_{\text {cosem }} 7.9 .9 \mathrm{~m}^{2}$ | ${ }^{\frac{1350.0}{}{ }^{2}}$ | ${ }^{131.14 \mathrm{~m}^{2}}$ | ${ }^{13,0 \mathrm{~m}^{2}}$ |  |  | ${ }_{\text {d, }}^{1.4 \mathrm{~m}^{2}}$ | ${ }^{\frac{24.4 .4 m^{2}}{}{ }^{2}}$ | ${ }_{24.7 \mathrm{~m}^{2}}^{323}$ | ${ }^{30.0 \mathrm{~m}^{2}}$ | ${ }^{4.1}{ }^{6.1 \mathrm{~m}^{2}}$ | ${ }^{6.0 \mathrm{~m}^{2}}$ | ${ }^{1.1 \mathrm{~m}^{2}}$ | ${ }^{7.0 \mathrm{~m}^{2}}$ | ${ }_{2}^{2950}$ | ${ }_{2800}^{2800}$ |  | ${ }_{2}^{2800}$ | ${ }_{3500}^{465}$ | ${ }^{3300}$ | ${ }^{1} 15550 \mathrm{~mm}$ | ${ }_{\text {smse }}^{\text {sme }}$ |  | ${ }_{\text {No }}^{\text {No }}$ | ${ }_{\text {Nos }}$ Nos | ${ }_{\text {No }}^{\text {No }}$ |  |  |  |  |
| Level 04 - Fourt | hfoor 8 . Ethem |  | 118290200 |  | ${ }_{\text {che }}^{513.3 \mathrm{~m}^{2}}$ | $\frac{462.0 \mathrm{~m}^{2}}{450 \mathrm{~m}^{2}}$ |  |  |  |  |  |  |  |  |  |  | ${ }^{48.0{ }^{2}}$ | $50{ }^{2}$ |  |  |  | 2800 | 325 | 3300 | S50m. |  |  |  |  |  | ${ }^{12}$ |  |  | 95 |
| Block | Level 05 - Fifth for | ${ }^{233}$ | $283 \mathrm{P}^{2}$ | 85.02 | ${ }_{6} 67.9 \mathrm{~m}^{2}$ | $63.0 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | ${ }^{13.0 m^{2}}$ | $7.1 \mathrm{~m}^{2}$ | $7.1 \mathrm{~m}^{2}$ | $20.1 \mathrm{~m}^{2}$ | $20.1 \mathrm{~m}^{2}$ | ${ }^{20.4 \mathrm{~m}^{2}}$ | $28.0 \mathrm{~m}^{2}$ | ${ }^{5.8} \mathrm{~m}^{2}$ | $5.0 \mathrm{~m}^{\text {a }}$ | ${ }^{6.1} \mathrm{~m}^{2}$ | 6.0.0 ${ }^{\text {a }}$ | ${ }_{2250}$ | ${ }_{22000}$ | 2100 | 2100 | ${ }^{3975}$ | 3800 | ${ }_{1}^{15500 \mathrm{~mm}}$ | NWNE | ves | No | No | № | 2 |  |  |  |
| ${ }_{\text {Block }}^{\text {Block }}$ | eve | ${ }_{2038}^{1823}$ |  | ${ }_{\text {b5504 }}^{8503}$ |  | ${ }^{450.0 \mathrm{~m}^{2}}$ |  | ${ }^{\frac{1,4.4 m^{2}}{130}{ }^{2}}$ | $114 \mathrm{~m}^{2}$ | $114 \mathrm{~m}^{2}$ | ${ }_{\text {che }}^{1.8 .8 \mathrm{~m}^{2}}$ |  | ${ }^{234.4 \mathrm{~m}^{2}}$ | ${ }^{23.00^{2}}$ |  |  |  |  | 980 | ${ }_{\text {cker }}^{2800}$ |  |  |  | 退300 | ${ }_{\text {c }}^{1550 \mathrm{~mm}}$ (150 m |  |  |  |  |  |  |  |  |  |
| восккв | Evelos 05 - Fith Fioor | ${ }^{244 P}$ | ${ }^{284}$ P-01 | ${ }^{85} .05$ | $7.9 .9{ }^{2}$ | $73.0 \mathrm{~m}^{2}$ | $13.1 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | 11.4 $\mathrm{m}^{2}$ | $24.5 \mathrm{~m}^{2}$ | ${ }^{244 \mathrm{~m}^{2}}$ | $323 \mathrm{~m}{ }^{2}$ | $30.0 \mathrm{~m}^{2}$ | 6.7m ${ }^{\text {a }}$ | $6.0 \mathrm{~m}^{2}$ | $7.2 \mathrm{~m}^{2}$ | $7.0 \mathrm{~m}^{2}$ | ${ }^{2980}$ | 2800 | 3340 | 2800 | ${ }_{4165}$ | 3800 | ${ }_{1} 1500 \mathrm{~mm}$ | sW/SE | ves | No | No | No | ${ }^{2}$ | 4 |  | 0.5 |
| Block | eios - Filt Foor | ${ }^{1822}$ | 1182 P - 04 | 18506 |  | ${ }^{4.50 .0 \mathrm{~m}^{2}}$ | ${ }^{1.4 \mathrm{~m}^{2}}$ | $11.4 \mathrm{~m}^{2}$ |  |  | ${ }^{4 \mathrm{~m}^{2}}$ | $11.4 \mathrm{~m}^{2}$ | $24.7 \mathrm{~m}^{2}$ | $23.0 \mathrm{~m}^{2}$ | $4.1 \mathrm{~m}^{2}$ | $3.0 \mathrm{~m}^{2}$ | $\frac{5.14 \mathrm{~m}^{2}}{358 \mathrm{~m}^{2}}$ | $5.0 \mathrm{~m}^{2}$ | 2950 | 2800 |  | 2800 | 3500 | 13300 | ${ }^{1550 \mathrm{~mm}}$ |  | No | № | Ves | No | 1 | ${ }_{17}^{2}$ |  |  |
| Block | Leverel06-Sxith flor | 11828 | $1182 P^{\text {O2 U }}$ | 186.01 | ${ }_{50.5}^{50.5 m^{2}}$ | $45.0 \mathrm{~m}^{2}$ | $113.0 \mathrm{~m}^{2}$ | $113.0 \mathrm{~m}^{2}$ |  |  | $113.0 \mathrm{~m}^{2}$ | $113.0 \mathrm{~m}^{2}$ | $24.2 \mathrm{~m}^{2}$ | $123.0 \mathrm{~m}^{2}$ | $13.3 \mathrm{~m}^{2}$ | $3.0 \mathrm{~m}^{2}$ | $5.1 \mathrm{~m}^{\text {a }}$ | $5.0 \mathrm{~m}^{2}$ | 2950 | 12800 |  | ${ }^{2800}$ | ${ }^{3825}$ | 3300 | 1550 mm | SENE | Yes | Yes | Yes | № |  |  |  | 0.5 |
| ${ }^{\text {BLOCCKE }}$ B |  | ${ }_{1823}^{283 P}$ | ${ }^{2382} \cdot{ }^{235}$ | ${ }_{86,03}^{86,02}$ | ${ }_{4929 \mathrm{~m}^{6}}^{6,9 \mathrm{~m}^{2}}$ | ${ }^{\frac{630.0}{}{ }_{45} \mathrm{~m}^{2}}$ | ${ }^{\frac{13,0.0}{}{ }^{\text {a }} 1.8 \mathrm{~m}^{2}}$ | ${ }^{\frac{13,0.02}{}} 11.4 \mathrm{~m}^{2}$ | 7.1. $\mathrm{m}^{2}$ | $1 \mathrm{~m}^{2}$ | ${ }^{20.1 .1 \mathrm{~m}^{2}}$ | ${ }^{20.1 .1 \mathrm{~m}^{2}}$ | ${ }^{30.4 \mathrm{~m}^{2}}$ | ${ }^{23.0 \mathrm{~m}^{2}}$ | ${ }_{\text {che }}^{5.8 \mathrm{~m}^{2}}$ | ${ }_{3.0}^{5.0 \mathrm{~m}^{2}}$ | ${ }^{6.1 \mathrm{~m}^{2}}$ | ${ }_{5}^{6.0 \mathrm{~m}^{2}}$ | ${ }_{2}^{2950}$ | 2200 |  | ${ }_{22000}^{2100}$ | ${ }_{\substack{3975 \\ 3850}}$ | ${ }^{3} 3000$ |  | Nw NW | ${ }_{\text {res }}^{\text {Yos }}$ | No | ${ }_{\text {Nos }}^{\text {Nos }}$ | $\xrightarrow{\text { No }}$ No |  |  |  |  |
| BLOCK ${ }^{\text {b }}$ | Level 106 -Skht Foor | 2348 | ${ }^{284 P}$ | 86.04 | $79.9 \mathrm{~m}^{2}$ | $73.0 \mathrm{~m}^{2}$ | $13.1 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $1.4 \mathrm{~m}^{2}$ | 24.5 m2 | $24.4{ }^{2}$ | $323 \mathrm{~m}^{2}$ | $30.0 \mathrm{~m}^{2}$ | ${ }^{6.7 \mathrm{~m}^{2}}$ | $6.0 \mathrm{~m}^{2}$ | $7.2 \mathrm{~m}^{2}$ | $7.0 \mathrm{~m}^{2}$ | 2280 | 2280 | ${ }^{3430}$ | 2800 | 4165 | 3000 | 1550 mm | SWNW | Ves |  | No | No |  |  |  |  |
| ${ }^{\text {Blockeck }}$ |  | ${ }_{1829}^{2649}$ | ${ }_{1828}{ }^{248 P_{0}}$ | ${ }^{86.065}$ | ${ }^{7} \times 9.9 \mathrm{~m}^{2}$ | ${ }^{\frac{7}{45.0 .0} \mathrm{~m}^{2}}$ | $\frac{1}{1 m^{2}}$ | ${ }^{\frac{13,0.02}{}} 1.14 \mathrm{~m}^{2}$ | 11.4 m |  | ${ }^{4.4 .4 \mathrm{~m}^{2}}$ | ${ }^{\frac{24.4 .4 m^{2}}{11.4 m^{2}} \text { 2 }}$ | ${ }^{324.3 \mathrm{~m}^{2}}$ | ${ }^{3} 23.0 \mathrm{~m}^{2}$ | ${ }_{4}{ }_{4}^{6.1 \mathrm{~m}^{2}}$ | ${ }_{3.0} .0 \mathrm{~m}^{2}$ | ${ }_{5}^{5.1 \mathrm{~m}^{2}}$ | $\frac{1.00}{5.0}$ | ${ }_{2}^{2950}$ | ${ }_{22800}^{2800}$ |  | ${ }_{2}^{2000}$ | ${ }_{3500}^{460}$ | (000 | ${ }_{1}^{1550 \mathrm{~mm}}$ | sE | Yes | No | Ves | No |  |  |  |  |
| Levelo6-S |  |  |  |  | $3788.2{ }^{\text {m }}$ | $34.0 \mathrm{~m}^{2}$ |  |  |  |  |  |  |  |  |  |  | $35.8 \mathrm{~m}^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{\text {Blocke }}$ B | ${ }^{\text {Level } 07}$ - Sevent flor | ${ }_{2828}^{1828}$ | ${ }^{1823 P 5}$ | ${ }_{87}^{87.01}$ | ${ }^{\frac{50.5 m}{} 6.9 \mathrm{~m}^{2}}$ | ${ }^{445.0 \mathrm{~m}^{2}} 6$ | ${ }_{\text {che }}^{13.0 \mathrm{~m}^{2}}$ | ${ }^{133.0 m^{2}} 1$ | $7.1 \mathrm{~m}^{2}$ | $7.1 \mathrm{~m}^{2}$ | ${ }^{3.0 . \mathrm{m}^{2}}$ | ${ }^{130.0 . \mathrm{m}^{2}}$ | ${ }^{24.2 .4 \mathrm{~m}^{2}}$ | ${ }_{20.0}^{23.0 m^{2}}$ | ${ }_{5.8}^{3.3 \mathrm{~m}^{2}}$ | $\frac{3.0 \mathrm{~m}^{2}}{5.0 \mathrm{~m}^{2}}$ | ${ }^{5.1 \mathrm{~m}^{2}}$ | ${ }^{5.0 \mathrm{~m}^{2}}$ | ${ }_{2050}^{2950}$ | ${ }_{282800}^{280}$ | 2100 | ${ }_{21200}^{2800}$ | ${ }_{39295}^{3925}$ | ${ }_{\substack{3300}}^{\text {3000 }}$ | ${ }_{\substack{1550 \mathrm{~mm} \\ 1 \\ 1500 \mathrm{~mm}}}$ | ${ }_{\text {SENE }}^{\text {SENE }}$ | Ves | ${ }^{\text {Yes }}$ | ${ }^{\text {Yes }}$ | $\xrightarrow{\text { No }}$ No | $\frac{1}{2}$ | ${ }^{3}$ |  | ${ }^{0.5}$ |
| ${ }^{\text {BLOCCK }}$ | ${ }^{\text {Levelol }}$ - Seventh Fioa | ${ }^{1829}$ | ${ }^{13229}$ | ${ }^{87,03}$ | $49.2 \mathrm{~m}^{2}$ | $45.0 \mathrm{~m}^{2}$ | ${ }^{11.8 .8 m^{2}}$ | ${ }^{11.4 m^{2}} 1$ |  |  |  |  | ${ }^{234 \mathrm{~m}^{2}}$ | 23.0. ${ }^{2}$ | ${ }^{51.1 \mathrm{~m}^{2}}$ | $3.0 \mathrm{~m}^{2}$ | $5.1 \mathrm{~m}^{2}$ | ${ }^{5.0 \mathrm{~m}^{2}}$ | ${ }^{2300}$ |  |  | 22000 | ${ }^{3850}$ | ${ }^{3300}$ | ${ }^{15500 \mathrm{~mm}}$ |  | No | No | Ves | No |  |  |  |  |
| ${ }_{\text {Block }}^{\text {Block }}$ |  | ${ }_{\text {204P }}^{204 \mathrm{P}}$ | ${ }_{264 P \cdot 01}^{289.00}$ | ${ }_{\text {Brios }} 8$ | ${ }^{79.9 .9 m^{2}}$ | ${ }^{733.0 \mathrm{~m}^{2}}$ | ${ }^{\frac{13,1.1 .^{2}}{13.1 m^{2}}}$ | ${ }^{13,0 m^{2}} 1$ | ${ }^{11.4 \mathrm{~m}^{2}} 1$ | ${ }^{11.4 \mathrm{~m}^{2}} 1.4 \mathrm{~m}^{2}$ | ${ }_{24.5}^{24.5 \mathrm{~m}^{2}}$ | ${ }_{24,4 \mathrm{~m}^{2}}^{24.4{ }^{2}}$ | ${ }^{323 \mathrm{~m}^{2}}$ | ${ }^{30.0 \mathrm{~m}^{2}}{ }^{\text {a }}$ | ${ }^{6.7 .7 \mathrm{~m}^{2}}$ | ${ }_{6}^{6.0 \mathrm{~m}^{2}}$ | ${ }_{72.2 \mathrm{~m}^{2}}^{7}$ | ${ }^{7.0}{ }^{7} .0 \mathrm{~m}^{2}$ | ${ }_{2}^{2980}$ | ${ }_{22800}^{2800}$ | ${ }^{3}{ }^{34330}$ | ${ }_{2}^{2800}$ | ${ }_{41655}^{4165}$ | - 3000 | ( ${ }_{\text {l }}^{1550 \mathrm{~mm}}$ | SWWN | ¢es | No | $\frac{\text { No }}{\text { No }}$ | $\xrightarrow{\text { No }}$ No | ${ }_{2}^{2}$ | 4 |  | 0.5 <br> 0.5 |
| ${ }_{\text {Block }}$ | Leverio - Sevent Floor | 1828 | 1822.04 | 18706 |  |  | $11.4 \mathrm{~m}^{2}$ | $114 \mathrm{~m}^{2}$ |  |  | $1.4 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $24.7 \mathrm{~m}^{2}$ | $23.0 \mathrm{~m}^{2}$ | $4.1 \mathrm{~m}^{2}$ | $3.0 \mathrm{~m}^{2}$ | ${ }_{3}^{51.4 \mathrm{~m}^{2}}$ | $5.0 \mathrm{~m}^{2}$ | 2950 | ${ }^{2800}$ |  | 2800 |  | 300 | ${ }^{1550 \mathrm{~mm}}$ |  | No | No | ves | No |  | 7 |  | 0.5 |
| Block ${ }^{\text {a }}$ | Levol 08 - Eight Flor | ${ }^{1822}$ | $182 P_{0} 02$ | 188.01 | $50.5 \mathrm{~m}^{2}$ | $45.0 \mathrm{~m}^{2}$ | $113.0 \mathrm{~m}^{2}$ | ${ }^{11.4 .4 m^{2}}$ |  |  | $113.0 \mathrm{~m}^{2}$ | ${ }^{11.4 .4 m^{2}}$ | $24.2 \mathrm{~m}^{2}$ | ${ }^{23.0 m^{2}}$ | ${ }^{3.3 \mathrm{~m} \mathrm{~m}^{2}}$ | $3.0 \mathrm{~m}^{2}$ | $5.1 \mathrm{~m}^{2}$ | $5.0 \mathrm{~m}^{2}$ | ${ }^{2950}$ | ${ }^{2800}$ |  | ${ }^{2800}$ | ${ }^{3825}$ | ${ }^{33300}$ | ${ }_{1}^{1550 \mathrm{~mm}}$ | SENE | ${ }^{\text {Ves }}$ | No | Yes | No | 1 | 2 |  | ${ }^{0.5}$ |
| Hock |  | ${ }^{2835}$ | ${ }^{2332+}$ |  |  |  |  |  | 1.1. | . ${ }^{\text {m }}$ |  |  |  |  |  |  |  |  |  |  | 2100 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| восскв | Levelo 0 - E Eghth Fior | ${ }^{248}$ | $284 P$ P01 | 88.04 | $7.9 .9 \mathrm{~m}^{2}$ | $73.0 \mathrm{~m}^{2}$ | $13.1 \mathrm{~m}^{2}$ | $13.0 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $11.4 \mathrm{~m}^{2}$ | $24.5 \mathrm{~m}^{2}$ | $244 \mathrm{~m}^{2}$ | $323 \mathrm{~m}^{2}$ | 30.0 m² | ${ }^{6.7 \mathrm{~m}^{2}}$ | $6.0 \mathrm{~m}^{2}$ | $7.2 \mathrm{~m}^{2}$ | $7.0 \mathrm{~m}^{2}$ | 2980 | 12800 | ${ }_{3430}$ | 2800 | 4165 | 3800 | ${ }_{1550 \mathrm{~mm}}$ | swaw | ves | No | No | No | 2 | 4 |  | 0.5 |
| ${ }^{\text {BlOCKB }}$ | Level 108 - Eight foor | ${ }_{1829}^{2048}$ | ${ }_{182950}^{264}$ | ${ }_{88006}^{88.05}$ | ${ }_{\text {che }}^{7.9 .9 \mathrm{~m}^{2}}$ | ${ }^{73.30 \mathrm{~m}^{2}}$ | ${ }^{131.14 \mathrm{~m}^{2}}$ | ${ }^{13.0 \mathrm{~m}^{2}} 1$ | $11.4 \mathrm{~m}^{2}$ | ${ }^{1.4 \mathrm{~m}^{2}}$ | ${ }^{24.5 \mathrm{~m}^{2}}$ | ${ }^{24.4 \mathrm{~m}^{2}}{ }^{1 / 4 \mathrm{~m}^{2}}$ | ${ }^{\frac{323}{23} \mathrm{~m}^{2}}$ | ${ }_{230}^{30.0 \mathrm{~m}^{2}}$ | ${ }^{6.71 \mathrm{~m}^{2}}$ | ${ }_{30.0 \mathrm{~m}^{2}}$ | ${ }_{\text {l2, }}^{7.2 \mathrm{~m}^{2}}$ | ${ }_{50.0 \mathrm{~m}^{2}}^{7.0{ }^{\text {a }}}$ | ${ }_{2050}^{2980}$ | ${ }_{2280}^{2200}$ | 3430 | ${ }_{2800}^{2800}$ | ${ }_{3}^{4650}$ | 3000 300 300 | ${ }_{\substack{1550 \mathrm{~mm} \\ .150 \mathrm{~mm}}}^{\substack{\text { a }}}$ | ${ }_{\text {SE }}^{\text {swISE }}$ |  | $\xrightarrow{\text { No }}$ | $\xrightarrow{\text { No }}$ | $\frac{\text { No }}{\text { No }}$ |  |  |  |  |
| Levelo 8 - Egigh | floor 6 |  |  |  | $3788.2 \mathrm{~m}^{2}$ | $344.0 \mathrm{~m}^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 9 |  |  |  |
| Block |  | ${ }^{1832}$ | ${ }_{2835 \mathrm{~F}}^{1201}$ | ${ }^{890.02}$ | ${ }_{6}^{50.9 .9 \mathrm{~m}^{2}}$ | ${ }^{4530.0 \mathrm{~m}^{2}}$ | ${ }^{133.0 \mathrm{~m}^{2}}$ | ${ }^{11.4 .4 \mathrm{~m}^{2}}$ | $7.1 \mathrm{~m}^{2}$ | ${ }^{7.1 \mathrm{~m}^{2}}$ | ${ }^{13.0 .1 \mathrm{~m}^{2}}$ | ${ }^{11.4 .1 \mathrm{~m}^{2}}$ | ${ }_{30,4 \mathrm{~m}^{2}}^{242}$ | ${ }^{23.0 .0 m^{2}}$ | ${ }_{5.8 \mathrm{~mm}}{ }^{3.3 \mathrm{~m}^{2}}$ | 5.0. ${ }^{3.0 \mathrm{~m}^{2}}$ | ${ }^{5.1 \mathrm{~m}^{2}}$ | ${ }_{6}^{5.0 \mathrm{~m}^{2}}$ | ${ }^{29550}$ | ${ }_{28200}^{22300}$ | 2100 | ${ }_{21200}^{2200}$ | ${ }^{\frac{3}{3925}}$ | ${ }_{3}^{3300}$ | ${ }^{1} 15550 \mathrm{~mm}$ | SENE | ${ }_{\text {Ves }}^{\text {Ves }}$ | ${ }^{\text {No }}$ No | ${ }_{\text {Ves }}^{\text {Nos }}$ | ${ }_{\text {No }}^{\text {No }}$ | $\frac{1}{2}$ | 3 |  | ${ }_{0}^{0.5}$ |
| ${ }_{\text {Block }}^{\text {Block }}$ | Levelog- Ninh Foor | ${ }^{18228}$ | ${ }^{182 P P P_{0} 01}$ | ${ }_{89,04}^{8903}$ | ${ }^{49.9 .9 \mathrm{~m}^{2}}$ | ${ }^{450.0 \mathrm{~m}^{2}}$ |  | ${ }^{1.14 .4 m^{2}}$ | ${ }^{\text {m }}$ | $4 \mathrm{~m}^{2}$ | $\mathrm{m}^{2}$ | ${ }^{11.4 \mathrm{~m}^{2}}$ | ${ }^{234 m^{2}}$ | ${ }^{23.0 \mathrm{~m}^{2}} 3$ | ${ }^{5.1 \mathrm{~m}^{2}} \mathrm{Cm}^{\text {a }}$ | ${ }^{3.0 \mathrm{~m}^{2}}$ | ${ }_{7}^{51.1 \mathrm{~m}^{2}}$ | ${ }^{5.0 \mathrm{~m}^{2}}$ | ${ }^{2} 2800$ | ${ }_{22800}^{2800}$ | 3430 | ${ }_{22800}^{2800}{ }^{2}$ | ${ }_{\substack{3850 \\ 4165}}$ | ${ }^{3300}$ | (1550 ${ }_{\text {l }}^{1.15 \mathrm{~mm}}$ | ${ }_{\text {NW }}^{\text {sww }}$ | $\xrightarrow[\substack{\text { Nos } \\ \text { ves }}]{\text { Nos }}$ | No |  | $\frac{\text { No }}{\text { No }}$ | $\frac{1}{2}$ |  |  |  |
| Block | Level 09 - N Ninh Fior | ${ }^{248 P}$ | ${ }^{284 P}$ - 01 | 80,09 | $\mathrm{m}^{2}$ | 3.0 ${ }^{2}$ | ${ }^{14 m^{2}}$ | ${ }^{114 \mathrm{~m}^{2}}$ | ${ }^{11.4 \mathrm{~m}^{2}}$ | ${ }^{11.4 \mathrm{~m}^{2}}$ | ${ }^{2.54 \mathrm{~m}^{2}}$ | ${ }^{244 \mathrm{~m}^{2}}$ | ${ }^{323 \mathrm{~m}^{2}}$ | 30.0. ${ }^{30}$ | ${ }^{\frac{6}{4} \cdot \mathrm{~m}^{2}}$ | 6.0.02 | ${ }_{7}^{72 \mathrm{~m}^{2}}$ | $7.78{ }^{7} \mathrm{~m}^{2}$ | 208 | 22000 | ${ }_{3}^{3430}$ | ${ }_{2}^{2000}$ | ${ }_{4}^{4155}$ | ${ }_{\text {cke }}^{3000}$ | ${ }_{\substack{1.550 ~ m m}}^{1.50}$ | ${ }_{\text {SWE SE }}$ | les | No | $\stackrel{\text { No }}{\text { Nos }}$ | No | ${ }^{2}$ |  |  |  |
| $\frac{\text { bocke }}{\text { Levelo - }}$ | Nntroor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| вLocki B 6 |  |  |  |  |  | 3495.0 |  |  |  |  |  |  |  |  |  |  | ${ }^{397.6}$ |  |  |  |  |  |  |  |  |  |  |  |  |  | 91 | 173 | ${ }^{91}$ | 30.5 |

## $\underline{09}$ <br> Appendices <br> Appendix C - Part V Provision

Refer to Architectural Drawing for full details:
22001-RKD-ZZ-ZZ-DR-A-1511
22001-RKD-ZZ-ZZ-DR-A-1512
22001-RKD-ZZ-ZZ-DR-A-1513

22001-RKD-ZZ-ZZ-SH-A-2000 22001-RKD-ZZ-ZZ-SH-A-2001 22001-RKD-ZZ-ZZ-SH-A-2002 22001-RKD-ZZ-ZZ-SH-A-2003

PART V HOUSING PLANS - SHEET 1 OF 3 PART V HOUSING PLANS - SHEET 2 OF 3 PART V HOUSING PLANS - SHEET 3 OF 3

## Part V Proposal Summary

1B2P 2B3P 2B4P TOTAL
$\begin{array}{lllll}\text { LEVEL } 01 & 8 & 1 & 4 & 13\end{array}$
$\begin{array}{lllll}\text { LEVEL } 02 & 7 & 1 & 2 & 10\end{array}$
LEVEL 03
TOTAL

HOUSING QUALITY ASSESSMENT SCHEDULE - SHEET 1 OF 3 HOUSING QUALITY ASSESSMENT SCHEDULE - SHEET 2 OF 3 HOUSING QUALITY ASSESSMENT SCHEDULE - SHEET 3 OF 3 HOUSING QUALITY ASSESSMENT SCHEDULE - PART V


[^0]0 Appendices
Appendix C - Part V Provision



Part V Proposal - Block A Level 03


Part V Proposal - Block A Level 02


Appendices
Appendix D - Performance Criteria in Assessing Proposals for Enhanced Height, Density and Scale

| Item | Objective | Performance Criteria in Assessing Proposals for Enhanced Height, Density and Scale | Architect's Response |
| :---: | :---: | :---: | :---: |
| 1. | To promote development with a sense of place and character | Enhanced density and scale should: <br> - respect and/or complement existing and established surrounding urban structure, character and local context, scale and built and natural heritage and have regard to any development constraints, <br> - have a positive impact on the local community and environment and contribute to 'healthy placemaking', <br> - create a distinctive design and add to and enhance the quality design of the area, <br> - be appropriately located in highly accessible places of greater activity and land use intensity, <br> - have sufficient variety in scale and form and have an appropriate transition in scale to the boundaries of a site/adjacent development in an established area, <br> - not be monolithic and should have a well-considered design response that avoids long slab blocks, <br> - ensure that set back floors are appropriately scaled and designed. | The proposed development promotes a sense of place and character. See pages $35-43$, page 27 , pages $20-22$, pages $65-74$ of 22001-RKD-ZZ-ZZ-RP-A-3000 for description and illustrated response to all points of the criteria. |
| 2. | To provide appropriate legibility | Enhanced density and scale should: <br> - make a positive contribution to legibility in an area in a cohesive manner, <br> - reflect and reinforce the role and function of streets and places and enhance permeability. | The proposed development provides appropriate legibility. See pages $26-27$ and pages $51-54$ of 22001-RKD-ZZ-ZZ-RP-A-3000 for description and illustrated response to all points of the criteria. |
| 3. | To provide appropriate continuity and enclosure of streets and spaces | Enhanced density and scale should: <br> - enhance the urban design context for public spaces and key thoroughfares, <br> - provide appropriate level of enclosure to streets and spaces, <br> - not produce canyons of excessive scale and overbearing of streets and spaces, <br> - generally be within a human scale and provide an appropriate street width to building height ratio of 1:1.5 1:3, <br> - provide adequate passive surveillance and sufficient doors, entrances and active uses to generate streetlevel activity, animation and visual interest. | The proposed development provides appropriate continuity and enclosure of streets and spaces. See pages 26-27, pages 51-54, pages $36-43$ of 22001-RKD-ZZ-ZZ-RP-A-3000 for description and illustrated response to all points of the criteria. |
| 4. | To provide well connected, high quality and active public and communal spaces | Enhanced density and scale should: <br> - integrate into and enhance the public realm and prioritises pedestrians, cyclists and public transport <br> - be appropriately scaled and distanced to provide appropriate enclosure/exposure to public and communal spaces, particularly to residential courtyards, <br> - ensure adequate sunlight and daylight penetration to public spaces and communal areas is received throughout the year to ensure that they are useable and can support outdoor recreation, amenity and other activities - see Appendix 16 , <br> - ensure the use of the perimeter block is not compromised and that it utilised as an important typology that can include courtyards for residential development, <br> - ensure that potential negative microclimatic effects (particularly wind impacts) are avoided and or mitigated, <br> - provide for people friendly streets and spaces and prioritise street accessibility for persons with a disability. | The proposed development provides well connected, high quality and active public and communal spaces. See pages $26-27$ and pages 51-54, page 59, of 22001-RKD-ZZ-ZZ-RP-A-3000 for description and illustrated response to all points of the criteria. |
| 5. | To provide high quality, attractive and useable private spaces | Enhanced density and scale should: <br> - not compromise the provision of high quality private outdoor space, <br> - ensure that private space is usable, safe, accessible and inviting, <br> - ensure windows of residential units receive reasonable levels of natural light, particularly to the windows of residential units within courtyards - see Appendix 16, <br> - assess the microclimatic effects to mitigate and avoid negative impacts, <br> - retain reasonable levels of overlooking and privacy in residential and mixed use development. | The proposed development provides high quality, attractive and useable private spaces. See pages $57-58$ and page 54 of 22001 - RKD-7Z-7Z-RP-A-3000 for description and illustrated response to all points of the criteria. |

Appendices
Appendix D - Performance Criteria in Assessing Proposals for Enhanced Height, Density and Scale

| 6. | To promote mix of use and diversity of activities | Enhanced density and scale should: <br> - promote the delivery of mixed use development including housing, commercial and employment development as well as social and community infrastructure, <br> - contribute positively to the formation of a 'sustainable urban neighbourhood', <br> - include a mix of building and dwelling typologies in the neighbourhood, <br> - provide for residential development, with a range of housing typologies suited to different stages of the life cycle. | The proposed development provides a mix of use and diversity of activities. See pages 27 , and $32-34$ of 22001 -RKD-ZZ-ZZ-RP-A3000 for description and illustrated response to all points of the criteria. |
| :---: | :---: | :---: | :---: |
| 7. | To ensure high quality and environmentally sustainable buildings | Enhanced density and scale should: <br> - be carefully modulated and orientated so as to maximise access to natural daylight, ventilation, privacy, noise and views to minimise overshadowing and loss of light - see Appendix 16, <br> - not compromise the ability of existing or proposed buildings and nearby buildings to achieve passive solar gain, <br> - ensure a degree of physical building adaptability as well as internal flexibility in desian and layout, | The proposed development provides a high quality and environmentally sustainable buildings. See pages $57-59$, and 7677, and $60-63$, and $36-45$, and $27-28$ of 22001-RKD-ZZ-ZZ-RP-A3000 for description and illustrated response to all points of the criteria. |
|  |  | - ensure that the scale of plant at roof level is minimised and have suitable finish or screening so that it is discreet and unobtrusive, <br> - maximise the number of homes enjoying dual aspect, to optimise passive solar gain, achieve cross ventilation and for reasons of good street frontage, <br> - be constructed of the highest quality materials and robust construction methodologies, <br> - incorporate appropriate sustainable technologies, be energy efficient and climate resilient, <br> - apply appropriate quantitative approaches to assessing daylighting and sun lighting proposals. In exceptional circumstances compensatory design solutions may be allowed for where the meeting of sun lighting and daylighting requirements is not possible in the context of a particular site (See Appendix 16), <br> - incorporate an Integrated Surface Water Management Strategy to ensure necessary public surface water infrastructure and nature based SUDS solutions are in place - see Appendix 13 , <br> - include a flood risk assessment - see SFRA Volume 7 <br> - include an assessment of embodied energy impacts see Section 15.7.1. |  |
| 8. | To secure sustainable density, intensity at locations of high accessibility | Enh anced density and scale should: <br> - be at locations of higher accessibility well served by public transport with high capacity frequent service with good links to other modes of public transport, <br> - look to optimise their development footprint; accommodating access, servicing and parking in the most efficient ways possible integrated into the design. | The proposed development provides sustainable density, intensity at locations of high accessibility. See pages 19-22, and $27-28$, and page 55 of 22001-RKD-ZZ-ZZ-RP-A-3000 for description and illustrated response to all points of the criteria |
| 9. | To protect historic environments from insensitive development | Enhanced density and scale should: <br> - not have an adverse impact on the character and setting of existing historic environments including Architectural Conservation Areas, Protected Structures and their curtilage and National Monuments - see section 6 below. <br> - be accompanied by a detailed assessment to establish the sensitives of the existing environment and its capacity to absorb the extent of development proposed, <br> - assess potential impacts on keys views and vistas related to the historic environment. | The proposed development protects historic environments from insensitive development. See pages 16-17, and page 30, and pages 44-48, and 65-68 of 22001-RKD-ZZ-ZZ-RP-A-3000 for description and illustrated response to all points of the criteria |
| 10. | To ensure appropriate management and maintenance | Enhanced density and scale should: <br> - Include an appropriate management plan to address matters of security, management of public/communal areas, waste management, servicing etc. | The proposed development will have appropriate management and maintenance. See pages $50-55$ of 22001-RKD-ZZ-ZZ-RP-A-3000 and the Outine Servicing and Operations Management Plan Report for description and illustrated response to all points of the criteria. |



## Thank you.


[^0]:    Housing Quality Audit (Part V Extract)

