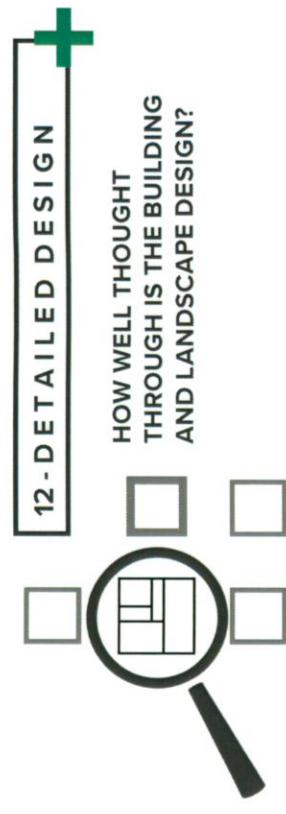


12.0 Detailed Design



12.0 Detail Design

12.1 Introduction



12 - DETAILED DESIGN

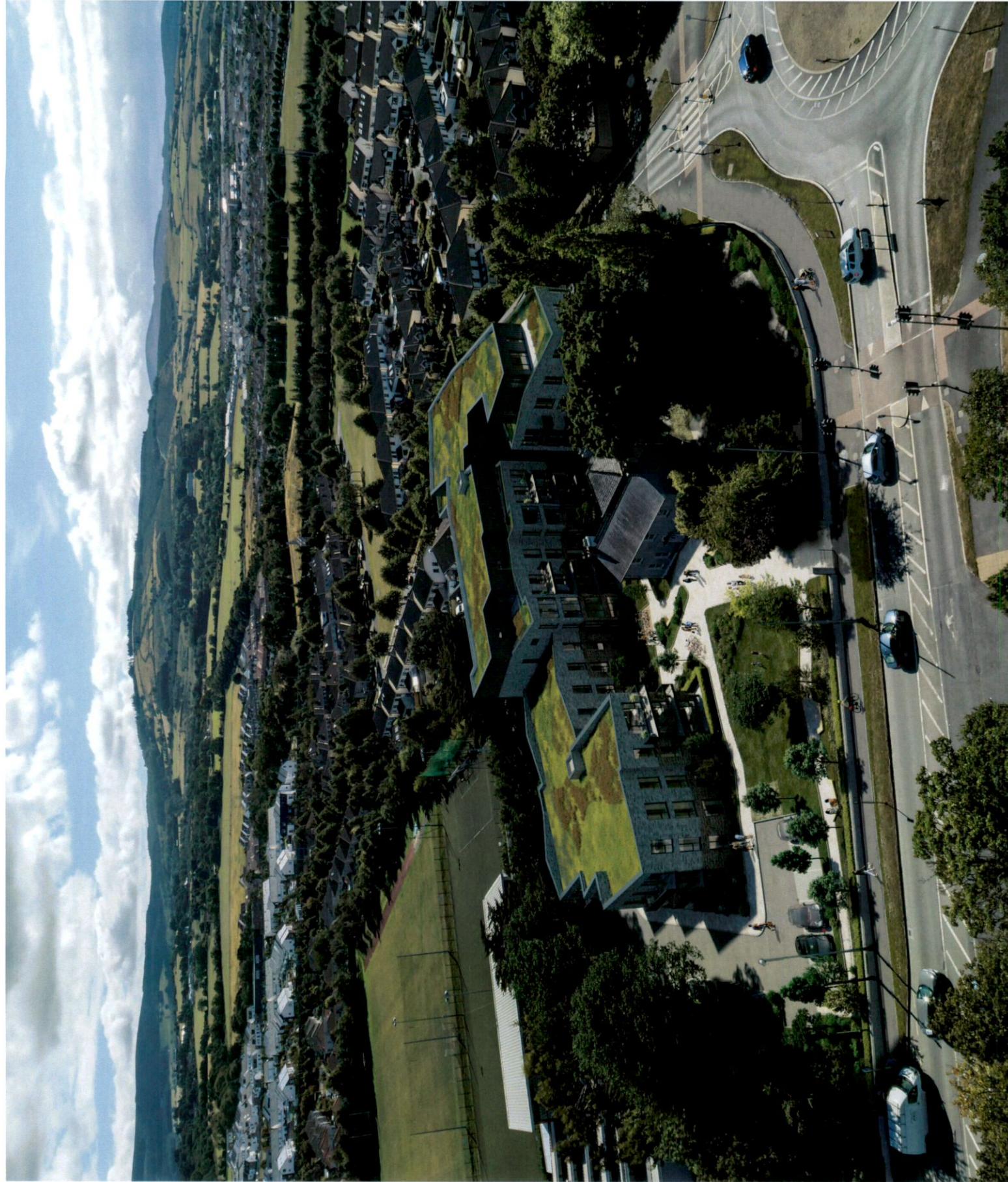
HOW WELL THOUGHT
THROUGH IS THE BUILDING
AND LANDSCAPE DESIGN?

The design has been subject to an engagement meeting with SDCC's conservation officer followed by a pre-planning meeting with South Dublin County Council.

The proposed development represents a high quality design whilst optimizing the appropriate use of the site which will help meet the ever increasing demand for residential accommodation.

The design treatment incorporates the latest technologies to achieve the highest standards in energy efficiency, also the selected material finishes, fenestration design and holistic landscape strategy will provide a new contemporary and high quality expression for the site as a refreshed new backdrop to Scholarstown house.

The drawings, reports and other supporting documents submitted as part of this application contain the detail design information of this planning application. The principal points are summarised within this chapter of this report. Please refer to the relevant documents for greater detail.



CGI aerial view from the north of proposed development

12.0 Detail Design

12.2 Urban Development and Building Heights

Development Management Criteria

This Section responds to the Development Management Criteria of the Urban Development and Building Heights Guidelines 2018 at the specified scales, as referenced in Specific Planning Policy Requirement (SPPR) 3(a):

"It is a specific planning policy requirement that where:

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

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

The above Urban Development and Building Heights Guidelines 2018, SPPR(3)(A) is also reflected in SDCC Appendix 10- Building Height and Density Guidelines 2022 SPPR3

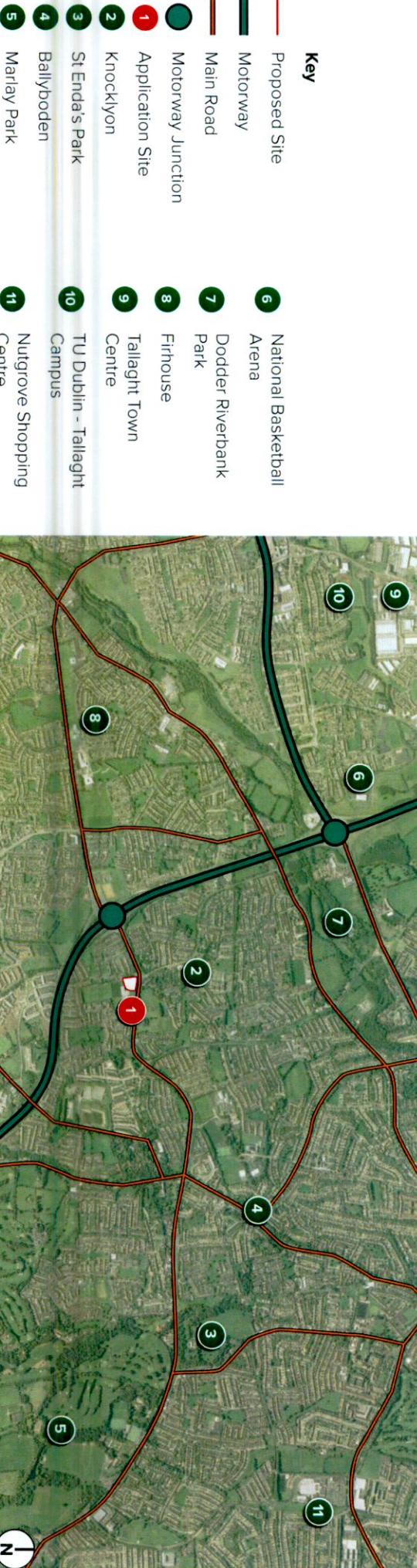
The Development Management Criteria are addressed in turn below:

At the scale of relevant city/ town

The criteria for assessment of developments at the scale of the relevant city/ town are addressed below:

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

As previously set out, the site is currently well served by public transport. Currently the No 175 Dublin Bus runs east and west on Scholarstown Road. There are currently 2 bus stops within approx 25m/50m to the north east. There is also a No 15 Dublin Bus stop within 50m of the site to the north west along St Colmcille's Way.



A dedicated cycle lane also runs along Scholarstown Road which encourages active transport. Scholarstown Road forms part of the Bus Connects plans with the A1 Spine/Branch route and the S8 Orbital route running past the site on Scholarstown road. Please refer to accompanying Traffic and Transport Assessment for further detail. The subject lands are suited to higher density development to maximise an efficient use of these transport resources.

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

The proposed scheme has been designed to respond to site specific location, existing Scholarstown House, orientation and context. The site is currently hidden from the public realm with a c2 meter high harsh edge to the public routes which hides Scholarstown House from the

The building forms have been designed to create a place with unique identity, marking the edge of Orlagh Grove while also integrating into both the existing and developing/under construction buildings on adjoining lands. This results in significant enhancement in the character of the area.

The subject site is not within any significant views or vistas externally. Cunnane Stratton Reynolds landscape

streetscape. The proposal addresses this, reducing this wall down to provide a dwarf wall with railings over and opening up the site for both visual and physical links for the public to enter the site and appreciate the high quality setting within around Scholarstown House and the new residential building.

Architects have been appointed to undertake a Landscape and Visual Impact Assessment as part of the planning application, and is a suitably qualified practitioner.

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

The proposal incorporates a new public streetscape along Orlagh Grove road with the building line set back to provide quality landscape spaces to ground floor apartments, space for appreciation of existing street trees and an edge which resonates and creates a balance between the set backs of the surrounding built environment. A quality green landscape strategy enhances the quality and bio diversity of the new enhanced setting. The existing site topography has been incorporated into the landscape strategy to enhance the green spaces and soften boundary treatments.

12.0 Detail Design

12.2 Urban Development and Building Heights

The proposed massing takes account of the above placemaking principles and enhancements to the public realm. The massing carefully considers and aims to minimize the effects of overshadowing into the communal amenity courtyards and public open spaces.

The orientation of the blocks provide the opportunity for direct sun light to penetrate into the communal/public gardens. The orientation of the building blocks also create pleasant spaces for people to stop, rest and communicate within the setting of Scholarstown House. The building blocks have also been orientated to retain and respect the existing vista to and from the front of Scholarstown House and minimize views into adjoining lands. The existing landscape elements and trees also played an important role in informing the design from the outset.

A daylight/sunlight study has been completed by 3D Design Bureau. This consideration and study of day/sun light from early design stage helps to ensure best possible light and aspect is provided to the apartment units while creating visual interest through architectural expression along the facade frontages.

At the scale of district/ neighbourhood/ street

The criteria for assessment of developments at the scale of district/ neighbourhood / street context are addressed below:

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

The proposal achieves a balance between built form and public/semi-public open spaces and the existing protected structure Scholarstown House which create high quality resident amenity spaces but also offers significant positive contribution to the urban neighbourhood and streetscape.

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

The building form responds to the site context and orientation which has informed the block layout and massing. The varying of block massing and height creates an interesting streetscape and avoids monolithic perimeter block forms. Reinforced by quality design and materiality of the building facades this creates enhanced facade articulation and expression.

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

The development will be subject of a Site Specific Flood Risk Assessment by Horgan Lynch Consulting Engineers (see accompanying report) and the lands are located in Flood Zone C, so the uses are compatible in accordance with the 2009 Flood Risk Guidelines.

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

The proposal is located at a key node on the roundabout junction where Orlagh Grove meets Scholarstown Road. This location marks the transitional space between the predominantly two story dwellings to the west and the 4/5+ storey existing and under construction buildings to the north and east.

The design response to the existing setting of Scholarstown House, Trees and significant sycamore tree to the north west of the House, combined with the conservation of the vista to the front of the House, provides preservation of the setting with a new build backdrop. This informs a large public/communal open space at the heart of the scheme with Scholarstown House and will create a central hive of activity which will enrich the development, connecting around the site to various routes formulated within the landscape scheme.

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

The proposal provides a Build To Sell development with 20% Part V units. Given the urban location of the development site, apartment type units are the most efficient use of the lands. See unit breakdown within table to the right. In reflection of the development plan zoning 'Res' 'To protect and/or improve residential amenity' the proposal complies with the zoning requirements with a mix of typologies provided to attract a range of individuals and families.

At the scale of the site/ building

The Guidelines also set out the following criteria for developments at the scale of the site / building:

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

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

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

Proposed Overall Residential Unit Mix (incl Scholarstown House)		
Unit Type	Number	Percentage (%)
1 Bed	32	42%
2 Beds (3P)	1	1%
2 Beds (4P)	33	43%
3 Beds	10	13%
Total	76	100%



Precedent: Public/Communal Amenity Space



Precedent: Public/Communal Amenity Space - Play Spaces

12.0 Detail Design

12.2 Urban Development and Building Heights

the proposed development has been carefully designed as to maximise access to natural daylight, ventilation and views and to minimize overshadowing and loss of light.

As discussed above, the proposed building form, massing and height has been carefully considered to achieve the following:

- Significant enhancement to the surrounding public realm with legibility from street level.
- Day/sunlight penetration from the south of the site, through the amenity landscape spaces, into the apartments and also down onto the landscape spaces.
- A mass and form which responds to the surrounding street frontage; creating an urban edge to the west Orlagh Grove road with a celebrated vista with new landscape planting from Scholarstown Road
- Providing a strong architectural facade and massing onto Orlagh Grove road which wraps and create a sensitive contemporary backdrop to Scholarstown House.
- Offer a sensitive and responsive transitional heights pattern which fits in with the existing context buildings. The subject site, with its strategic location as a node, and absence of quality built form (and slight level difference between site and Orlagh Grove road) justifies the proposed height on the subject site to maximise the amenity benefit and create a strong backdrop and identity to Scholarstown House.

3D Design Bureau have undertaken a sunlight and daylight access analysis and have been involved in the design development, to ensure the proposal will comply with the BRE and BS standards for impacts on neighbouring development and internal lighting to the apartments and communal open space.

As such it is respectfully submitted that the proposed development has been carefully designed as to maximise access to natural daylight, ventilation and views and to minimize overshadowing and loss of light.

Specific Assessments

The Building Height Guidelines criteria also sets out that for support proposals at some or all of the scales outlined, specific assessments may be required:

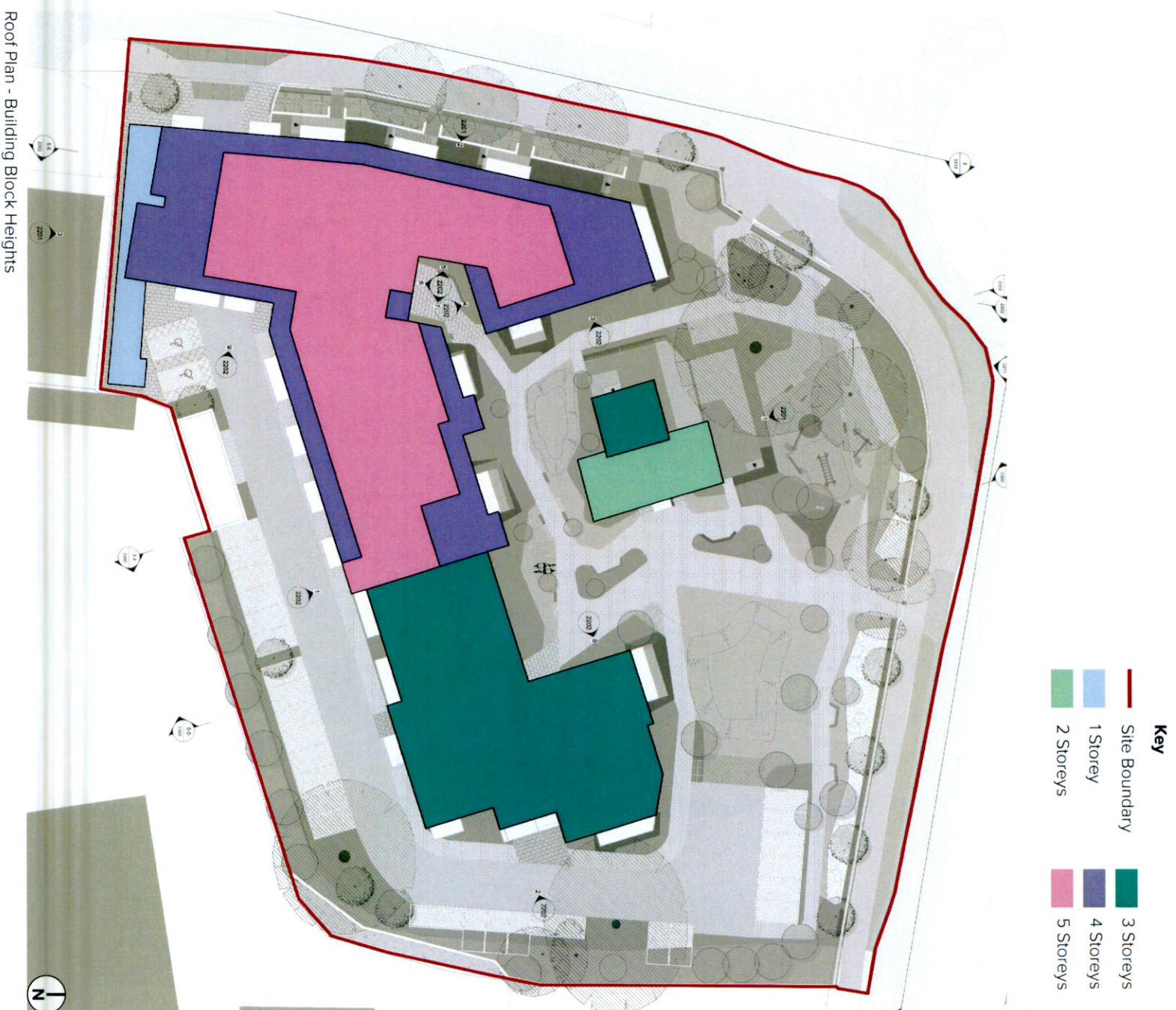
"In development locations in proximity to sensitive bird and / or bat areas, proposed developments need to consider the potential interaction of the building location, building materials and artificial lighting to impact flight lines and / or collision."

An Appropriate Assessment Screening report and a Bat Fauna Impact Assessment has been prepared by Altemar Ltd Marine and Environmental Consultants.

The AA Screening report notes the subject site is not an important foraging or roosting site for bird species protected as qualifying interests in nearby SPAs. As such, the proposed development project will not have a significant impact on the conservation objectives of Natura 2000 sites. The construction and operation of the proposed development will not impact on the conservation objectives of features of interest of Natura 2000 sites.

On the basis of the content of the report, the competent authority is enabled to conduct a Stage 1 Screening for Appropriate Assessment and consider whether, in view of best scientific knowledge and in view of the conservation objectives of the relevant European sites, the Proposed Development, individually or in combination with other plans or projects is likely to have a significant effect on any European site.

The Bat Fauna Impact Assessment has been undertaken by Altemar Ltd. The report presents the results of site visits by Bryan Deegan (MCIEEM) on the 8th and 21st September 2022. Bat emergent and



12.0 Detail Design

12.2 Urban Development and Building Heights

- detector surveys were carried out on both dates. The internal and external inspection of outbuildings and sheds was carried out on the 8th September 2022 and the internal and external inspection of house was carried out on the 21st September 2022. Trees on site were examined for bat roosting potential.
 - No evidence of bats or bat roost were identified in any of the onsite trees.
 - No evidence of bat roosting was noted within or external to the buildings.
 - No bats, evidence of bats or a bat roost were identified in any of the onsite buildings.
 - However, the several mature trees of bat roosting potential. These include trees heavily clad in ivy and trees with features such as cracks and hollows that could be used by bats as roost habitats. Prior to felling/works on the trees these trees will need to be inspected for bats/bat roosts.
 - Emergent/detector surveys were carried out by Bryan Deegan on the 8th September 2022 and 21st September 2022. Please refer to Emergent/detector surveys chapter page 12 for full details and results.

- With no bats been noted roosting on site and the level of activity on site is low with common bat species transiting through the site. As a result the report outlines a number of mitigation measures including; sensitive lighting, post construction bat survey and light spill assessment and a pre construction bat roosting inspection.
- Please see accompanying Appropriate Assessment Screening report and a Bat Fauna Impact Assessment prepared by Altemar Ltd Marine and Environmental Consultants contained within the Planning Statement by HW Planning.
- "An urban design statement including as appropriate, impact on the historic built environment"*
- The application is accompanied by an Architectural Design Statement prepared by C+W O'Brien Architects (this document) and a Landscape and Visual Impact Assessment prepared by Cunnane Stratton Reynolds Landscape Architects. The assessments concludes that overall the development integrates well, is well designed and composed of appropriate materials in a contemporary manner that engages with its environs in

different ways.

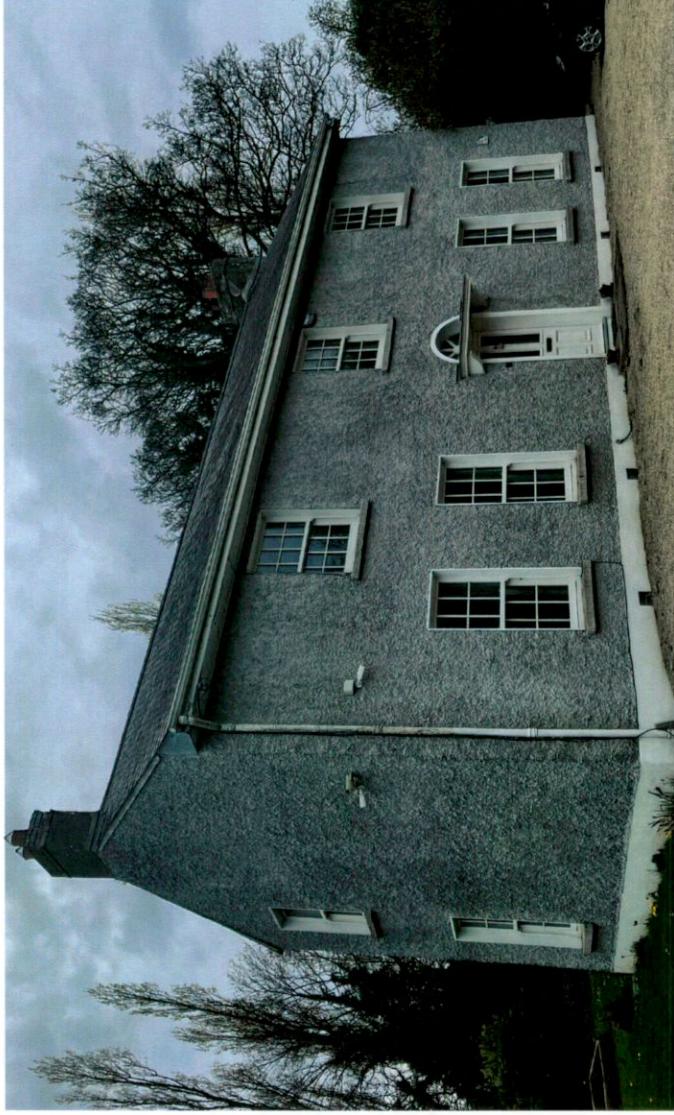
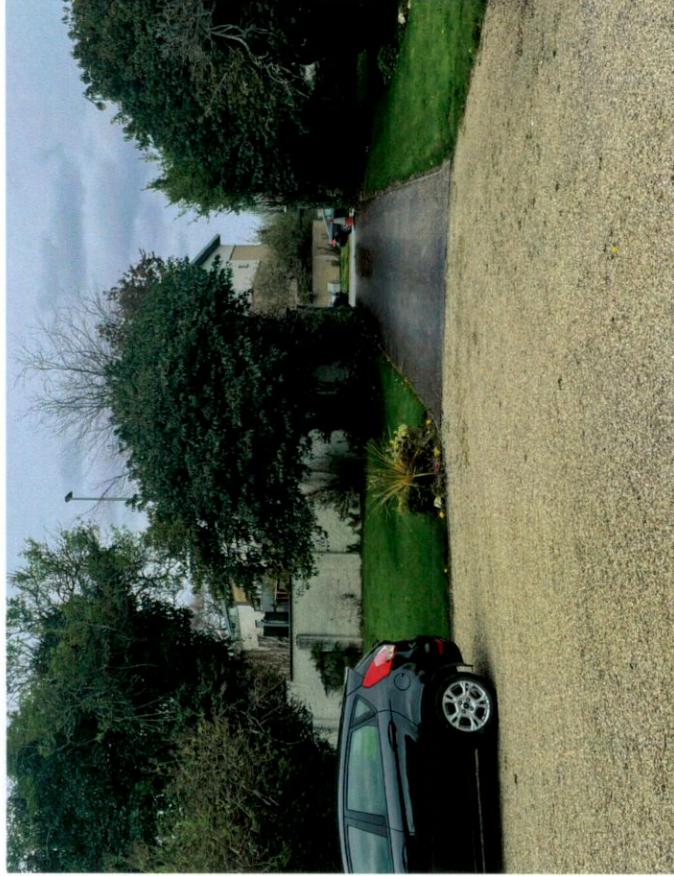
The design will result in alternating the historic house's existing setting through the loss of boundary trees which affects its current strong degree of enclosure and it's resulting limited visibility from the surroundings. The opening up of the proposed site's boundaries, through tree removal and reduction of the boundary wall, will allow opportunities for greater visibility of Scholarstown House from the immediate area and new public interaction around the grounds of the house. The proposed development will also ensure the historic house is retained and improved allowing for its continued use as a residence and retaining its historic character.

Please also see attached Architectural Heritage Impact Assessment prepared by John Cronin conservation consultants for further detail relating to Scholarstown House.

"Relevant environmental assessment requirements, including SEA, EIA, AA and Ecological Impact Assessment, report"

The planning application is accompanied by An Appropriate Assessment Screening report and a Bat Fauna Impact Assessment has been prepared by Altemar Ltd Marine and Environmental Consultants contained within the Planning Statement by HW Planning.

It is respectfully submitted that the proposed development has had regard to the planning policy framework as set out in the Building Height Guidelines.



12.0 Detail Design

12.3 Daylight / Sunlight Study

Sunlight/Daylight

SDCC Development Plan Chapter 12.6.7 notes:

Residential Developments shall be guided by the quantitative performance approaches and recommendations under the 'Site Layout Planning for Daylight and Sunlight' (2nd edition): A Guideline to Good Practice (BRE 2011) and BS 8206-2: 2008 – 'Lighting for Buildings – Part 2: Code of Practice for Daylighting' or any updated guidance.

- A daylight analysis will be required for all proposed developments of 30+ units or in any other case where the layout or design could unduly impact on residential amenity.

- The impact of any development on existing habitable rooms should also be considered.

It is for the proposer of residential applications to demonstrate that the development can satisfy the standards set out above in relation to potential impacts on the quality and usability of spaces including public open spaces and communal spaces. This can potentially be achieved through appropriate heights and orientation of adjoining blocks to allow for adequate levels of sunlight to reach communal amenity space throughout the year.

Please refer to architectural design statement section Daylight / Sunlight Study and the accompanying Daylight and Sunlight Assessment Report prepared by 3DDB for further information.

This can be considered excellent results and can be attributed to reasons stated above for VSC impact.

Effect on Sun On Ground in Existing Gardens

This study has assessed the effect the proposed development would have on the level of sunlight on March 21st in the rear gardens of the neighbouring properties. In total 6 no. spaces have been assessed. 100% of these outdoor spaces have met the criteria for effect on sunlighing as set out in the BRE Guidelines.

This can be considered excellent results and can be attributed to reasons stated above for VSC impact.



Effect on Sun On Ground in Proposed Outdoor Amenity Areas

The BRE Guidelines recommend that for a garden or amenity to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on March 21st. The results show Communal Open Spaces are quality spaces which receives at least two hours of sunlight on March 21st therefore are fully compliant with the requirement above.

Sunlight Exposure (SE)

A sunlight exposure assessment has been carried out on all habitable rooms within the proposed new build, in total 74 no. units have been assessed. The level of sunlight exposure for 42-44 no. units is considered high, 9-13 no. medium, 5-7 no. have reached the minimum recommendation with 12-16 units below the minimum recommendation. The SE assessment has shown that circa ~78% - 84% of the proposed units meet the criteria for sunlight exposure as set out in the BRE Guidelines.

2 no. units located in the Scholarstown House have been assessed. The SE assessment has shown that 100% of the proposed units meet the criteria for sunlight exposure as set out in the BRE Guidelines.

Whilst, the criterion applies to rooms of all orientations, it should be noted that if a room faces significantly north of due east or west it is unlikely to be met. As such, it is not always possible to achieve full compliance.

No recommendation is made regarding the performance of a development as a whole for SE performance, but 3DDB consider the proposed development to perform favourably in this regard. The proposed apartment block presents a good number of dual and triple aspect units. The noticeable difference between winter and summer state compliance rates suggests that the large number of trees in the surrounding context would contribute towards a reduction of direct sunlight in some units when trees are in full leaves during summer. However, they also reduce the risk of potential heat gain and can be considered to provide a favourable outlook for occupants.

12.0 Detail Design

12.3 Daylight / Sunlight Study

Spatial Daylight Autonomy (SDA)

The proposed new build block consists of 74 no. units, which makes up 199 no. habitable rooms. Under the criteria as set out in the BRE 209, the SDA value in 184-188 no. habitable rooms meet or exceed their target values in the summer and winter time calculations respectively.

This gives a **circa compliance rate of ~(92% - 94%)**. This could be considered a very good level of compliance, which demonstrates that consideration has been given to the daylight and sunlight when designing the proposed scheme and internal layouts. Also, the design team worked closely with 3DDB to put in place targeted amendments to the interior layout to increase the compliance rate. This was done through the increase of glazing areas where required and the re-configuration of some internal spaces/layouts. Also, the landscape design was amended, and proposed trees have been repositioned and resized where they were heavily affecting the daylight levels to some units.

It should be also noted that a supplementary assessment has been carried out with the removal of the 3 no. existing trees along Orlagh Grove and the 2 no. big evergreen trees to the south of the proposed building, to assess if the non-compliance of some rooms was attributed to the design itself or the presence of those trees. The findings have shown that LKDs of units 018, 0210, 0211 would meet the recommended Lux levels for SDA (respectively with an SDA of 72%, 53%, 54% in summer state) without those trees in place, bringing the compliance rate to ~(94% - 96%). However trees are an integral part of any scheme with regard to environmental and planning grounds along with biodiversity. Whilst trees can contribute towards a reduction of daylight in units they also reduce the risk of potential heat gain and can be considered to provide a favourable outlook for occupants.

With regards to internal daylighting, Section 6.7 of the Sustainable Urban Housing: Design Standards for New Apartments December 2020, states the following:

"Where an applicant cannot fully meet all of the requirements of the daylight provisions above, this must be clearly identified and a rationale for any alternative, compensatory design solutions must be set out, which planning authorities should apply their discretion in accepting taking account of its assessment of specific (sic). This may arise due to design constraints associated with the site or location and the balancing of that assessment against the desirability of achieving wider planning objectives. Such objectives might include securing comprehensive urban regeneration and/or an effective urban design and streetscape solution."

Based on the above statements, compensatory measures have been incorporated into the design of the proposed development where rooms do not achieve the daylight provision targets in accordance with the standards they were assessed against within the primary study (BRE 209).

Compensatory Measures

The primary reason for lower daylight levels within the lower performing units is the existing surrounding mature street trees along the western boundary at Orlagh Grove, existing mature trees to the south and east along the boundary with the school lands and the mature sycamore tree to the northwest of Scholarstown House. Proposed trees also have been included by 3DDB as per CSR landscape architect layouts, within the daylight analysis to BRE 209 requirements. The below outlines the individual compensatory measures provided to these rooms.

The ground level of the proposed new building responds to existing site topography and levels of Scholarstown House. This informs the proposed ground floor level of the new building which is slightly below the level of Orlagh Grove. The balcony of a unit above creates overshadowing to the unit underneath; however we believe the provision of private external open space accessed directly from the living space outweighs the negative of a reduction in daylight during some periods of time. Ground floor units are provided with large private open space garden/terrace which is accessed directly from the living space.

All units are provided with access to the internal communal multifunctional amenity space of 73sqm area located at ground floor level adjacent to the main entrance. There is also a second multifunctional communal amenity space providing 27sqm area located at the first floor level above this space. It is intended that these communal amenity facilities will provide multifunctional spaces to be used for a variety of uses by all residents of the scheme. These internal communal amenity spaces are complemented by external communal amenity landscaped gardens within the setting of Scholarstown House which provide play spaces, rest spaces and spaces for residents to meet, walk and exercise.

Unit 0001 - Kit/Liv/Din

The Kitchen/Living/Dining room within this unit is provided with 35.7sqm floor area which is 5.7sqm above the minimum 30sqm requirement. This unit is also provided with a private garden of 62sqm which includes

a 12.6sqm terrace area and private access gate directly onto Orlagh Grove.

Unit 0002 - Kit/Liv/Din

The Kitchen/Living/Dining room within this unit is provided with 34.9sqm floor area which is 4.9sqm above the minimum 30sqm requirement. This unit is also provided with a private garden of 60sqm which includes a 12.6sqm terrace area and private access gate directly.

Unit 0002 - Bedroom 2

This bedroom achieves the BRE 209 requirements in the winter condition. Therefore the leaves on the street trees create the shading and reduce the light into the bedroom during the summer. We believe the amenity benefits of the street tree outweigh the slight reduction in daylight into the room in the summer condition. The bedroom is also 1sqm above the area required for a double bedroom and the overall apartment is 11sqm above the minimum area required.



CGI View from North West: Scholarstown Roundabout

12.0 Detail Design

12.3 Daylight / Sunlight Study

Unit 0003 - Kit/Liv/Din

The Kitchen/Living/Dining room within this unit is provided with 34.5sqm floor area which is 4.5sqm above the minimum 30sqm requirement. This unit is also provided with a private garden of 61sqm which includes a 12.6sqm terrace area and private access gate directly onto Orlagh Grove.

Unit 0003 - Bedroom 1

This bedroom achieves the BRE 209 requirements in the winter condition. Therefore the leaves on the street trees create the shading and reduce the light into the bedroom during the summer. We believe the amenity benefits of the street tree outweigh the slight reduction in daylight into the room in the summer condition. The overall apartment is 5.5sqm above the minimum area required.

Unit 0005 - Kit/Liv/Din

The Kitchen/Living/Dining room within this unit is dual aspect and provided with 27.2sqm floor area which is 4.2sqm above the minimum 23sqm requirement. This unit is also provided with a private garden terrace of 9.2sqm with surrounding buffer low level hedge and accessed directly from the living space. This unit also benefits from attractive views of Scholarstown House and associated landscaping.

Unit 0006 - Kit/Liv/Din

The overall floor area of this dual aspect apartment is 99sqm which is 26sqm above the minimum required. The living space overlooks the existing heritage building Scholarstown House and associated vista, quality landscaping and preserved mature sycamore tree and benefits from the addition of bay a window which provides additional floor space to the internal living/kitchen/dining but also offer significant dual aspect views of these significant amenity spaces.

Unit 0006 - Bedroom 1

The overall floor area of this dual aspect apartment is 99sqm which is 26sqm above the minimum required. The floor area of this bedroom is 7sqm above the minimum area required which provides additional

internal space for the occupant but makes the inner areas of the bedroom achieve less daylight.

Unit 0006 - Bedroom 2

The overall floor area of this dual aspect apartment is 99sqm which is 26sqm above the minimum required. The floor area of this bedroom is 1sqm above the minimum area required which provides additional internal space for the occupant but makes the inner areas of the bedroom achieve less daylight. This bedroom achieves the BRE 209 requirements in the winter condition. Therefore the leaves on the trees create the shading and reduce the light into the bedroom during the summer. We believe the amenity benefits of the street tree outweigh the slight reduction in daylight into the room in the summer.

Unit 0106 - Kit/Liv/Din

The Kitchen/Living/Dining room within this unit is provided with 34.9sqm floor area which is 4.9sqm above the minimum 30sqm requirement. This unit is also provided with a private balcony of 7.5sqm accessed directly from the living space. This living space receives a reduction of daylight due to the existing street trees, we believe the amenity benefits of the street tree outweigh the slight reduction in daylight into the room.

Unit 0107 - Kit/Liv/Din

The Kitchen/Living/Dining room within this unit is provided with 34.9sqm floor area which is 4.9sqm above the minimum 30sqm requirement. This unit is also provided with a private balcony of 7.5sqm accessed directly from the living space. This living space receives a reduction of daylight due to the existing street trees, we believe the amenity benefits of the street tree outweigh the slight reduction in daylight into the room.

Unit 0107 - Kit/Liv/Din

The Kitchen/Living/Dining room within this unit is provided with 34.9sqm floor area which is 4.9sqm above

Unit 0118 - Kit/Liv/Din

The overall floor area of this dual aspect apartment is 46.5sqm which is 1.5sqm above the minimum required. The apartment benefits from a south facing aspect at first floor level. The living space of this apartment receives a reduction in daylight ingress due to the existing mature Monterey Cypress tree across the access road. This Cypress tree will also be pruned to arborist guidelines at the initial construction stage which will increase daylight into the apartments further.

We believe the amenity benefits of the cypress tree outweigh the slight reduction in daylight into the room and offers a significant quality of visual amenity to this apartment unit.

The Kitchen/Living/Dining room within this unit is provided with 34.5sqm floor area which is 4.5sqm above the minimum 30sqm requirement. This unit is also provided with a private balcony of 7.5sqm accessed directly from the living space. This living space receives a reduction of daylight due to the existing street trees, we believe the amenity benefits of the street tree outweigh the slight reduction in daylight into the room.

Unit 0211 - Kit/Liv/Din

The Kitchen/Living/Dining room within this unit is provided with 34.5sqm floor area which is 4.5sqm above the minimum 30sqm requirement. This unit is also provided with a private balcony of 7.5sqm accessed directly from the living space. This living space receives a reduction of daylight due to the existing street trees, we believe the amenity benefits of the street tree outweigh the slight reduction in daylight into the room.



CGI View from south west / Orlagh Grove

12.0 Detail Design

12.3 Daylight / Sunlight Study

Existing Scholarstown House

The existing dwelling of Scholarstown house, a protected structure, has been subdivided into two residential units. These units have been designed to respect the existing building fabric while creating a viable future use that is sympathetic to its significance. With that in mind the proposed units have been designed to have minimal impact on the existing building to retain the existing building shell and significant historic features with best practice conservation principles as set out in the Architectural Heritage Protection Guidelines for Planning Authorities, DAHG (2011) and the Design Manual for Quality Housing (2020).

The existing house in the proposed layout consists of 2 no. units, which makes up approximately 9 no. habitable rooms. Under the criteria as set out in the BRE 209, the SDA value meets or exceed its target value only in 1 no. instance.

The levels of daylight would not be sufficient to comply with BRE Guidelines in most cases, and an increase in glazing areas would not be possible. However, the house has been re-arranged internally for use as two separate units as opposed to the current one unit, with attention to a daylight-conscious design with the relocation of the stairs to the north and the habitable rooms to the south. These proposed design amendments will improve the house condition and interior layout will better respond to current housing needs.

Scholarstown House Unit 1

The combined Kitchen/Living/Dining room within this unit is provided with 55sqm floor area which is 15sqm above the minimum 30sqm requirement. This unit is

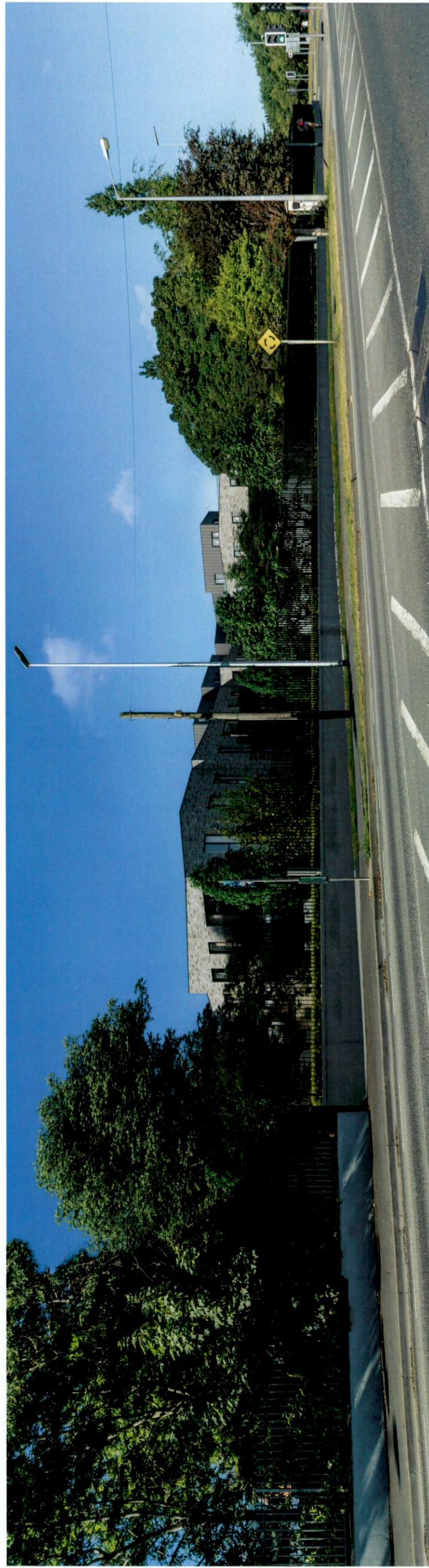
The combined Kitchen/Living/Dining room within this unit is provided with 33sqm floor area which is 3sqm above the minimum 30sqm requirement. This unit is also provided with a private open space of 76.9sqm. The proposed layout to first and second floor will take advantage of the existing window positions to configure the new layout, without having an adverse impact on the elevations.

provided with a private open space of 66.3sqm accessed directly from the kitchen/dining space. The existing 3 bedrooms to the first-floor of the front element of the house have been reconfigured to comply with the Design manual for Quality Housing. In order to preserve the existing scale and proportion of the existing house, there will be no new window openings proposed to the existing protected structure building envelope.

Scholarstown House Unit 2

The rear three storey return with pitched roof of the existing house has been completely reconfigured internally to create a domestic dwelling. The poor-quality existing layout has been removed with the intention of creating a viable dwelling. This has been achieved, incorporating the new layout within the existing fabric with minimal intervention to the facades.

Please refer to the results for the study on SDA in section C.3 on page 71 of the appendix section in 3D design Bureau's Daylight and Sunlight Assessment Report.



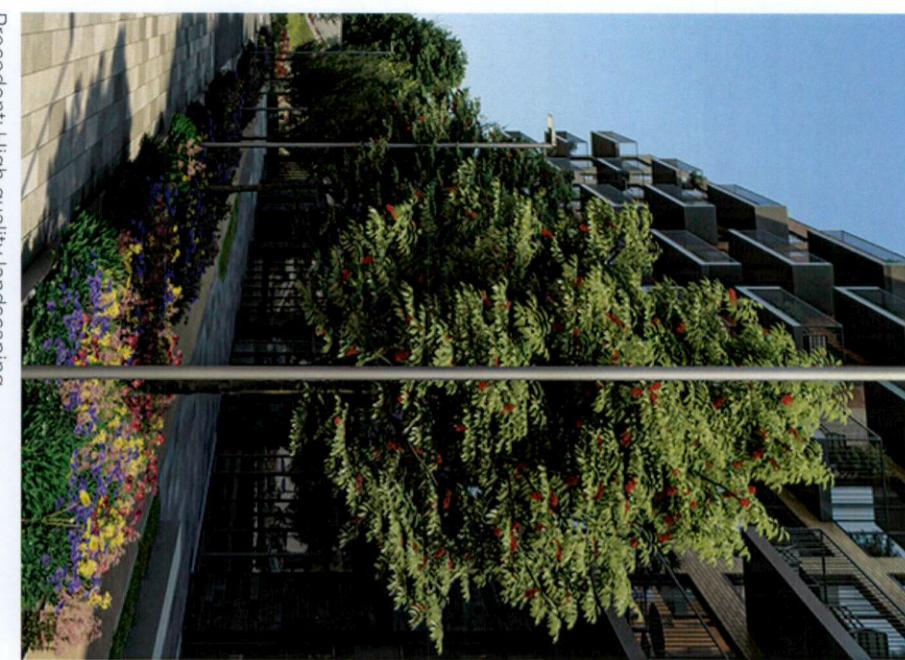
CGI View from north east / Scholarstown Road

12.0 Detail Design

12.3 Daylight / Sunlight Study



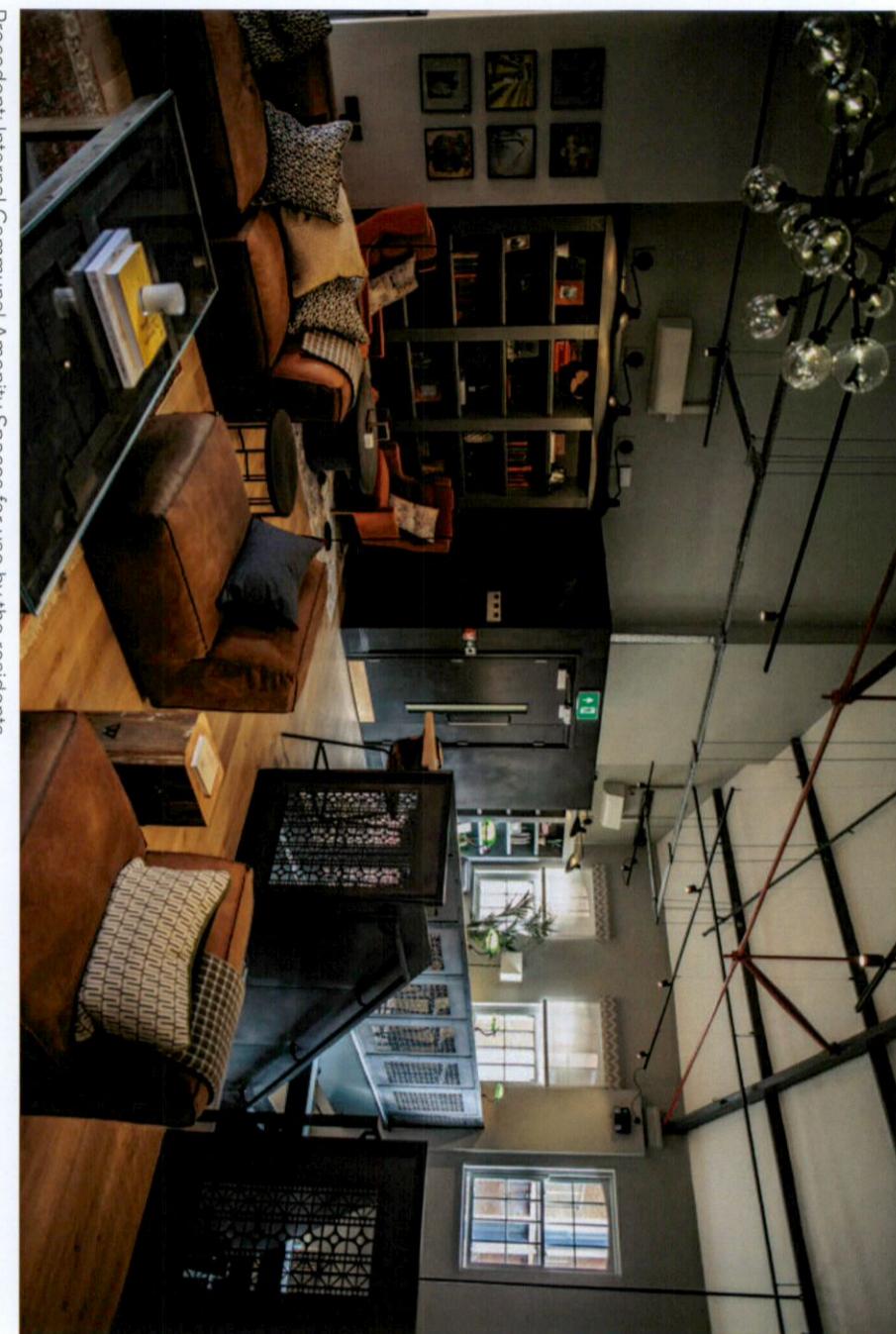
CGI excerpt of Communal Amenity Space in front of
Scholarstown House



Precedent: High quality landscaping



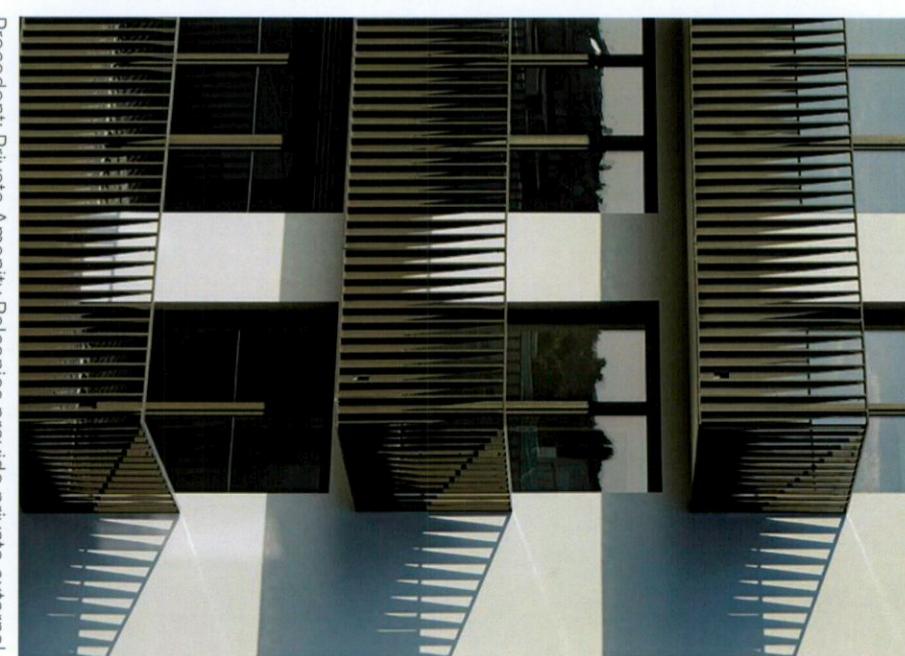
Precedent: External communal amenity space



Precedent: Internal Communal Amenity Spaces for use by the residents



Precedent: Internal Communal Amenity Space



Precedent: Private Amenity Balconies provide private external amenity space but overshadow units below. The benefit of a balcony as a private amenity space adjacent to the primary living space is understood to be more beneficial to the resident than excess daylight. The design creates a design solution which aims to provide the best of both requirements.

12.0 Detail Design

12.4 Existing Building - Design Proposal

Proposed Layout - Scholarstown House

The new development proposes to renovate the existing house, improving its condition and make it fit for purpose for 21st century living. The existing Scholarstown house will be re-arranged internally for use as two separate units over two/three stories respectively. Most central to the development is the stripping out of the existing three storey rear return and reinstating a new residential unit within.

The Scholarstown House proposal can be broken down as such:

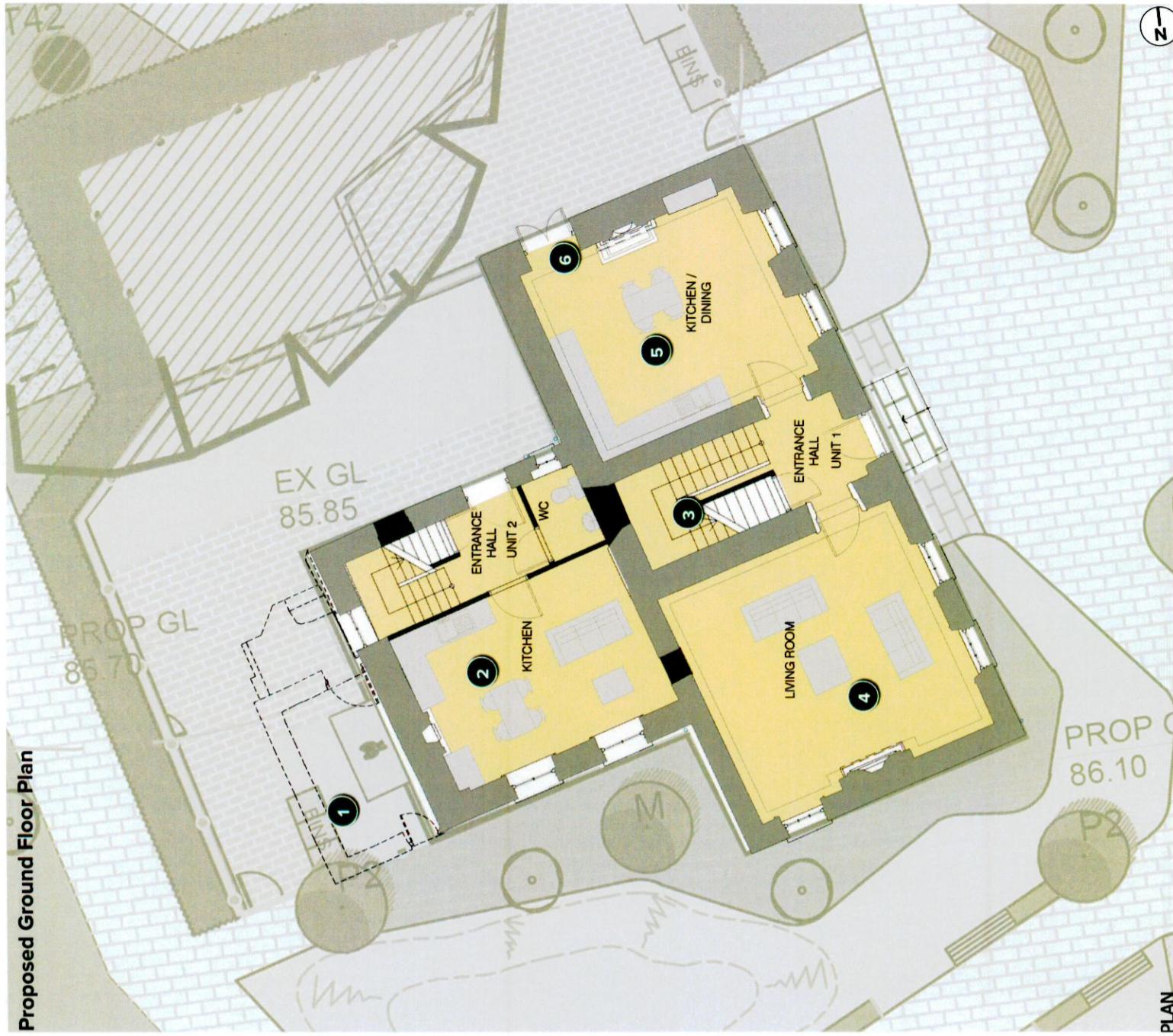
Main House:

- The existing original two storey house is designed to accommodate a 3 bedroom unit with minimal intervention to the existing fabric.
- Formation of a new arched ope through existing alcove to north elevation.
- Reinstate the stairs to their original location within the two storey Scholarstown House, reinstating the entry experience of the protected structure to its original form.
- Block up internal opes between main house and rear three storey return which also removes the existing discrepancy of various level changes between front and rear

Three storey rear return:

- Demolish internal fabric including floors and partition walls (poor existing condition).
- Incorporate new stairs to suitable floor levels to provide optimised floor to ceiling heights within the existing outer walls and roof.
- Create new room layouts which optimise the spaces and light within the existing external wall fabric.

Proposed Ground Floor Plan



The South Dublin County Development Plan 2022 - 2028 Chapter 12.3.7 outlines the requirements which need to be considered/provided regarding works proposed to protected structures. The core principles as outlined were carefully considered when re-imagining the protected structure. The proposed works to the protected structure will be carried out in accordance with best practice conservation principles as set out in the Architectural Heritage Protection Guidelines for Planning Authorities, DAHG (2011). Please see accompanying reports prepared by John Cronin & Associates conservation consultants for further detail.

See accompanying Conservation report prepared by John Cronin Associates for further details.

Key

- Later addition to shed building to be removed.
- Internal fabric of existing return to be stripped out and new layout constructed.
- New stairs layout to be reinstated in original location.
- Existing room proportions and features such as coving, architraves and fireplaces retained.
- Existing room proportions and features such as coving, architraves and fireplaces retained.
- New arched ope to existing alcove providing access to dedicated private open space garden.

12.0 Detail Design

12.4 Existing Building - Design Proposal

Proposed Layout - Scholarstown House

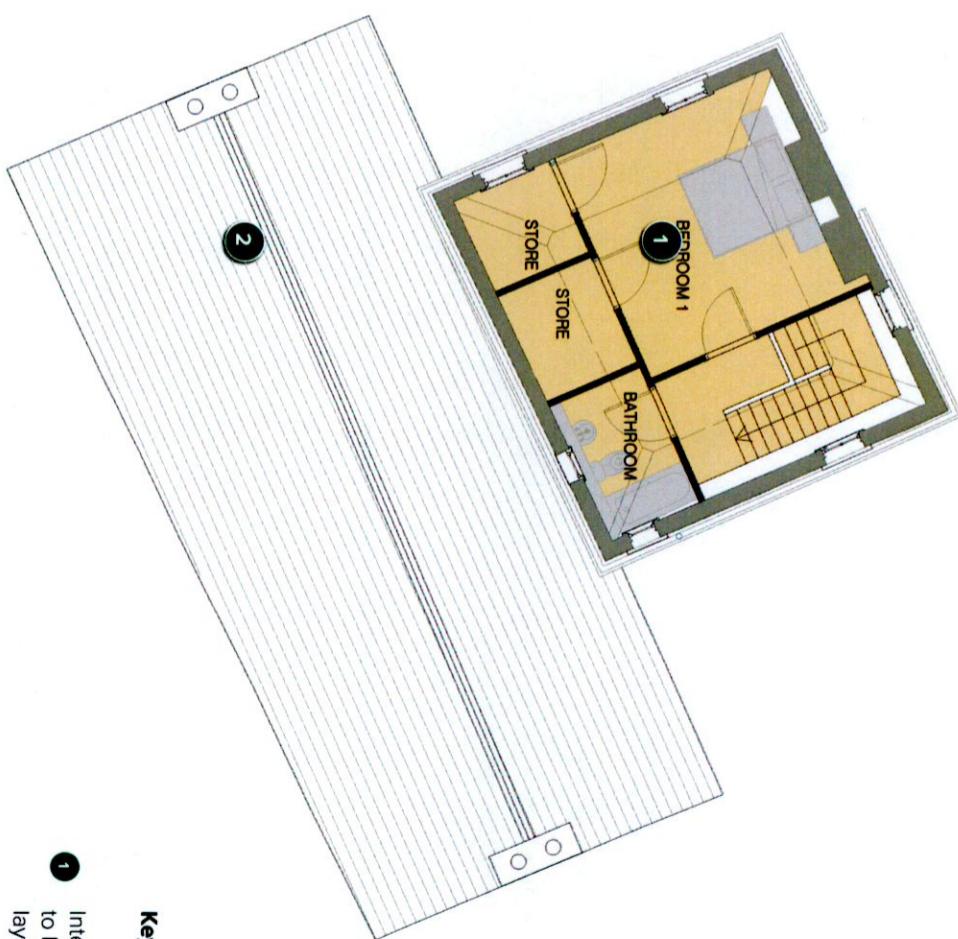
Proposed First Floor Plan



Key

- 1 Internal fabric of existing return to be stripped out and new layout constructed
- 2 New stairs
- 3 New layout to first floor to create a comfortable family unit

Proposed Second Floor Plan



Key

- 1 Internal fabric of existing return to be stripped out and new layout constructed
- 2 Existing slate roof to be refurbished and repaired where necessary

12.0 Detail Design

12.4 Existing Building - Design Proposal

Impact and Mitigation

Main house: Ground Floor

The two existing ground floor rooms of the main house contains some of the original building fabric in terms of cornicing, skirting, architraves and fireplaces. It is intended that these are retained and protected during building works.

A new opening is proposed to the northern elevation, this will be facilitated through the existing arched alcove to the left hand side of the existing fireplace. The new ope will in part replicate the elevational treatment to the southern elevation, which contains a window to the ground floor.

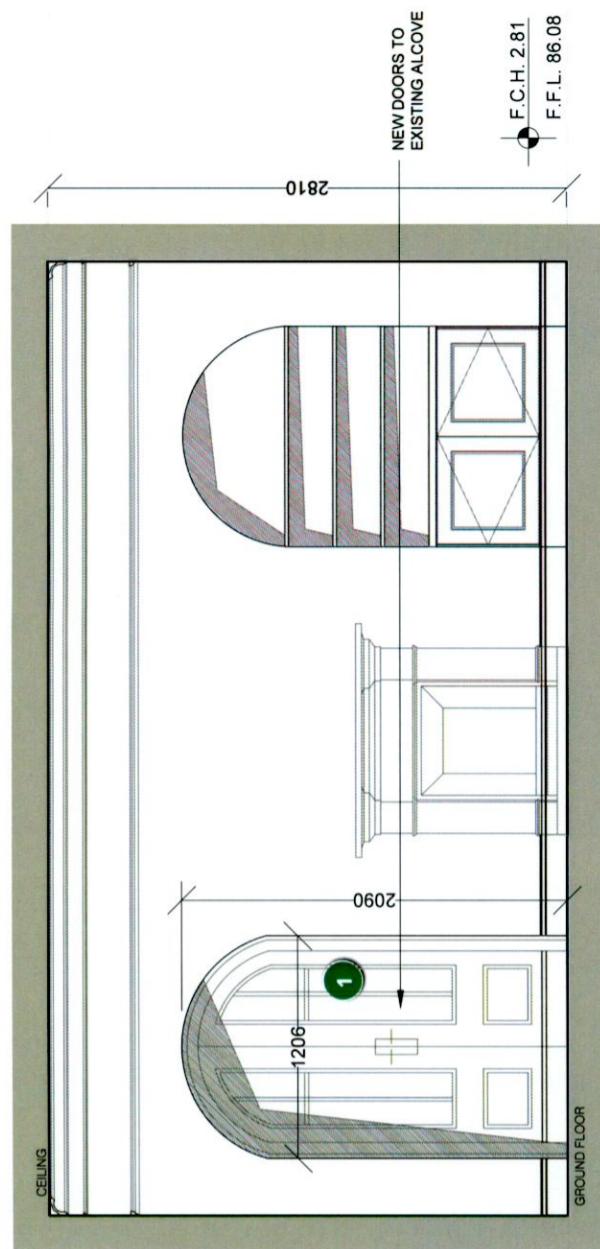
A new stairs is proposed to be reinstated to the original position, (where the original stairs would have been positioned prior to the construction of the rear return). This will re-create the entrance procession experience and will eliminate the various level changes that exist in the current layout and create an ease of circulation within the proposed dwelling.

There will be minimal alteration of historic fabric through opening up new opes but this opes will be constructed sensitively not to undermine the existing fabric.

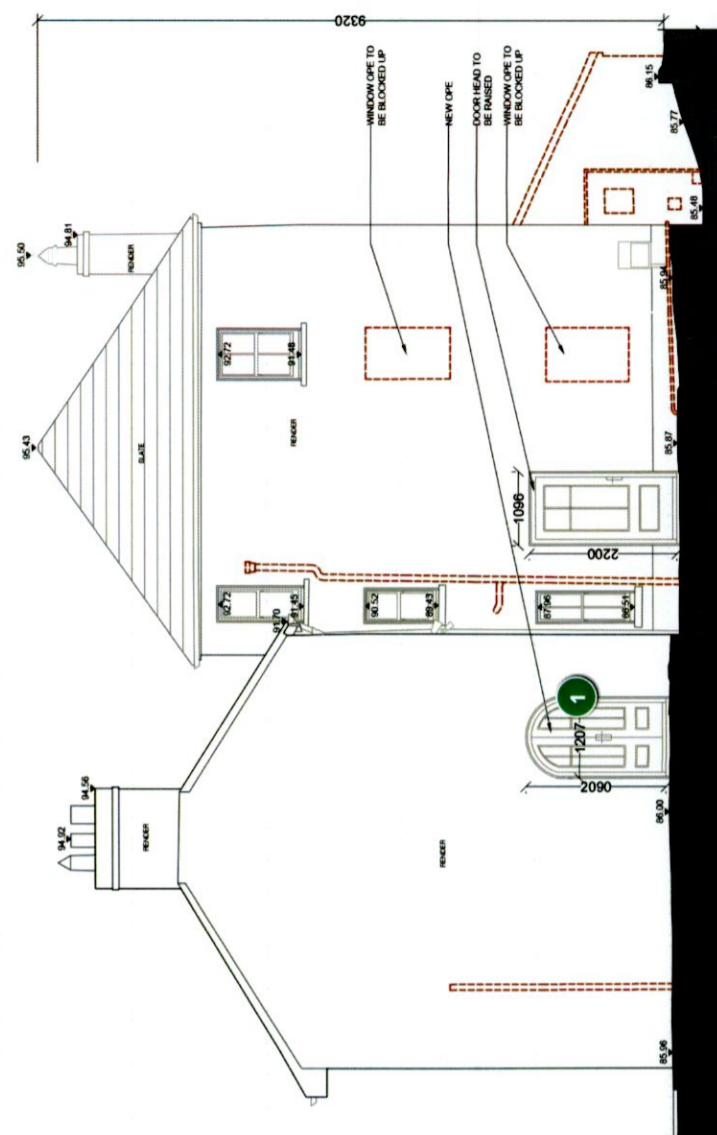
Main house: First Floor

The three existing first floor rooms are dis-proportioned and it is proposed that the revised layout will help accommodate a 3 bedroom dwelling. Much of the existing architraves and surrounds will be retained and protected during works. The proposed repositioning of some of the doors will require some of the architraves to be carefully removed for reuse in newly formed opes.

Where historic fabric will be impacted by new opes and removing partitions, all will be consolidated in accordance with conservation best practice.



Internal North Elevation



External North Elevation

12.0 Detail Design

12.4 Existing Building - Design Proposal

Impact and Mitigation

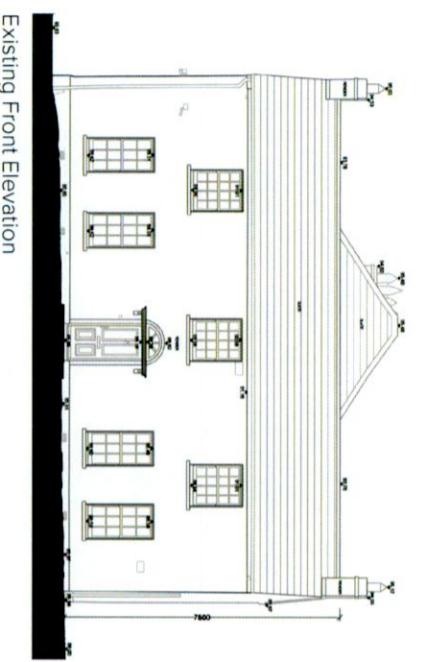
Three storey rear return

The existing rear return contains no fabric of historic significance, is not of good quality and is laid out in a disjointed fashion with poorly located and dis-proportioned rooms.

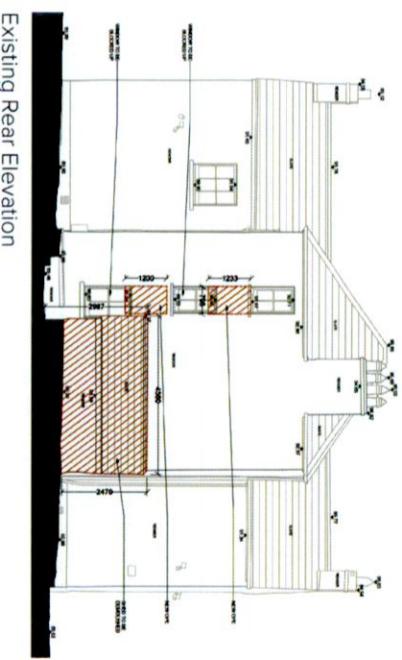
The proposed interventions seek to rectify the main layout issues by stripping out all existing internal fabric and reconstructing the internal layout with improved amenity and interconnectivity. The new layout will create an individual 2 bedroom residential unit over 3 levels suitable for domestic living. The existing internal openings between the main house and the rear return will be blocked up and made good.

To achieve the proposed layout the elevations will require some works to introduce new or block up some window openings to the external façades. The interventions to the façades will primarily be to accommodate the new stairs. The windows to be removed are timber frame, single pane, 2 over 2 sliding sash windows and located in a section of the rear facade which was historically less visible. The ones that are proposed to be blocked up are not detrimental to the character of the building or facade articulation.

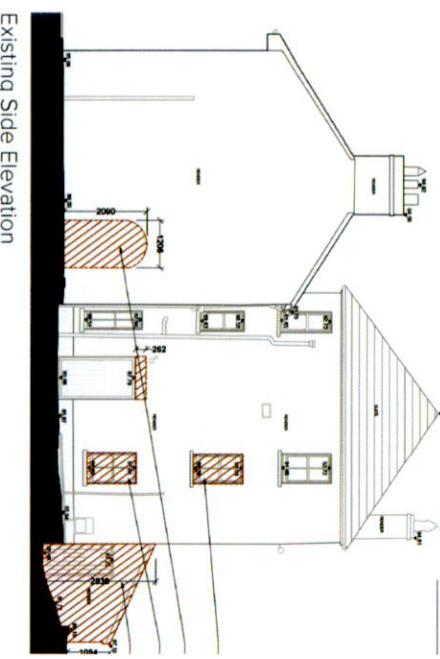
There will be no loss of historic fabric or undermining of the buildings integrity from the proposed works carried out to the internal fabric of the rear return.



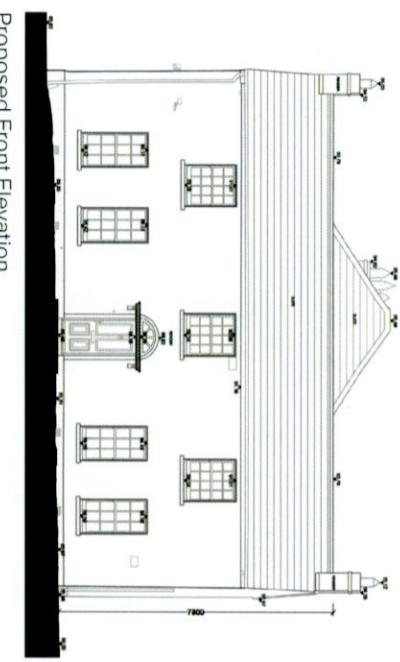
Existing Front Elevation



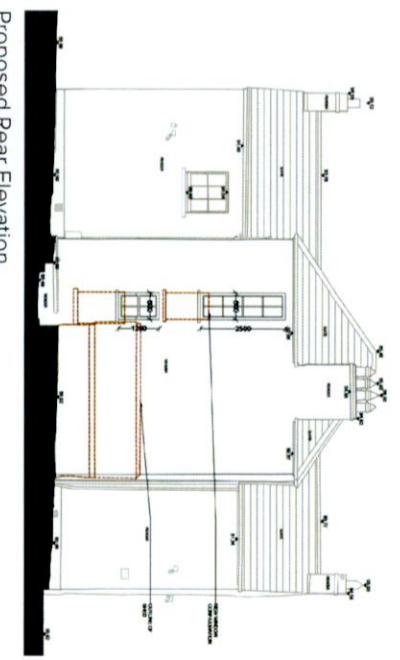
Existing Rear Elevation



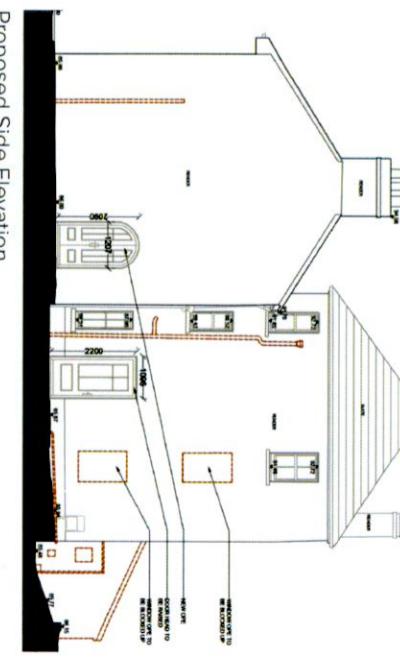
Existing Side Elevation



Proposed Front Elevation



Proposed Rear Elevation



Proposed Side Elevation

12.0 Detail Design

12.5 Proposed Site/Floor Layouts

Proposed Ground Floor Level

- Surface Parking (0.50 ratio)
- 1 Building Form forming contemporary backdrop to Scholarstown House
- Landscaped Communal Amenity Courtyard in front of Scholarstown House
- New Vehicular Access Located on Southwest onto Orlagh Grove
- Maintain Existing Access Gates for Pedestrian Use
- Maintain Existing Trees of Merit
- Maintain Vista of Existing House

Key

- 1 Existing Pedestrian Access
- 2 Careful Design Response To Protected Structure
- 3 Strong Urban Edge To Orlagh Grove Road
- 4 Residence Entrance
- 5 Residence Internal Communal Amenity Space
- 6 Residence Off Street Access Between Existing Street Trees
- 7 Tree soft landscaping buffer to site boundary
- 8 Vehicular Access (visitor & resident), Fire Tender/Refuse / Maintenance/ Services Access
- 9 Plant Room
- 10 Specimen Sycamore Tree Retained
- 11 Vista To Protected Structure Retained
- 12 Secure Bicycle Storage
- 13 Private Open Space With Steps To Negotiate Level Change between Existing Public Footpath And Proposed Ground Floor Level

- | | | |
|------------------------|-----------------|--------------------|
| Circulation | Service | Undercroft Parking |
| 1 Bed Apartment | 2 Bed Apartment | 3 Bed Apartment |
| Bicycle Store | | |
| Communal Amenity Space | | |



12.0 Detail Design

12.5 Proposed Site/Floor Layouts

Proposed First Floor Level

- Building Form forming contemporary backdrop to Scholarstown House
- Double Height vehicular access Located on southwest onto Ornagh Grove with height provided for service and fire tender vehicles
- Existing Trees maintained provide high amenity value to internal apartment units and shading in summer.
- Facade design responding to existing façades of Scholarstown House.
- Multi-functional amenity space above ground level communal amenity space with double height void visual connection.



12.0 Detail Design

12.5 Proposed Site/Floor Layouts

Proposed Second Floor Level

- Building Form forming contemporary backdrop to Scholarstown House
- Building bridging over forming contemporary arch over double height vehicular access
- Existing Trees maintained provide high amenity value to internal apartment units and shading in summer.
- Façade design responding to existing façades of Scholarstown House



Key	
Site Boundary	
1	Centralised Vertical Circulation Core
2	Strong Urban Edge Responding To Orlagh Grove Road
3	Building Form Responding To Scholarstown House Setting, Massing and Vista.
1 Bed Apartment	
2 Bed Apartment	
3 Bed Apartment	
Circulation	
Unit 2	

12.0 Detail Design

12.5 Proposed Site/Floor Layouts

Proposed Third Floor Level

- Building Form and massing reduced responding to Scholarstown House front facade alignment creating responsive relationship of form.

- Forms at third floor create contemporary backdrop to Scholarstown House.

- Building form along western Orlagh Grove creating response to urban setting and contextual buildings.

- Green roof to second floor roof level.



12.0 Detail Design

12.5 Proposed Site/Floor Layouts

Proposed Fourth Floor Level

- Building Form and massing further reduced responding to Scholarstown House whilst maximising potential of site and providing quality penthouse units with private roof terraces.
- Forms at fourth floor create contemporary grey penthouse walls which resonate with pitched roof slate of existing contextual pitched roofs.
- Private roof amenity terraces/green roofs.



Key

Site Boundary
1 Reduction In Massing Responding To Existing Scholarstown House
2 Fifth Floor Set-back creating definition of form
3 Reduction In Massing In Response To Existing Local Services Block
4 Reduction In Massing Responding To Existing Scholarstown House & Site Context
1 Bed Apartment
2 Bed Apartment
3 Bed Apartment
Circulation

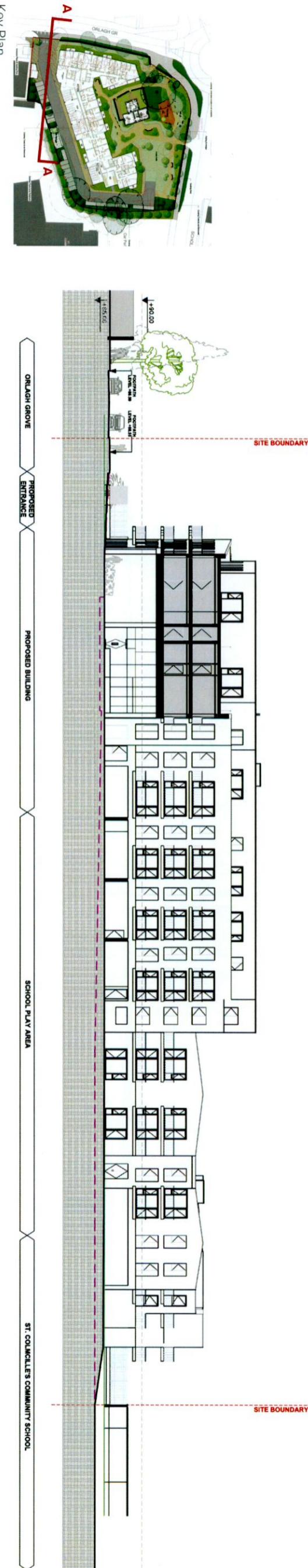
12.0 Detail Design

12.6 Site Sections

Site Section A-A

A number of Existing and Proposed site sections have been created to illustrate the design response within the topography and associated building context.

The heights and levels of the protected structure and adjoining properties, have a large influence on the massing of the proposed building. On the basis of site survey and investigation information, privacy, over shadowing, and views have been considered carefully to avoid adverse impacts on the protected structure or adjoining properties.



12.0 Detail Design

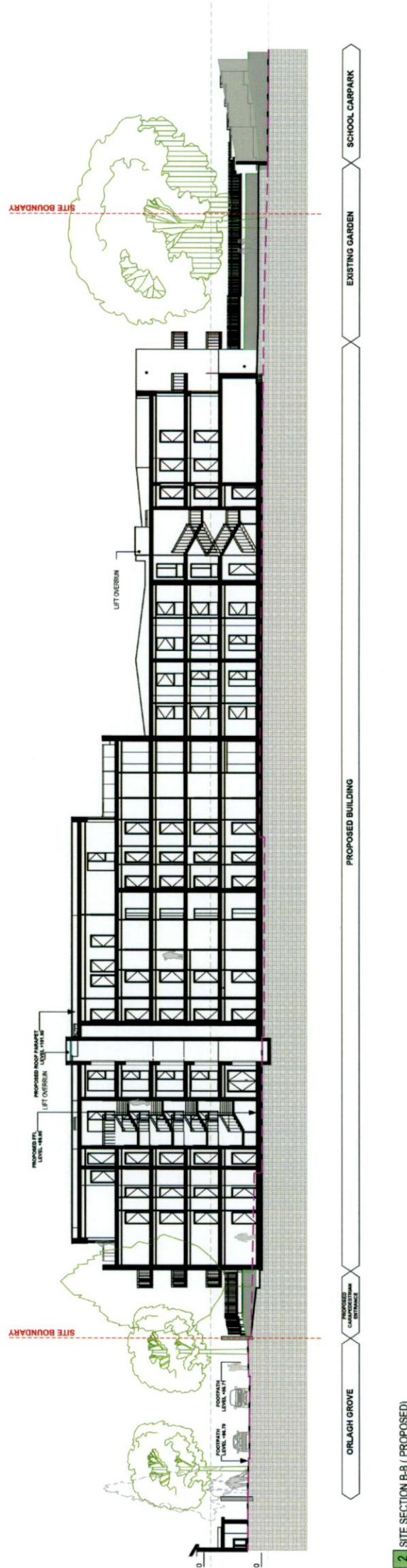
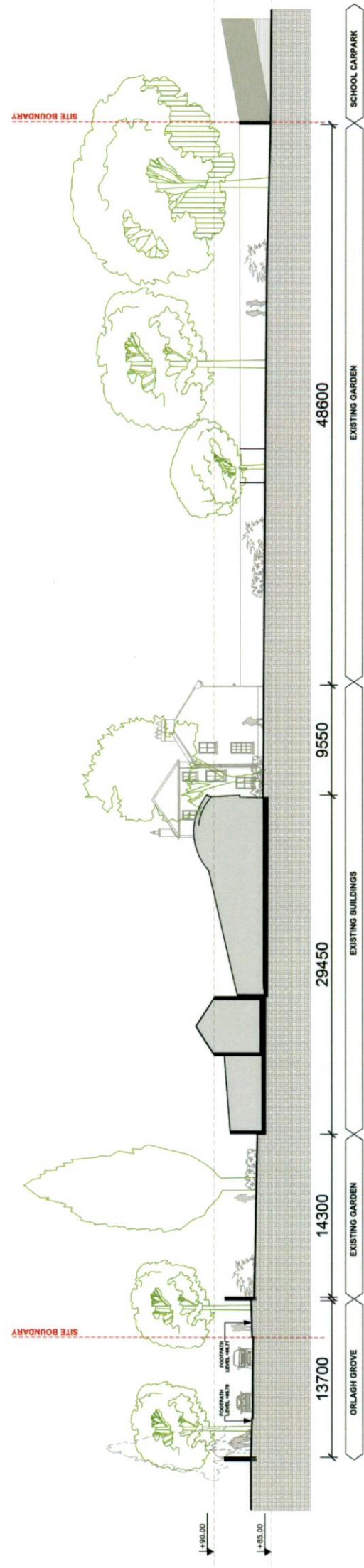
12.6 Site Sections

Site Section B-B

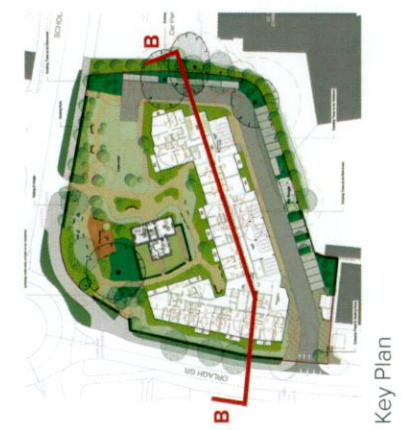
The proposed building consists of one block and has been designed in accordance with the existing ground levels. The height range varies between 3 and 5 storeys to respond the height of the protected structure and reduce the mass while maximising the quality of daylight entering the apartment units.

The Block has been carefully considered from the scale of the pedestrian to ensure that the massing from Orlagh Grove has been stepped and kinked so as to create interest and not to result in an overwhelming monolithic streetscape. The recessed volumes at upper levels achieve a variety within the streetscape.

1 SITE SECTION B-B (EXISTING)



2 SITE SECTION B-B (PROPOSED)



Key Plan

12.0 Detail Design

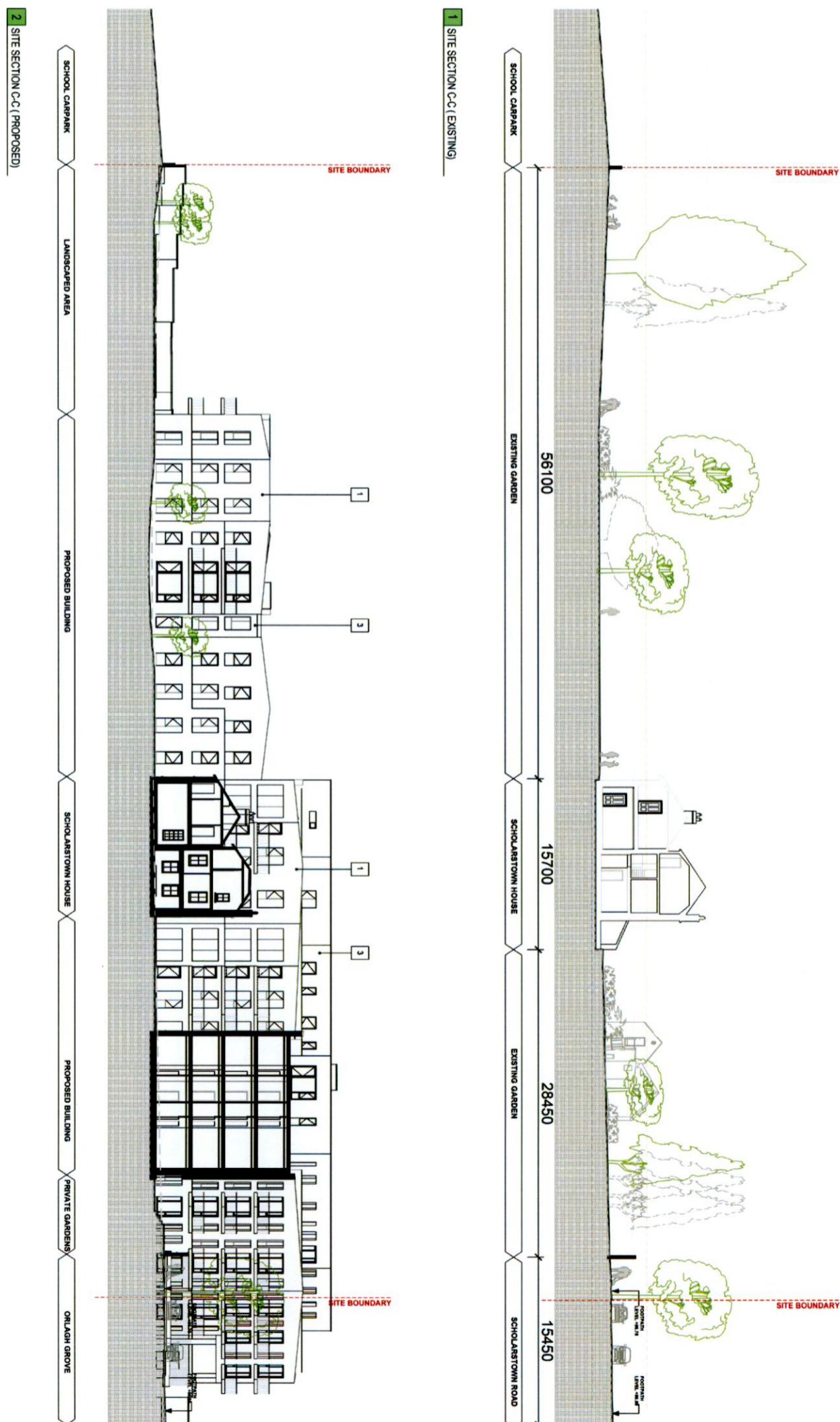
12.6 Site Sections

Site Section C-C

The proposed building's ground level and floor heights have been carefully designed to respond to the existing floor levels of Scholarstown House while also integrating into the existing and surrounding site topography and access points. This insures level gently sloped access for people of all mobility requirements are provided. The separation space between the proposed building and Scholarstown House will help to create a communal space, of human scale while the driveway and boundary treatments will create a generous space between the boundary with the school and the proposed building, therefore, along with the planting strategy avoiding any overlooking issues.



Key Plan



12.0 Detail Design

12.7 Movement

Movement Plan

The adjacent site analysis plan diagram has been prepared to illustrate the primary access and circulation strategy considerations for the site.

Pedestrians are provided with access from Scholarstown road to the north via the existing access gates. The vehicular use of these access gates will be extinguished. Pedestrians can also access from the existing pedestrian access to the north west off Orlagh Grove and the new access point at the south west. The residents of the 4no. ground level units are provided with an access gate directly off Orlagh Grove road into their private open space and associated apartment units.

Cyclists are also provided with easy access from the cycle route along Scholarstown road through the existing gateway and also via the new entrance to the south west off Orlagh Grove. Circulation for pedestrians and cyclists within the site has been carefully integrated seamlessly into the landscape strategy centred around Scholarstown House and access into the existing and proposed buildings.

The primary vehicular access is located to the south west off Orlagh Grove road, this point provides access through the contemporary 'arch' which forms a transition from the public road into the shared surface circulation within the site. This use of shared surface with pedestrian priority aims to slow the vehicular movements and provides access to the residents and visitor parking spaces. The cul de sac route terminates with a hammer head turning zone which has been designed to facilitate services e.g waste collection and fire tender turning space and car turning space. The car parking spaces are divided up by intermittent green spaces which respond to the location of existing tree locations,



Ground Floor Plan

Key	Vehicular Route	Cycle/Pedestrian Routes	Resident's Route through Block	Car Parking Space	Electric Vehicle Parking Space	Accessible Car Parking Space	Secure Bike Storage	Private (Garden) Bike Storage	Bike Stands
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12.0 Detail Design

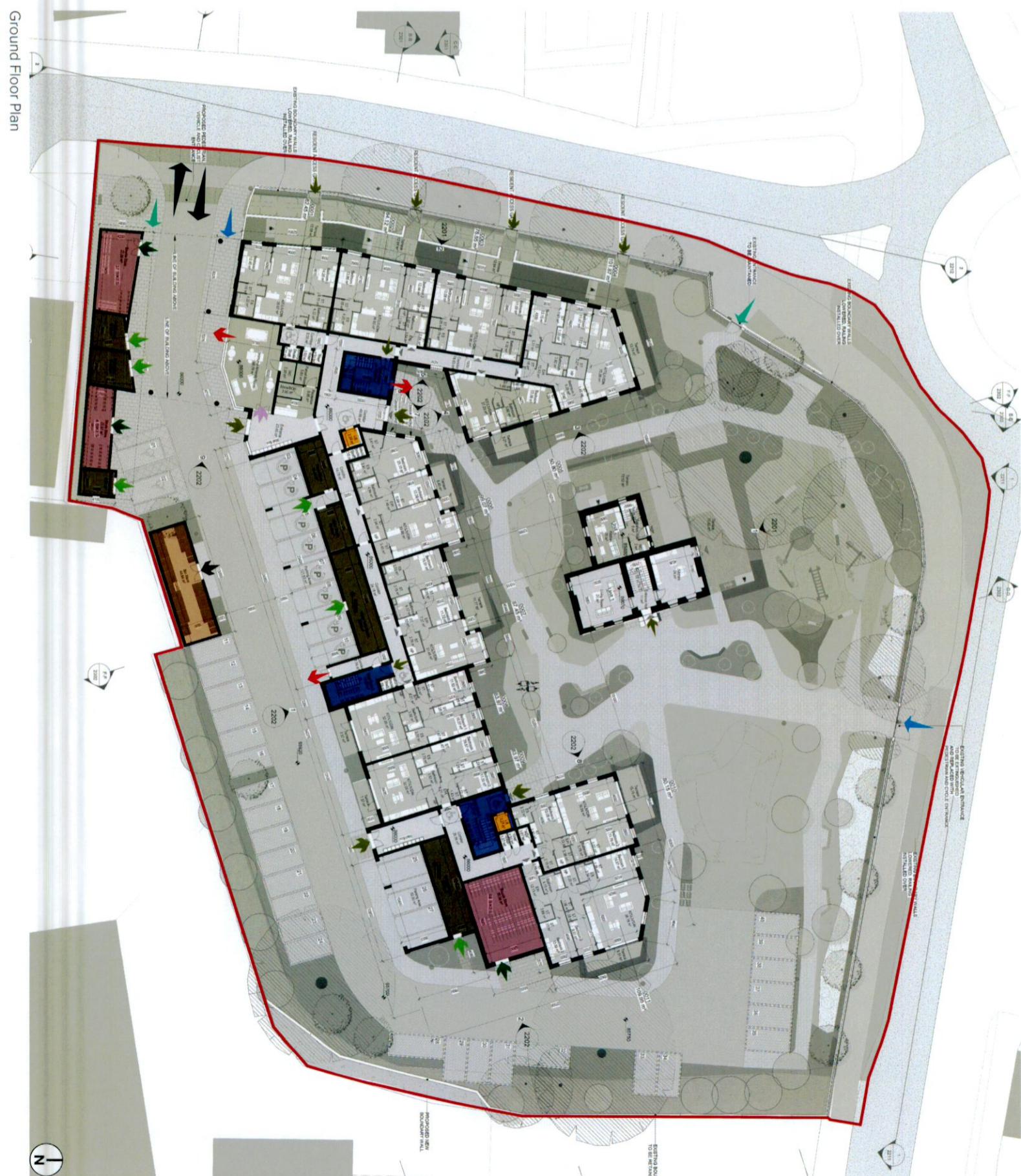
12.8 Access

Access

The entrances to the buildings have been designed to respond to the site setting and contextual circulation routes. This ensures easy access to all units from each of the three site access points. This includes residents or visitors which approach via walking, cycling or vehicle with cycle parking areas being easily accessible from all directions. The cycle storage areas have been separated to provide easy access to bicycle, cargo bicycle and universal bicycle storage areas which are covered and secure. Visitor cycle parking is also dispersed throughout the site and integrated into the landscape design strategy. These design considerations promote active modes of transport.

All of the entrances to the buildings will provide universal access to Part M requirements providing accessible entrance routes to all units for residents and visitors of a variety of mobility abilities.

The surfaces to the bin stores will also provide accessible access via the shared surface access route with no kerbs and pedestrian priority.



Ground Floor Plan

12.0 Detail Design

12.9 Waste Management

Operational Waste Management Plan

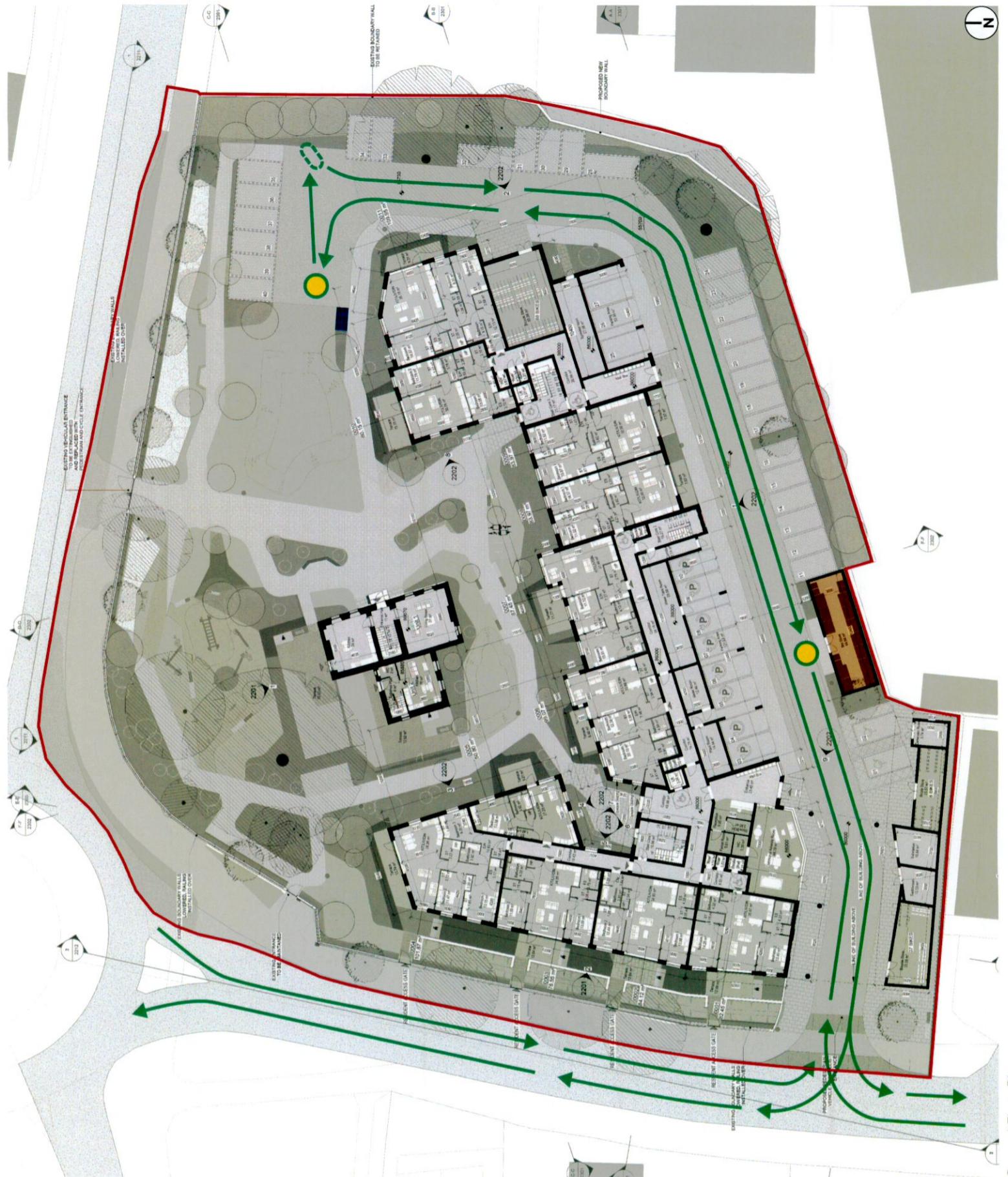
An Operational Waste Management Plan (OWMP) has been prepared by AWN Consulting for this development. This plan pertains to a waste strategy that complies with all legal requirements, waste policies and best practice guidelines and demonstrates that the required storage areas have been incorporated into the design of the development. The proposed refuse enclosure has been located external to the proposed apartment block, easily and safely accessed from all users. In keeping with the overall scheme development the refuse store has been designed in the same material language of the apartment block. Implementation of the OWMP will ensure a high level of recycling, reuse and recovery at the development. All recyclable materials will be segregated at source to reduce waste contractor costs and ensure maximum diversion of materials from landfill, thus achieving the targets set out in the EMR Waste Management Plan 2015-21. The SDCC Development Plan 2022-28 sets out a number of objectives for the South Dublin area in line with the objectives of the EMR waste management plan.

Their will be 1 no. primary dedicated waste storage area provided for use by the residents of the new build. This will provided communal waste storage for organic, mixed non-recyclables and dry mixed recyclables. The residents of the units within Scholarstown House will be provided with dedicated 240L bins for organic, mixed non-recyclables and dry mixed recyclables. These waste storage areas are located as illustrated in the adjacent graphic for easy access by the residents.

Bins will be collected directly from the waste storage area by the waste contractor. For full details on the operational waste strategy, please refer to the Operational Waste Management Plan prepared by AWN Consulting.

Key

- Site Boundary
- Route of Bin Lorry
- Bin Lorry Stopping Point
- Bin Store
- Bin Staging Area



Ground Floor Plan

12.0 Detail Design

12.10 Dual Aspect Units

Dual Aspect Ratio

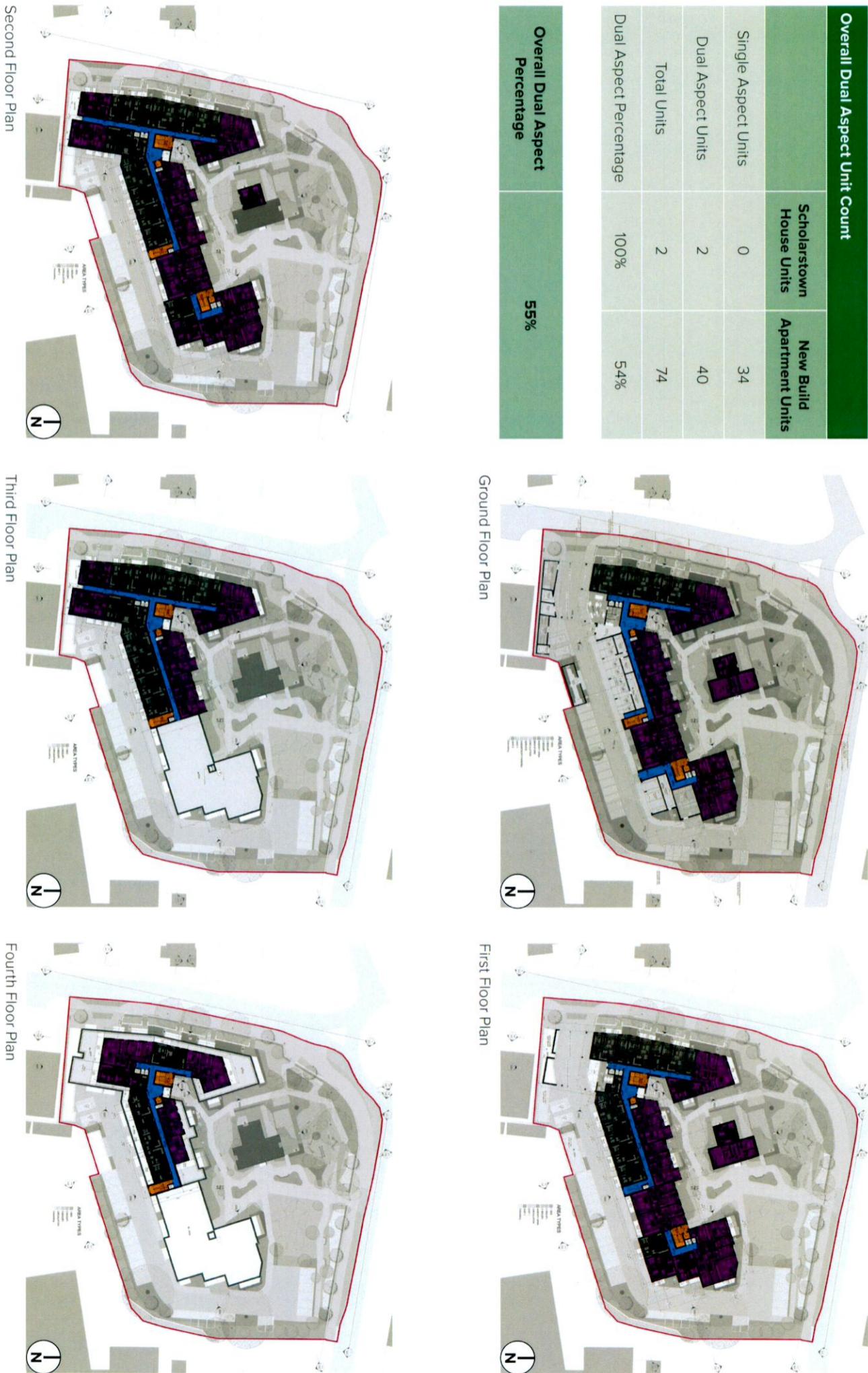
Specific Planning Policy Requirement of the "Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities (2020)" states the following:

- "(i) A minimum of 33% of dual aspect units will be required in more central and accessible urban locations, where it is necessary to achieve a quality design in response to the subject site characteristics and ensure good street frontage where appropriate."

- "(ii) In suburban or intermediate locations it is an objective that there shall generally be a minimum of 50% dual aspect apartments in a single scheme."

Overall Dual Aspect Unit Count		
	Scholarstown House Units	New Build Apartment Units
Single Aspect Units	0	34
Dual Aspect Units	2	40
Total Units	2	74
Dual Aspect Percentage	100%	54%

Overall Dual Aspect Percentage
55%



The submitted design has provided a total of 42no. Dual Aspect units as outlined in the table below. An overall percentage of 55% of the units within the proposed scheme are dual aspect. It is submitted that this is fully compliant with the above policy and is in excess of the 33% and also the 50% requirement stipulated within the policy objectives.

Aspect

The aspect of all units has been considered carefully to optimise the orientation of the site and sun/day light to apartment units. See chapter 1.3 'Compliance with development standards' of the accompanying Housing Quality Assessment for further information regarding unit orientation.

12.0 Detail Design

12.10 Dual Aspect Units

Dual Aspect Units - Orientation

The scheme has been designed at the outset to maximise sun and day light penetration into the public/communal garden spaces and individual units. The layout of the floor plans, unit orientation and building massing have been designed to carefully consider good urban design principles (creating an urban edge to Orlagh Grove and responsive to the setting and existing Scholarstown House) while also maximising the number of dual aspect units.

Bay Windows

The two selected dual aspect units per floor which overlook the existing heritage building Scholarstown House and associated vista, quality landscaping and preserved mature sycamore tree benefit from the addition of bay windows which provide additional floor space to the internal living/kitchen/dining but also offer significant dual aspect views of these significant amenities.

The locations of these bay windows have been carefully considered to offer compensatory floor area to these selected units which to not benefit from direct sunlight while also enhancing the design quality of the scheme elevations. As illustrated in the diagram to the right, the site orientation, in combination with the bay window and facade design provide these units with aspect from west through to east to maximise the aesthetic of Scholarstown House, existing mature trees and landscaped setting.

The overall floor area of these units is also considerably above the minimum required to enhance the benefits of from these views. Units 0006, 0110, 0214, 0314 overall floor area = 99sqm and Units 0007, 0111, 0215, 0315 overall floor area = 87.5sqm which is above the 73sqm minimum required. The ground floor units also benefit from larger external private amenity terraces which are above the areas required and integrate the units into the landscaping setting. These terraces are accessed directly from the living spaces within the units.

The diagram to the right demonstrates the use of these bay windows and end windows to create dual aspect units on this elevation. In our opinion these units are therefore in compliance with the requirements of the design guidelines. Please refer to floor plan drawings and site landscape plan for further information.



First Floor Plan

Key
→ West, East and North Views
from Apartments

12.0 Detail Design

12.11 Elevational Treatment - Materiality

Old & New

Building Form

The form of the new building evolves in response to the existing setting, location, orientation and form/pitched roof of Scholarstown house while also creating a reference to the pitched roofs of the vernacular out buildings from times past which would have stood with Scholarstown house when it was a farm holding.

With the intention of keeping much of the existing Architectural Heritage, the proposed scheme has evolved around Scholarstown house. In order to protect the main vista to the historic building the proposed development has been positioned to the rear and side of the existing house, retaining the connection and approach of the house to the road. As mentioned previously the existing building is proposed to be retained and refurbished to reinstate the building so that it can survive for many years to come.

The form and massing of the proposed scheme has been carefully considered in conjunction with Scholarstown house to minimise impact on the character and setting while also creating a street edge to the west. Although taller than the existing house, the scale and massing of the proposed has been stepped in form to be more sympathetic to the immediate context, with Scholarstown house being retained as the focal point of the scheme to maintain a positive contribution to the setting. A simple traditional material palette for the new building will be of good quality, low maintenance, durable products that will compliment the existing fabric. The new building will be a contemporary expression of new housing, forming a backdrop to the historic house.

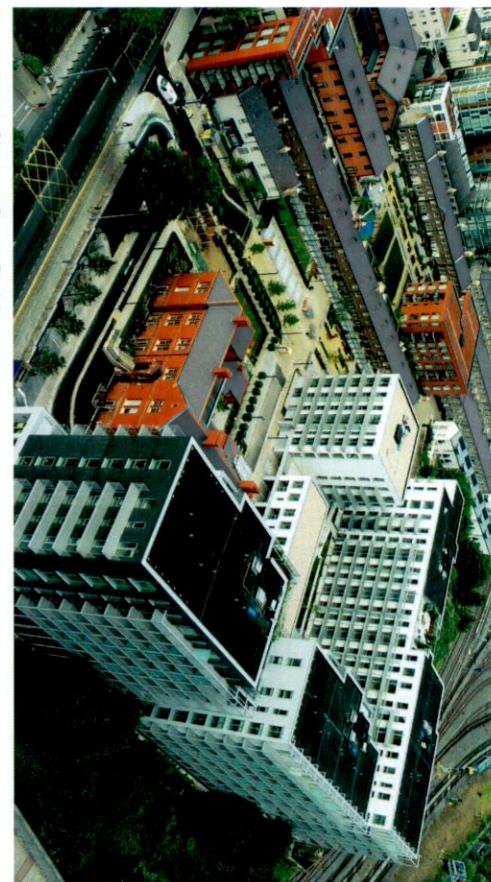
The adjacent images are just a sample of schemes where old and new can co-exist in their environment, without losing the sense of place and how the juxtaposition of materials can forge positive setting, highlighting the existing building at the heart of the scheme and establishing a clarity of hierarchy.



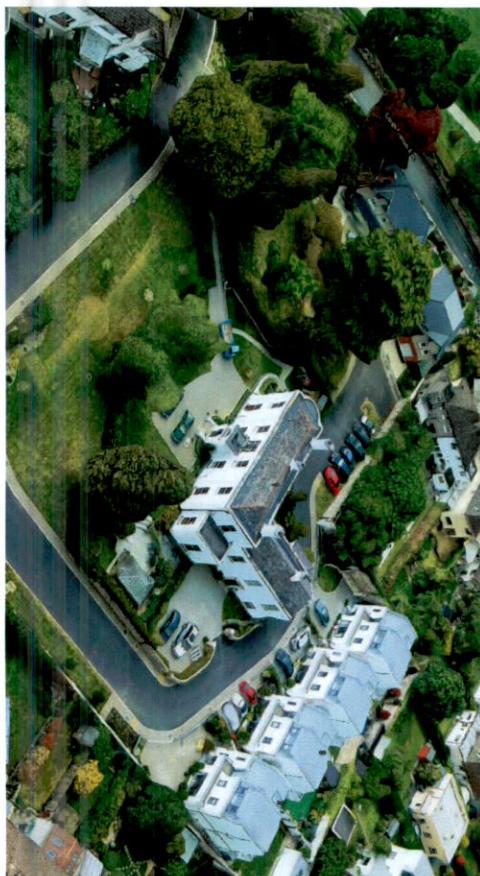
Precedent: Bolton Park, Rathfarnham Dublin



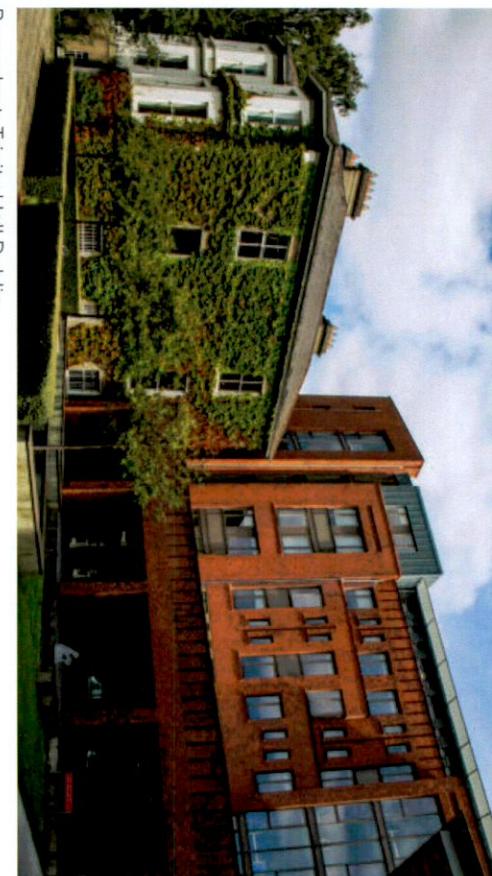
Precedent: Clancy Quay, Dublin



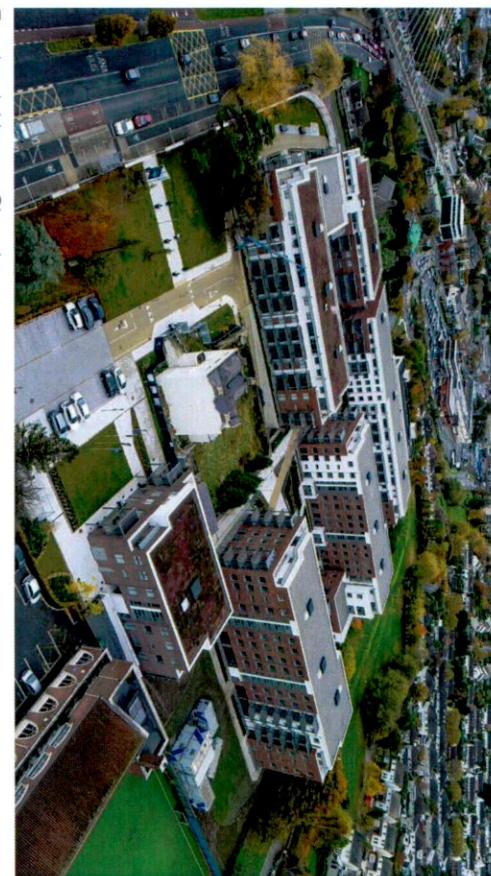
Precedent: Clancy Quay Dublin



Precedent: Silveracre House, Rathfarnham



Precedent: Trinity Hall Dublin



Precedent: Fernbank House, Churchtown

12.0 Detail Design

12.11 Elevational Treatment - Materiality

Materiality

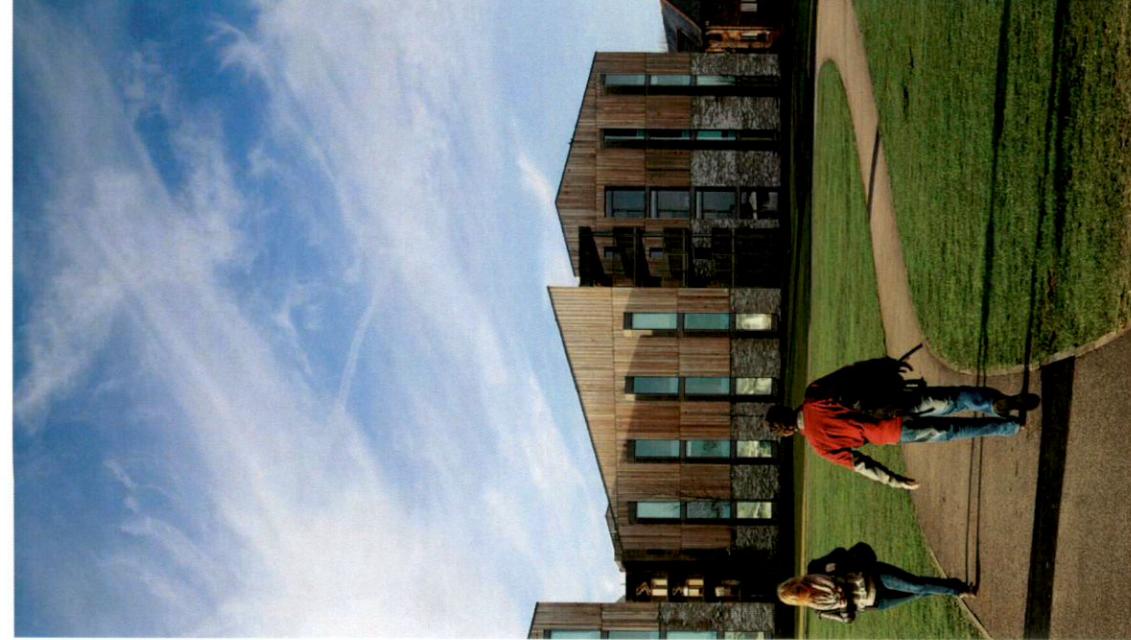
Scholarstown house is constructed from stone with wet dash render finish. The outbuildings which would have been constructed around the same time Scholarstown house was built and would have also been constructed from stone.

The prevailing material in the current surrounding context is brick which is used on the majority of housing developments in the locality.

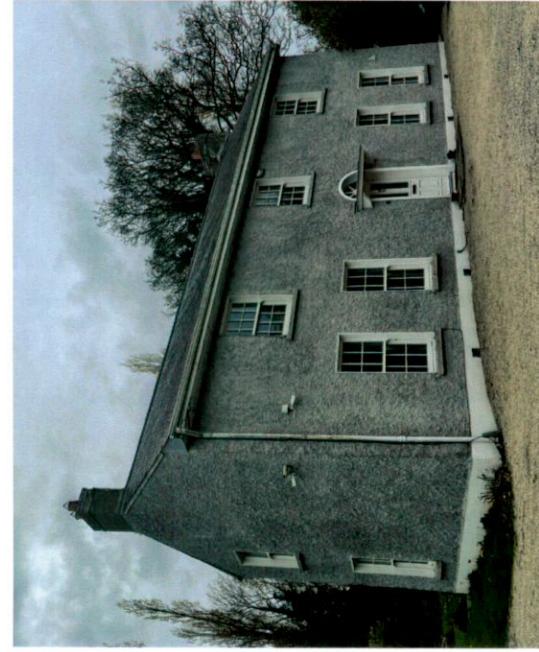
The proposed combination and juxtaposition of various brick colours and materials create a dialogue with the surrounding environment, establishing a connection to the place, while also softening the massing and reducing any monolithic inclination. The selected material palette horizontally will offer a legibility to the scheme. The material section of high quality durable products with low maintenance requirements will contribute to a quality design that will retain their aesthetic over a long time period.

The introduction of a contemporary metal cladding will add a richness to the urban fabric and compliment the traditional brick finishes.

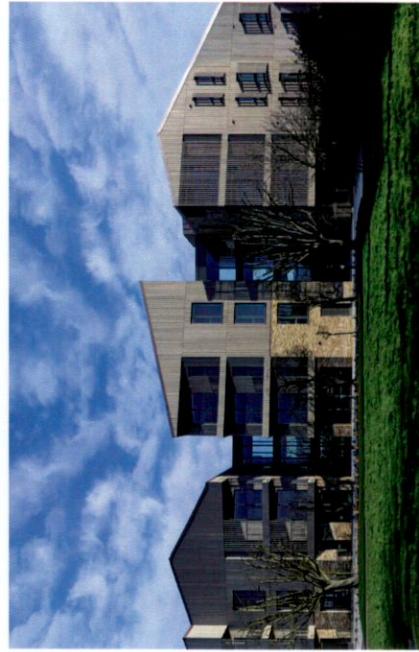
There are many examples of contemporary architectural schemes which demonstrate how a high quality living environment, reinforced by best practice placemaking principals, can be created and complemented through the re-imagining of these traditional materials by their use through contemporary design.



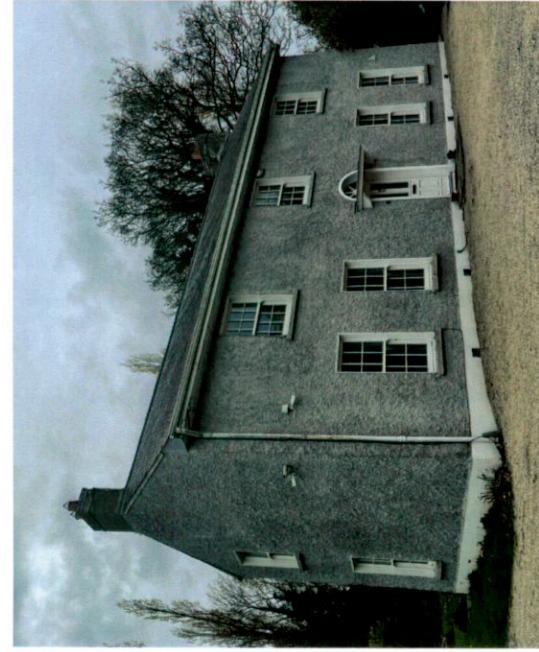
Precedent - Royal Veterinary College, Hertfordshire -
Brick & Cladding



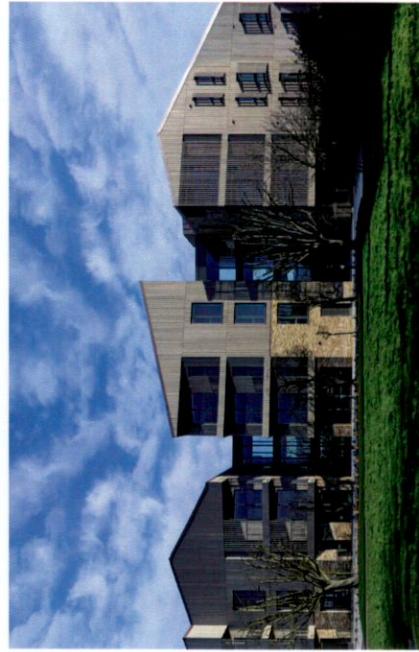
Scholarstown House - Wet Dash Render



Precedent - Derry Avenue, South Ockendon, UK



Scholarstown House - Wet Dash Render



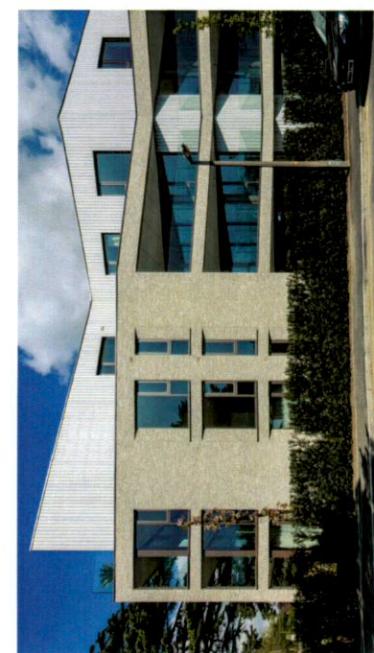
Precedent - St-Zotique Residential, Montreal, Canada



Precedent - Bracknell Road, Berkshire Barn, UK



Precedent: Woodlands, Bournemouth, UK



Precedent: Woodlands, Bournemouth, UK

12.0 Detail Design

12.11 Elevational Treatment - Materiality

Proposed Roof Level

The urban analysis has fed into the scheme design, with the complexity of the setting and surrounding context carefully considered so as to ensure that the new development does not dilute the wider area.

Variations in prevailing heights helps to manage the transition between the existing and new urban fabric while providing a visual interest to the streetscape/skyline. The variations in height will reduce the bulk, mass and scale of the proposed in the immediate context.

The roof form and elevation design has been further explored to create a facade of visual interest with the introduction of shaped parapets to compliment the vernacular of pitched roofs in the area.

Facade Design: Typology- Horizontal/ Pitched Expression

Typology Description

Reduce overall perception of mass by controlling the horizontal and vertical expression devices:

- Varying Horizontal expression, a proportion used in historic agricultural out buildings throughout the world.
- Use of shade and colour of the same or different material. Change of material from one storey to the next mid way on the facade. This provides a reduced height expression and offers a familiarity between the height of the existing house and the perceived height of the new build.
- Articulate the parapet to erode the perceived roof line.
- Addition of an alternative material to add variety to the overall composition

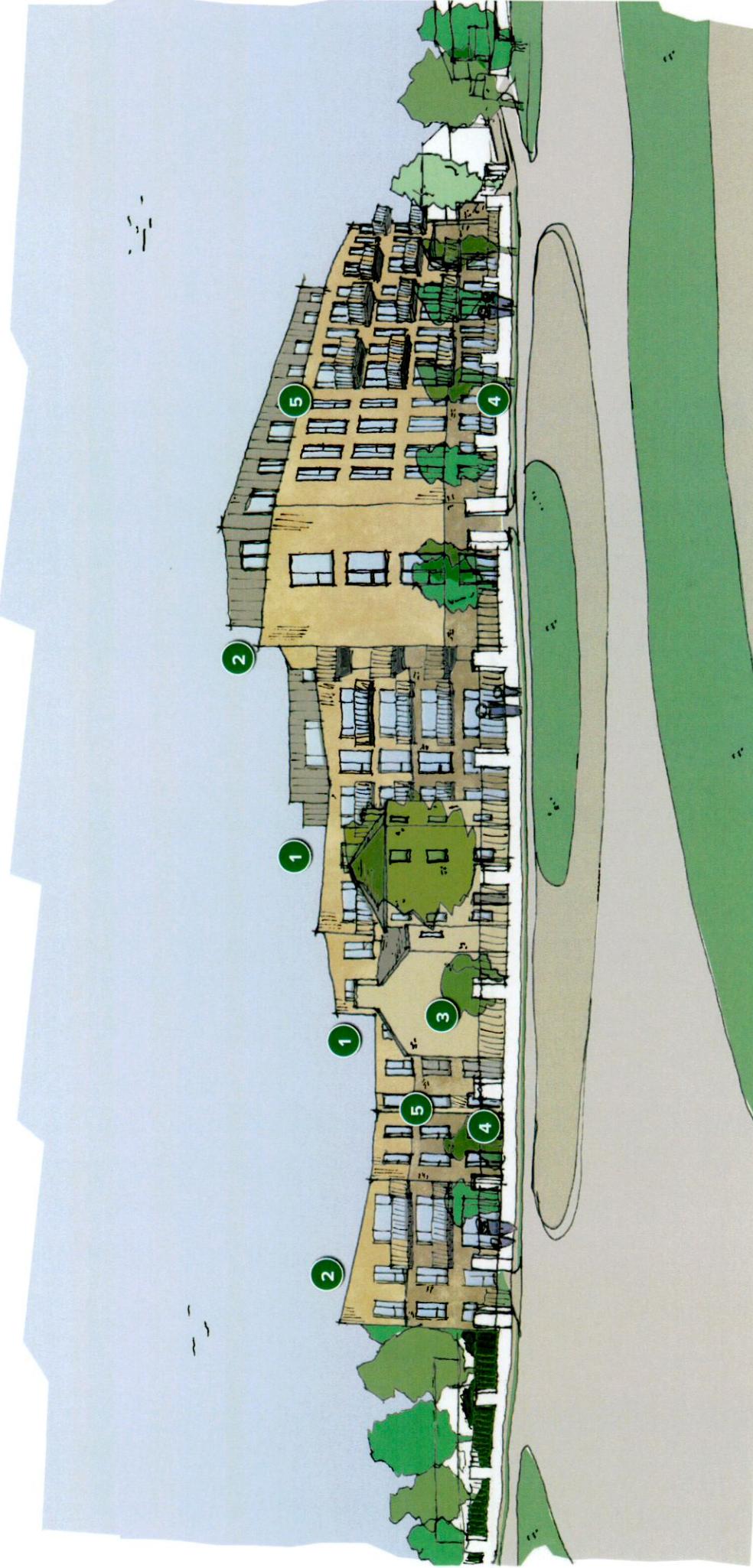


12.0 Detail Design

12.11 Elevational Treatment - Materiality

Urban Design Criteria; Considerations

- Variations in prevailing heights and the vertical expression of taller built elements should serve to promote a sense of legibility and place. Part of this will be managing the transition between existing and new urban fabric by means of a height strategy that fosters a consistent and legible urban form while providing visual interest and avoiding a monotonous intrusion into the streetscape or skyline. [4.3.5 Appendix 10; Building Height and Density Guide 2022]
- ... articulation of built volumes into primary and secondary massings to break down the apparent scale of a development; shaping of roof forms or expression of fenestration patterns within a facade to provide visual interest; and so on. Specific attention should be paid to such design strategies where new development immediately adjoins existing development at a lower scale. [4.3.5 Appendix 10; Building Height and Density Guide 2022]
- ... development may have to employ less than optimal layouts from either a building efficiency or an overall site efficiency perspective in order to provide, preserve or protect important views. [4.3.6 Appendix 10; Building Height and Density Guide 2022]
- Proposals should avoid creating streets or spaces that are not overlooked by development to deter antisocial behaviour but should also ensure that sufficient consideration is given to threshold spaces and building edges to maintain privacy of residential uses at the street edge.
- The proposal should provide a richness to the detailing and high quality materials and create a material palette that is sympathetic to surrounding urban fabric and builds on the established sense of place, whilst also creating order between the elements. [4.3.12 Appendix 10; Building Height and Density Guide 2022]



3D Sketch: North West Street View

Key

- 1 Variations in height
- 2 Shaped roof forms
- 3 Protect Views of Existing house
- 4 Preserve public realm
- 5 Variation in material palette



Key Plan

12.0 Detail Design

12.11 Proposed Materials Materiality

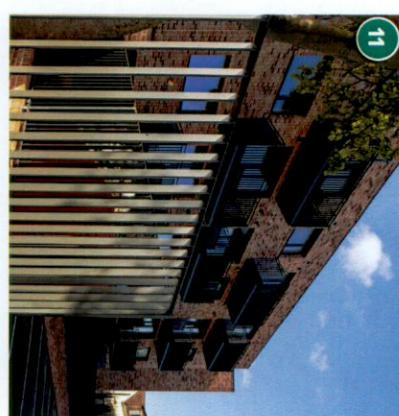
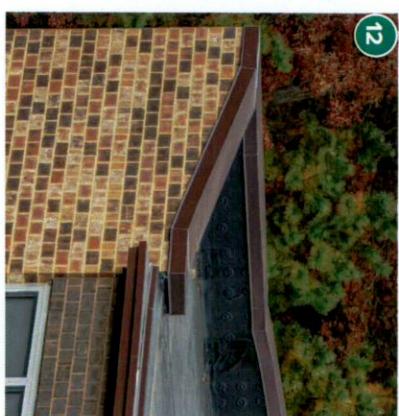
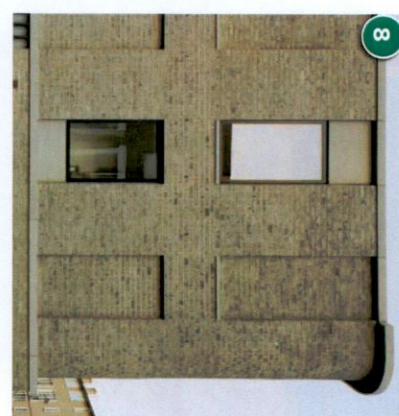
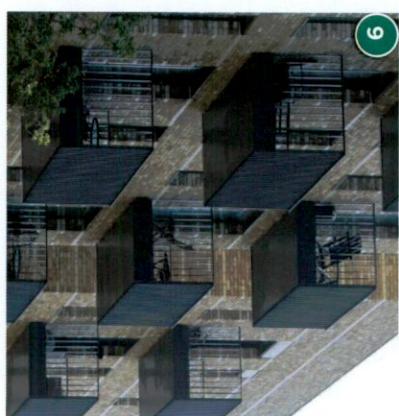
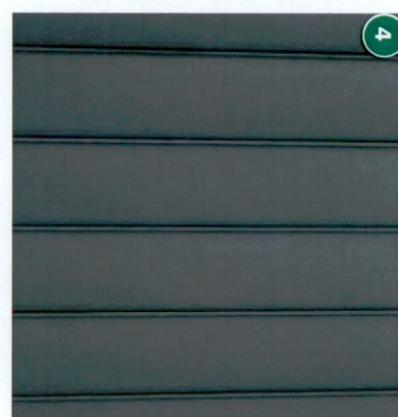
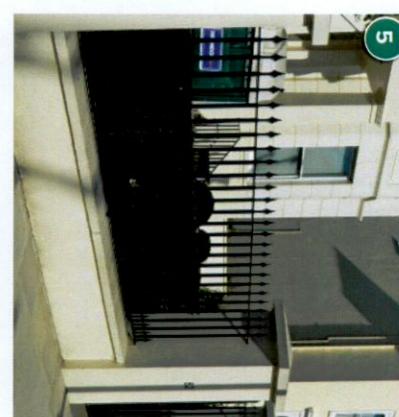
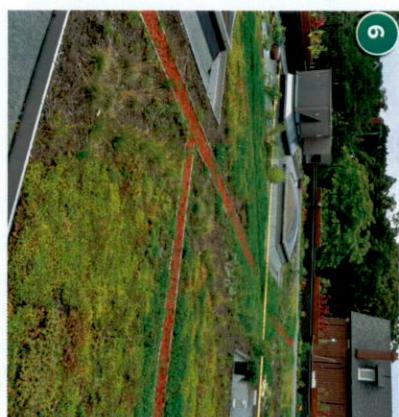
Materiality - Facade Expression

Each of the elevations are considered carefully regarding aspect, massing and scale. High-quality materials are used throughout the development. Brick is the predominant material for facades with a metal cladding on the top storey. The proposed building will have green roofs with spaces reserved for PV panels.

- Brickwork façades in various colour and finish creates a dynamic, interesting character with tone and texture key to promoting the censorial presence
- Inset panel to brickwork detailed to offer relief to punch window elevations
- Alternative material/finish to selected design elements such as set back top floor levels and vertical circulation cores in selected areas.

Materiality Key

- 1 Selected Brick Type 1
- 2 Selected Brick Type 2
- 3 Selected Brick Type 3
- 4 Profiled Metal Cladding
- 5 Boundary Walls
- 6 Green Roof
- 7 Green Roof with Solar Panels
- 8 Inset Brick Panels
- 9 Metal Balconies
- 10 Glass Railings
- 11 Metal Railings
- 12 Metal Capping



12.0 Detail Design

12.11 Proposed Materials Materiality

Durability

The selection of durable materials also provide low maintenance requirements. Innovative building techniques requires building designers to be adequately knowledgeable and utilise a skill-set to combine this technology with material selection to create components with lower life-cycle costs.

Quality design and construction is fundamental to ensuring the materials selected will be long life and maintain quality aesthetic throughout their life. Brickwork and metal cladding are robust materials and combined with quality detailing shall ensure minimal facade staining. The principle of high durability will follow through to internal spaces with hard-wearing materials being utilised in communal circulation lobbies/areas.



Materiality Key

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