

## 11. LANDSCAPE & VISUAL IMPACT ASSESSMENT

### 11.1. Introduction

The purpose of this report is to provide an assessment of the landscape and visual impacts arising from the proposed development of student accommodation. The subject site is located in the Belfield campus of University College Dublin, in the south east of the city. The N11/Stillorgan Road (R138) traverses to the east/northeast of the university grounds, Fosters Avenue (R112) and Roebuck Road traverse to the south / southwest and Clonskeagh Road to the west. The area in the vicinity of the university is generally residential in nature, characterised by two-storey, suburban-style residential.

The site lies within the south west area of Belfield, in the area of Roebuck. It is bounded by UCD's Belgrove Residences to the north-west, the UCD Quinn School of Business and the UCD Sutherland School of Law to the north; Merville Student Residences to the east; Roebuck Hall Residences, and Roebuck Road to the south; and existing residential development Roebuck Castle outside the campus to the west.

There is a separate area to the north of the Little Sisters of the Poor Holy Family Residence within the grounds of the UCD campus.

This appraisal relates solely to the proposed development in the context of its existing suburban campus environment but in assessing its landscape and visual impacts, reference is also made to the cumulative effects<sup>1</sup> of this proposed development when considered in conjunction with other proposed developments in the immediate area.

The site currently comprises of surface car parking to the north; two centrally located playing pitches, open space and hedgerow; surface car parking to the south associated with Roebuck Hall Residences; and a number of buildings centred on Roebuck Castle, which is a Protected Structure (DLR217) to the south. There is a range of trees of varying maturity across the site.

There are three other compartments to the site:

- An extension to the existing construction access road which includes a section of mature woodland boundary close to the junction with Foster's Avenue and North Avenue to the east;
- A piece of open grassland to the east of the Sutherland School of Law;
- and a section of sloping ground with remnants of an orchard and stripped ground to the west of Belgrove residences.

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<sup>1</sup> Current guidelines for Landscape and Visual Impact Assessment (as part of an Environmental Impact Statement) suggest that a determination should be made as to whether 'cumulative effects' are likely to occur – these are outlined in the current GLVIA guidelines (3<sup>rd</sup> edition) as 'additional effects caused by the proposed development when considered in conjunction with other proposed developments of the same or different types'. They were originally conceived as an important consideration in the context of developments such as wind farms, primarily in rural areas and where there was a strong possibility of further future related development. It has become accepted that a determination generally needs to be made as to whether any likely pending or permitted development of a similar nature will have any bearing on the assessment of the proposed development - this is subject to the assessor's judgement in the matter.

## 11.2 Research Methodology

The basis for the assessment follows the guidance of the following:

- Guidelines for Landscape and Visual Impact Assessment (GLVIA3) 2013 published jointly by the LI and IEMA and Routledge
- Guidelines on the information to be contained in Environmental Impact Statements prepared by the Environmental Protection Agency (EPA) 2002; and
- Advice Notes on Current Practice in the preparation of Environmental Impact Statements (Environmental Protection Agency (EPA), September 2003).
- The assessment is consistent with the Directive 2014/52/16 & the associated Draft EPA Guidelines.

The visual and landscape assessment was carried out from April to September 2016 and includes the following:

- A desk study of the receiving environment for the proposed development. Information regarding the site and its hinterland was gathered from Ordnance Survey maps, topographical surveys, aerial photography, tree survey and on site observations.
- Assessment of the potential visual / landscape impact of the proposed development by viewing the detailed plans, elevations, sections of the scheme and its various elements together with the information gathered on the receiving environment.
- A detailed landscape analysis based on the assessment process to determine the character of the existing landscape taking account of the various natural and manmade features, including topography, landform, vegetation, land use, built environment etc. together with the visibility of and the views to and from the landscape.

### 11.2.1 Aspects of Impact

Impact on the landscape arising from development has two distinct but closely related aspects. The first is impact in the form of change to the character of the landscape that arises from the insertion of the proposed development into the landscape. The combined impacts will elicit responses whose significance will be partially dependent on how people perceive a particular landscape and how much the changes will matter in relation to other senses as experienced and valued by those concerned. The second aspect, visual impact, in contrast to character impact, is less subjective. Visual impact occurs by means of intrusion and /or obstruction.

Visual impacts are considered as '*visual intrusion*' and, '*visual obstruction*', and occur on a spectrum from *imperceptible* to *profound*.

*Visual obstruction* is defined as the full or substantial blocking of a view by the development proposal or by constituent elements of the proposal.

*Visual intrusion* is concerned with the relative perception of visual impact based on the degree to which the proposed development impinges on a view without blocking it.

The significance criteria used for the visual and landscape assessment are based on those given in the 'EPA Guidelines on the information to be contained in Environmental Impact Statements - 2002 - 5. 'Glossary of Impacts' are as follows:

- **Imperceptible Impact:** An impact capable of measurement but without noticeable consequences
- **Slight Impact:** An impact which causes noticeable changes in the character of the environment without affecting its sensitivities.
- **Moderate Impact:** An impact that alters the character of the environment in a manner that is consistent with existing and emerging trends.
- **Significant Impact:** An impact which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.
- **Profound Impact:** An impact which obliterates sensitive characteristics.

The quality of potential visual and landscape impacts are assessed according to EPA guidelines as follows:-

- **Positive:** A change which improves the quality of the environment
- **Neutral:** A change which does not affect the quality of the landscape
- **Negative:** A change which reduces the quality of the environment

Potential impacts arising from a proposed development may also be considered in terms of duration as described in the EPA Guidelines:

- **Temporary:** Impact lasting one year or less
- **Short-term:** Impact lasting one to seven years
- **Medium-term:** Impact lasting seven to fifteen years
- **Long-term:** Impact lasting fifteen to sixty years
- **Permanent:** Impact lasting over sixty years

#### 11.2.2 Photomontage Methodology

The methodology used is outlined as follows:

- **Choice of Views**

The views were chosen to fairly represent the likely visual impact in all directions. Views from the Public Domain were given priority, roads and preserved views and prospects. A range of both close-up views and distant views are represented. The location of the views were chosen and provided to Dun Laoghaire Rathdown County Council for approval.

The views submitted were not the only views examined but were considered to be important and representative, having regard to the requirement to examine the greatest likely impacts.

It is not practical to present montages from all possible views, however greater visual impacts were chosen over lesser ones where they were likely to be similar.

- **Production of CGIs**

The computer generated images of the proposed development were prepared by Modelworks Ltd. Drawings and a 3d (graphic) model for the proposed development were provided by Reddy Architecture and Urbanism. Proposed landscaping layout was provided by Mitchell & Associates. The site survey was prepared by Apex Surveys Ltd. Camera locations, survey data and the 3d digital model were integrated by Modelworks Ltd.

Site photography and surveying of camera locations was carried out by Modelworks.

- **3d Model**

The 3d model of the proposed development was rendered using lighting conditions corresponding to the respective site photograph. Materials for the proposed buildings were prepared according to the Architects' specifications.

- **Control Point Verification**

Each photomontage was verified with survey control points matching consistently.

- **Photomontages**

Each rendered view of the proposed development is superimposed onto its matching photograph. The mathematical accuracy is then checked visually by ensuring that existing prominent features which are also modelled, line up exactly in the photo. Careful consideration is given to establishing which existing (retained) landscape features are in the foreground and therefore mark the proposal and those which are in the background.

A more detailed methodology for production of the photomontages (prepared by Modelworks Media) is contained in the separate A3 photomontage folder.

## **11.3 RECEIVING ENVIRONMENT**

### **11.3.1 Site Context and Landscape Character**

The site is located in UCD Belfield Campus in south east Dublin.

The site lies within the south west area of Belfield, in the area of Roebuck. It is bounded by Belgrove Residences to the north-west, the UCD Quinn School of Business and the UCD Sutherland School of Law to the north; Merville Student Residences to the east; Roebuck Hall Residences. and Roebuck Road to the south; and the existing residential development Roebuck Castle outside the campus to the west.

The site currently comprises of surface car parking to the north; two centrally located playing pitches, open space and hedgerow; surface car parking to the south associated with Roebuck Hall Residences; and a number of buildings centred on Roebuck Castle to the south. There is a range of trees of varying maturity across the site. Roebuck Castle is located to the west of the complex of buildings. There are numerous extensions and

additional buildings to the south and east of Roebuck Castle which were constructed during the 1950's and 60's and later. Glebe Lodge is located at the south-west corner of the complex and is a single storey gate lodge in residential use. The Roebuck Castle Complex has remnants of local coursed random rubble yard walls, some of which have unmanaged fruit trees against them. Scrub and mature woodland rising on an escarpment to the south eastern tip forms the boundary to the proposed Eastern Bypass road reservation. The mid eastern section of the site has mature and over-mature trees associated with the Merville grounds. The western boundary with Roebuck Castle residences also has mature trees forming a screen and shelterbelt or varying width. A section of amenity walkway cuts through the northern section of the site in an east-west orientation; this 'Elm Walk' consists of young elm trees, and also features a group of Lime trees, one of which is a mature specimen, a section of hedgerow of mixed tree and shrub species including bramble and elder, and the remnants of a wall. There are three other compartments to the site; an extension to the existing construction access road which includes a section of mature woodland boundary close to the junction with Foster's Avenue and North Avenue to the east; a piece of open grassland to the east of the Sutherland School of Law; and a section sloping ground with remnants of an orchard and stripped ground to the west of Belgrove residences.

The central portion of the site is characterized by large open grass playing pitches with trees, car parking and residences to each side except to the north which is open to academic buildings.



*Plate 11.1: A view of the central area of the site looking from the Roebuck Castle area north eastwards across the playing Plate pitches. A service road, a grass bank and young elm trees are in the foreground. Beyond the pitch are from left to right are surface car parking; academic buildings (Schools of Business and Law); hedgerow; a mature lime tree and hedgerow and the Merville student residences.*



*Plate 11.2* A view from the north eastern part of the site looking south westwards across Owenstown Park access road, surface car parking and the pitches. The Elm Walk is across the middle ground and to the right is a mature Lime tree. Roebuck Student residences are in the distance to the left and buildings around Roebuck Castle can be glimpsed in the distance on the far right.

The southern portion of the site associated with Roebuck Castle has more mature trees to the boundaries and a series of yard-type enclosures.



*Plate 11.3* A view of the complex of buildings and a courtyard with Roebuck Castle in the middle background.



*Plate 11.4 A view of part of the rear area of Roebuck Castle and other buildings with a former boundary wall on the left with a wooded slope behind.*

The western extrusion to the site is an un-metalled construction road with a section of mature woodland at the boundary.

The northern eastern portion is a piece of grass field between the Sutherland School of Law and a belt of woodland planting to the east. It has the ring road to the south and is separated from the new attenuating lake to the north by informal grass mounds.



*Plate 11.5 A view of the area to the east of the Sutherland School of Law showing the grass field with the ring road to the right.*

The separate portion to the north west is a combination of sloping and rough ground and spoil sloping northwards, and remnants of an orchard, with a distinct sense of enclosure by the rising ground and mature trees and residences bordering on the site.

The western boundary is secured by garden walls, including the parcel of land to the west of Belgrove Residences. The rest of the site is within the campus and has no physical boundaries except a palisade fence at Roebuck Residences. There is a wire fence at the short section of boundary at Foster's Avenue. The access from Foster's Avenue along Owenstown Road forms the southern access to the site.

There is a range of trees of varying maturity on the campus. The majority of the trees (66%) are 'Category C' - young to semi mature - having been planted in the last 20 years. The tree survey report concludes that these trees are 'of a small size and not contributing significantly to the tree-scape of the campus or of the greater surrounding area'.

#### 11.3.1.1 Topography

The central area of the site appears generally flat, and in fact falls gently northwards from approx. 31.5m to 27.5m, the main playing field area falling from approx. 29.7m to 29.3m with occasional banks and cuttings associated with the level changes at the edges of the pitches, car parks and boundaries which are approx. 1 to 2m in height and have an approximate gradient of 1:3. The south east wooded bank at Roebuck Castle is a steep rise from approx. 34m to 41m with a general gradient of 1:6, although it is steeper in places. The parcel of land to the west of Belgrove Residences rises steeply from a datum of 24m in the north to 29m in the south.



*Plate 11.6* A view of the northern end of the site showing the topography of the pitches to the left and the typical grass bank dropping down to a footpath and car parking.

### 11.3.1.2 Existing Vegetation

The primary groundcover is managed grassland, with areas of woodland ground-flora, low ornamental shrub planting and hedges to car parks and residences, and a mixed hedgerow with Hawthorn, Bramble and Elder bisecting the site.



*Plate 11.7 A view of the existing hedgerow in the middle ground with mature trees in the distance.*

The trees on the site have been surveyed for their age and condition. In summary, 627 individual trees were surveyed 14 hedges, and groups, lines and belts of trees on the site, and are both planted and self-seeded. They are located largely around the perimeters. The exception is the line of recently planted Elms along the Elm Walk on the northern section of the site, along with a group of Limes with the large mature Lime intersecting with the walk. The main species include: Lime, Ash, Birch, Sycamore, Norway Maple, Beech, Alder and Oak. There are some evergreen and coniferous species including Scots Pine, Yew and Holly.

Due to the number and elevation of mature trees and buildings along the boundaries, the character is one of a contained and defined landscape. The trees are actively managed on the campus, with a cross section of ages and species, although the majority of the trees are young.

The hedgerow that bisects the site is described in detail in the ecological report and is noted as having little biodiversity and to be of lower ecological significance.

For a more detailed description of the existing trees on the site see the Tree Survey report prepared by Felim Sheridan of Arborist Associates Ltd. In Appendix 10.B of this EIAR.

For further details on the plant species on the subject site see 'Flora and Fauna' Chapter 10 of this EIAR prepared by Padraic Fogarty of Openfield. Refer also to Figure 10.2 Map of Existing Habitats.

### 11.3.1.3 Contiguous Land Uses

The site is contained within the UCD campus boundary. The internal boundaries border on 5 storey student housing at Ashfield set around a courtyard to the north west; the academic buildings of the Quinn School of Business and the Sutherland School of Law and associated open spaces which are across the campus ring road to the north; the Merville student housing, which is 3-4 storey blocks set around courtyards to the north-east and east; to the south of Merville is the UCD perimeter of woodland and the suburban houses and gardens associated with Owenstown Park and Foster's Avenue; Roebuck student housing, which consists of two linear blocks of 6 storeys lies along the mid-south perimeter; to the south of that lies the land reservation of trees and grassland for the Eastern Bypass.

**Figure 11.1** Extract from Dun Laoghaire Rathdown County Council Development Plan 2016-2022 with red line boundary overlaid.



The western perimeter of the site has a boundary with the suburban houses, gardens and green spaces with mature trees of the Roebuck Castle residential area.

The southern-most end of the site has a boundary on to Roebuck Road, characterised in this section by long estate boundary walls, grass verges, planted embankments and mature trees.

### 11.3.2 Zoning

University College Dublin has published a Strategic Campus Development Plan 2016-2021-2026 to communicate the broad direction of future physical development on the Belfield Campus. Among its goals, some are particularly relevant to the landscape and visual quality:

- *Deliver high architectural quality with a focus on sustainable design which minimises the impact of the campus on the environment.*
- *Strengthen and consolidate academic disciplines and the Character Areas of the Belfield Campus.*
- *Protect and develop the Belfield sylvan setting and biodiversity within the campus.*
- *Develop the campus community, improve public leisure and recreation areas and facilitate interaction between faculty, staff, students and the public.*
- *Reach out and foster engagement with the local community, both in the immediate environs of the campus and in the wider city.*
- *Facilitate the delivery of high quality residential accommodation to meet the needs of a growing student population.*
- *Support the new ECD Campus Travel Plan in order to maximise accessibility of the University in the most sustainable way in line with national policy.*

The site is zoned in the Dun Laoghaire-Rathdown Development Plan 2016 – 2022 as 'Objective TLI' *'To facilitate, support and enhance the development of third level education institutions.'*

Objective 146 of the Development Plan is *'To prepare a Local Area Plan for Clonskeagh\UCD'*.

There are also specific local objectives:

*1: To facilitate, support and enhance the development of University College Dublin including all associated and supporting facilities. A range of uses will be facilitated on Belfield campus lands to encourage and foster strong links between education, community and the business sector in the County.*

*6: To promote potential additional future uses of the Dublin Eastern Bypass reservation corridor, including a greenway-cycleway, a pedestrian walkway, biodiversity projects, recreational opportunities inclusive of playing pitches and public transport provision such as Bus Rapid Transit services, pending a decision from the National Roads Authority/Central Government in relation to the future status of the Bypass. Any potential additional future short-term uses of the reservation corridor will be subject to a joint feasibility study to be undertaken by the NRA and NTA.*

*148: To prepare in conjunction with the National Transport Authority a Traffic Management Study for UCD and its surrounding environs to address the existing localised car parking issues within the area*

The campus is also subject to the Amenity Objective *'To protect and preserve Trees and Woodlands'*.

The Protected Structure, Roebuck Castle is within the site, as is the Glebe Lodge, which is also a Protected Structure.

To the south east of the site is a Traveller Accommodation Objective *To provide accommodation for the Travelling Community*

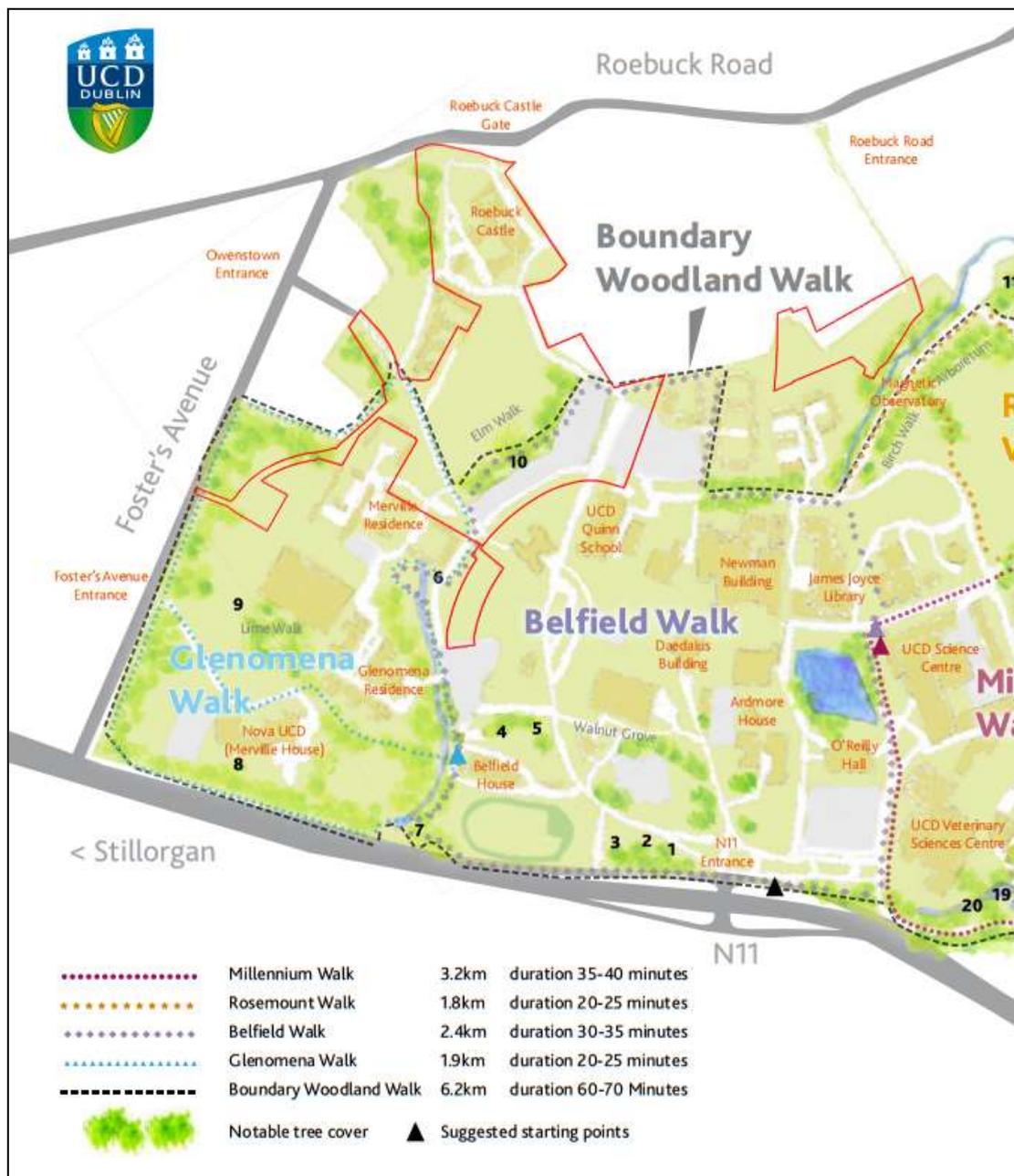
11.3.2.1 Circulation

The site has a high permeability; accessed by public and private transport through Owenstown Park, and from the internal Ring Road (accessed from N11 and Clonskeagh Rd). There are pedestrian and cyclist entrances along Forster’s Avenue, Nova and Roebuck Rd. All of the access routes are gated.

The site itself contains surface car parking and associated circulation routes; it is bisected by the continuation of Owenstown Park, and there is a perimeter road along the western boundary.

There is a pedestrian route to the south of the site associated with Roebuck student housing. There is a section of the woodland walkway ‘Elm Walk’ close to the northern boundary. Cyclists tend to share the carriageway with vehicles and the wide footpaths at the residential blocks to access cycle parking.

Figure 11.2 Extract from UCD Woodland Walk Map and Guide with approx. site boundary overlaid.



### 11.3.3 Visual Analysis

The main part of the site is relatively flat and with a gentle fall towards the north. Rising ground to the south and the perimeters of mature trees to the east, south and west means that the site is visually contained with a sylvan character along these boundaries.

The site is open towards the north, looking towards the academic buildings of the campus. These are at a lower level than pitches in the central part of the site. The School of Engineering however is 4 storeys with plant level and could be considered a landmark building, along with the 6 storey Roebuck residences to the south. Currently, Ashfield student housing has just been completed, and the Science and Newman Buildings are of a comparable height to 7 storeys. The Confucius Institute to the north is under construction.

The School of Law is relatively new, and the planting associated with it has yet to mature.

The Owenstown Park access is used by buses, cars, cyclists and pedestrians, with further pulses of students on foot going to and from the residences and academic areas as they move according to their timetables. There are also older people and young families walking their dogs through the campus and along the woodland walk routes. The characteristic of the site looking northwards is one of a busy and developing campus.

The site itself is characterised by internal perimeter roads and surface parking, with student residential buildings beyond relatively recent tree planting and mature trees.

The central portion of the site is the large grass pitches bisected by the scrub-like hedgerow. Despite the scale, they are relatively sheltered by the surrounding topography, buildings and mature trees.

The area of the southern portion of the site is associated with the protected structure at Roebuck Castle. It is contained with high estate boundary walls, mature trees and the wooded embankment to the road reservation for the proposed Eastern Bypass. It is a distinct enclave within the site as well as the overall campus, with both the engaging architectural presence of the protected structure, and the expanse of yards and backs of buildings giving a sense of lack of defined use and an obsolete character.

The overall characteristic is one of an evolving suburban university campus, within the landscape of former estates, notably Roebuck Castle and the mature trees and woodland belts.

#### *11.3.3.1 Views In*

Views in to the site are limited by the boundary walls and planting. They occur at breaks in the perimeter at Owenstown Park, which is a significant view in to the site along the access road looking northwards; and at Roebuck Rd where glimpses into the campus are seen through pedestrian gateways. The ornamental castellations of Roebuck Castle can be seen at the western entrance off Roebuck Road by the Glebe Lodge.

There are also glimpsed views towards the campus from the Roebuck Castle Housing Estate residential area; there are a series of 3 spur roads orientated in an east-west direction that look eastwards through mature trees towards the area of the pitches.

There are views towards the site from within the campus. These are south eastwards and south westwards along the ring road looking towards surface car parking, the Elm Walk and pitches; and looking southwards from the landscape spaces and routes from the Quinn School of Business. The Roebuck Students residences

are contained within internal boundary planting so there is no direct visual link at ground level looking north towards the pitches.

The proposed buildings on the site will be significantly taller than the existing buildings to the perimeter, and thus these will probably be visible from more locations than within the existing site.

The visual impact of the proposed development will be analysed in detail later in this report.

#### 11.3.3.2 Views Out

The site, as described in earlier sections, is well contained towards the east south and west, and there are therefore only views limited to the penetrations in the boundary. There are views through trees of the upper stories of Merville student residences, to the east, Roebuck Student housing to the west and to the 2<sup>nd</sup> stories and roofs of housing close to the western perimeter at Roebuck Castle residential area.

Open views out to the north towards the academic part of the campus are terminated in the foreground by the Schools of Business and Laws. The 5 storey School of Engineering terminates the view to the north, although there are long distance views beyond to north Dublin.

#### 11.3.3.3 Protected Views:

There are no protected views associated directly with the site. However, Deerpark, a District Public Park is approximately half a kilometre to the south of the site, and has an amenity objective 'to preserve views' looking northward.

## 11.4 Characteristics of the Proposal

The proposed development comprises a total of 3,006 no. residential bedspaces providing an overall gross floor area (GFA) of 99,495sqm over a partial basement level (22,540sqm).

The proposed accommodation will be arranged in a series of 6 no. Residential Blocks, which will vary in height from 5 to 10 storeys. The Residential Blocks comprise Block A: 15,434sqm, Block B: 12,179sqm, Block C: 12,276sqm, Block D: 13,038sqm, Block E: 12,174sqm, Block F: 26,041 sqm (3 buildings). Dedicated Residential Activity Hubs are proposed within each of the residential blocks with lounge, function and study spaces are provided to encourage interaction, creating a distinct lively quarter in the Belfield Campus permeated with open spaces and active urban streetscapes.

The proposed development also provides for an additional student facility centre (9442sqm), referred to as the Fulcrum Building, comprising a multifunction hall, gym, health & wellbeing centre, with studio accommodation above and supporting shops and services (bank, convenience store, café's, shops etc.).

The proposed development includes for the removal of recent additions to Roebuck Castle to the south and east. No other works are proposed to the Protected Structures (Roebuck Castle and Glebe Lodge).

The scheme will remove grass pitch areas, and a hedgerow, along with trees of predominantly young age.

The proposed development provides 637 no. basement car parking spaces, 32 no. disabled spaces (at-grade), 225 no. spaces by extending the Little Sisters surface car park; and 100 no. spaces adjacent to the Sutherland School of Law.

A range of student amenity and common spaces will be provided and will comprise a mix of outdoors spaces within the courtyards and immediately adjacent to the respective Blocks, and internal spaces within each Block and at Roebuck Castle. An external sports area and outdoor active and passive amenity area on the eastern part of the site. The proposed development ensures the retention of the existing woodland and new landscaping will complement and enhance the amenity of the walkway.

A new, temporary construction access onto Foster's Avenue and associated construction parking for approximately 200 no. cars during construction are proposed for the duration of the proposed development.

Refer to Chapter 3 'Description of the Development' for a more detailed description of the proposed architectural and landscape schemes.

## **A. Potential Impacts of the Proposed Development**

The development has the potential to impact upon the landscape and visual aspects of the existing environment in a number of ways at both constructional and operational stages. Effects can be short or long term, temporary or permanent. The purpose of this section of the EIAR report is to describe any such likely effects.

### **i. Construction Phase**

Potential visual impacts during the construction phase are related to temporary works, site activity and vehicular movement within and around the boundaries of the subject site. Vehicular movement will increase in the immediate area, and temporary vertical elements such as tower cranes, hoarding and scaffolding etc., will be put in place. All construction impacts will be temporary and will include, but are not limited to, the following:-

- Site preparation works and operations including tree felling, and vegetation clearance;
- Cut and fill excavations;
- Site infrastructure and vehicular access;
- Construction traffic;
- Dust and other emissions;
- Temporary hoardings;
- Temporary site lighting;
- Scaffolding structures; and
- Cranes,

## ii Operational Phase

The proposed development will result in the insertion of 9 new 5-10 storey buildings into the existing environment, together with associated access and service roads and drop-off car parking, shared surfaces, recreational amenity spaces, and a shared surface plaza. The landscape treatments include green roofs and ground levels SUDs. The proposed development will not be out of context in terms of the developing character of this area of the campus. However there is a potential impact relating to the evolution of the former demesne landscape from which the campus is derived, to the recreational landscape characterised by the existing pitches and the proposed development which will consolidate the transition to a more urban residential zone of the campus.

The sensitivity to these impacts will fall in to two categories; one being when the development is experienced within the campus by the those who are familiar with the evolving landscape context; and the other where the development is viewed from outside of the campus. The second category stems from locations on the south-western perimeter of the campus where the development will be experienced in the context of the neighbouring residences and Roebuck Road.

In terms of cumulative impacts, whereby the proposed development may have cumulative effects in relation to other pending or proposed developments, consideration has been given to the Confucius Institute which is currently under construction and to the land zoned for the proposed Eastern Bypass to the south of the site, and to a possible extension to the Quinn School of Law adjacent to the site.

The UCD Confucius Institute for Ireland building will be a 3 storey academic building which lies to the north east of the site. It is within the academic zone of the campus and consistent with the campus development and the proposed student housing has a cumulative impact in that it is also consolidating built development in this area of the campus.

The area zoned for the proposed Eastern Bypass is subject to a Specific Local Objective no 6 of the DLRCC Development Plan 2016-2021:

*'to promote potential additional future uses of the Dublin Eastern Bypass reservation corridor, including a greenway-cycleway, a pedestrian walkway, biodiversity projects, recreational opportunities inclusive of playing pitches and public transport provision such as Bus Rapid Transit services, pending a decision from the National Roads Authority/Central Government in relation to the future status of the Bypass. Any potential additional future short-term uses of the reservation corridor will be subject to a joint feasibility study to be undertaken by the NRA and NTA.*

It is not possible to ascertain the potential cumulative impact the proposed development will have on the objectives listed as the proposals are unknown and until the feasibility study noted in the objective is complete.

An extension to the Lochlainn Quinn School of Business is planned. A building here will consolidate the academic buildings and in this zone. It will also intensify the population using the area which is located beside the main urban space in the proposal en-route to the proposed student hub and residences.

The cumulative impact from a notional extension to the academic building would therefore be positive in theory and dependant on details of facades, entrances, heights and associated landscape.

The proposed surface car park to the west of Belgrove Residences is a distinct and separate parcel of land that has no public views. The car park and footpaths will regularise an unmanaged landscape whilst retaining existing trees amongst new planting. In the context of the UCD campus landscape it is a coherent use and not considered as impactful on the overall landscape.

There is potential for a negative impact if the proposed planting scheme fails to establish in the context of the sylvan character of the campus landscape.

Once the landscape planting scheme has established and is properly maintained, along with the proper maintenance of the new buildings and hard landscape, there is the potential for a significant and positive impact.

### iii. The '*Do-nothing*' Scenario

Should the proposed development not go ahead, the area around Roebuck Castle would continue as a mix of ancillary buildings and additions with associated yards and car parking areas. The pitches would remain in situ and operational and the campus-wide tree management plan would be ongoing. Essentially due to the campus management regime, very little will change.

## B. Mitigation Measures

Avoidance, remedial and reductive measures will be instigated at both the construction and operational stages to reduce or mitigate the visual impact of the development where possible.

### Construction Stage

The elements of construction, noted in the Potential Impacts of the Construction Phase above are generally understood as being a temporary and unavoidable feature of construction in an urban setting. The development is envisaged to be constructed in 3 phases, which will limit the amount of construction being carried out in one tranche. The impact of the construction stage for each of the phases will therefore be short-term.

The impact during the construction phases will be mitigated somewhat through appropriate site management measures and work practices to ensure the site is kept tidy, dust is kept to a minimum, and that public areas are kept free from building material and site rubbish. A construction environmental management plan will be implemented by the contractor which will ensure that the site is appropriately managed during the construction phase in respect of the above.

### Operational Stage

As stated previously, the site is contained within the campus, and the central area of the site consists primarily of open playing fields with a section of car parks and yards and ancillary buildings associated with the protected structure at Roebuck Castle.

There are no Tree Preservation Orders relating to the trees, however there is an amenity zone objective in the DLR Development Plan 2016-2022 'To protect and preserve Trees and Woodlands'.

The development will involve the removal of 317 trees mainly from the northern Elm Walk areas, and the loss of the hedgerow that bisects the playing fields. Some of these removals are necessitated directly as part of

the development due to the location of building and boundary perimeter footprints and some indirectly as a result of changes in levels.

Re-planting mitigation will take the form of planting 670 trees within the scheme, including a significant proportion of native species. Trees will be planted as semi-mature standards with a minimum girth of 16-18cm. Hedgerow habitats will be increased and managed across the campus to replace the loss of habitat associated with the hedgerow that is proposed to be removed.

The scheme will therefore begin to reinforce the sylvan setting of the campus as the tree planting begins to mature.

The proposed landscape scheme for the development will include specification of food source plants for invertebrates and birds within the planting scheme which will improve biodiversity.

Following defects liability period of maintenance the scheme will be taken into UCD's landscape management plan to ensure ongoing successful establishment of the works and the proper running and uses of the amenity spaces.

## **C Predicted Impacts**

The development itself will impact on the landscape in varying degrees and due to the nature of the development it will be deemed to have a permanent visual impact on the existing environment. In landscape terms, impacts on three inter-related aspects to be addressed, namely:-

- The perceived character of the area;
- The existing amenity value of the landscape; and
- The existing views.

### **i. Impact on Landscape Character**

Despite the presence of a significant area of playing fields, road infrastructure and car parking, with trees and woodland, and the surrounding residential and academic buildings, the overall landscape character today is contained within that envelope of a semi urban campus landscape

The presence in the locality of recent 6 storey high rise residential buildings at Belgrove and Roebuck gives a precedence of higher built development in this area and means that the proposed development will not be anomalous within the existing landscape setting. However, there will be a cumulative impact of further built development.

The development will involve the removal of trees located at the northern part of the site and at the boundaries. The Elm Walk trees will be relocated on the campus. The impact of this will be substantially ameliorated by the replanting of exotic, native and locally occurring species within the landscape of the proposed development, which will be fundamental in enhancing the existing and creating a new appropriate green structure.

Changes to the landscape character of the site itself will include the removal of the playing pitches and an intensification in the use and programming of the new spaces, including courtyards, active linear 'streets', social spaces, shared surfaces, a plaza and recreational spaces

The overall impact on landscape character will be significant and neutral.

## ii. Impact on Landscape Amenity Value

The subject site at present is used for active sports recreation and a footpath as part of the campus woodland walks.

The proposed scheme will include a public plaza, active 'streets', courtyards and recreational spaces with playful and social elements and a reinstatement of the campus walk.

The overall impact on landscape amenity is moderate and positive.

## iii. Impact on Views

Views numbers 1 to 12 are photomontages of the development which have been generated by computer. These show before and after views of the development, based on a simulation utilising baseline survey data and scaled drawings of the buildings. It should be noted that, it is the normal convention for selecting viewpoints that views from the public domain are paramount. A location plan precedes the viewpoints for accuracy. The photomontages prepared by Modelworks Ltd., are contained in Appendix 11.A of this EiAR.

Notes:

- The photography work represented in view no.1 -12 were taken in the summer of 2016 and depicts full leaf coverage.
- The red line which appears on some of the photomontages indicates the outline of the proposed development in the background that is not visible from the view location. Factors such as distance, topography, existing vegetation and the existing built environment may screen the development from view from these locations.

### View 1

#### Existing View:

This viewpoint is taken from within the campus from the new Ashfield student residences along the ring road looking south west towards the development.

The recently completed Ashfield residences occupies the foreground on the right prior to new tree planting being completed (now complete) with temporary fencing and roadworks associated with construction works. To the left are mature trees typical of the campus setting. The surface car park, large Lime tree and Elm Walk are beyond with Merville student residences visible in the distance.

#### Proposed View:

The proposed student residence building with retail on the ground floor and proposed tree planting on the new urban space is visible to the centre of this view. The corners of other residential buildings step back on the left middle ground.

The proposed buildings and plaza terminate the view in the middle distance. The full height of the buildings are visible, with some partially screened by existing and new tree planting. The development is visually in keeping with the existing student residences and continues the sequence of built development in a more urban campus form similar to other parts of the campus.

The visual impact will be moderate and neutral.

## View 2

### Existing View:

This viewpoint is taken from within the campus from the eastern side of the Sutherland School of Law which appears on the right hand side of the image along with a parallel path and a sculpture. The school of Law building is 3 storeys and has a stair or lift core in the middle of the elevation with a façade of glazed panels across the upper two storeys framed in plum stone. The main façade is a light buff coloured stone. A raised planter bed with a grove of young birch trees and groundcover fills the middle foreground. The ring road runs from left to right in the middle ground with Merville student residences seen in the background to the left. Owenstown Park, surface parking, street lighting columns, and traffic lights are in the middle of the image in the distance, and grass and trees are in the distance on the right hand side.

### Proposed View:

The main view in the middle of the image beyond the birch grove is of a proposed seven storey student residence with new tree and shrub planting and a continuation of the existing footpath. The building steps back to the left hand side. The façade is composed of a square grid of muted brown brick which sits forward of panels of cream and brown colour and floor to ceiling glazing. The upper storey is modulated to a higher grid, and the east façade is modulated by removing a portion of the grid. The right hand side of the image has a surface car park and associated planting on the right hand side.

The proposed scheme shows the building being larger in scale than those adjacent to them and so is a more urban continuation of the campus, but distinct in its form from the academic building.

The visual impact will be significant and neutral.

## View 3

### Existing View:

This viewpoint is taken within the campus from the open space in front of the Centra shop at the Merville residences looking westwards towards a surface car park and along the ring road.

The ring road with associated road markings and light standards and the open space in front of Merville residences and shop dominate the foreground. The Sutherland School of Law is to the right in the middle ground, behind young existing trees in the open grass area

**Proposed View:**

The proposed residences dominate the background to this view. The buildings are larger in scale to those adjacent to them which increases the urban character of the campus at this point. The façade facing the viewer is composed of a square grid of muted brown brick which sits forward of panels of cream and brown colour and floor to ceiling glazing. The rhythm of the façade is modulated by removing a portion of the grid. The articulation and massing of the proposed development appears to wrap around the ring road.

The proposed surface car parking can be seen on the right hand side of the image with new tree planting.

The proposed scheme shows the buildings being larger in scale than those adjacent to them and so is a more urban continuation of the campus, but distinct in its form from the academic building.

The visual impact will be significant and neutral.

**View 4****Existing View:**

This viewpoint is taken from within the campus at the Owenstown Park entrance road to UCD looking northwards along the access road towards Roebuck residences on the left.

The view is dominated by the Owenstown Park access road in the foreground, along with an associated light standards and a belt of tree planting on the left stretching to the middle ground. To the left beyond the tree belt are the Roebuck residences. Merville residences can be glimpsed on the right hand side. In the distance is a temporary crane associated with construction works at the Confucius Institute and the corner of the School of Engineering building. The horizon line of Dublin is in the far distance.

The landscape character is of a sylvan campus.

**Proposed View:**

The foreground and approach road remain the same. The proposed development hides the horizon line and School of Engineering in the distance. The proposed building continue the built form of Roebuck residences stepping across the middle ground. The façades are composed of a square grid of muted brown brick which sits forward of panels of cream, yellow and brown colour and floor to ceiling glazing. The rhythm of the façade is modulated by removing a portion of the grid. The buildings are larger in scale to those adjacent to them which increases the urban character of the campus at this point.

The visual impact will be moderate and neutral.

**View 5****Existing View:**

This viewpoint is taken from outside the campus at Louvain residential area looking north eastwards across Roebuck Road towards the UCD campus boundary.

The foreground is dominated by the road and suburban tree and shrub planting. The near middle ground shows the boundary wall and doorway to the UCD campus and a small lodge building (Crannog Lodge) backed by mature trees.

**Proposed View:**

The proposed view shows a new backdrop of a seven storey student residence and new entrance through its undercroft to the campus. The façades are composed of a square grid of muted brown brick which sits forward of warm coloured panels of orange and red, with floor to ceiling glazing. The rhythm of the façade is modulated by removing a portion of the grid over the undercroft which leads in to the campus. The upper storey is modulated to a higher grid. The proposed buildings are different in scale than the adjacent Crannog Lodge which is partially relieved by the tree planting between the two buildings. The scheme increases the urban character of the campus and Roebuck Road at this point.

The visual impact will be significant and neutral.

**View 6****Existing View:**

This viewpoint is taken from outside the campus at Roebuck Road looking eastwards along the road.

The foreground of the view is dominated by Roebuck Road carriageway, cyclepaths and footpaths and a lighting column with overhead wires. The road sweeps gently down to the right before rising again with a glimpse of the yellow brick gable of the 4 storey Roebuck Hill apartments. The UCD boundary wall and the plinth wall and railings of Roebuck Castle residences are across the middle of the image from the foreground to the distance following the sweeping line of the road. To the left of the image there is a glimpse through trees of the chimney, roof and gable of Glebe Lodge, which is a Protected Structure. The backdrop is of mature trees.

**Proposed View:**

The proposed view shows the proposed 5 storey rising to 6 storey student residence with staircores on the right hand side and along the road moving in to the middle ground. The façades are composed of a square grid of muted brown brick which sits forward of warm coloured panels of orange and red, with floor to ceiling glazing. The rhythm of the façade is modulated by removing a portion of the grid. The proposed buildings are larger in scale to the Glebe Lodge adjacent to them which increases the urban character of the campus and Roebuck Road at this point, noting the apartment development in the distance.

The visual impact will be significant and negative.

**View 7****Existing View:**

This viewpoint is taken from outside the campus at Roebuck Road at the entrance to Roebuck Castle residential area, looking eastwards along the road.

The foreground of the view is dominated by the entrance road to Roebuck Castle residential area and its plinth wall and railings. Roebuck Road is to the right with carriageway, cyclepaths and footpaths, signage and a lighting column with overhead wires. The road sweeps gently down to the right before rising again with a glimpse of the yellow brick facades of the 4 -5 storey Roebuck Hill apartments. The UCD boundary wall and the plinth wall and railings of Roebuck Castle residences are across the middle of the image from the foreground to the distance following the sweeping line of the road. To the right of the image there is a glimpse of the roof and façade of Crannog Lodge. The middle ground and backdrop is of mature trees.

**Proposed View:**

The proposed view shows the proposed 5 storey rising to 6 storey student residence with a staircore on the right hand side and along the road moving in to the middle ground. The full length of the building facing the viewer can be seen from left to right, and the upper roof area, and this is broken by the foreground of mature trees. The façades are composed of a square grid of muted brown brick which sits forward of warm coloured panels of orange and red, with floor to ceiling glazing. The rhythm of the façade is modulated by removing a portion of the grid. The proposed buildings are larger in scale to the Crannog Lodge adjacent to them which increases the urban character of the campus and Roebuck Road at this point, noting the apartment development in the distance.

The visual impact will be significant and neutral.

**View 8****Existing View:**

This view is taken from outside the campus, close to the entrance of Roebuck Castle residential area, off Roebuck Road, looking eastwards towards the UCD campus boundary.

The view is largely occupied by Roebuck Castle residential road and houses, open space with mature trees.

The character is a sylvan suburban setting.

**Proposed View:**

A 5-6 storey residential building can be glimpsed through the trees. The change in level and distance means that the building parapets and set-backs are visible. The view indicates the increased urban character of the adjacent campus.

The visual impact will be slight and neutral.

**View 9****Existing View:**

This view is taken from outside the campus, mid-way in the Roebuck Castle residential area, off Roebuck Road, looking eastwards towards the UCD campus boundary.

The view is largely occupied by Roebuck Castle residential road and houses, open space with mature trees.

The character is a sylvan suburban setting.

**Proposed View:**

A 5-6 storey residential building rising to a staircore and 7 storey building can be seen over the rooftops of the two-storey houses to the left and glimpsed through trees directly ahead. The change in level and distance means that the building parapets and set-backs are visible, including brick clad gable walls. The view indicates the increased urban character of the adjacent campus.

The visual impact will be significant and negative.

**View 10****Existing View:**

This view is taken from outside the campus in the northern part of the Roebuck Castle residential area, off Roebuck Road, looking eastwards towards the UCD campus boundary.

The view is largely occupied by Roebuck Castle residential road and houses, open space with mature trees

The character is a sylvan suburban setting.

**Proposed View:**

A 5-6 storey residential building rising to a staircore and 7 storey building can be seen over the rooftops of the two-storey houses to the left and glimpsed through trees directly ahead. The change in level and distance means that the building parapets and set-backs are visible, including brick clad gable walls. The view indicates the increased urban character of the adjacent campus.

The visual impact will be slight and neutral.

**View 11****Existing View:**

This view is taken from Mount Anville Road looking northwards across the Dublin skyline.

The image is dominated by Mt Anville Road carriageway, lighting columns, boundary wall and green space in the foreground. The ground falls away sharply and the roofs and gables of suburban housing can be seen on

the right in the middle ground. Mature trees are seen across the middle distance with longer views across the Dublin skyline. Two landmarks are the UCD water tower to the right, and Poolbeg chimneys and Dublin Bay to the right which rise above the horizon, as does a communications mast in the middle of the view.

**Proposed View:**

The proposed development can be glimpsed beyond the mature trees in the middle distance. Much of the proposed development is outlined in red to show the extent of the development which is hidden from view. Two of the taller staircores can be seen and the warm colouring to the facades can be discerned. The proposed development does not break the skyline.

The visual impact will be slight and neutral.

**View 12****Existing View:**

This viewpoint is taken from Deerpark which is a regional park with protected views in the DIR Development Plan 2016-2021. The view is taken from rising ground looking northwards towards the UCD campus and the Dublin Skyline.

The foreground is of the park, with grass and a footpath lined with trees and a bench facing the view. The middle ground is dominated by the gables, roofs and chimneys of adjacent housing. The ground falls away to a distant view of Dublin suburbs and beyond to the city and north Dublin. The green dome of Rathmines Church can be seen in the distance on the left, and the UCD water tower can be glimpsed behind a tree on the left. A communications mast breaks the skyline in the middle right of the image. There is a yellow crane on the right which is located at the site of the Confucius Institute on the UCD campus beside the School of Engineering.

**Proposed View:**

The proposed development can be seen in the middle distance beyond the roofs of the houses and mature trees. Some of the proposed development is outlined in red to show the extent of the development which is hidden from view. Three of the taller staircores can be seen and the neutral warm colouring to the facades can be discerned. The proposed development does not break the skyline.

The visual impact will be moderate and neutral.

**The 'Worse-Case' Scenario**

In the event of the development proceeding, the 'worse case' scenario is that it is not constructed as per the drawings and details provided in the planning application and that the positive attributes of the design and mitigation measures were not carried through in full or enforced by the Local Authority.

An example of this would be if trees were felled as per the application, but no replacement tree planting was carried out.

## **D. Monitoring**

### **i. Construction Phase**

Monitoring of the development during construction will be necessary to ensure that the proposed development is implemented successfully. The implementation of a Construction Environmental Management Plan which establishes good house-keeping, will be required to maintain a tidy site and to limit emission impacts. Tree protection measures detailed in the arborists' report need to be fully in place prior to commencement of any site works to protect surrounding woodland.

### **ii. Operational Phase**

Monitoring of the performance of new planting will be important to ensure successful visual mitigation.

Publicly accessible areas will need to be periodically monitored to ensure continued functioning and accessibility. Maintenance of the buildings and associated landscape, all public areas and accesses will be the responsibility of the owner.

## Appendix 11.A: Photomontages by ModelWorks