Whitebox Student Campus

at Groody Road, Castletroy, Limerick

Planning Submission

Landscape and Visual Impact Assessment

29th January 2025

Registered Landscape Architect

KFla | Kennedy Fitzpatrick landscape architecture

1.1. INTRODUCTION

The purpose of this assessment is to analyse the existing landscape and to assess the likely potential visual impacts arising from the proposed development on the existing landscape and any mitigation measures proposed. The proposed scheme is to create a new student campus and a public park in an existing urban setting. It is proposed to deliver the park and built development together.

1.2. ASSESSMENT METHODOLOGY

The criteria as set out in the current EPA Guidelines on Information to be contained in Environmental Impact Assessment Reports (Published May 2022) are used in the assessment of the likely impacts.

The assessment was carried out by visiting the site and its surroundings in October 2024 and by analysis of the relevant documents as listed below:

- Limerick Development plan 2022-2028
- Assessment of the accurately surveyed and modelled photomontages of the proposed development
- Current and historic aerial photographs,
- Historic maps of the site and surrounds using the Ordnance Survey Ireland's National Historic Maps Archive

Through analysis of the above, the subject lands were assessed in relation to their surrounding environment to identify a study area in which both visual and landscape character impacts would be perceivable. Important landscape features on subject lands and in the wider area were identified as part of this process.

The proposed viewpoints for the verified views were selected to represent points in the local landscape from which the development would potentially be visible and are relate to views from potential visual receptors. Various viewpoints have been selected to provide a well-rounded and realistic representation of how the development will look from different aspects and demonstrate views from sensitive receptors. Views are located, North, South, East and West of the subject lands, both at close-range and long-range, and have been selected from specific locations where more expansive views are possible.

The buildings roads and landscape are modelled in three-dimensional AutoCAD software by the CGI consultant (Digital Dimensions Ltd). Two-dimensional AutoCAD drawings are provided by the design team for the CGI consultant to accurately model the external parts of the development. Liaison between the CGI consultant and the project Architect, Engineer and Landscape Architect on their respective designs informs the final appearance of the verified views. For details on methodology in relation to the surveying of photo view locations, lenses and specifics on the development of the verified views, refer to the accompanying Appendix completed by Digital Dimensions Ltd.

1.2.1 Assessment of Landscape and Visual Effects

The GLVIA 3rd Edition (Landscape Inst. + IEMA 2013) gives specific guidelines for landscape and visual impact assessment. The GLVIA advises that effects on views and visual amenity be assessed separately from the effects on landscape, however acknowledging the two topics are fundamentally linked.

'Landscape' results from the interaction of the physical, social, and natural components of our surroundings. How these elements interact creates the intrinsic landscape character of a place. Landscape impact assessment identifies the changes to this character which would result from the proposed development and assesses the significance of those effects on the landscape. Visual impact assessment is concerned with changes that arise in the composition of available views (primarily public views), the response of people to these changes and the overall effects on visual amenity.

The criteria as set out in the EPA Guidelines on Information to be contained in Environmental Impact Assessment Reports (EPA, May 2022) are used in the assessment of the likely impacts.

The ratings may have negative, neutral or positive application where:

- Positive impact - a change that improves the quality of the environment;
- Neutral impact - a change that does not affect the quality of the environment; and
- Negative impact - a change that reduces the quality of the environment.

Terms relating to the duration of impacts are as described in the EPA Guidelines as:

- Momentary impact – a few seconds or minutes;
- Brief impact – less than a day;
- 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; and
- Permanent impact - lasting over sixty years

Terms of magnitude of impacts are as described in the EPA Guidelines as listed in the table below:

Significance of Impact	Topic Specific Criteria
Imperceptible	An effect capable of measurement but without significant consequences
Not Significant	An effect which causes noticeable changes in the character of the environment without significant consequences
Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities
Moderate	An effect that alters the character of the environment in a manner that is consistent with the existing and emerging baseline trends
Significant	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment
Very Significant	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment
Profound	An effect which obliterates sensitive characteristics

Table 1.1: Criteria for significance of effects under EPA Guidelines on the information to be contained in Environmental Impact Assessment Reports, Published May 2022

1.3. RECEIVING ENVIRONMENT

1.3.1 Site Area Description

The subject lands are situated on the east of Limerick city in the between the Groody Road and Groody River, a small tributary of the Shannon. The northern edge of the site is approximately 800 from the banks of the Shannon and the County Clare Boundary. The application area measures approximately 3.4 hectares and masures 316m on it's north south axis and from 43m to 190m on its east west axis. .

The ground levels generally fall from the Groody road towards the river . However there is a localised depression in the northern section of the lands where the levels fall from the centre of the site towards the Dublin Road. The slopes within the subject lands are relatively shallow with some generally flat sections. The slope gets more severe from the western edge of the subject lands to the river where the levels drop by 3 m over 13m .

Figure 1.1 Site Context.

1.3.2 Site Area Context

The subject lands sit in the Groody River Valley with the city of Limerick to the east, west and south. To the east, the site is bordered by the Groody road with the Troy Student Village and Curragh Birin

housing area beyond this road. The northern boundary is formed by the Dublin road and some commercial and light industrial buildings and yards.

The study area lies 2km from the centre of Limerick city. The land to the east and west of the study area is primarily residential developments. These residential areas are mostly low-rise developments from the 1990 and 2000s with some more recent developments to the south. There are also a number of large commercial buildings and student housing in the vicinity especially along the Dublin road that runs along the northern edge of the lands.

The Groody Valley Green Wedge (LCC Development Plan 2022-2028) adjoins the site to the south and west. This is made up of the river and surrounding agricultural fields. This valley and landscape type continues beyond the Dublin Road to the North to the River Shannon. Limerick University campus lies to the north east of the Dublin Road and some associated student residential buildings.

1.3.3 Character of the Site

The landscape character of the study site and its environs has largely been determined by the following:

- The river Groody, the valley and its topography
- landscape history of agricultural use with grassland and traditional hedgerow field boundaries and drainage ditches still visible
- built history with a number of large brownfield sites in the vicinity
- wetland meadow area to the west of the river , Reboge Meadows
- new road infrastructure and housing, recently built and currently under construction.
- number of large industrial and commercial buildings and associated infrastructure in the local landscape.
- urban residential landscape to the east, west and south
- the Groody Valley landscape to the north and the river Shannon

Figure 1.2 View from the roundabout on the Dublin Road towards the north eastern corner of the site.

Figure 1.3 View from the Groody Road toward the subject lands from the south. The Travelodge Hotel is visible in the background.

Figure 1.4 View from the Groody Road toward the eastern boundary of the subject land. The Travelodge Hotel is visible on the right side of the view

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Figure 1.4 View from the Dublin Road at the Travelodge Hotel toward the subject lands.

Figure 1.4 View from the footbridge over the Groody River on the Shannon River towpath in the direction of the subject lands. The Travelodge Hotel is visible in the background.

Most of the subject lands would be considered to have the character of a transitional landscape with the eastern side of the lands classed as 'Brownfield Tier 1' in the county development plan. This area is mostly covered by scrub and no landscape management is taking place. The western side of the lands is within the area designated as the Groody Valley Green Wedge in the county development plan. This area is mostly grassland with some trees and areas of scrub. The subject lands are bounded to the east by a railing and tree line along the Groody road. To the north the boundary is made up of a number of boundaries associated with the light industrial units and the Dublin road in part. To the south the boundary is an agricultural field hedgerow and there is no physical boundary to the lands on the north as the boundary line runs at a 10m plus offset form the edge of the Groody river.

Through a comparison of the historical Ordnance Survey maps and aerial photography with the current site and through analysis by site visits it is evident that there has been little change to the study area until recent times. The subject lands were open farmland through both sets of historic maps, 6-inch maps (1837-1842) and 25-inch maps (1888-1913). The field boundaries and patterns in the historic maps are much the same and are visible on the lands to the west of the river. The local area started to change in the 1990s with the construction of the Groody Road and the new residential areas through the 1990s and 200s. What remains of the river valley is very similar to that shown in the historic maps in terms of typology, pattern and scale.

1.3.4 Landscape Sensitivity and Planning

Within the Limerick County Development Plan, the subject lands fall under the Urban Character Area 3, Castletroy, Plassey and Annacotty.

The lands are not located within or adjoining any Natura 2000 designated sites or nationally designated NHA or pHNA . There are no Tree Preservation Orders , listed views or prospects, SAC or SPA or any other landscape designation applied to the subject lands or its immediate surrounds.

Sensitivity	Description
Very High	Areas where the landscape exhibits a very strong, positive character with valued elements, features and characteristics that combine to give an experience of unity, richness, and harmony. These attributes are recognised in landscape policy or designations. In such areas the landscape character exhibits a very low capacity for change in the form of development. Examples of which are high value landscapes, protected at an international or national level (World Heritage Site/National Park).
High	Areas where the landscape exhibits strong, positive character with valued elements, features and characteristics. These attributes are recognised in landscape policy or designations as being of national, regional, or county. In such areas the landscape character exhibits a very low capacity for change in the form of development. Examples of which are high value landscapes, protected at a national or regional level (Area of Outstanding Natural Beauty).
Medium	Areas where the landscape has certain valued elements, features or characteristics but where the character is mixed or not particularly strong. The character of the landscape is such that there is some capacity for change in the form of development. These areas may be recognised in landscape policy at local or county level and the principal management objective may be to consolidate landscape character or facilitate appropriate, necessary change

Low	The character of the landscape is such that it has capacity for change; where development would make no significant change or would make a positive change. Such landscapes are generally unrecognised in policy and where the principal management objective is to facilitate change through development, repair, restoration, or enhancement.
Negligible	Areas where the landscape exhibits negative character, with no valued elements, features or characteristics. The character of the landscape is such that its capacity for accommodating change is high; where development would make no significant change or would make a positive change. Such landscapes include derelict industrial lands or extraction sites, as well as sites or areas that are designated for a particular type of development. The principal management objective for the area is to facilitate change in the landscape through development, repair, or restoration.

Table 1.2 Categories of Landscape Sensitivity

Categories of Landscape Sensitivity**,** *Developed by KFLA ltd for this study based on GLVIA (Guidelines for Landscape and Viaul Impact Assessment) 3rd Edition (Landscape Inst. + IEMA 2013)*

The subject site is covered by two different land use zonings, with the primary land use comprising 'New Residential Use'. This land use is described in the development plan as "to provide for new residential development in tandem with the provision of social and physical infrastructure". The area in proximity to the river is designated as 'Groody Valley Green Wedge'. Under UCA3 there is a specific reference to the designation as follows :

Groody Valley Wedge

Objective: To preserve and protect the Groody Valley from development.

Purpose: To maintain the area's importance in preventing the encroachment of the built-up area of Limerick City and to retain its important role as a wildlife corridor and a flood management zone

Within Chapter 3 of the county development plan Objective GV 01 , Groody Valley States the following:

It is an objective of the Council to:

a) Require a high-quality landmark design.
b) Facilitate purpose-built student accommodation where deemed appropriate.
c) Require car parking to be located to the rear of any building, or adequately screened and sympathetically integrated within the site.
d) Require connectivity for pedestrians and cyclists to the Groody Valley zoned lands.
e) Ensure the design facilitates access to enable complementary development on the Groody Valley zoned lands

With the above considered the sensitivity of the landscape to built development would be low to medium. The brownfield lands, zoned residential have the capacity to accommodate built development with minimal risks to the landscape in terms of character or visual amenity. The area of the site within the Groody Valley Green Wedge designation would have a high sensitivity to built development with risks to the landscape character, amenity value and biodiversity.

Figure 1.5 Location of Potential Sensitive Visual Receptors as listed in table 1.3.

1.3.4 Sensitivity of Local Visual Receptors

The sensitivity of a receptor is determined by a combination of several factors, the type of viewer, the viewer's relationship with the locality and how direct and regular the view is, the quality of the view and the quality of the existing environment from where the development will be viewed.

For this study the sensitivity of receptors is divided in 5 categories based on the criteria in Table 5.0 below.

Sensitivity Rating	Visual Receptor
Very high	Designated views, viewpoints, and vistas. Areas containing protected views as outlined in Development Plans or landscape policies. Very highly aesthetic views and vistas.
High	Local residences and local facilities with a direct and prolonged view of the development. High quality views from public open spaces Non-designated views of distinctive or characteristic landscapes from general road network. Views to and from local ridges, hills, high-points, buildings of note. Views to and from sites of regional ecological and / or cultural interest.
Medium	Viewers with a moderate interest in their environment such as recreational travelers and less frequent users of recreational facilities, e.g. walkers along canal, users of any adjacent parks, Viewers within a landscape dominated by traffic. Visual condition of the landscape is degraded. Views to and from open spaces, local parks. Views from sports and recreational facilities. Views to and from sites of local ecological and / or cultural interest. Views from general community, schools, institutional buildings, and associated outdoor areas.
Low	Viewers with a passing interest in their surroundings or whose interest is not specifically focused on the landscape, e.g. workers. Viewers within an exclusively trafficked landscape (i.e. a major roadway or adjacent to one with no mitigation) Views of unremarkable landscapes from general road network. Views of unremarkable landscapes from residences where significant road infrastructure exists in the vicinity. Views to and from industrial/commercial landscapes of little or no cultural heritage antiquity or aesthetic merit.
Negligible	Views to and from degraded or abandoned urban or peri-urban landscapes or areas of dereliction with very low aesthetics value and little or no elements of interest. Views dominated by transportation and other infrastructure of no aesthetics merit.

Table 1.3 Sensitivity Categories for Visual Receptors

Rating of Visual Sensitivity of Receptors *(Developed by KFLA ltd for this study based on Transport Infrastructure Ireland Publication, Landscape Character Assessment (LCA) and Landscape and Visual Impact Assessment (LVIA) of Specified Infrastructure Projects - Overarching Technical Document, Document No. PE-ENV-01101)*

The Sensitive Visual Receptors identified in this study are listed in the table below and rated according to the categories in table 1.3 above. Refer to fig 1.5 for location map.

Receptor	Description	Sensitivity
VR 1	Motor dealers, petrol station and light Industrial units facing Dublin road. All units back on to the subject lands.	**Low**
VR 2	The Park Retirement Village. Three storey residential blocks with dense screening belt of trees obstructing views to the south and west.	**Medium**

VR 3	Curragh Birin. Semi-detached and terrace housing backing onto Groody road. Partial views of the lands from the units closest to the site	**Medium**
VR 4	Groody Centre retail and commercial units	**Low**
VR 5	Groody Student Park. Three storey student housing units with rear of buildings facing site. Double line of trees provides screening.	**Medium**
VR 6	Brú No Gruadán . Semi-detached and terrace housing facing Groody Rd. Three lines of trees provide screening between this housing and the site.	**Medium**
VR 7	New residential development on Bloodmill Rd. Semi-detached housing backing on to the Groody Valley. Significant hedgerow vegetation exists between this housing and the subject lands.	**Medium**
VR 8	Carn Na Ree. Semi-detached housing backing facing Groody Valley. Significant hedgerow and scrub vegetation exists between this housing and the subject lands.	**Medium**
VR 9	Chesterfield Grove. Semi-detached housing with side gables facing Groody Valley. Significant vegetation exists between this housing and the subject lands.	**Medium**
VR 10	Parkway retail Park. Large retail units with a large carpark facing the Dublin Road.	**Low**
VR 11	Foxhill House. 2 storey residence off the old Dublin road. With significant screening vegetation to the rear of the house.	**Medium**
VR 12	Travellodge Hotel . Highrise building with views over the subject lands	**Low**
VR 13	Retail and petrol station units facing Dublin road towards the site. Motor dealers, petrol station and light Industrial units obstruct views of the subject lands.	**Low**
VR14	From the tow path along the Shannon	**High**
VR15	Retail and educational buildings .	**Low /Medium**

Table 1.4 Sensitive Visual Receptors

1.4. DESCRIPTION OF EFFECTS

This section describes the effects that the overall development could have without consideration of ameliorative landscape and visual mitigation measures. Incorporated design mitigation measures have been considered.

1.4.1 Construction Effects

The change of use of the site from its current state to that of a construction site has the potential to result in the following impacts:

- Visual impacts due to the introduction of new structures, access roads, machinery, materials storage, associated earthworks, car parking, lighting and hoarding.
- Change of character due to the change in use.
- Visual impacts due change in ground levels and earthworks.
- Visual and landscape character impacts due to the removal of existing vegetation.

1.4.2 Operational Effects

The proposed development has the potential to result in the following impacts:

- Visual impacts due to the introduction of new buildings and built structures.
- Visual impacts due to the introduction of new roads, parking, mechanical plant and lighting.

- Change of character due to the change in use.
- Visual impact of landscape proposals – planting, lighting, hard surfaces etc.
- Landscape and visual impacts due to the removal of existing vegetation
- Landscape and visual impacts due to the installation of trees, woodland, meadows and wetland vegetation

1.5. LIKELIHOOD OF SIGNIFICANT EFFECTS

Landscape assessments measure the sensitivity of specific landscape types and features and describe the nature and significance of changes to that landscape occurring because of a proposed development. In general it can be assumed that landscape and visual impacts are intrinsically linked however both types of impacts are assessed separately in this study where a development characteristic may result in a starkly different type, quality or magnitude of impact in landscape or visual terms. The assessment of likely significant impacts has been made on the basis that all incorporated design mitigation measures are included.

Character, for the purposes of this assessment refers to the interaction of elements in the landscape that combine to give the area its identity. In this context, impacts on character include the effect on existing land uses and responses that are felt towards the combined effects of the new development.

These effects have been compiled to identify any areas where the proposed development may impact the landscape character and visual amenity of the local area and represents the potential impact rather than the eventual long-term effect. This section identifies potential, rather than actual, impacts which facilitates the identification of further landscape mitigation measures beyond incorporated design mitigation.

1.5.4 'Do-Nothing'Effects

In the event of this scenario, the majority of the site would likely continue to be left in it's unmanaged , transitional state. Existing scrub and hedgerow on the site would continue to mature. The existing areas of scrub and grassland would continue to grow wild and eventually scrub vegetation would start to dominate. Most of the subject lands has a specific zoning for development and the specific requirements of objective GV01 require this type of built development. It is therefore likely that the site would be developed in the future in a similar scale and type as is currently proposed.

1.5.1 Construction Effects

Landscape Character

As described under 1.4.1 above, the initial construction operations created by the clearance of the site and the construction of the buildings and roads will give rise to temporary or short-term impacts on the landscape character, through the introduction of new structures, machinery etc. and the removal of a small amount of vegetation. The conversion of parts of the site from a greenfield landscape type to a building site, is likely to be perceived in the short term as a significant, negative 'loss' of landscape character, particularly by sections of the local community closest to it.

The removal of existing vegetation will also cause a negative impact on the landscape character, however the existing vegetation in the Groody valley area of the site is to be retained and incorporated into the landscape design.

With the above considered the negative visual impact on the landscape character during construction would be considered moderate in magnitude. However, these impacts would only be short-term in duration.

Visual

The introduction of the visual elements associated with the activities listed under 1.4.1 will give rise to negative visual impacts for the users of the public realm and the sensitive visual receptors listed in table 1.3. Visual impacts during construction will affect most of sensitive receptors identified with the magnitude of that effect changing over the course of the construction period.

The proposed development itself will mostly negatively impact sensitive visual receptors 1,3,4,5 and 13.

1.5.2 Operational Effects

Landscape Character

The landscape character of the subject lands will be notably changed from its current largely brownfield and greenfield, undeveloped character to that of built environment in part and a nature park. As described in section 1.3.3 of this report the sections of the current landscape has the character of a traditional agricultural landscape that is common in the wider environment and some sections have a brownfield, transitional landscape character. The lands are zoned for the type of development proposed in each section, and it is unlikely that the land will remain as they are currently. Therefore, its current state is temporary.

The proposed development includes a landscape scheme which includes the creation of a public park focused on biodiversity enhancement and habitat creation. This includes extensive amount of proposed native woodland, wildflower meadow, orchards, wetlands and bioswales which all improve local biodiversity and enhance green infrastructure links. The landscape scheme associated with the proposed residential development provides a range of high-quality amenity options to the new residents. These design measures will mitigate the level of impact.

The initial change to a new landscape that includes built development may be perceived negatively by some people, however due to the surrounding urban and suburban environment this would be considered a continuation of existing and emerging trends in the area. With this considered the impact would be moderate in significance and long term in duration.

Visual

The extent of potential visual impact of the proposed development on the built environment from seven representative view locations around the proposed development is assessed in the following section. The view locations are representative of locations from which it was suggested by mapping analysis and review in the field, that the proposed development might be visible. Photomontages from these locations are submitted as part of the application, as a separate A3 document by Digital Dimensions Ltd.

Views from specific locations

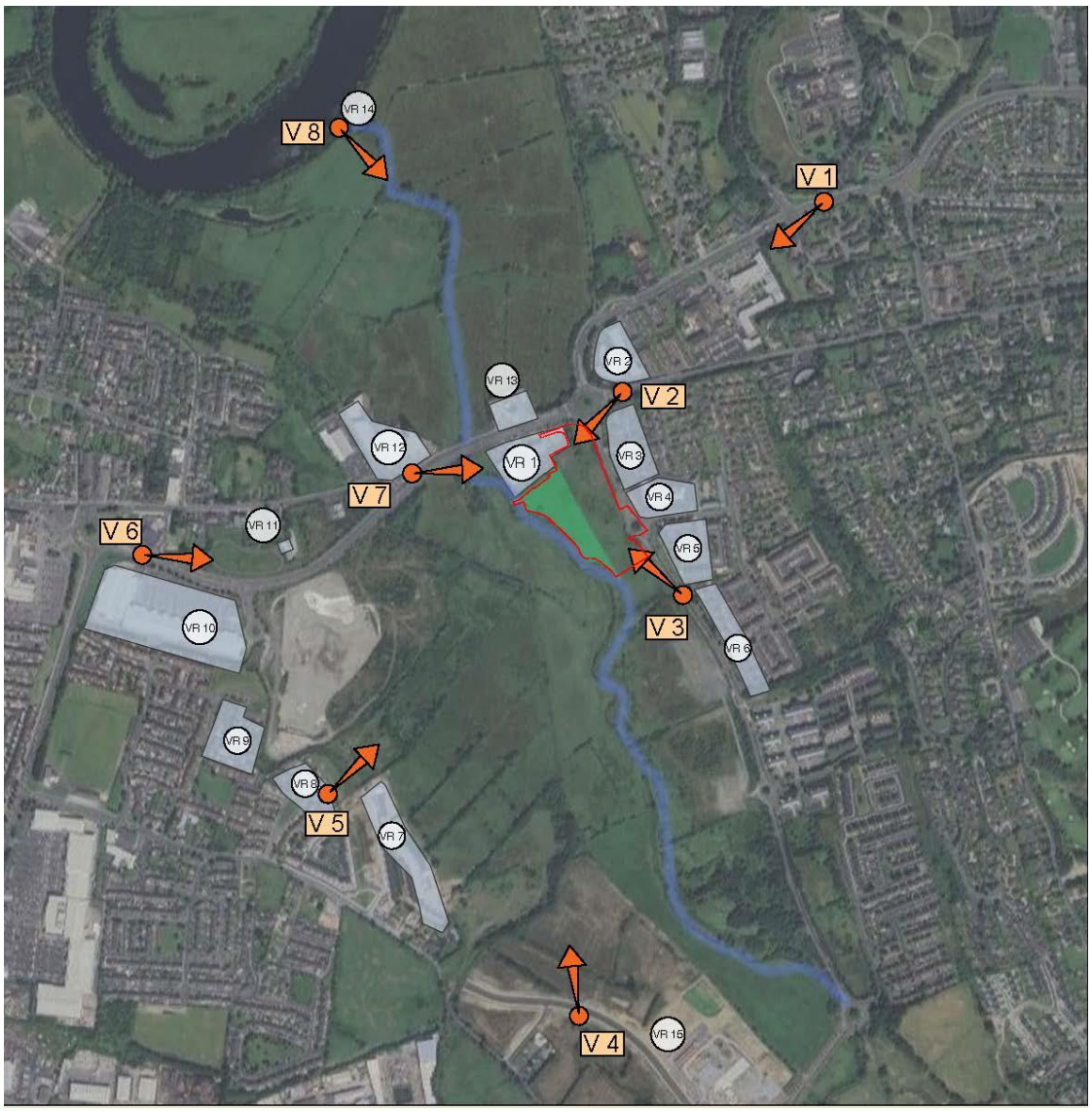

Figure 1.6 Location of Viewpoints in relation to subject lands and the Sensitive Visual Receptors as listed in Table 1.3.

View 01	620m from the edge of the subject lands
Existing View : A distant view in the direction of the subject lands from the vicinity of the University of Limerick campus. This is a built up urban area with a large number of mature trees and tree belts. Distant views are only possible along the alignment of the main roads. The subject lands are not visible.	
Proposed View Year 5 : Due to the distance between the viewpoint and the proposed development and intervening features in the local landscape, the proposed development is not visible.	
Predicted impact during construction	The development is not visible in views from this location
Predicted impact during operation	The development is not visible in views from this location

View 02	60m from edge of the subject lands
Existing View : A short-range view taken to the east of the subject lands. The viewpoint is located on the roundabout where the Groody Rd meets the Dublin Rd. The view is from the vicinity of the group of residences listed as VR 2 and 3 in this study. The subject lands are visible in the centre of the view with the roundabout and traffic in the foreground and the Travelodge Hotel building visible in the right hand side of the view. The trees and scrub on this perimeter are visible behind the timber boundary fence..	
Proposed View Year 5 : The proposed development will result in a notable change to this view. The block in the north eastern corner of the scheme is clearly visible in the centre of the view and result in a noticeable change to the ridgeline of the view. The proposed berm and boundary tree belts will aid the visual integration of the new building. This treatment would be similar to the boundary treatment at the retirement village on the opposite side of the roundabout (VR2) . The proposed development would be seen as a continuation of existing and emerging development trends in the area due to the number of large buildings along the Dublin road most notable the Travelodge Hotel. No sensitivities are affected by the visual impact. The residences at VR3 face away from the development and there is a belt of trees providing a level of screening from VR2. Most people affected are road users on the roundabout.	
Predicted impact during construction	A moderate and short-term negative visual impact.
Predicted impact during operation	A moderate and long-term negative visual impact.

View 03	140m from edge of masterplan lands
Existing View : A short-range view taken from the public road adjacent to VR5 and VR6. The viewpoint is located close to the subject lands with the road and fence dominant in the foreground. The subject lands are visible in the centre of the view with the scattered trees and scrub forming a small section of the view. The trees in the Groody valley to the left of the view are more prominent. The Travelodge Hotel building is visible in the centre background of the view.	
Proposed View Year 5 : Most of the proposed building blocks are visible in this view. The buildings will read visually as a continuation of the built environment of the large buildings along the Dublin Road and in the Castletroy Park area. The impact of the development on this view is reduced due to the number of large buildings in the landscape built along the Dublin Road in recent years. The berm and boundary tree belts proposed will aid the visual integration of the new buildings into the existing landscape. The residences at VR5 face away from the development	
Predicted impact during construction	A moderate and short-term negative visual impact.
Predicted impact during operation	A moderate and long-term negative visual impact.

View 04	795m from edge of masterplan lands
Existing View : A long-range view taken from a new road to the south of the lands further up the Groody River Valley. A construction site is prominent in the foreground of the view where a new development is currently under construction. In the right background of the view, the mountains to the north of Limerick city are visible in the distance. Due to the distance of the view and the tree cover the subjects lands are not visible or imperceptible in the view.	
Proposed View Year 5 : The proposed development will result in a notable change to this view. The proposed buildings are visible in the centre of the view and result in a noticeable change to the ridgeline of the view. Due to the distance of the view the development will only affect a small portion of the background. Any perceived impact is mitigated due to the buildings under construction in the foreground. Once complete these buildings will result in a complete obstruction of this area of the view.	
Predicted impact during construction	A not significant and short-term negative visual impact.
Predicted impact during operation	A not significant and long-term negative visual impact

View 5	630m from edge of masterplan lands
Existing View : A long-range view taken from the western edge of the Groody River Green Wedge at the Carn Na Ree residential development. The sensitive visual receptors VR7 and VR8 are in this vicinity. . The subject lands are visible in the centre middle ground of the view however it only makes up a very small part of this view. The visual ridgeline is dominated by existing buildings are trees in the eastern fringes of the city. In the left background of the view, the mountains to the north of Limerick city are visible in the distance. The Travelodge Hotel building and the powerlines are prominent in the foreground of this view.	
Proposed View Year 5 : The proposed development will result in a notable change to this view. The proposed buildings are clearly visible in the centre of the view and result in a noticeable change to the ridgeline of the view. The proposed buildings are visible in the centre of the view however they do not alter the ridgeline of the view. Due to the distance of the view the development will only affect a small portion of the background and reads as a continuation of the urban landscape on the eastern edge of the site. The significant amount of woodland habitat proposed in the new public park within the scheme will visually integrate the scheme into the landscape. This screening will increase as the woodland areas mature.	
Predicted impact during construction	A slight and short-term negative visual impact.
Predicted impact during operation	A slight and long-term negative visual impact

View 6	770m from edge of masterplan lands
Existing View : A long-range view taken to the west of the subject lands from the vicinity of the Parkway roundabout. . The viewpoint is located on the Dublin in the vicinity of the group of the retail centre listed as VR 10 in this study. The subject lands are not visible from this location.	
Proposed View Year 5 : Due to the distance between the viewpoint and the proposed development and intervening features in the local landscape, the proposed development is not visible.	
Predicted impact during construction	The development is not visible in views from this location
Predicted impact during operation	The development is not visible in views from this location

View 7	190m from edge of masterplan lands
Existing View : A mid-range view taken from front of the Travelodge Hotel on the opposite side of the Dublin Rd. . The sensitive visual receptors VR11, VR12 and VR1 are in this vicinity. The subject lands are visible in the right hand side of the view where the area along the river makes up a small section of the middle ground. The visual ridgeline is dominated by the trees and vegetation in the centre of the view.	
Proposed View Year 5 : The proposed development will result in a notable change to this view. The proposed buildings are partially visible to the left where the a section of the most northerly building is protrudes beyond the tree belt. The existing vegetation screens most of the proposed development. The new woodland and meadow habitats proposed in the public park will be partially visible in this view.	
Predicted impact during construction	A moderate and short-term negative visual impact.
Predicted impact during operation	A slight and long-term negative visual impact

View 8	630m from edge of masterplan lands
Existing View : A long-range view taken from the footbridge over the Groody River along the Shannon River towpath. The subject lands are not visible from this location due to the level of vegetation and built development in the local area. The Travelodge Hotel building is prominent in the centre of the view where it breaks the visual ridgeline.	
Proposed View Year 5 : The proposed development will be visible in this view however only very small glimpsed views of the very upper levels will be possible. The significant amount of woodland habitat in the area screens most of the built development. This screening will increase as the woodland areas mature.	
Predicted impact during construction	An imperceptible and short-term negative visual impact.
Predicted impact during operation	An imperceptible and long-term negative visual impact

View	Relevant Receptors	Receptor Sensitivity	Quality	Significance	Probability	Duration
02	VR 2+3	Medium	Negative	Moderate	Likely	Long term
03	VR 5	Medium	Negative	Moderate	Likely	Long term
04	VR 15	Low	Negative	Not Significant	Likely	Long term
05	VR 7+8	Medium	Negative	Slight	Likely	Long term
07	VR 1, 11+12	Low/Medium	Negative	Slight	Likely	Long term
08	VR 14	High	Negative	Imperceptible	Likely	Long term

Table 1.4 Summary of Effects of the Development on Sensitive Visual Receptors before mitigation (assessment takes account of integrated design mitigation measures only)

1.6. REMEDIAL & MITIGATION MEASURES

1.6.1 Construction Phase

16.6.1.1 Mitigation by Avoidance / Design

CONST 1 - Development of a construction management plan as an integral part of the design process, with control of construction activity, traffic, materials storage and lighting with due consideration for neighbouring residences and surrounding area

CONST 2 – A site planning design strategy to retain boundary hedgerows and tree protection measures was designed and implemented as part of the design process.

1.6.1.2 Mitigation by Prevention

CONST 3 – Site hoarding shall be erected to screen views of construction activities

CONST 4 - Tree protection measures will be installed ensure vegetation to be retained is fully protected during the construction process

1.6.1.3 Mitigation by Reduction

CONST 5 - Monitoring of construction management plan and tree protection measures throughout the construction phase

1.6.2 Operational Phase

1.6.2.1 Mitigation by Avoidance / Design

OP 1 - The architectural design of the building aims to reduce the visual mass through its form and choice of materials.

OP 2 - The retention of existing hedgerows and trees where possible will assist the visual integration of the building into the landscape and mitigate the visual impact.

OP 3 - The landscape proposals include green links, trees, hedgerows, wetlands, SUDS features, woodland blocks and wildflower meadow. These elements will assist the visual integration of the building into the landscape and mitigate the visual impact.

1.6.2.2 Mitigation by Prevention

OP 4 - Creation of new hedgerows, tree belts in locations where they will aid visual integration of the scheme and reduce negative visual impacts.

1.6.2.3 Mitigation by Reduction

OP 5 - Periodic tree surveys and implementation of a tree management plan for the mature trees on site to ensure their continued sustainability.
OP 6 - The implementation and monitoring of a landscape management plan for the full duration of the defects liability period to ensure successful establishment of the proposed planting scheme and trees.

1.7. RESIDUAL EFFECTS

1.7.1 Construction Phase

The predicted residual effects will be as set out in section 1.5.1. The preventative and reduction mitigation measures listed will ensure the integrated design mitigation measures are successful. The integrated design mitigation measures are considered in the assessment section 1.5.1**.**

1.7.1 Operational Phase

The ameliorative mitigation measures as listed in section 1.6.2.2 will reduce the effects of the masterplan development on several of the listed visual receptors, as below :

View 2 – The creation of a berm and tree planting will reduce the visual impact of the built development. This measure will create a similar edge treatment to that of the retirement village on the opposite side of the roundabout. The impact on this view from the road and visual receptors 2+ 3 will be reduced , however it will remain moderate in terms of its magnitude rating.

View 3 – The retention of the boundary hedgerow to the south and creation of a new tree belt on this perimeter and along the Groody Rd. will reduce the visual impact of the built development. The impact on this view from the road and visual receptor 5 will be reduced however remain moderate and negative.

View 5 – The creation of a new park with significant blocks of woodland will reduce the visual impact of the built development. This measure will integrate the development into the existing landscape surrounding it. The impact on this view from the road and visual receptors 7+8 will be reduced from slight to not significant and negative.

View	Relevant Receptors	Receptor Sensitivity	Quality	Significance	Probability	Duration
02	VR 2+3	Medium	Negative	Moderate	Likely	Long term
03	VR 5	Medium	Negative	Moderate	Likely	Long term
04	VR 15	Low	Negative	Not Significant	Likely	Long term
05	VR 7+8	Medium	Negative	Not significant	Likely	Long term
07	VR 1, 11+12	Low/Medium	Negative	Slight	Likely	Long term
08	VR 14	High	Negative	Imperceptible	Likely	Long term

Table 1.4 Summary of Residual Effects Overall Masterplan Proposal on Sensitive Visual Receptors (after prevention and reduction mitigation measures)

1.8. MONITORING

1.8.1 Construction Phase

Contracts will ensure good working practices to reduce any negative impacts arising from construction to the lowest possible level and to ensure that all machinery operates within clearly defined construction areas. Storage areas will be located to avoid impacting on sensitive views, trees, hedgerows, drainage patterns etc. and such areas will be fully re-instated prior to, and at the end of the construction contract. The works will also have continuous monitoring to ensure adequate protection of areas outside of the construction works. All tree protection measures will be monitored by a qualified Arborist throughout the construction period.

1.8.2 Operational Phase

A landscape management plan will form part of the works contract and include for ongoing maintenance of the planting scheme. A qualified landscape architect will monitor the post installation management and maintenance of the scheme by a suitable qualified landscape contractor. The landscape works and maintenance contracts will include a requirement for replacement planting to ensure the full design intent is realised.