CHAPTER TWELVE THE LANDSCAPE

12.1 INTRODUCTION

This Chapter assesses the potential effects of the proposed development on the receiving environment in respect of the landscape and key views/visual amenity. It describes the impact of the proposed development on the urban landscape character and visual amenity of the site and on the contiguous landscape and its environs. It describes the landscape character of the subject site and its urban landscape context, together with the visibility of the site from key viewpoints in the vicinity. It includes an outline of the specific methodology used to assess the effects, descriptions of the receiving environment (the baseline landscape), descriptions of the potential impacts of the development and of the resultant potential effects. Mitigation measures introduced to ameliorate or offset impacts are outlined and the resultant predicted (residual) effects are assessed. The evolution of the baseline and an assessment of cumulative effects are also included.

12.2 ASSESSMENT METHODOLOGY

12.2.1 Introduction

The proposed application site (Phase II) is part of a phased development proposal for a significant city centre, regeneration area or Masterplan Site (MS). This MS is divided into four different phases of delivery as detailed in Section 1.6.3 in Chapter 1.0 Introduction. The overall MS layout which illustrates the indicative layout of the subject site and adjoining lands in the ownership of the applicant is displayed in Chapter 1.0, Figure 1.4 and full details of the development phases proposed for the MS are provided in Chapter 2.0, Section 2.2.4. In addition to an in-depth assessment of the proposed development, this assessment takes a holistic approach and examines the wider MS area, taking into account the proposed future phases of development based on the available information at this time. This Chapter focuses on the likely significant effects of the proposed development, i.e., Phase II of the MS. The other phases of the Masterplan are considered in the assessment of cumulative effects, insofar as details of these are available.

Phase II is subsequent to ongoing stabilisation and repair of the Flaxmill protected structure (Phase I). Phase III is intended to comprise an educational campus, inclusive of the adaptive reuse of the Flaxmill Building as part of that development and will be subject to a future separate application.

The assessment methodology adopted in the preparation of this Chapter adheres to the requirements and guidelines as referenced in Chapter 1.0, Introduction, and specifically to the Guidelines on the Information to be Contained in Environmental Impact Assessment Reports, EPA, May 2022, however reference is also made to the 'Guidelines for Landscape and Visual Impact Assessment', prepared by the Landscape Institute and the Institute of Environmental Assessment, 3rd Edition 2013 (GLVIA), which sets out guidance and detailed advice regarding the specific process of assessing the landscape and visual effects of developments and their significance. This is the most up-to-date, best practice guidance in Ireland for landscape and visual assessment.

'Landscape' can be described broadly as the human, social and cultural experience of one's surroundings. It is derived from the interplay between the physical, natural and cultural components of our surroundings, as experienced by people. The combination of these components elicits responses whose significance will be partially dependent on how people perceive a particular landscape and how much changes will matter in relation to other senses, as experienced and valued by those concerned. This assessment seeks to understand the potential effects of a development on the urban landscape as an environmental, cultural and economic 'resource', but also considers the aesthetic, perceptual and experiential aspects of landscape that make a place distinctive. Despite the extremely large part played by our visual experience in forming our views on landscape, one's perception and indeed memory also play an important part, if the changes brought about in landscape character are to be fully understood. It is clear therefore that different people doing different things will experience the surrounding landscape in different ways. Such sensitivities and variations in response, including where and when they are likely to occur, are broadly taken into consideration in the assessment.

'Visual amenity' as expressed through views, refers to the interrelationship between people and the landscape. In accordance with the guidelines, the effects on views and visual amenity are assessed separately from the effects on landscape, though the two are inherently linked. Visual assessment is concerned with the changes that arise in the composition of available views, the response of people to these changes and the overall effects on the area's visual amenity. Generally, these are evidenced by the comparison of baseline (existing) images and photomontages illustrating the proposed development in context.

12.2.2 Study area

The study area includes all areas around the site from where effects created by the proposed development upon the landscape may potentially be discernible or from where views of the proposed development may be obtained – the latter is limited to views from the public realm., which adheres to current best practice as set out in the GLVIA. The study area has been determined and defined primarily by walk-around survey and includes the subject site plus the surrounding landscape and visual context within a zone of visibility defined largely by the topography and distance from the site. A zone of visibility was established via the walk around survey, and for locations outside the city by drive-around survey to potential viewpoints determined by prior research (including map study, google streetview, etc). Both surveys were conducted on 21st Jan 2005. The walkaround survey was generally up to approx. 1km distant from the site location where more distant views to the site are possible, eg, up to Colbert Station and in both directions along the river, to Thomond Bridge and Barrington's Pier. Shorter distance views (450-550m) only are achievable when the site is viewed from the higher ground locations north of the site and visibility of the site diminishes for locations further north. However, check views were taken from Thomond Park 1.1km away and Brennan's Cross 4.25km away.

The zone of visibility within the city area is outlined in Figure 12.1, below.

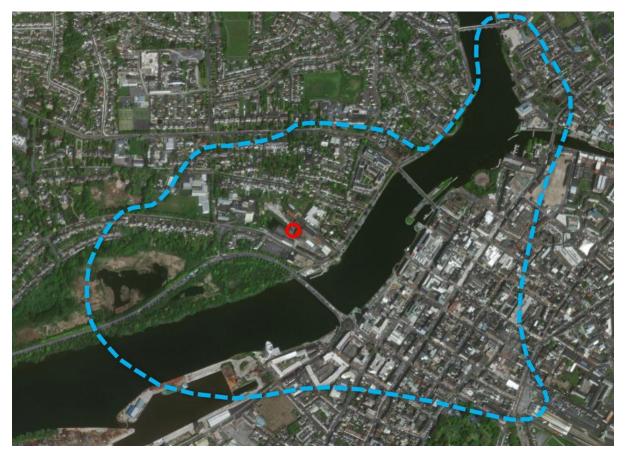


Figure 12.1: Approximate utline of the Study Area (Source: Bing maps, with overlay by Mitchell + Associates).

12.2.3 Methodology for Assessment of Landscape Effects

The assessment of potential landscape effects involves (a) classifying the sensitivity of the receiving environment (i.e., the nature of receptors), and (b) identifying and classifying the magnitude of landscape change (i.e., the nature of the effect), which will result from the proposed development. These factors are combined to arrive at a classification of significance of the landscape effects.

12.2.3.1 Landscape Sensitivity

The sensitivity of the landscape is a function of its land use, patterns and scale, visual enclosure, the distribution of visual receptors, and the value placed on the landscape. The nature and scale of the development in question is also taken into account, as are any trends of change, and relevant policy. Five categories are used to classify sensitivity (refer to Table 12.1, below).

Sensitivity	Description
Very High	Areas where the landscape exhibits very strong, positive character with valued elements, features and characteristics that combine to give an experience of unity, richness and harmony. The landscape character is such that its capacity to accommodate change is very low. These attributes are recognised in policy or designations as being of national or international value and the principal management objective for the area is protection of the existing character from change.
High	Areas where the landscape exhibits strong, positive character with valued elements, features and characteristics. The landscape character is such that it has limited/low capacity to accommodate change. These attributes are recognised in policy or designations as being of national, regional or county value and the principal management objective for the area is the conservation of existing character.
Medium	Areas where the landscape has certain valued elements, features or characteristics but where the character is mixed or not particularly strong, or has evidence of alteration, degradation or erosion of elements and characteristics. The landscape character is such that there is some capacity for change. These areas may be recognised in policy at local or county level and the principal management objective may be to consolidate landscape character or facilitate appropriate, necessary change.
Low	Areas where the landscape has few valued elements, features or characteristics and the character is weak. The character is such that it has capacity for change; where development would make no notable change or would make a positive change. Such landscapes are generally unrecognised in policy and the principal management objective may be 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 is such that its capacity to accommodate change is high; where development would make no discernible change or would make a positive change. Such landscapes include derelict industrial lands, 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 12.1: Categories of Landscape Sensitivity

12.2.3.2 Magnitude of Landscape Change

The magnitude of change is a factor of the scale, extent and degree of change imposed on the landscape by the proposed development, with reference to its key elements, features and characteristics (also known as 'landscape receptors'). Landscape receptors include individual aspects of the landscape, e.g., landform/topography, vegetation, and the density, mix, pattern and scale of building typologies, which may be directly changed by the development. The surrounding landscape character areas are also receptors whose character may be altered by these changes. Five categories are used to classify magnitude of change (refer to Table 12.2, below).

Magnitude of Change	Description
Very High	Change that is large in extent, resulting in the loss of or major alteration to key elements, features, or characteristics of the landscape, and/or introduction of large elements considered totally uncharacteristic in the context. Such development results in fundamental change in the character of the landscape.
High	Change that is moderate to large in extent, resulting in major alteration to key elements, features, or characteristics of the landscape, and/or introduction of large elements considered uncharacteristic in the context. Such development results in change to the character of the landscape.

Medium	Change that is moderate in extent, resulting in partial loss or alteration to key elements, features, or characteristics of the landscape, and/or introduction of elements that may be prominent but not necessarily substantially uncharacteristic in the context. Such development results in change to the character of the landscape.
Low	Change that is moderate or limited in scale, resulting in minor alteration to key elements, features, or characteristics of the landscape, and/or introduction of elements that are not uncharacteristic in the context. Such development results in minor change to the character of the landscape.
Negligible	Change that is limited in scale, resulting in no alteration to key elements, features, or characteristics of the landscape, and/or introduction of elements that are characteristic of the context. Such development results in no change to the landscape character.

Table 12.2: Categories of Magnitude of Landscape Change

12.2.3.3 Landscape Effects

A conclusion on the relative importance of landscape effects (whether on the physical landscape elements or on the landscape character), can be arrived at by combining the landscape sensitivity and the magnitude of landscape change - this is indicated in Table 12.3 Classification of the relative importance of Landscape Effects, below.

		Sensitivity of the Landscape					
			Very High	High	Medium	Low	Negligible
ape		Very High	Profound	Profound	High	High-Moderate	Moderate- Slight
to the Landscape	ie Landsca	High	Profound	High	High-Moderate	Moderate	Moderate- Slight
Magnitude of Change to th	Medium	High	High-Moderate	Moderate	Moderate- Slight	Slight	
	Low	High- Moderate	Moderate	Moderate- Slight	Slight	Imperceptible	
	Negligible	Moderate- Slight	Moderate- Slight	Slight	Imperceptible	Imperceptible	

Table 12.3: Classification of the relative importance of Landscape Effects

The classifications of the relative importance of landscape effects as set out in Table 12.3 above and as used throughout this Chapter, may be defined as follows in Table 12.4:

Importance	Description
Imperceptible	An effect which may be capable of measurement but is without important consequences.
Slight	An effect which causes few noticeable changes in the character of the environment but without important consequences.
Moderate-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 landscape context and with existing and emerging baseline trends.
High-Moderate	An effect which, by its character, magnitude, duration, or intensity, alters a sensitive aspect of the environment.
High	An effect which, by its character, magnitude, duration, or intensity, alters most of a sensitive aspect of the environment.
Profound	An effect which obliterates sensitive characteristics.

 Table 12.4: Description of the classifications of Landscape Effects

12.2.4 Methodology for Assessment of Visual Effects

The assessment of visual effects involves identifying a number of key viewpoints in the site's receiving environment which overall, are representative of the existing visual environment, and for each viewpoint: (a) classifying the visual sensitivity of the viewpoint/visual receptor (i.e., the nature of the receptor), and (b) classifying the magnitude of change imposed on the view by the proposed development (i.e., the nature of the effect). These factors are combined to arrive at a classification of relative importance of the effects on the visual amenity/views.

12.2.4.1 Visual Sensitivity

Viewpoint/visual receptor sensitivity is a function of two main considerations:

- (i) Susceptibility of the visual receptor to change; this depends on the occupation or activity of the people experiencing the view, and the extent to which their attention is focussed on the views or visual amenity they experience at that location. Visual receptors most susceptible to change include for example, residents at home, people engaged in outdoor recreation focused on the landscape (e.g., trail users), and visitors to heritage or other attractions and places of community congregation where the setting contributes to the experience. Visual receptors less sensitive to change include for example, travellers on road, rail, and other transport routes (unless on recognised scenic routes), people engaged in outdoor recreation or sports where the surrounding landscape does not influence the experience, and people in their place of work or shopping where the setting does not influence their experience.
- (ii) Value attached to the view; this depends to a large extent on the subjective opinion of the visual receptor but also on factors such as policy and designations (e.g., scenic routes, protected views), or

the view or setting being associated with a heritage asset, visitor attraction or having some other cultural status.

Five categories are used to classify a viewpoint/visual receptor's sensitivity (refer to Table 12.5, below):

Sensitivity	Description
Very High	Iconic viewpoints (views towards or from a landscape feature or area) that are recognised in policy or otherwise designated as being of national or international value. The composition, character and quality of the view are such that its capacity for change is very low. The principal management objective for the view is its protection from change.
High	Viewpoints that are recognised in policy or otherwise designated as being of value, or viewpoints that are highly valued by people that experience them regularly (such as views from houses or outdoor recreation features focused on the landscape). The composition, character and quality of the view may be such that its capacity for accommodating change may or may not be low. The principal management objective for the view is its protection from change that reduces visual amenity.
Medium	Views that may not have features or characteristics that are of particular value, but have no major detracting elements, and which thus provide some visual amenity. These views may have capacity for appropriate change and the principal management objective is to facilitate change to the composition that does not detract from visual amenity, or which enhances it.
Low	Views that have no valued feature or characteristic, and where the composition and character are such that there is capacity for change. This category also includes views experienced by people involved in activities with no particular focus on the landscape. For such views, an important management objective is to facilitate change that does not detract from visual amenity or enhances it.
Negligible	Views that have no valued feature or characteristic, or in which the composition may be unsightly (e.g., in derelict landscapes). For such views, the principal management objective is to facilitate change that repair, restores, or enhances visual amenity.

Table 12.5: Categories of Viewpoint Sensitivity

12.2.4.2 Magnitude of Change to the Visual Amenity/Views

Classification of the magnitude of change takes into account the size or scale of the intrusion of development into the view (relative to the other elements and features in the composition, i.e., its relative visual dominance), the degree to which it contrasts or integrates with the other elements and the general character of the view, and the way in which the change will be experienced (e.g., in full view, partial or peripheral view, or in glimpses). It also takes into account the geographical extent of the change, as well as the duration and reversibility of the visual effects.

Five categories are used to classify magnitude of change to visual amenity/views (refer to Table 12.6, below):

Magnitude of Change	Description
Very High	Full or extensive intrusion of the development in the view, or partial intrusion that obstructs valued features or characteristics, or introduction of elements that are completely out of character in the context, to the extent that the development becomes dominant in the composition and defines the character of the view and the visual amenity.
High	Extensive intrusion of the development in the view, or partial intrusion that obstructs valued features, or introduction of elements that may be considered uncharacteristic in the context, to

	the extent that the development becomes co-dominant with other elements in the composition and affects the character of the view and the visual amenity.
Medium	Partial intrusion of the development in the view, or introduction of elements that may be prominent but not necessarily uncharacteristic in the context, resulting in change to the composition but not necessarily the character of the view or the visual amenity.
Low	Minor intrusion of the development into the view, or introduction of elements that are not uncharacteristic in the context, resulting in minor alteration to the composition and character of the view but no change to visual amenity.
Negligible	Barely discernible intrusion of the development into the view, or introduction of elements that are characteristic in the context, resulting in slight change to the composition of the view and no change in visual amenity.

Table 12.6: Categories of Magnitude of Visual Change

12.2.4.3 Visual Effects

As for landscape effects, to classify the relative importance of visual effects, the magnitude of change to visual amenity/views is measured against the sensitivity of the viewpoint and a conclusion on the relative importance of visual effects (whether on visual amenity or on the views), can be arrived at by combining the visual sensitivity and the magnitude of visual change - this is indicated in Table 12.7 below.

		Sensitivity of the Visual Amenity/View				
		Very High	High	Medium	Low	Negligible
 	Very High	Profound	Profound	High	High-Moderate	Moderate- Slight
Magnitude of Change to the Visual Amenity/View	High	Profound	High	High-Moderate	Moderate	Moderate- Slight
	Medium	High	High-Moderate	Moderate	Moderate- Slight	Slight
	Low	High- Moderate	Moderate	Moderate- Slight	Slight	Imperceptible
	Negligible	Moderate- Slight	Moderate- Slight	Slight	Imperceptible	Imperceptible

Table 12.7: Classification of the relative importance of Visual Effects

The classifications of the relative importance of visual effects as set out in Table 7 above and as used throughout this LVIA, may be defined as follows in Table 12.8 below:

Importance	Description
Imperceptible	An effect which may be capable of measurement but is without important consequences.
Slight	An effect which causes few noticeable changes in the character of the environment but without important consequences.
Moderate-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 visual context and with existing and emerging baseline trends.
High-Moderate	An effect which, by its character, magnitude, duration, or intensity, alters a sensitive aspect of the environment.
High	An effect which, by its character, magnitude, duration, or intensity, alters most of a sensitive aspect of the environment.
Profound	An effect which obliterates sensitive characteristics.

Table 12.8: Description of the classifications of Visual Effects

12.2.5 The Use of Photomontages and the Selection of Viewpoints

The primary method adopted for the assessment of visual effects relies largely on a comparative visual technique, whereby accurate verified views (photomontages), incorporating the proposed development are compared to the existing corresponding baseline photograph so that an assessment of effects can be made.

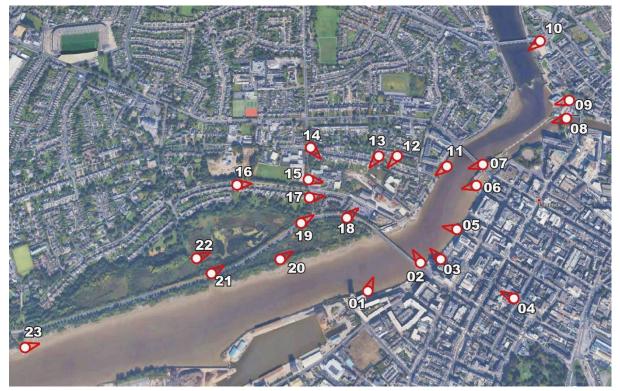


Figure 12.2: Selected view locations – Viewpoint map A. Source: Digital Dimensions.

These 'before' and 'after' images are prepared for each of the selected viewpoints. In recognition of the potential sensitivities of this location and in order to enable a full and detailed assessment of the development proposal, a total of 25 views was selected for verified view preparation. Figures 12.2 above and 12.3 below illustrate the location of viewpoints selected for assessment and for which verified views have been prepared by Digital Dimensions Ltd. These are included in Volume III Appendix 12.1. The verified views are prepared by experienced specialists, to a set of accepted protocols and a specific detailed methodology to ensure accuracy. The adopted methodology for their preparation is described in the report prepared by Digital Dimensions, the photomontage specialist.



Figure 12.3: Selected view locations – Viewpoint map B indicating distant views from Thomond Park (View 24) and Brennan's Cross (View 25). Source: Digital Dimensions.

The selection of viewpoints has been carried out in accordance with the 'Guidelines for Landscape and Visual Impact Assessment', prepared by the Landscape Institute and the Institute of Environmental Assessment, published by Routledge, 3rd Edition 2013. The guidance on viewpoint selection and baseline photography requires that the proposed development is considered in context and that the views used to illustrate the proposed development include sufficient landscape context for proper assessment.

Whilst the potential for views was considered generally up to a radius of approximately 1 km from the proposed development site, views from specific viewpoints further afield were also considered. However, practical choices have to be made regarding the number of viewpoints selected for illustration and choices made to ensure selection of those most likely to illustrate the greatest maximum impact. The potential for view impact can however be limited in such urban contexts, where large or tall buildings may obstruct lines of sight. In addition, due consideration is given to protected or key views in and around the city, and the potential for these to be impacted by the proposed development. In this particular case, a walkaround visual survey was conducted and this resulted in the selection of the 25 views submitted, the viewpoints for which range from approx.100m to over 4 km distant from the site.

12.3 EXISTING RECEIVING ENVIRONMENT

12.3.1 Introduction

The lands occupying the site offer a mix of local scale landscape elements which represent a series of industrial uses stretching back to the mid-19th Century and which now largely supplant any former natural landscape features. The current site is described in Chapter 2 of this EIAR and the site boundary for the current planning application is outlined in Figure 12.4, below.

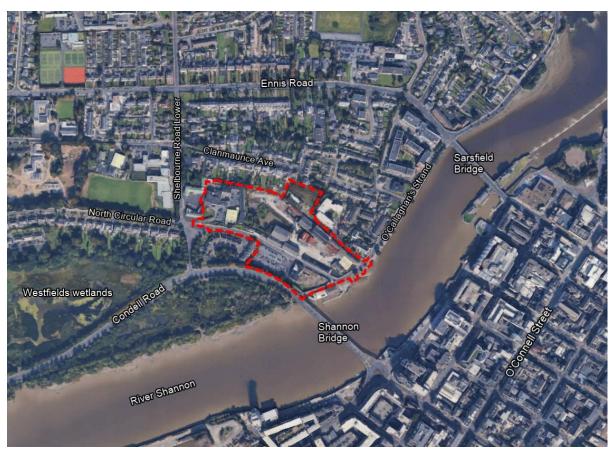


Figure 12.4: Site location (Source: Google maps with overlay by Mitchell + Associates)

12.3.2 The Site

The site is located on the north bank of the River Shannon, reaching back nearly 400 metres from the river's edge just above Shannon Bridge, up to the higher ground at the top of Stonetown Terrace to the north and as far as the Salesians Primary School to the west.

The site is an amalgam of distinct zones, each of which is proposed for discrete aspects of development within this current planning application. These development zones reflect their underlying landscape qualities and differ from one another in terms of landform, elevation, exposure/enclosure, historical development, vegetation, built forms etc. The site is dissected by the North Circular Road, which separates the zones which are proposed to receive the bulk of development from the 'Shipyard' development zone, south of the road, which is earmarked for future development but with only temporary 'meanwhile' development proposed under this current planning application.

Ranging back from the river these zones are referenced as follows:

- a. The 'Riverfront' zone (St. Michael's Rowing Club), along the north bank of the river, which whilst included in the Masterplan for development is largely excluded from the current planning application area. A smaller portion of the eastern end is included, stretching back from the river's edge and incorporating the adjacent lower part of O'Callaghan's Strand.
- b. The 'Shipyard' zone is a relatively level site and is contiguous with a substantial section of the North Circular Road. Apart from one existing warehouse building, it is a series of open hardstandings which are currently used for car parking and storage.
- c. The 'Flaxmill' zone incorporates the majority of the existing historic industrial buildings on the site. It rises gradually up from O'Callaghan's Strand north-westwards and includes the reservoir pond (excavated initially to power the mills) at its western end. This zone is largely enclosed by buildings relating to the former industrial uses on the site and high stone walls infill any gaps between them to create a secure contained site.
- d. The 'Quarry' zone west of the flaxmill site is the former quarry site from which much of the stone for building the earlier industrial buildings was extracted. Its floor is broadly contiguous with the Flaxmill zone but the quarry removed a substantial wedge of stone to create two near-vertical faces (approx. 6-9 metres high) roughly perpendicular to one another along its western and northern edges. These quarry faces form part of the boundary to zone e ('Stonetown Terrace') to the north and most of the boundary with zone f ('Salesians') to the west. The floor and faces of the quarry site have undergone the early stages of natural recolonisation and revegetation over the intervening years since the quarry operations ceased.

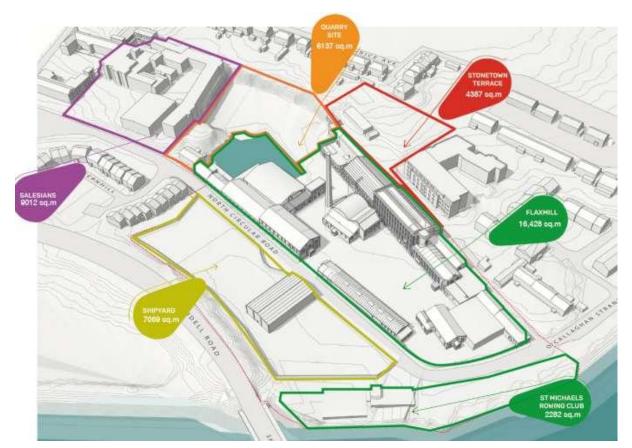


Figure 12.5: Site development zones

- e. The 'Stonetown Terrace' zone is situated at the upper (north-west) end of Stonetown Terrace, leading up from O'Callaghan's Strand. It is perched some 4-6 metres above the Quarry and Flaxmill zones. It is currently characterised by low level scrub and grass/weed vegetation and it is broadly topographically contiguous with the existing adjacent residential land uses to the west, north and east.
- f. The 'Salesians' zone, currently occupied by Fernbank House and a former secondary school. This zone rises quite steeply up from the North Circular Road and becomes increasingly separated from the Quarry zone along its eastern edge by the Quarry face (up to 8 metres in height) as one moves northwards. Topographically this zone is broadly contiguous with the rear gardens of the residential properties to the north and with the Salesians primary school site to the west.



Figure 12.6: Aerial view of the existing subject site looking north-west.

12.3.3 Landscape Context

Our understanding of 'landscape' is derived from the interplay between the physical, natural and cultural components of our surroundings, as experienced by people. Part of that experience is an understanding of the historic development of the site and its surroundings – an understanding of how it came to be as it is. In the case of Limerick, this is a function of its location on the river, coupled with higher ground on each bank where building could occur without the risk of flood. The ability to transport goods in bulk also created favourable conditions which encouraged the development of commerce. Despite diminishing dependence on the river for transportation, the river has been central in the city's development and remains a major aspect of the city's landscape character and its personality. The

larger part of the Cleeves site is physically enclosed by inward-looking buildings and surrounding boundary walls around, however it too shares these very strong connections with the River Shannon – visually, culturally and historically.

12.3.3.1 Historical Development

The historical development of Limerick is closely linked, indeed founded on its strategic location at the lowest fordable point on the River Shannon. The city initially grew up in the Medieval period around the readily achievable shorter bridging points over the Abbey River linking south and east of the river to King's Island upon which King John's Castle and St. Mary's Cathedral were established. The construction of Thomond Bridge during this period, spanning approx.125 metres across the river, at a location just above the Castle, provided a gateway to the west and represented a major boost to the development of the city. The construction of Sarsfield Bridge in the late 18th/early 19th Century, some 600 metres downstream, reflects the extension of the city southwards through the Georgian period and encouraged further development of the city across the river on its north bank. Development of the Cleeves site for industrial purposes commenced in 1850, shortly after the completion of Sarsfield Bridge. It took until 1988 for the construction and completion of Shannon Bridge, Limerick's most recent bridge over the river, some 460 metres further downstream.

Whilst the Cleeves site is located close to the northern end of Shannon Bridge, the bridge and Condell Road (R527) leading from it were primarily intended to conduct vehicular traffic northwards over the bridge, skirt the existing development on the north bank of the city and carry it westwards to Shannon Airport and further out into Co. Clare.

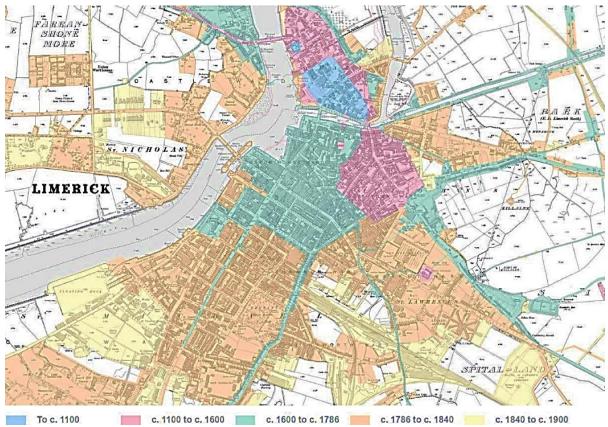


Figure 12.7: Historical development of Limerick City (Source: Irish Historic Town Atlas)

12.3.3.2 Land-Use, Topography and Vegetation

The establishment of the city was largely based on its location on the River Shannon and the river continues to play a large part in the life and the commerce of the city. It is a broad river, and it is therefore a constant presence in the city. Much revolves around it. It has both encouraged development and constrained it. Development related to shipping took advantage through the construction of the quays and the city has gradually grown behind them. Beyond the guays, on both sides of the river, the land rises by 10-15 metres up to relatively level ground, across which the built city landscape has emerged. Whilst development was initially prevalent on the south bank, development on the north bank also gradually took hold. The Cleeves industrial site was first developed in the mid-19th Century after the establishment of the Shipyard site next door. The river has always had a particularly significant visual presence, and its expansive nature opens up many views, both towards the site and from it. Extensive views are afforded from within a number of the existing buildings on the site and this positive attribute would presumably pass in large measure to many of the new and re-used buildings which are proposed. This rather expansive aspect of the site's context, looking eastwards across the river and southwestwards down river, across the wetlands, contrasts starkly with the relatively small-scale nature of the urban land uses up 'behind' the site. This elevated land on the north bank of the river was given over to residential development dating from the late 19th Century. Here the ground rises from the North Circular Road and O'Callaghan's Strand, up Shelbourne Road Lower and Ennis Road respectively to where they meet at Union Cross, by which point the topography has levelled out and then very gradually dips, to the west at the western end of Ennis Road and to the north beyond the Cratloe Road at Thomond Park. This higher ground is characterised typically by late 19th to mid-20th C residential development consisting generally of 2-3 storey houses of varying scales and finishes and almost invariably contained within relatively substantial gardens, many of which include mature trees. This primarily residential urban landscape is occasionally interspersed with the institutional buildings and the open spaces associated with schools. Its neatly contained domestic qualities suggest a level of constraint in respect of massing and proximity should be closely considered within the proposed design, even though this residential area generally sits at a higher elevation than most of the developable site and the typically long rear gardens provide reasonable distancing from the proposed development.

At the lower levels south of the site, Condell Road was constructed (in conjunction with the construction of Shannon Bridge in the 1980's) to convey traffic from north of the bridge and westwards out around the north-western part of the city. The road was constructed just south of the North Circular Road which had previously marked the edge of the river's wetland margin along the north bank. The Condell Road had therefore to be constructed at an elevated level through the wetlands. The wetlands do however substantially remain and currently cover an area of approx. 25Ha north of the river - this forms part of the Lower River Shannon Special Area of Conservation (SAC). The wetlands are actively managed by Limerick City and County Council with the primary aims of protecting and improving their ecology and biodiversity together with maintaining and enhancing their accessibility to the public as a recreational and educational resource.

12.3.4 Visual Context

The Cleeves Masterplan site is located just north of the Condell Road, at the northern end of Shannon Bridge. It forms a part of the interface between the built city and the protected wetlands to the south and as such, it presents a marked contrast between the low-lying, soft riparian, semi-natural wetlands to the south-west and the more elevated land with its built development north of them. Visually this

contrast was greatly accentuated by the insertion of Shannon Bridge between the two and is most apparent when looking northwards along the bridge or across the river from the quays along the south bank.



Figure 12.8: Existing view north-westwards along Shannon Bridge. The site is on the right.

The site's location on the north bank of this broad river, further creates a high level of visual exposure from an extensive range of locations along the south bank and potentially from a number of points within the city core to the east. The site itself is presented at two basic levels; from the river's edge up and into the quarry, the site rises very gradually and is broadly set at a lower elevation. To the west and north of this, the quarry face creates a sharp change in elevation, whereby the Salesians and Stonetown Terrace zones sit approx. 2 to 5 metres above this lower level. To the north and west of these, the existing adjacent residential area along Clanmaurice Avenue sits at an approximately contiguous level.

This landscape configuration creates potentially significant and/or sensitive views from four main areas, as follows:

- 1. the river's edge and the low-lying wetlands south of the site;
- 2. the quays along the south bank, all the way from Steamboat Quay up to Honan's Quay;
- 3. a number of individual locations within the Medieval and Georgian cores to the north-east and east:
- 4. a localised residential area immediately north of the site.

12.3.5 Planning Context

A detailed description of the planning context within which this proposed development sits is provided in Chapter 3.0 of this EIAR. However it is appropriate to elaborate further on some aspects, which may be particularly pertinent to the assessment of the proposed development in terms of how it may impact on the landscape and the visual environment.

12.3.5.1 **Zoning**

The Limerick Development Plan 2022-2028 sets out policies and objectives for the city. Current land use zoning is set out and illustrated in the Zoning Maps in the Development Plan, an extract of which is reproduced below (Figure 12.9).

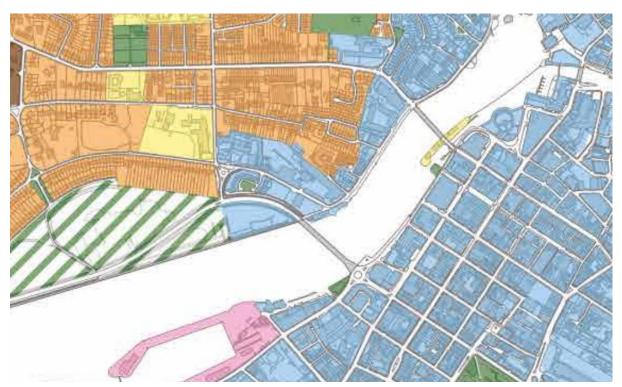


Figure 12.9: Limerick Development Plan 2022-2028 – extract from zoning map.

Whilst the Development Plan references the 'Landscape Character Areas' differentiated within the County, the Zoning maps give a clearer picture of existing and planned land-uses within the city. At the scale of the proposed development these are a much more appropriate tool for use in understanding the basis for decision-making in respect of future development intentions. The majority of the 'City Centre' zoning (pale blue shading) lies on the southern side of the river with only a relatively narrow section lining the northern edge of the river and reaching back along the North Circular Road as far as Shelbourne Road Lower. Most of the proposed Cleeves development site lies within the 'City Centre' zoning at the south-western end of this section. The orange shading indicates 'Existing Residential' zones to the north and west of the site and includes the 'Stonetown Terrace' part of the site. The green hatch south-west of the site indicates the Westfields wetlands along the north bank of the river. Part of the site is located within identified flood zones.

12.3.5.2 Designations and Protections

Architectural Conservation Area 4, around the Ennis Road and Shelbourne Road affords a level of protection and direction for development in that area which sits to the north of the Cleeves site. It also conveys a duty of care when considering the impact of any nearby development.

The Lower River Shannon Special Area of Conservation (SAC), Site Code 002165, takes in the river and the Westfields wetlands.

The River Shannon and River Fergus Special Protection Area (SPA), Site Code 004077, takes in the river and part of the Westfields wetlands, up to Shannon Bridge.

The Fergus Estuary and Inner Shannon, North Shore Proposed Natural Heritage Area (pNHA), Site Code 002048, includes the north bank of the river up to Thomond Bridge and includes the Westfield wetlands.

Map 6.1 of the Limerick Development Plan 2022-2028 outlines Landscape Character Areas identified within the County. The subject site sits within the 'city' character area, however the character areas outlined are much greater in scale than would be appropriate for use in Landscape and Visual Impact Assessment of an individual development site such as this site.

Map 6.2 of the Limerick Development Plan 2022-2028 outlines a number of views and prospects within the County area, however these refer to a limited number of protected views at County scale, none of which are likely to be affected by the proposed development. Key city views and prospects are however referenced in the Building Height Strategy for Limerick City (June 2022), which is contained in Volume 6 of the Development Plan - this sets out Significant Views and Landmarks in and around the city, a number of which will be potentially impacted by the proposed development. Key vantage points for views into the city have been considered when identifying views which may be impacted by the proposed development. These include distant views from the lower Shannon estuary, from higher ground to the north-west in Co. Clare, the river prospects gained from the bridges over the Shannon and views from the approach roads to the city, such as those gained from Condell Road. The Building Height Strategy identifies the view looking down river from Kings Island and the Medieval core as most sensitive. Views from the Georgian core towards the riverfront, looking east-west down the grid of streets are also cited, however none of those indicated actually yield direct views of the Cleeves site. Ironically the only east-west view on this grid which does align with the proposed Cleeves development, along Glentworth Street, is not referenced in the Building Height Strategy. This view has been included in the view selection for this assessment, even though it is partially truncated by the 3-storey Henry Street Garda station at its western end.

Within the city limits the Cleeves site is seen as a local landmark with both Protected Structures on the site, the brick chimney and the flaxmill building, registering from a variety of viewpoints. Panoramic views from the site, across and down the river are also particularly noteworthy.

12.4 CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

12.4.1 Introduction

The content of the proposed development is outlined in 12.4.2 below, and in addition to the drawings and details for the proposed development which are submitted as part of the application for consent, it is further described and illustrated within the Architectural Design Statement and the Landscape Design Statement also submitted. These set out the design rationale for the development, together with details and illustrations, including the finishes and materials proposed for the project. A full description of the proposed development and the context within which this application is being made, is also provided in Chapter 2.0 of this EIAR.

12.4.2 Project Description

The proposed development includes:

A. Demolition of a number of structures to facilitate development and B. Construction and phased delivery of (i) buildings within the site ranging in height from 3 – 7 stories (with screened plant at roof level) including (a) 234 no. residential units; (b) 270 no. student bedspaces (PBSA) with ancillary resident services at ground floor level; (c) 299sqm of commercial floorspace; and (d) a creche; (ii) extensive public realm works, riverside canopy and heritage interpretative panels (iv) 3 no. dedicated bat houses; (v) Mobility Hub with canopy; (vi) pedestrian / cycle connectivity from North Circular Road to Condell Road; and (vii) all ancillary site development works including (a) water services, foul and surface water drainage and associated connections across the site and serving each development zone; (b) attenuation measures; (c) raising the level of North Circular Road; (d) car and bicycle parking; (e) public lighting; (f) telecommunications antennae; and (g) all landscaping works. Consent is also sought for use of the PBSA accommodation, outside of student term time, for short-term letting purposes.



Figure 12.10: Aerial photomontage illustrating the proposed development, following completion.

12.4.3 Phased Development

The proposed development is structured into nine distinct but overlapping stages. The content of the proposed development stages, their timeframes for construction and their anticipated sequencing are described in detail in Section 2.6.1 (Chapter 2.0). The broad outline of sequencing is as follows:

Stage 1: Construction of Bat Houses

Stage 2: Site Demolition and Enabling Works

Stage 3: Flood Protection Works

Stage 4: Salesians Zone Development

Stage 5: Stonetown Terrace Zone Development Stage 6: O'Callaghan Strand Zone Development

Stage 7: Quarry Zone PBSA and Public Realm

Stage 8: Flaxmill Plaza and Riverside Public Realm

Stage 9: Shipyard Mobility Hub

The overall construction period for the proposed development is estimated to be in the order of three years.

The site sequencing and expected timeframes for the construction of the proposed development facilitate an understanding of the potential for gradual landscape change as the project is built out in stages. This is particularly relevant to the assessment of impacts during the Construction stage.

The overall masterplan within which this current application sits, provides the broader, future planned development context for the proposed development. The phased delivery and timeline associated with the Masterplan scheme is referenced in Section 2.2.4 (Chapter 2.0) and can be outlined as follows:

Phase I – Heritage Works

Phase II - Residential & Public Realm (the subject proposed development)

Phase III – TUS Campus

Phase IV - Shipyard Site

12.5 LIKELIHOOD OF SIGNIFICANT EFFECTS

A proposed development such as this has the potential to impact significantly upon the landscape and visual aspects of the existing developing urban environment in a number of ways, at both construction and operational stages. The purpose of this section is to outline and describe the potential effects of the proposed development; upon both the landscape and visual aspects of the site, its immediate surroundings and further afield, where relevant.

12.5.1 Construction Effects

The main elements of the construction process which will create landscape and visual impacts will include:

- Demolition works;
- Site preparation works and operations, including installation of temporary fencing/hoardings, site lighting and site accommodation;
- Site infrastructure, vehicular access and traffic management measures;
- Identification of trees and vegetation for retention and installation of appropriate protection;
- Tree and vegetation removal;
- Demolition works;
- Site excavations and earthworks;
- Materials storage, spoil heaps etc;
- Construction operations, including building and delivery of the proposed development on a staged basis;
- Construction traffic, dust and other emissions; and
- Cranes and scaffolding.

Potential impacts during the construction phase are related to works which are temporary or short term in nature, including site activity, and vehicular movement within and around the subject site. Vehicular

movement may increase in the immediate area, and temporary vertical elements such as cranes, scaffolding, site fencing, gates, plant and machinery etc., will be required and put in place.

Landscape sensitivity is low-medium (refer to Table 12.1). The magnitude of landscape change is high (refer to Table 12.2). The potential impacts of the construction on the landscape are therefore expected to be moderate to high-moderate and negative (refer to Table 12.4) but will also be temporary or short-term.

Visual sensitivity is medium (refer to Table 12.5). The magnitude of visual change is high (refer to Table 12.6). The potential impacts of the construction on the visual environment will be high-moderate and negative (refer to Table 12.8) but will also be temporary or short-term.

12.5.2 Phased Construction Effects

The phased construction of the proposed development will be achieved in nine stages, as referenced in Section 12.4.3. Following the initial three stages; involving the construction of bat houses, site demolitions/enabling works and flood protection works, the main building works commence on the higher ground in the Salesians and Stonetown Terrace zones, followed by the buildings proposed for the O'Callaghan Strand and Quarry zones and the public realm proposed for the Flaxmill Plaza and Riverside zones. The construction of the Shipyard mobility hub completes the construction of the proposed development. The main building works therefore progress eastwards and southwards towards the river and consequently the impacts created will largely be experienced in similar sequence. These are the works which are primarily assessed within this assessment.

The subsequent works proposed (in outline at this stage) under the Cleeves Riverside Masterplan are intended as future development which is assessed insofar as it would be considered to provide a future context within which the proposed development creates cumulative effects. Many of the potential construction effects created by the future masterplan development would be expected to be similar to those created by the proposed development, however most importantly they will extend the expected time period over which construction is experienced generally in this area. It should be said however, that these later Masterplan developments largely comprise the TUS and the Shipyard zone developments which are sited in the lower lying zones, closer to the river and largely away from the rather more sensitive residential areas to the north and east of the site.

12.5.3 Operational Effects

12.5.3.1 Landscape Effects

The proposed development will consist of the insertion of a substantial new, largely residential development, its associated accessible and permeable public realm, including adjacent footpaths and a new proposed landscape infrastructure and its ancillary elements, onto the subject site. This will replace many of the existing derelict, defunct and rather utilitarian industrial buildings currently occupying the site. Whilst the proposed development represents a substantial change in the nature of the existing site, the prevailing landscape in this local area is one of buildings of varying scales, all within a broader developing context of emerging and planned change. However, whilst change may be expected, so too is a concomitant increase in scale, height and density. The proposed development is expected to create landscape impacts relating to a change in the nature and type of facilities currently on the site, but which will be entirely in keeping with, or complimentary to those prevalent and/or planned

in the local area. This should readily facilitate the assimilation of the proposed development into the broader built landscape and into the existing community. There is a high potential for increased positive social contact and diversity within the existing local community as a result of the proposed development being realised.

The increased building scale and height proposed in the new development represent a degree of divergence from most of the existing lower scale residential development around the site, predominantly to the north and west, however the proposed scale and height accords with the Building Height Strategy for this area of the city and does not diverge from the prevailing norm for taller buildings in the city centre zone of which this is part.

Landscape sensitivity in this case is broadly considered to be low-medium (refer to Table 12.1). The magnitude of landscape change is high (refer to Table 12.2). The potential operational impacts on the landscape will therefore be expected to be **moderate** to **high-moderate** (refer to Table 12.4), but they are also likely to be **positive**. Given the expected lifespan of the buildings, they will also be **long term** or **permanent**.

12.5.3.2 Visual Effects

In terms of potential visual impacts, whilst the proposed building types are not uncharacteristic within the broader context, there is a clear change of building scale between what is currently there and what is proposed. Given the relatively flat and gently sloping topography in and around the site respectively, the greater scale and height of the proposed buildings does make it potentially more visible from greater distance. The proposed development will, therefore, be expected to be more visibly prominent within the immediate area and beyond. It should increase the greater apparent scale to the built townscape on the north bank of the river and add greater mass to the city generally, especially when viewed from the bridges and along the river corridor. The sensitivities of those living around the site may have been raised by the proposed insertion of taller buildings on the subject site. However, the acquisition of the site by the Local Authority and their published plans for development, may also have created a sense of expectation and possibly even hope, in respect of a confirmed appropriate and manageable future for the site which could be more positive than the degradation and dereliction which has persisted across the site for many years. The level of potential impact will also be mitigated by well-considered and sensitive design. The potential for increased positive visual impact as experienced by people visiting, living in, or using these areas for social and/or recreational purposes, could also be considered in some instances to be moderately high. Visual sensitivity in this case is broadly considered to be medium (refer to Table 12.5). The magnitude of change in the visual environment is assessed as high (refer to Table 12.6). The potential operational impacts of the proposed development generally on the visual environment will therefore be expected to be high-moderate (refer to Table 12.8), but they are also likely to be broadly neutral or positive. Given the expected lifespan of the development, they will also be long term or permanent. This assessment appears to be broadly supported by the individual assessments for the selected views as set out in Section 12.5.3.3, below.

The selected viewpoints for the preparation of photomontages takes both potentially positive and negative sensitivities into consideration by taking views from a range of locations expected to vary in terms of how such proposed development may be perceived. The site's visual context as set out in Section 12.3.4 identifies four main areas from which there is most potential for significant and/or sensitive views. The potential for significant effects on views from these areas is as follows:

- 1. The river's edge and the low-lying wetlands south of the site. Views from this area would be expected to be moderately sensitive, and the prospect of taller buildings appearing in views from within the tranquil, verdant, soft and green semi-natural expanse of the wetlands is likely to be seen as negative. However, despite the wetlands' popularity as a recreational resource, the number of people using it and therefore experiencing views from it, is relatively low, compared to adjacent public roads and footpaths;
- 2. The quays along the south bank, all the way from Steamboat Quay up to Honan's Quay. Views to the site from the south bank of the river are accentuated somewhat by the expanse of the river which creates a clear foreground and focuses on the visual impact created by the proposed development in the context of the broader river frontage and an extended horizontal backdrop. In this case the design of the proposed development proposals, particularly in terms of scale, form and finish become more important in terms of its integration into the existing built context. Views from these quays are experienced by a relatively large proportion of the city's occupants and therefore represent a moderate to high level of sensitivity;
- 3. A number of individual locations within the Medieval and Georgian cores to the north-east and east. Whilst these views are relatively distant, the context from which they are viewed are sensitive locations. They tend however, to be localised snapshot views where closer existing buildings either obscure the view or will compete successfully for attention with the buildings proposed for the subject site:
- 4. A localised residential area immediately north of the site. As a new neighbour, the proposed development is likely to represent a substantial change to occupants of properties in this area, however the properties along Clanmaurice Avenue for example, are fairly tightly spaced along the avenue which limits views towards the site from the public realm. Whilst it would be expected that parts of the proposed development will be visible in views from the rear gardens of those properties towards the site, these cannot be assessed as part of an LVIA and are more relevant to an assessment of 'residential amenity' than of landscape and visual impact.

The design rationale adopted and the architectural and landscape architectural approach to the design of the proposed development and the details employed, seek to respond to such issues and to mitigate negative effects on both the broader landscape character and the visual amenity of the area. In particular, the integrated design not only accommodates and responds effectively to the inherent level changes across the site, it seeks to capitalise on them positively.

12.5.3.3 Assessment of Views

Each of the 25 photomontages (verified views) produced to illustrate the effects of the proposed development has been assessed on the basis of the descriptions as set out in the methodology (Tables 12.1 – 12.8) and are categorised as follows:

View 1:

Existing View and Visual Receptor Sensitivity;

This is a view looking northwards from Steamboat Quay, adjacent to the Clarion Hotel. In the left of view the north bank across the river is characterised by the vegetation of the wetlands area. In the right of view is the Shannon Bridge. The lower (easterly) part of the proposed development site is marked

by the red brick chimney and the flaxmill building to the right of it. The expanse of the river in the foreground has the effect of creating distance between the viewer and the site but it also has the effect of focussing the eye on the concentrated horizontal fringe between the river and the sky. Consequently, any changes to the skyline will also be drawn into focus. This view is experienced by people walking along the quay, where the view would be considered an important aspect of the recreational value gained.

Visual receptor sensitivity is considered high.

Proposed view and Magnitude of Change;

This view angle from this viewpoint is virtually side-on to the east-west linear layout of the proposed development. As a consequence, the proposed view illustrates the whole development at its most extensive, with all of the main built elements arranged along the horizon. To the left of the chimney, the buildings proposed for the Quarry zone and the elevated Salesian zone are partially screened and are embedded beyond the existing riverside vegetation of the wetlands. Though individually identifiable, they create together a new urbanised horizon, extending westwards, away from the river. The proposed new buildings, whilst breaking the skyline and fairly prominent in the view are not uncharacteristic in the broader context. To the right of the chimney, the proposed buildings are partially screened by the Shannon Bridge in front, appearing to be almost founded on the bridge. They are arranged around and appear intrinsically linked to the existing retained buildings on the site as they extend down towards the river. From this viewpoint, all of the proposed buildings take their cues from the existing retained buildings on site in terms of height, scale and massing. The proposed building finishes similarly relate well to the retained buildings, with the use of harmonising tones, colours and fenestration. This view reveals the extensive nature of the proposed development and confirms it as an extension of the city westwards from the north bank of the river. Whilst the proposed development represents a substantial change in the view, the proposed development relates appropriately to the existing context and is generally not uncharacteristic. Whilst the view clearly shows a major change, neither the character of the view nor the visual amenity are adversely affected.

Magnitude of change is considered **medium**.

Visual Effect;

The visual effect of the proposed development in this view is assessed as high-moderate, and neutral.

View 2:

Existing View and Visual Receptor Sensitivity:

This is a view looking north-westwards from Bishop's Quay, adjacent to the southern end of Shannon Bridge. The bridge with its bright green railing parapet to the left of view, tends to draw the eye, however as for View 1 the expansive river surface in the foreground narrows one's focus on the far bank and compresses it into a relatively thin horizontal band which is likely to accentuate the impact of any proposed changes. The site location is marked by the taller flaxmill building and the iconic brick chimney on the site. As for View 1, this view is experienced by people walking along the quay, where the view

would be considered a fairly important aspect of the recreational value gained, albeit in the context of adjacent high levels of vehicular traffic.

Visual receptor sensitivity is considered **medium**.

Proposed view and Magnitude of Change;

The proposed view illustrates the proposed development from a nearer viewpoint than for View 1 and is rather more aligned along the axis of the site, than is the case for View 1. This results in a lateral visual compression of the proposed elements within the field of view, which renders the proposed development as closer, much more compact and somewhat more integrated with the adjacent retained elements. The public open space leading up to and alongside the built elements, featuring the canopy structure and tree planting, creates the sense of a cohesive urban riverside quarter, which from this viewpoint appears to be open and inviting. As such, it is likely to create greater patronage across the bridge from the existing city core on the south side. As for View 1, the proposed buildings are clearly designed with reference to the existing retained buildings on site in terms of height, scale, massing, tone, colour and fenestration. In addition, the O'Callaghan Strand building to the right of view echoes the form, scale and finish of an industrial building allied to the retained flaxmill building and is also wholly appropriate to its riverside location. Again, the proposed development represents a substantial change in the view, but it relates appropriately to the existing riverside and the adjacent lower scale residential context. It integrates very well and is not in any way uncharacteristic in this context. The communications antennae and screened plant located on the roof of Block 2A (of the PBSA) is a little more visible in this view, however its simplified form and light toned finish is very effective in reducing any visual impact on the skyline. It should be noted that the 3 metre micro-siting allowed for in the design of the antennae is not likely to create any additional impact or significantly alter its appearance as illustrated in the view.

Magnitude of change is considered high.

Visual Effect;

The visual effect of the proposed development in this view is assessed as **high-moderate**, and **positive**.

View 3:

Existing View and Visual Receptor Sensitivity;

This is a view looking north-westwards from the lower, northern end of Mill Lane, close to its junction with Bishop's Quay. It is similar to View 2, however the context from which it is viewed is a street off the quays, where the focus is less likely to be on the recreational value of the view across the river. In addition, the vertical foreground elements ranged along the Quay, including the street lights, signs and trees, tend to complicate and mask the view somewhat. The view is no longer clear and simple, and one's focus is not so much on the far riverbank.

Visual receptor sensitivity is considered low.

Proposed view and Magnitude of Change;

As for View 2, the proposed buildings are clearly designed with reference to the existing retained buildings on site in terms of height, scale, massing, tone, colour and fenestration. The O'Callaghan Strand building to the right of view echoes the form, scale and finish of an industrial building allied to the retained flaxmill building and is also wholly appropriate to its riverside location. Again, the proposed development represents a change in the view, which however relates appropriately to the existing riverside landscape and the adjacent lower scale residential context. The development integrates well and is not in any way uncharacteristic. However, whilst these are positive attributes, the vertical street furniture elements in the foreground tend to diminish any impact created by the proposed development across the river and effectively relegate it to the status of 'background', albeit a relatively well coordinated and homogeneous background.

Magnitude of change is considered **medium**.

Visual Effect;

The visual effect of the proposed development in this view is assessed as **moderate-slight**, and **positive**.

View 4:

Existing View and Visual Receptor Sensitivity;

This is a view looking north-westwards down Glentworth Street, from a location at its junction with Catherine Street. The buildings lining the street are largely of the Georgian period and lead the eye to the 3-storey, brown brick Garda Station building in Henry Street. Beyond this the Clare hills are just visible on the horizon. The context within which the view is experienced conveys a somewhat higher level of sensitivity.

Visual receptor sensitivity is considered **low-medium**.

Proposed view and Magnitude of Change;

The proposed view illustrates a very small part of the proposed development (in the Salesians zone), which appears above the Garda Station at the end of the street. This constitutes a minor alteration to the view but the tones, colouring and façade treatment of the visible part of the development blend readily with other buildings in the view. There is no change to visual amenity.

Magnitude of change is considered low.

Visual Effect:

The visual effect of the proposed development in this view is assessed as slight, and neutral.

View 5:

Existing View and Visual Receptor Sensitivity;

This is a view looking westwards from Howley's Quay (at Lower Cecil Street), across the river towards the site, the location of which is marked by the brick chimney and the flaxmill building. Again, as for Views 1 and 2, one's focus is narrowed to the far bank and that relatively thin horizontal band of land, 'compressed' between the river surface and the sky. Consequently, this is again likely to accentuate the impact of any proposed changes. As for View 1, this view is experienced by people walking along the quay, where the view would be considered an important aspect of the recreational value gained.

Visual receptor sensitivity is considered high.

Proposed view and Magnitude of Change;

The proposed view illustrates a part of the proposed new development in which the O'Callaghan's Strand building (OCSB) with its twin-pitched roof, is dominant. However, as indicated for other views, this proposed building is wholly appropriate to this broad river context, in terms of scale, form and finish. The remainder of the proposed buildings in the proposed development are largely screened by the OCSB and the existing Flaxmill building behind it. A very small part of the Quarry zone development can be seen behind the Flaxmill and the proposed Stonetown Terrace buildings just peek above the existing residential buildings to the right of view. The public realm and soft landscape elements proposed, which reach back from the river's edge behind the OCSB into the development give a sense of allying the whole development with the river and creating an open connection with the city core via the bridge. Together, these visible elements present a new partial intrusion into the view which, whilst fairly prominent in the view, is not uncharacteristic in the broader context. More than this, it creates an integrated composition and provides a positive presence in the view.

Magnitude of change is considered **medium**.

Visual Effect;

The visual effect of the proposed development in this view is assessed as **high-moderate**, and **positive**.

View 6:

Existing View and Visual Receptor Sensitivity;

This is a view looking south-westwards from Harvey's Quay (at the lower end of Bedford Row) and is similar in some respects to Views 1, 2 and 5, except that despite the site's location across the river within that focussed narrow horizontal band, other elements within the view lead the eye away – these include the Clarion Hotel in the distance to the left and the foreground balustrade and walled island to the right. Notwithstanding the planning zoning for the area around the subject site, there is little to suggest that the city extends to include the far bank. Only the Flaxmill building and the chimney support such a notion, although it should be said, the apparent greater width of the river in this view exacerbates

this effect. Nevertheless, this view is experienced by recreational walkers and in common with other views along the quays, they place considerable value on it.

Visual receptor sensitivity is considered **medium**.

Proposed view and Magnitude of Change;

The proposed view, as for View 5, indicates how the OCSB dominates in respect of the newly proposed buildings. However, the greater distance of the viewer from the site, the angle of view and the presence of other prominent buildings, such as the Clarion Hotel further along the south bank, conspire to reduce the perceptible visual impact of the proposed development. In addition to the OCSB, only the upper level of the proposed Stonetown Terrace apartments is visible and then, only partially so. The remainder of the proposed buildings are screened by the existing buildings. The OCSB, in addition to its positive attributes as already discussed, offers in this a view, an element of balance in response to the Clarion Hotel across the river and relates well to the bend on the river which it now occupies.

Magnitude of change is considered low.

Visual Effect;

The visual effect of the proposed development in this view is assessed as **moderate-slight**, and **positive**.

View 7:

Existing View and Visual Receptor Sensitivity;

This is a view looking south-westwards from Sarsfield Bridge, across the river towards the site, the location of which is marked by the brick chimney and the back of the flaxmill building. Again, as for Views 1, 2 and 5, one's focus is narrowed to the far bank and that relatively thin horizontal band of land, 'compressed' between the river surface and the sky. Consequently, this is again likely to accentuate the impact of any proposed changes, however one's focus in this view is somewhat distracted by other built elements such as the Clarion Hotel on the left and the proximity of the taller apartment buildings on the right.

Visual receptor sensitivity is considered **medium**.

Proposed view and Magnitude of Change;

This viewpoint is located further north along the quays from View 6 and the greater distance and slight change in angle create a further reduction in the relative visual impact experienced since only a relatively small part of the proposed new development is visible. Again, only the OCSB and a small part of the proposed Stonetown Terrace buildings are visible and then, only partially so. The remainder of the proposed buildings are screened by the existing buildings in the view and at this distance the visible elements of the development appear appropriately scaled and integrate very well into the urban landscape context.

Magnitude of change is considered **low**.

Visual Effect;

The visual effect of the proposed development in this view is assessed as **moderate-slight**, and **positive**.

View 8:

Existing View and Visual Receptor Sensitivity;

This is a view looking south-west down river from the Sylvester O'Halloran footbridge at the Potato Market. The view is framed by Sarsfield House on the left and the Strand Hotel on the north bank to the right. In the centre of view is the Shannon Rowing Club on the island just in front of Sarsfield Bridge. The site which can be identified by the brick chimney and the flaxmill building, now sits more in the background, however the context within which the view is experienced, i.e., from the footbridge, is nevertheless relatively sensitive.

Visual receptor sensitivity is considered **medium**.

Proposed view and Magnitude of Change;

In this proposed view only a small part of the OCSB is visible, just to the right of the Shannon Rowing Club building. The profile of the remainder of the development is indicated by the red line and illustrates how it will be screened by the existing residential and hotel buildings. Within this broader context the proposed development makes very little impact on the view.

Magnitude of change is considered **negligible**.

Visual Effect;

The visual effect of the proposed development in this view is assessed as **slight**, and **neutral**.

View 9:

Existing View and Visual Receptor Sensitivity;

This is a view from St. Augustine Place in the Medieval core of the city, looking south-westwards towards the site, which is in the distance across the river and in the gap between the Limerick Court Office to the left and the offices of Limerick City and County Council on the right. Because the site is aligned with the street it is a focussed view, however with the medieval Cathedral framing the view on the left and so many other foreground distractions, it is not considered a frequently experienced view or one where the site (or what is proposed for it) is likely to be perceived as particularly important.

Visual receptor sensitivity is considered low.

Proposed view and Magnitude of Change;

The red lines in the proposed view indicate the profile outline of the proposed development. It will not be visible in the view.

Magnitude of change is considered negligible.

Visual Effect;

The visual effect of the proposed development in this view is assessed as imperceptible.

View 10:

Existing View and Visual Receptor Sensitivity;

This is a view from a location at the eastern end of Thomond Bridge, close to King John's Castle (on the left of view), nearly 1km away from the site. The site is largely masked by the trees and buildings (primarily the Strand Hotel) on the horizon, though the very top of the brick chimney on site can just be seen peeking above and beyond the hotel roofline. The Clarion Hotel, which is on the south bank of the river, can also be seen in the distance to the left of centre. Whilst the view focusses on the buildings on the far riverbank, these are a diverse mix of scales and finishes and are from a range of more recent time periods. However, given the historic context from which the view is experienced, viewer sensitivity is rather more heightened.

Visual receptor sensitivity is considered **medium**.

Proposed view and Magnitude of Change;

The red lines in the proposed view indicate the profile outline of the proposed development. An extremely small part of the proposed development will be barely discernible in the view.

Magnitude of change is considered negligible.

Visual Effect;

The visual effect of the proposed development in this view is assessed as slight and neutral, however to all intents and purposes it is in effect, **imperceptible**.

View 11:

Existing View and Visual Receptor Sensitivity;

This is a view looking south-west from O'Callaghan's Strand, at its junction with Strandville Gardens. The eye is somewhat led down the Strand and the view is terminated by the Clarion Hotel. The context is primarily one of relatively modern low rise residential development which faces onto the river, not the

site. The broader context for the viewer is the riverside walkway alongside the road, where one is rather more tempted by the views across the river towards the city centre. This will not therefore be the primary view from this viewpoint.

Visual receptor sensitivity is considered low.

Proposed view and Magnitude of Change;

The proposed view indicates how only upper floor and roof of the OCSB will be visible at the far end of the street and appears as a continuation of the existing building line. The form of the proposed OCSB echoes that of other existing adjacent buildings and integrates well within the view. Other parts of the proposed development are indicated by the red profile line to the right of view and this confirms they will not be visible from this viewpoint.

Magnitude of change is considered low.

Visual Effect;

The visual effect of the proposed development in this view is assessed as slight, and neutral.

View 12:

Existing View and Visual Receptor Sensitivity;

This is a view looking south from the upper end of Strandville Gardens, near its junction with Clanmaurice Gardens. The context is one of fairly modern 2-storey residential development and one is only vaguely aware of the existing Cleeves site buildings beyond, however the red brick chimney is a significant landmark in this view. A number of the houses face towards the site and will be relatively sensitive to proposals on the site for development and the site's proximity adds to this.

Visual receptor sensitivity is considered medium.

Proposed view and Magnitude of Change;

The proposed view illustrates how only the top floor(s) of the 5-storey apartment block proposed for the Stonetown Terrace area will be visible from this viewpoint. The lower part of the block is masked by the existing 2-storey residential buildings in the foreground. This creates an effect which causes a noticeable change in the character of the environment but does not affect its sensitivities. The red profile lines indicate parts of the proposed development which will not be visible in the view.

Magnitude of change is considered low.

Visual Effect;

The visual effect of the proposed development in this view is assessed as **moderate-slight**, and **neutral**.

View 13:

Existing View and Visual Receptor Sensitivity;

This is a view looking south from Clanmaurice Avenue. As for View 12, the context is one of 2-storey residential development, but of an earlier vintage. Again, apart from the red brick chimney, which is a significant landmark in the view, one is only vaguely aware of the existing Cleeves site buildings beyond. Few, if any, of the houses face towards the site, however the road does focus the view on the chimney for pedestrians and vehicle occupants, so they will be relatively sensitive to proposals on the site for development although they will experience this view on an infrequent or transitory basis. Again, the site's proximity adds to this experience. The Clarion Hotel is partially visible in the distance but is masked somewhat by garden planting in this view.

Visual receptor sensitivity is considered **medium**.

Proposed view and Magnitude of Change;

The proposed view illustrates, beyond the existing residential properties at the end of the street, how each of the two buildings proposed for the Stonetown Terrace will be partially visible from this viewpoint. The 5-storey apartment block can be seen to the left of the existing chimney, and the 3-storey townhouses sit to the right of it, at the end of the road. Neither of these buildings appears overly dominant or inappropriately scaled.

Magnitude of change is considered **medium**.

Visual Effect;

The visual effect of the proposed development in this view is assessed as moderate, and neutral.

View 14:

Existing View and Visual Receptor Sensitivity;

This is a view looking south-east from the junction of North Circular Road, Clanmaurice Avenue and Shelbourne Road Lower. Dominant in the view is the 2-storey red brick house on the corner and the dense evergreen hedge in front of it. The eye is led both left and right by the road alignments. The visual context is wholly low rise residential with mature front and rear gardens. Whilst there may be sensitivities amongst occupants of the houses backing onto the site, these are likely to relate more to aspects of residential amenity rather than landscape and visual impact. This view from the road intersection will be experienced primarily by road and footpath users, a high proportion of whom would tend to be non-recreational receptors, simply concentrating on getting from one place to another. A high proportion of these are also quite likely to be concentrating on safely negotiating the intersection or crossing the road.

Visual receptor sensitivity is considered low.

Proposed view and Magnitude of Change;

The roofline and a small part of the top floor of the southern end of the westernmost apartment block in the Salesians zone is visible above the evergreen hedge along the property boundary on Shelbourne Road. This does not have important consequences for the visual environment or visual amenity in this view. As indicated by the red profile line, all other parts of the proposed development will be screened from this viewpoint by the existing residential properties along Clanmaurice Avenue or the roadside garden planting along Shelbourne Road Lower.

Magnitude of change is considered low.

Visual Effect;

The visual effect of the proposed development in this view is assessed as slight, and neutral.

View 15:

Existing View and Visual Receptor Sensitivity;

This is a view looking east from Shelbourne Road Lower into the grounds of the Salesian Primary school and towards the former Secondary school and the remainder of the site beyond (marked by the brick chimney). This view will tend to be a transient, and perhaps only glanced view, for pedestrians walking along Shelbourne Road Lower. It presents more of a focussed view for those entering the Primary School grounds. However, the existing school buildings in the middle distance present a rather harsh grey face towards the road which is further accentuated by the expanse of tarmac in front and the grey boundary walls and entrance gates in the foreground.

Visual receptor sensitivity is considered **low**.

Proposed view and Magnitude of Change;

The westernmost building proposed within the Salesians zone, being taller than those to be demolished on the site, is clearly visible in the proposed view. The retained arched walkway on the eastern edge of the primary school site creates an appropriate base above which the new development appears. The proposed new apartment block sitting 6 storeys above the arches is however appropriately scaled to the retained primary school buildings in the foreground and offer a refreshingly welcome touch of colour to the otherwise grey Primary School environs. Despite its greater height, the proposed development does not appear in any way overbearing in this context with the open tarmac 'playground' in the foreground counterbalancing its increased height and mass. The quality and finish of the proposed buildings is also significantly greater than the existing buildings to be demolished.

Magnitude of change is considered medium-high

Visual Effect;

The visual effect of the proposed development in this view is assessed as moderate, and neutral.

View 16:

Existing View and Visual Receptor Sensitivity;

This is a view looking eastwards along North Circular Road (lower part) towards the site, some 300 metres distant. The approx. centre of the site is marked by the chimney which acts as a visual focus in this view. The context is that of a pleasant quiet road flanked on one side by residential development with mature front gardens and tall boundary walls interspersed by gated entrances, and on the other by the continuous stone boundary wall backed by mature trees which flank the grounds of the High School.

Visual receptor sensitivity is considered **medium**.

Proposed view and Magnitude of Change;

The red profile lines indicate the outline profile of the proposed development. The proposed view illustrates how only an extremely small part of the proposed development may be visible from this viewpoint.

Magnitude of change is considered **negligible**.

Visual Effect;

The visual effect of the proposed development in this view is assessed as slight and neutral, however to all intents and purposes it is in effect, **imperceptible**.

View 17:

Existing View and Visual Receptor Sensitivity;

This is a view looking eastwards from the roundabout at the junction of North Circular Road (lower) and Shelbourne Road Lower. It is a complex view featuring the Primary School on the left with the former Secondary School behind it, left of centre. On the right of view is the white rendered Fernhill housing estate. In the background, the brick chimney and flaxmill building on the subject site, present as historic landmark buildings which provide cultural and architectural interest to the view. However, the dominant foreground elements include road surfaces, car parking, entrance roads and the roads furniture that goes with it all. When coupled with the diverse range of buildings behind, set at different levels and with a mix of scales, forms and finishes, a totally discordant visual environment is created which few are likely to value.

Visual receptor sensitivity is considered low.

Proposed view and Magnitude of Change;

The proposed view illustrates how the proposed Salesians zone developments totally supplant the rather discordant existing former Secondary School, providing a much more simplified and rather more coherent urban extension to the city, along this part of the North Circular Road. The scale of the proposed development as seen in this view, is clearly greater than the existing school buildings which

are set up at the higher level and are separated from the road by a rather unkempt planted embankment. The proposed development, however, negotiates the steep levels difference through the bold but totally appropriate approach of proposing two 3-storey triplex buildings which address the street, providing an active urban frontage, with a raking roof which visually lifts these buildings back into the site and links them comfortably with the 7-storey apartment blocks behind. The two triplex blocks are also scaled and finished to integrate with both the existing Primary School building to the left of view and the existing Fernhill housing across the road. Their alignment further accentuates the visual focus on the landmark chimney and Flaxmill beyond, from this viewpoint at least. The solitary tree proposed at the gable end of the triplex units will contribute some relief from the otherwise blank gable.

Magnitude of change is considered high.

Visual Effect;

The visual effect of the proposed development in this view is assessed as moderate, and positive.

View 18:

Existing View and Visual Receptor Sensitivity;

This is a view looking north-east across Condell Road towards the site with the gables of Fernhill housing estate on the left. Being 'broadsides' to the site and so close to it, this view cannot take in the full extent of the proposed development and consequently can't be seen in its landscape context. As such, it probably does not qualify for assessment, however it does at least serve some purpose in informing if the proposed development will or will not be visible from this part of Condell Road.

Visual receptor sensitivity is considered low.

Proposed view and Magnitude of Change;

The proposed view illustrates how small parts of the proposed development will be visible in the small gaps between the existing foreground buildings left of centre and on the extreme right of view. Their scaling and finish sit well within the existing, largely industrial, context.

Magnitude of change is considered low.

Visual Effect:

The visual effect of the proposed development in this view is assessed as **slight**, and **neutral**.

View 19:

Existing View and Visual Receptor Sensitivity;

This is a view looking north-east from a location on the Condell Road further west and further from the

site than the location for View 18. The housing estate at Fernhill can be seen left of centre and the red brick chimney on the proposed development site can just be seen right of centre, through the trees. As part of the Neil Cusack Trail, the path from which the view is taken, is a popular route for runners and walkers so has some recreational value, however the dense tree planting along the roadside and in the wetlands area to the right provide a significant screen to views along the road.

Visual receptor sensitivity is considered low.

Proposed view and Magnitude of Change:

The proposed view indicates how the proposed residential buildings within the Salesians and Quarry zones will be partially visible through the roadside hedge and beyond the white rendered housing of Fernhill, in the left of view. The visible proposed buildings appear appropriately scaled in the view and are not overtly intrusive. Their visual integration is greatly assisted by the earth tones employed in respect of the façade finishes. Other built elements within the proposed development are totally screened by the trees in the centre and right of view. The proposed treatment of the screened plant and communications antennae on the roof of the PBSA Block 2A building is very effective in reducing its impact and again the allowed 3 metre micro-siting of the antennae is very unlikely to be of any significance in respect of visual impact.

Magnitude of change is considered low.

Visual Effect;

The visual effect of the proposed development in this view is assessed as slight, and neutral.

View 20:

Existing View and Visual Receptor Sensitivity;

This is a view looking north-eastwards from the elevated footpath along the river, between Condell Road and the north bank of the river. The low-lying wetlands and a dense mix of mature wetland trees occupy the foreground with only the red brick chimney identifying the approx. location of the site beyond. Because the path is used frequently by recreational walkers and is located within an island of vegetation at the edge of the city, there is a level of sensitivity attached to this view.

Visual receptor sensitivity is considered **medium**.

Proposed view and Magnitude of Change:

The red profile line in the proposed view illustrates the location of the proposed development in the view and reveals how only the very top of the Salesian apartment blocks is likely to be visible. Given the proposed development is side-on to the viewpoint, the full extent of the development can't be captured in the view, however it is likely that the upper level of the westernmost Salesians apartment block will also be seen to the left of this.

Magnitude of change is considered low.

Visual Effect;

The visual effect of the proposed development in this view is assessed as **moderate-slight**, and **neutral**.

View 21

Existing View and Visual Receptor Sensitivity:

This is a view further out from the city along Condell Road (relative to View 19) and is directed towards the site at a similar angle. The viewpoint is located close to a pedestrian crossing giving access into the Westfields wetlands which are situated behind the roadside trees to the left of view. This view will primarily be experienced by people arriving into the city by road however whilst the numbers experiencing it may be relatively high, the view is transitory. As for View 19, the path from which the view is taken is part of the Neil Cusack Trail and is a popular route for runners and walkers, so there is some recreational value attached. However, the context within which this view is experienced, i.e., adjacent to a busy road reduces that value considerably.

Visual receptor sensitivity is considered **low-medium**.

Proposed view and Magnitude of Change;

The red lines in the proposed view indicate the outline profile of the proposed development and illustrate how only the top floor of an accommodation block within the Quarry zone can be seen beyond the white rendered Fernhill housing development in the distance. The tone and colouring of the visible proposed development assists in its visual recession, particularly in the context of the focus placed on the bright white Fernhill houses, left of centre.

Magnitude of change is considered low.

Visual Effect;

The visual effect of the proposed development in this view is assessed as slight, and neutral.

View 22:

Existing View and Visual Receptor Sensitivity;

This is a view from the viewing deck in the Westfields Wetlands, looking north-east. The approximate centre of the proposed development site is marked by the brick chimney in the centre of view. Also, beyond the trees, the pale render of houses on the North Circular Road and the Fernhill housing estate is visible. This view would be experienced primarily by a reasonably large cohort of recreational walkers, runners and bird watchers who would attach a fairly high degree of sensitivity to it.

Visual receptor sensitivity is considered high.

Proposed view and Magnitude of Change;

The proposed view indicates how the upper levels (the top three floors) of the Salesians development and the top floor of the Quarry zone development will be visible from this distant viewpoint. Whilst the proposed development may be visible, to the more sensitive viewer, it is at least, reassuringly located beyond the trees fringing the wetlands and does not appear to impact the wetlands park itself. The visible facades of the proposed Salesians buildings are finished in earth tones and colouring that assist greatly in visually absorbing the development within the trees in front of them. No other parts of the proposed development are visible in the view. Given the sensitive approach to the design and the selection of proposed development finishes, the visual amenity is not adversely affected. The communications antennae and screened plant located on the roof of Block 2A (PBSA) is marginally visible on the skyline in this view, however again, it is not prominent and its simplified form and light toned finish are very effective in reducing any visual effect on the skyline. As for previous views, it should be noted that the 3 metre micro-siting allowed for in the design of the antennae is not likely to create any additional impact or significantly alter its appearance as illustrated in the view.

Magnitude of change is considered medium.

Visual Effect;

The visual effect of the proposed development in this view is assessed as high-moderate, and neutral.

View 23:

Existing View and Visual Receptor Sensitivity;

This is a view from Barrington's Pier which juts out from the north bank of the River Shannon, some 1.4km south-west of the proposed development site. The view looks up-river towards Shannon Bridge and the Georgian core of the city where the taller buildings on the south bank (to the right of view) dominate and include the Clarion Hotel, Riverpoint and the recently completed 1BQ building. The contrast between north and south of the river is quite stark. To the left of the view, the densely vegetated north bank screens the nearby Condell Road, the site and the north bank part of the city beyond, whilst to the right the built city is apparent only on the south bank. The exposed location of the viewpoint and its clear view of the city from distance is an important reference point for recreational walkers.

Visual receptor sensitivity is considered medium.

Proposed view and Magnitude of Change;

The red line outlines in the proposed view illustrate how the proposed development will not be seen from this viewpoint.

Magnitude of change is considered negligible.

Visual Effect;

The visual effect of the proposed development in this view is assessed as slight and neutral, however

it is in reality, imperceptible.

View 24:

Existing View and Visual Receptor Sensitivity;

This is a view looking south from Cratloe Road adjacent to Thomond Park. The location is 1.1km distant from the proposed development and this is essentially a check view to determine if the proposed development can be seen from this area.

Visual receptor sensitivity is considered low.

Proposed view and Magnitude of Change:

The red line outlines in the proposed view illustrate how the proposed development will not be seen from this viewpoint.

Magnitude of change is considered negligible.

Visual Effect;

The visual effect of the proposed development in this view is assessed as imperceptible.

View 25:

Existing View and Visual Receptor Sensitivity;

This is a distant view, over 4km from the site, looking southwards from higher ground at Brennan's Cross, Meelick, Co. Clare. As for View 24, it is essentially a check view to determine if the proposed development can be seen from this area.

Visual receptor sensitivity is considered low.

Proposed view and Magnitude of Change;

The red line outlines in the proposed view illustrate how the proposed development will not be seen from this viewpoint.

Magnitude of change is considered negligible.

Visual Effect;

The visual effect of the proposed development in this view is assessed as imperceptible.

12.5.4 Phased Operational Effects

Once the full construction of the proposed development is complete, one would not expect any further operational effects to emerge, other than those which could be created through the subsequent development and delivery of any of the later Masterplan elements – these do not form part of this assessment, save in respect of their cumulative effect which is discussed in Section 12.6 below.

12.5.5 Do Nothing Scenario

If the proposed development were not to proceed, the site would presumably remain in its present form for a period, prior perhaps to a revised or an alternative planning application. In such circumstances, there would be little change to the existing landscape or views to the site in the short term, however current land uses would remain and the dereliction that currently characterise the site would also presumably continue as at present. This is likely to result only in relatively small changes to the scale and content of the existing regenerating vegetation and the further degeneration of existing buildings, all of which would have relatively small effects on the existing landscape and visual environment as viewed from without. The maintenance and management of the site would remain a burden on the Local Authority in the absence of any significant return on the site's ownership, as site security and safety obligations would have to be met in any event, however this is likely to be limited to maintenance of secure fencing of the site perimeter to secure against unauthorised access. The existing nature of the site and its associated visual amenity would remain much as is, though a slow gradual decline over time would be expected.

12.6 CUMULATIVE DEVELOPMENT & IMPACTS

12.6.1 Introduction

The Guidelines on the information to be contained in Environmental Impact Assessment Reports - Environmental Protection Agency (EPA), May 2022 defines cumulative effects as "the addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects" and require that a determination should be made as to whether cumulative effects are likely to occur. The current GLVIA guidelines (3rd edition) describes cumulative effects as "additional effects caused by the proposed development when considered in conjunction with other proposed developments of the same or different types". Such determination and consideration of cumulative effects needs to be made in respect of any applied for/permitted developments or developments that the applicant is aware of, which will have a bearing on the assessment of the proposed development - this is subject to the assessor's judgement in the matter. The predicted cumulative effects currently related to the proposed development for plans and projects both outside and inside the site are outlined below in Sections 12.6.2 and 12.6.3 respectively.

12.6.2 Other proposed developments - beyond the Masterplan area

A list of plans and projects outside the broader Masterplan for Cleeves Riverside and within an approx. 1km radius of the site, which could create the potential for cumulative effects, is set out in Appendix 1.1 of this EIAR - a limit of 1km radius from the site is considered appropriate for assessment of other plans and projects, in this context. The proposals for these projects involve new building or amendments to existing buildings and each has been individually assessed through the details available for them within

the planning system, in terms of their potential scale, height and massing and ultimately, their potential cumulative landscape and visual impacts when considered in the context of the proposed development. However, none are of a scale or nature which could be considered to create cumulative effects with the proposed development of any significance. Whilst the certainty of many of these plans and projects to progress to construction is unclear, it is not likely that they will all proceed at the same time as the proposed development, though there could be considerable overlapping of construction periods. However, very few of the listed projects are of a scale whereby they, or their construction will register visually beyond a street or two. All the listed projects fall well within the scale, form and type which would represent the norm for Limerick or any other city the size of Limerick, and are therefore not expected to have adverse effects that could act in combination with effects from the proposed development.

12.6.3 Other proposed developments – within the Masterplan area

As described in Chapter 2.0, Project Description, in addition to the proposed development, other development is also planned under the Cleeves Riverside Masterplan. The phases for delivery of these are set out in Section 2.6.1, Construction Timeframe, as follows:

- Phase I, Heritage works, including stabilisation and repairs to the Flaxmill this work will commence in Q1 2026.
- Phase II, the proposed development works, contained within the application site boundary.
- Phase III, TUS Educational Masterplan, for which consent will be sought in Q2, 2026.
- Phase IV, Shipyard site, which has no defined timescale.

Of these, Phase II constitutes the proposed development and as such, is the subject of the current application and the primary subject of this assessment. Phases III and IV represent future planned development which has only been designed in outline, to a level appropriate for masterplanning purposes. As such, these two phases have only been modelled in outline but do not provide enough information to adequately prepare photomontages to assess.

The verified views illustrate only the current proposal and exclude later 'masterplan' phases. This ensures the visual analysis remains aligned with the defined development baseline and avoids overstating potential effects. To include future phases within the photomontages could misrepresent the magnitude and significance of change, as these elements are unconsented, hypothetical and they do not form part of the receiving environment or part of the proposed development, i.e., the subject of this application.

The Phase I Masterplan proposals relate to the required Heritage works to existing buildings including relatively low key but urgent work to roofs and the removal of more recent layers applied to existing buildings. As such, they are not expected to generate any significant cumulative effects.

The proposed Phase III and IV Masterplan proposals, however, include substantial built elements including a tall landmark building on the Shipyard site. Whilst this in itself is likely to create significant impacts which could have positive or negative qualities attached, these cannot be assessed here. However, in terms of additional effects caused by the proposed (Phase II) development when considered in conjunction with these other later developments, the greater height and scale of the future

Masterplan proposals will create an effect in potentially reducing the apparent comparative scale of the proposed development, and therefore, reduce the apparent comparative visual impact of the development proposed under the current (Phase II) application, when viewed from a variety of viewpoints. This effect is created by the greater height and massing of the subsequent Masterplan proposal when compared with the current proposed development. The later Masterplan proposals will also have an effect in screening all or part of the proposed development when viewed from various viewpoints around the site, thereby further reducing its potential visual impact.

It should be noted that whilst the form of the proposed Phase III and IV Masterplan proposals has been set out, this is in broad outline only and has largely been based on established urban design principles which have formed a major part of the options development process. This has included the general consideration of the positioning and massing of the proposed buildings, as well as addressing specific attributes and constraints related to existing retained elements such as the brick chimney and the Flaxmill building, especially in relation to their visibility. In addition, given that most of the public realm proposed for the overall Masterplan scheme sits within the current (Phase II) proposed development, the overall Masterplan design has necessarily had to include consideration of future connections and linkage, as well as permeability throughout the overall scheme. As part of that process the potential effects of the proposed buildings and associated landscape has been considered in terms of landscape and visual impact, however their design is not sufficiently advanced for their full potential in these respects to be determined at this point. However, later Phases of the Masterplan will be subject to further assessment of landscape and visual impacts, and these will also include cumulative assessment with the proposed development at that stage.

12.7 REMEDIAL & MITIGATION MEASURES

12.7.1 Incorporated Design Mitigation

In terms of how the proposed development will integrate with and impact upon the existing landscape context and visual environment, the importance of design quality in inserting new buildings into the urban fabric should not be underestimated. Good design in such circumstances is a rigorous process involving: a deep understanding of the site, its context and existing sensitivities; a broad knowledge of suitable design approaches, testing appropriate design options and the ability to convert these through careful detailing, materials selection and effective control throughout the construction process. These aspects of design are central to successful and appropriate integration of new development within its context. Any development has the potential to impact negatively, particularly if poorly designed. Conversely it has the potential to impact positively, indeed, to inspire, if well-designed.

The high quality of the proposed design is an important factor in the reduction of potential impact in respect of both landscape and visual effects. The design rationale and details employed within the design seek to mitigate negative effects on the landscape character and upon the visual amenity of the area by:

Employing a subtle variation of tone, colour, texture and reflectiveness across the facades, particularly where the buildings may be seen from greater distance and the use of appropriate and harmonising colour, tones and materials to integrate with other buildings nearby and within the proposed development, in order to reduce the apparent massing of the buildings;

- The setting back of the taller elements of the proposed buildings away from public roads and footpaths to assist in reducing the apparent massing adjacent to surrounding smaller scale residential buildings;
- Including public open spaces within the design which link with and relate appropriately to existing adjacent/neighbouring open spaces;
- The provision, maintenance and management of an associated and sensitively considered soft landscape design for the development, which assists in the visual integration and screening of the buildings within the existing landscape - the introduction of appropriate new planting to such effect:
- Rationalisation of all services elements and any other potential visual clutter, its incorporation internally within building envelopes (as far as practically possible) and the inclusion of integrated screening at roof level to conceal plant etc, where this is not possible. It should be noted in this regard that the specific siting of communications antennae on top of PBSA Block 2A localises and limits their visual impact and the finishes proposed for them are effective in reducing their visibility on the skyline;

12.7.2 Construction Phase Mitigation

The building site including a site compound with site offices, site security fencing, scaffolding and temporary works will be visible during the construction phase, from a range of viewpoints around the site. Such elements are generally viewed as temporary and unavoidable features of construction in any setting. However, the perimeter site hoarding will screen from view much of the construction activity and materials at ground level. Other mitigation measures proposed during this delivery stage of the development revolve primarily around the implementation of appropriate site management procedures during the construction works - such as the control of lighting, storage of materials, placement of site offices and compounds, control of vehicular access, and effective dust and dirt control measures. Such mitigation is set out in the Construction and Environmental Management Plan (CEMP) prepared by AtkinsRealis as part of the documentation submitted for planning for the proposed development. This outlines a range of construction phase mitigation measures, many of which are relevant to the reduction of the temporary impacts on the landscape and visual environment during the construction phase. It forms the basis for the required measures to be included in the appointed contractor's CEMP. As such, it will reference construction phase mitigation measures which have relevance to the assessment of Landscape and Visual Impact. It will be prepared by the appointed contractor and subsequently submitted to and agreed with the Local Authority prior to the commencement of any construction works. This is a working document which will be continually reviewed and amended through the construction phase to ensure effective mitigation throughout. It will deal with all issues related to the construction, delivery and management of the proposed development during the construction stage and will ultimately include details on the following:

- Daily and weekly working hours;
- Agreed haul routes for incoming materials;
- Use of licensed hauliers;
- Disposal sites;
- Travel arrangements for construction personnel;
- Appropriate on-site parking arrangements for construction personnel to prevent overspill parking on the local road network;
- Temporary construction entrances to be provided;

- The nature of site lighting including aspects of timing, orientation and shielding;
- Wheel wash facilities if/as required;
- Road cleaning and sweeping measures to be put in place, if/as required;
- Temporary traffic management measures and construction signage to be put in place and maintenance of same;
- Liaison arrangements with the local community.

The definitive mitigation measures included during the construction phase are as follows:

- Site hoarding shall be erected to screen views of construction activities;
- Vegetation protection measures, particularly around the quarry walls, will be installed ensure vegetation to be retained is fully protected during the construction process;
- The CEMP which accompanies the application for approval shall continue to be developed by the contractor to include the control of construction activity, traffic, materials storage and lighting with due consideration for neighbouring residences and surrounding area.

In addition, the organisation of the construction and delivery of the proposed development into distinct zones which will have distinct construction programmes and different delivery dates, also provides a level of mitigation, in that people living around the site and living progressively on the site (as parts of the development are completed and occupied) will be aware of progress towards completion – this is supported by the liaison arrangements between contractor and the local community. In principle, whilst not part of the assessment of the proposed development, this also applies to the development of the later Masterplan elements.

The construction of the proposed development is programmed to take three years and, in that time, a relatively large population is expected to occupy the completed, largely residential units. Their experience in living on the site will continue to emerge and develop as the later scheduled parts of the proposed development proceed towards completion.

12.7.3 Operation Phase Mitigation

In addition to the incorporated design mitigation, the following mitigation measures will be effective in quickly establishing a human scale soft landscape aspect to the proposed development and assist in integrating the proposed buildings into the broader emerging urban landscape:

- Incorporation of measures to ensure the successful retention of mature planting either within or without the site, along the site boundaries;
- Incorporation of measures to ensure the successful establishment of new proposed planting, including: appropriate establishment maintenance of planting, the agreement and monitoring of planting growth parameters/targets and the engagement of appropriate professional advisors throughout the construction period and beyond.
- Inclusion of facilities management arrangements, targets and performance indicators in respect of the maintenance and management of the finished proposed development, in terms of access and security, and the upkeep of building services and fabric, the public realm and the soft landscape.

The definitive mitigation measures included during the operation phase are as follows:

- Periodic vegetation surveys shall be undertaken to ensure the continued sustainability of vegetation on site;
- The implementation and monitoring of a landscape management plan shall be undertaken for the full duration of the defects liability period to ensure successful establishment of the planting scheme and trees proposed.

12.8 RESIDUAL IMPACTS

12.8.1 Introduction

In assessing landscape and visual effects, there are two main inter-related aspects to be addressed in considering the impact of the development proposals:

- The landscape as a resource and landscape character these relate primarily to the landscape's physical components, which may include: topography; vegetation; built elements etc, and how they translate into the perceived character of the existing landscape of the site in its context. How is this physical landscape impacted by the proposal and how do people perceive the change? This will include assessment of the effects of the proposed development on the social and cultural amenity aspects of landscape.
- The visual amenity and the proposed views of the development, relative to the existing site and the associated impact on the visual environment and on visual amenity.

The residual landscape and visual effects are considered and assessed in accordance with the methodology for each and qualitative values are included. Construction Phase effects are assessed in Section 12.8.2 and Operational effects are assessed in Section 12.8.3, below.

Largely there will be no change to effects post mitigation as mitigation has been incorporated into the design, however there may be small, subtle positive effects following the incorporation of the additional mitigation measures during the Operational Phase as set out in 12.7.3

12.8.2 Construction Phase

Mitigation measures have been proposed as per Section 12.7.2, to minimise the impact of the construction works on the site environs, however these are preliminary outline measures only and are subject to refinement, finalisation and agreement with the Planning Authority prior to construction commencement. Generally, where such mitigation is agreed and carried out (or enforced), the measures involved will be effective in limiting construction phase effects. Whilst this may be so, their effectiveness may not be enough to change the assessed category as determined in Section 12.5.1

Landscape sensitivity is low-medium. The magnitude of landscape change is high. The residual impacts of the construction on the landscape will be **moderate-slight** and **negative**.

Visual sensitivity is low-medium. The magnitude of visual change is medium-high. The residual impacts of the construction on the visual environment will be **moderate to high-moderate** and **negative**.

The duration of construction phase effects is determined primarily by the construction contract period and are of much shorter duration than operational phase effects. The construction period is likely to be

less than seven years, therefore the duration of construction phase effects is deemed to be **temporary** or **short-term**.

12.8.3 Operational Phase

12.8.3.1 Landscape Effects

In respect of Landscape effects, whilst the additional mitigation measures outlined in Section 12.7.3 are considered positive in their effect, they are insufficient to create a change to the assessment category found in Section 12.5.3 (likelihood of significant operational effects).

Landscape sensitivity is low-medium. The magnitude of landscape change is high. The residual operational impacts on the landscape will therefore remain **moderate to high-moderate** and **positive**.

The duration of operational phase effects is determined by the lifespan of the proposed development, as may be tempered by any mitigating effects of the maturing designed landscape proposed as an integral part of the development. In this case the development may have an expected/design life of up to 60 years or beyond. Effects on both landscape character and visual amenity during the Operational Phase of the proposed development are therefore deemed to be of **long-term** or **permanent** duration in this instance.

12.8.3.2 Visual Effects and Assessed Views

In respect of visual effects, the additional mitigation measures are again considered positive in their effect, and they create further improvement in respect of the assessment category, as follows:

Visual sensitivity is generally medium. The magnitude of visual change is generally high. The residual operational impacts on the visual environment and amenity will therefore remain **high-moderate** and generally **neutral** or **positive**. They will also be **long term** or **permanent**.

12.9 WORST CASE SCENARIO

The proposed development is not reliant on other projects in order to advance. However, as for most development construction schemes, a worst-case scenario in terms of landscape and visual impact could potentially arise whereby demolition works, vegetation removal and excavation works commence and are substantially completed, but subsequently the proposed development is halted part way through the construction phase and before completion of the buildings, associated infrastructure and new landscape works.

In such cases there is substantial adverse impact without the potential benefits promised by the full realisation of the project. Under such circumstances further degradation of the existing landscape has also resulted from the early phase preparation works which have been commenced or completed and building structures may be only partially complete, leaving a skeletal presence on the site. Whilst such cases arose following the economic crash of 2008, any such repetition is not expected in the foreseeable future. In addition, the scale of any such occurrence will be limited in this case because the proposed development is subject to a strict scheduling process, in terms of site development sequencing.

12.10 MONITORING

12.10.1 Construction Phase

The Outline CEMP references construction phase mitigation measures which have relevance to Landscape and Visual Impacts created during the Construction phase of the Proposed Development. An outline Construction Environmental Management Plan (CEMP) has been developed by AtkinsRealis and is included with this planning application. The CEMP will be updated by the Construction Manager, Environmental Manager, Resource Manager and/or Ecological Clerk of Works, as required if site conditions change, and for any planning conditions that may be imposed. The CEMP will be implemented and adhered to by the construction Contractor(s) and this is a working document which requires continuous review and amendment throughout the construction phase by both parties, to ensure effective mitigation.

12.10.2 Operational Phase

The constructed development requires adequate facilities maintenance and management to ensure the continued upkeep, functioning and appearance of the development. This will include all necessary management of the buildings, plant and equipment together with the maintenance and management of the hard and soft landscape elements including public realm, open spaces and planting works integral to the development.

12.11 REFERENCES

- 'Guidelines for Landscape and Visual Impact Assessment', prepared by the Landscape Institute and the Institute of Environmental Assessment, published by Routledge, 3rd Edition 2013.
- 'Guidelines on the information to be contained in Environmental Impact Assessment Reports' Environmental Protection Agency (EPA), May 2022.
- 'Visual Representation of Development Proposals': Technical Guidance Note 06/19, Landscape Institute UK (LI) September 2019.
- Limerick Development Plan 2022-2028.