

CHAPTER SIX POPULATION & HUMAN HEALTH

6.1 INTRODUCTION

This chapter addresses the potential impacts of the proposed development on Population and Human Health. It describes the baseline population and sensitive receptors, identifies and evaluates potential pathways of impact during construction and operation of the proposed development for existing and proposed population.

The assessment of Population and Human Health is not undertaken in isolation but through examination of its relationship with other environmental factors examined under separate chapters of this EIAR. European Commission guidance¹ highlights that human health is a broad, project-dependent issue, with effects varying according to the nature, scale, and location of a project/proposed development. Impacts are best understood through the pathways by which they arise - most commonly via socio-economic effects, or physical and perceived effects including changes in air, water, land, noise, living conditions, impact on amenities or exposure to hazards. This integrated approach ensures that the assessment of human health is embedded within the wider environmental analysis, allowing for a comprehensive understanding of risks, impacts, and mitigation measures.

Impacts are assessed using recognised methods, standards and descriptions set out in Section 1.9.4 of Chapter 1.0, with consideration of mitigation measures stated or recommended in other Chapters. Cumulative and residual effects are also considered.

6.2 ASSESSMENT METHODOLOGY

Although no single defined methodology exists for assessing effects on population and human beings, this chapter has been prepared in adherence to:

- *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment* (Department of Housing, Planning and Local Government, 2018)
- *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports* (EPA, 2022)

For the proposed development, the factors most likely to affect the baseline population arise from construction, demolition, and operational phases. These comprise air emissions, noise and vibration, traffic and access, road safety, water quality and flood risk, visual and lighting effects, land-use change (including effects on built and natural heritage), socio-economic impacts (such as housing supply, gentrification, and local amenities), and wider determinants of public health and wellbeing (including active travel and open space). Decommissioning effects are excluded, as the proposed development is intended to be permanent and decommissioning does not form part of the normal development cycle for

¹ Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report, European Commission, 2017 <http://ec.europa.eu/environment/eia/eia-support.htm>

this type of scheme. Effects from 'demolition' are considered under examination of 'construction phase' given the overlapping nature of construction and demolition phases and site sequencing.

Cross-reference is made to other EIAR chapters where these environmental factors are examined in detail, ensuring that the assessment of Population and Human Health is fully integrated with the broader environmental evaluation.

All reference in this chapter to the Limerick Development Plan means, the statutory and adopted Limerick Development Plan 2022-2028.

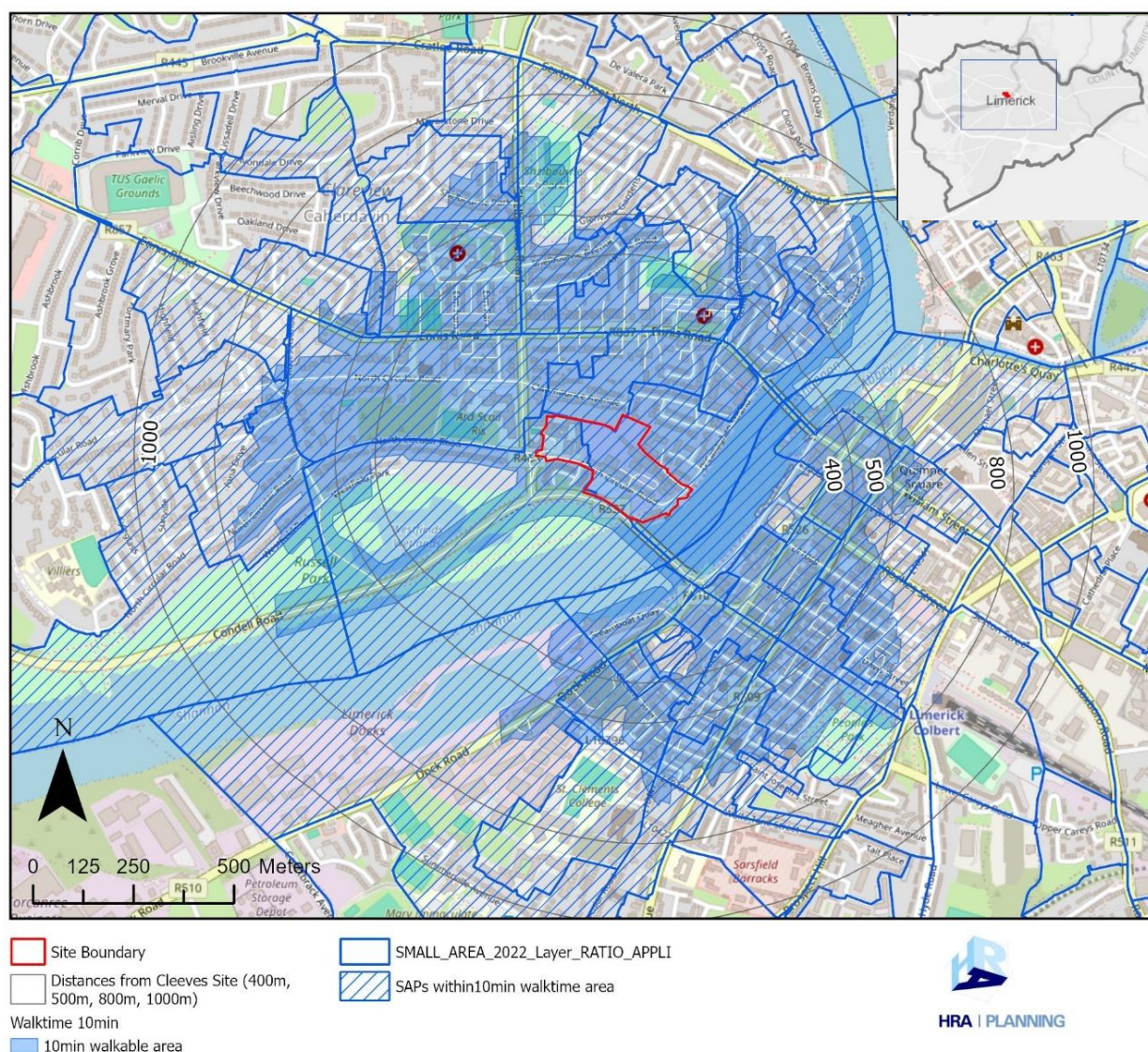
6.3 RECEIVING ENVIRONMENT

6.3.1 Population Dynamic & Well Being

The baseline population and receptors have been established through analysis of local population and socio-economic data, providing a profile of current demographics and insights into health and wellbeing based on the availability and accessibility of social infrastructure and services.

This assessment has drawn on CSO Census of Population 2022 data to characterise the local population and identify features that may indicate potential sensitivities. The 'local' population has been defined as those living within a 10-minute walk of the site, in line with the '10-minute city' or '10-minute neighbourhood' concept - a contemporary urban planning principle promoting compact, connected communities where residents can access daily services, facilities, and amenities within a short walk or cycle and which is referenced also in Section 2.4 'Core Strategy' of the Limerick Development Plan 2022-2028 - the statutory development plan applicable to the proposed development.

Within this area, the most detailed data available - the Small Area Population Statistics (SAPS) - has been used. The spatial extent of this local 10-minute neighbourhood has been illustrated in Figure 6.1.



Where relevant, this local analysis has been referenced against the wider Limerick City and Suburbs area to provide contextual understanding – the extent of which is shown in the insert box in Figure 6.1.

Extrapolation of the Census of Population 2022 Small Area Population (SAP) statistics indicates a population of circa 2,479 persons within a 10-minute walktime catchment area of the proposed development. This local 10-minute population represents 2.4% of the population of the entire 'Limerick City and Suburbs' area of just over 100,000 persons². The Limerick City and Suburb area has experienced significant growth between the 2016 and 2022 census of population periods, with a 14.07% increase, or, +12,616 people.

The breakdown of population by age with the local 10-minute neighbourhood is illustrated in Figure 6.2 below.

² Population of 102,287 for Limerick City and Suburbs (Census of Population www.cso.ie)

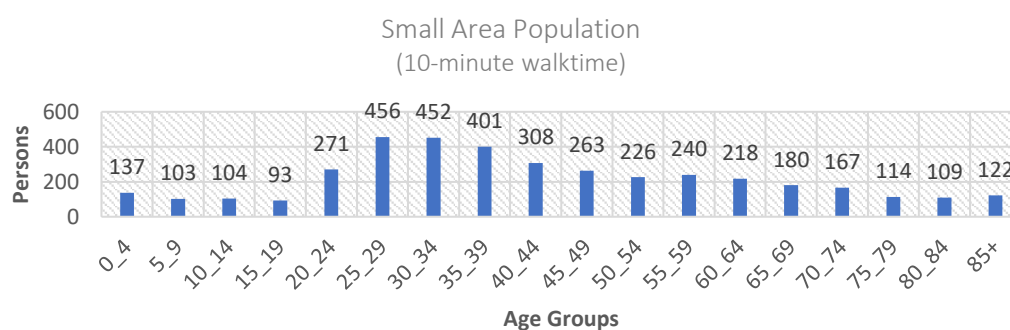


Figure 6.2 Age Breakdown 10 minute Catchment Area from Site with SAP Areas

This profile indicates a population heavily concentrated among working-age adults, particularly those in their late twenties to late thirties. The largest groups are 25–29 (456 people), 30–34 (452 people), and 35–39 (401 people), highlighting a strong presence of young to mid-career individuals. From age 40 onward, numbers begin to taper off, with 308 people aged 40–44 and 263 aged 45–49. Children and teenagers make up a smaller share, with only 137 aged 0–4 and fewer than 105 individuals in each age group between 5 and 19. Older adults (65+) represent a moderate proportion, peaking at 218 people aged 65–69 and gradually declining to 109 in the 80–84 range, before a slight increase to 122 aged 85 and over. Notably, only around 3.3% of the population remain in education past age 15, suggesting a relatively low student and third-level presence.

A deeper analysis of this census data to examine the *family cycle* profile (within the 10-minute local neighbourhood) indicates that the 464 families recorded is dominated by pre-family households (126, 27%), followed by adult families (85, 18%) and retired households (62, 13%). Families with children represent smaller proportions, ranging from 7–9% across pre-school, early school, pre-adolescent, and adolescent stages. This indicates the area is primarily characterized by younger, pre-family adults, with a secondary presence of adult and retired households, and relatively few child-rearing families.

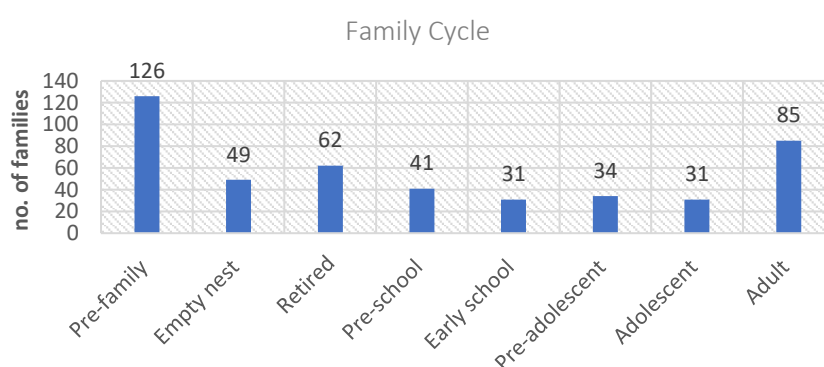


Figure 6.3 Family Structure within the local neighbourhood

The relatively small child and teenage population indicates that the area is not currently dominated by family households, while the moderate but declining older population points to a mix of long-term residents alongside newer, younger arrivals. The low proportion of students further underlines that this is not primarily a student-focused area but one shaped by working professionals.

To emphasize this further, consideration of the SAP data for Population aged 15 years and over by principal economic status and sex' demonstrates the area has a high workforce (59.8%), with the next largest economic group comprised by those retired (17%) with a low level of unemployment and active job seekers. This level of active employment is comparable with the 'all city and suburbs' at work demographic (52%) and low unemployment rates equally similar and higher than the national average of 56.1%³. The retired population demographic is slightly higher than the all city and suburban area which is circa 14.8%.



Figure 6.4 Family Structure within the local neighbourhood

6.3.1.1 Level of Deprivation

According to the 2022 Pobal Deprivation Index⁴, Ireland's primary tool for measuring socio-economic gradients, derived from analysis of Census 2022 data, the **Castle C** Electoral Division (ED) of Limerick City in which the Cleeves site is located, is classified as **Marginally Above Average**, an index classification that sits at Level 5 on the eight-level scale of national deprivation ranging from Extremely Disadvantaged to Extremely Affluent.

The deprivation index data is provided at the smallest level, which is; Electoral Division which are shown in figure 6. Though the **Castle C** ED is slightly smaller than the 10 – minute neighborhood area (identified earlier in Figure 6.1) it is nonetheless useful given the availability of data at the level and for comparison with the 10-minute catchment area.

³Census of Population 2022 - Summary Results <https://www.cso.ie/en/releasesandpublications/ep/p-cpsr/censusofpopulation2022-summaryresults/employmentoccupationindustryandcommuting/>

⁴ <https://www.pobal.ie/pobal-hp-deprivation-index/>

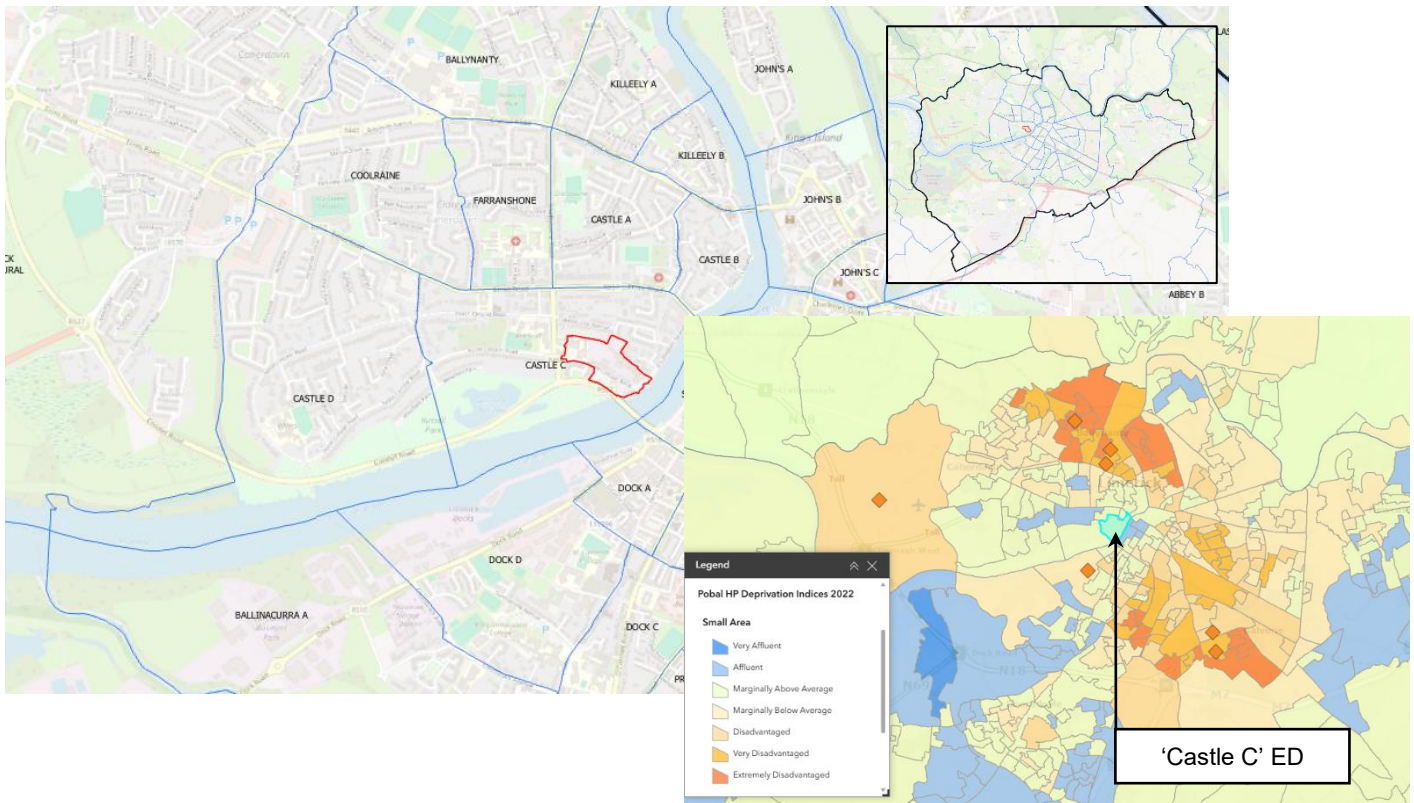


Figure 6.5 Site shown in redline in the context of CSO Electoral Divisions (ED) showing 'Castle C' ED. Insert top-right, shown within the context of the Limerick City and Suburbs
Insert bottom-right illustrates deprivation index (Source: Pobal)

This presents an inherent population base that is economically active, mobile, and less family-oriented, aligning with patterns typically observed in transitional urban neighborhoods adjacent to core city areas. The profile does not suggest any population cohort or family structure or economic group that is inherently sensitive, marginalized or at disadvantage considerably beyond local or national standards and relative to this edge of centre location.

6.3.1.2 Health

Census data in respect to the self-reported health and extrapolated from the 10-minute neighbourhood as illustrated in figure 6.6 below indicates that overall health within the population is positive, with 43.7% describing their health as “very good” and a further 25.5% as “good.” Only a small minority report poor outcomes, with 0.8% rating their health as “bad” and 0.3% as “very bad.” Around 7.4% describe their health as “fair,” while a relatively large share (22.2%) did not state their health status, which may slightly limit interpretation. Overall, the profile suggests a community with a generally strong baseline of health.

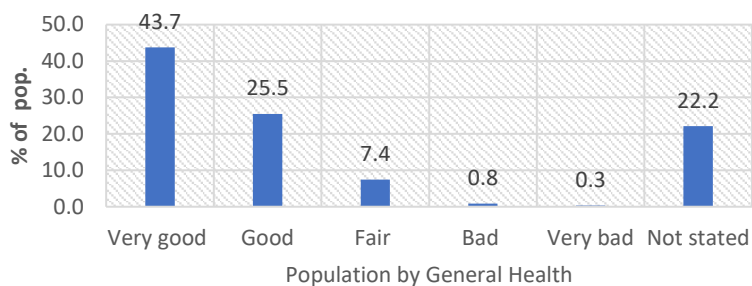


Figure 6.6 General Health (Source: CSO 2022)

6.3.2 Housing Stock & Structure

Housing tenure and composition is considered further given the large residential component of the proposed development. An analysis of local housing tenure composition (from the 2022 census of population) highlights a predominance of larger (3+ bed) residential units within the **Castle C** Electoral Division (ED) in which the Cleeves is located (figure 6.5 refers).

As expected given the relatively similar size and geographical location, there is also general consistency between the population profile of the local **10-munite catchment** area, and the **Castle C** ED generally. The population structure of the Castle C ED is highest in the 30–39 age groups, with numbers gradually declining in older cohorts, while younger age groups under 20 show smaller representation.

Figure 6.7 tabulates the composition of household unit tenure within Castle C ED in terms of room number per household and in comparison with the wider city and suburbs area. This analysis indicates that only 3.85% of the household tenure composition within Castle C ED comprises one and two-bed units whilst the predominant tenure (88.46%) consists of 3+ bedroom households. This representation of one and two-bed units represents only 1.7% of that tenure provision within the context of the all City and Suburb area.

Housing Tenure Analysis: 'Castle C' ED and in the Limerick City and Suburbs ³										
Bedrooms Per household ⁵	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms	8 +rooms	Not Stated	TOTAL
No.	1	20	106	68	43	97	65	104	42	546
% of Castle ED	0.18	3.66	19.41	12.45	7.88	17.77	11.90	19.05	7.69	100%
% of Castle ED	3.85%		88.46%						7.69%	/
All City and Suburbs ⁶ (No.)	190	1,700	3,709	4,259	8,947	7,716	4,699	4,275	2,479	37,974
% of tenure in all City and Suburbs	1.7%		2.86%	7.15%					/	/

Figure 6.7 Housing Tenure Analysis (Source: HRA PLANNING using extrapolation of CSO data)

⁵ As recorded for the purpose of Census of Population 2022

⁶ As defined and calculated by CSO for Census of Population <https://visual.cso.ie/?body=entity/censusurbanprofiles>

Market analysis of the rental property market (from review of the 'daft.ie' property platform⁷) shows that at the time of writing, only 27 No. one and 2-bed apartments for sale and 13 one and 2-bed units available for rent in Limerick City Centre (generally, within 1km of the Cleeves site).

The housing profile reveals an imbalance in unit sizes when compared to the wider city. Very few smaller dwellings exist locally, with just 0.18% of households (within the Castle C ED) occupying one-room units (versus 1.7% citywide) and 3.66% in two-room units (compared to 4.47% citywide). In contrast, over 96% of housing stock comprises three rooms or more, reflecting a strong skew toward larger dwellings. These findings are consistent with similar analysis from the 10-minute neighbourhood area of Cleeves where the majority of units comprise 3-6 bedrooms, where there is a relatively high number of larger homes, and where very few households live in single-room dwellings (<1%), highlighting low prevalence of smaller apartment size units in this part of the central urban area as illustrated in Figure 6.7 below.

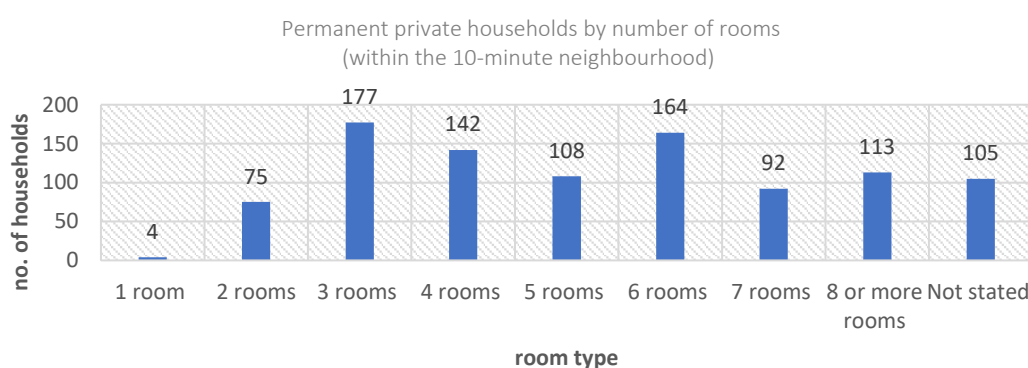


Figure 6.8 Household composition structure within the 10-minute neighbourhood (Source: Census 2022 data assessed by HRA Planning relative to the study area)

This limited supply of smaller units is misaligned with demographic and market trends, particularly as census data highlights a high proportion of pre-family and smaller households within the area. Future demand for compact housing is likely to increase, in line with both national and local shifts toward one- and two-person households, as outlined in National projections set out in the revised National Planning Framework ("NPF").

6.3.3 Economic Performance

The 2025 edition of the Mid-West Economic Insights (MWEI) compiled by Limerick Chamber's in-house policy unit, offers a robust, localized data-driven snapshot of the region's performance across housing, employment, education, transport, and logistics; and is seen as increasingly vital for strategic planning, investment decisions, policy formulation, and economic benchmarking, not just in the Mid-West, but on a national scale⁸. The MWEI acknowledges that employment in the Mid-West (within which Limerick city performs as the metropolitan hub) has reached an all-time high of circa 280k persons, with a declining unemployment at 3.4% and that the region continues to attract international talent, accounting for 8.3% of all national work permits issued. The industrial sector remains the largest sector for employment in the region however, the report warns that talent shortages and inadequate infrastructure could stall growth if left unaddressed.

⁷ September 2025

⁸ Limerick Chamber: <https://limerickchamber.ie/limerick-chamber-mid-west-economic-insights-report-2025/>

The report shows a steep increase in housing prices, with the Mid-West experiencing a 44% increase in home prices over the past five years and a rise of nearly €70,000 (22%) in Co. Limerick alone. Though the report references over 1,000 complete homes in Limerick in 2024, it references analysis by the Housing Commission suggesting Limerick could need as many as between 2,000 and 4,300 homes to meet demand and that 5.4% were affordable homes in comparison with the national figure of almost 42%. The report suggests that the housing crisis is *undermining competitiveness, hampering talent retention, increasing wage pressures, and forcing workers into long commutes due to limited urban availability.*

6.3.4 Access and Connectivity

Cleeves is highly accessible and well connected to the surrounding neighbourhood and to the city centre by the local road network, footpath and cycle lane and public transport infrastructure. Figure 6.9 illustrates the public bus network that operates within the urban area in proximity to Cleeves and identifies 5 no. bus stops located within 500m of the development site.

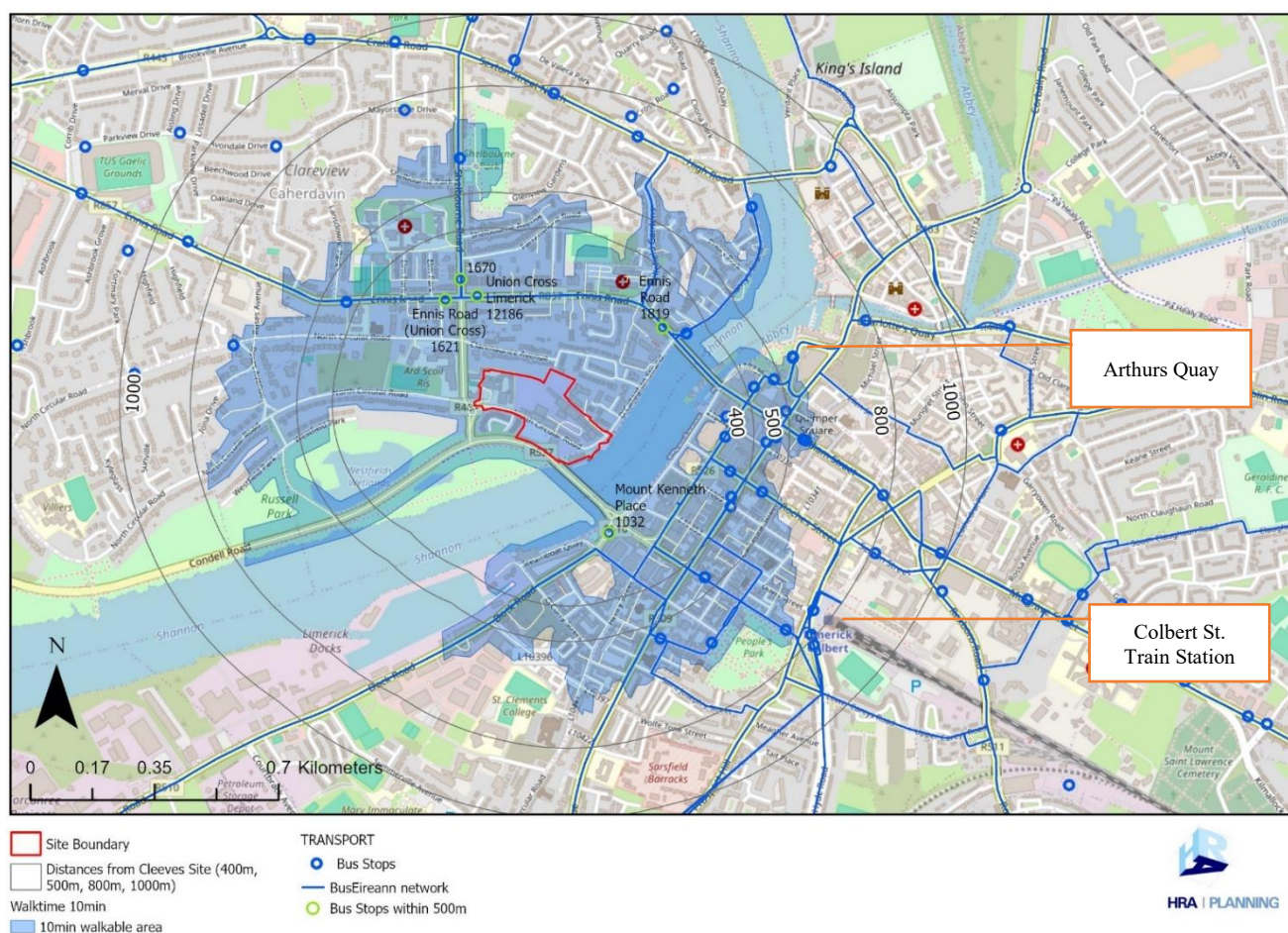


Figure 6.9 Bus stops within 500m from the subject site with other bus stops and the bus network shown.

6.3.5 Social Services & Infrastructure

An evaluation of social infrastructure within the 10-minute neighborhood (approx. 800m) of Cleeves confirms strong provision across all key service and infrastructure categories. The catchment is well served by **sports, leisure, and open space facilities**, a **comprehensive range of educational institutions** from primary to third level, and **robust healthcare provision** including local GP practices, health centres, and wider hospital access. **Religious facilities** are available for multiple denominations, while **community, cultural, retail, and entertainment amenities** are concentrated in the nearby city centre, just 500m away. Collectively, this provision, together with the level of access and connectivity discussed in the previous section, presents a well-rounded and accessible infrastructure base to support existing residents. This service and infrastructure provision is considered further below.

6.3.5.1 Open Space, Sport and Leisure

In addition to the adjacent Westfields Wetlands parkland, and extensive amenity walkways along the River Shannon and through the city centre, but excluding Thomond Park and Gaelic Grounds (which are not open to the public save for as spectators on match days), the immediate neighbourhood offers a particularly high density and diversity of sports and recreational facilities. The Social Infrastructure Audit (SIA), prepared as part of this application, confirms the breadth of provision across categories, with water sports and outdoor recreation strongly represented due to the riverfront location - enhancing the attractiveness of the area for both residents and visitors.

Facilities are well-distributed across age groups: playgrounds, walking routes, and parks support families and older residents, while numerous gyms and fitness centres cater to the younger working-age population, which is dominant locally. Arthur's Quay Park, located within the city centre, provides an important civic green space and venue for cultural programming, complementing Limerick's vibrant calendar of festivals and city-centre events that foster social interaction and cultural vitality.

Collectively, these assets - documented in detail through the Social Infrastructure Audit (SIA) - provide a robust foundation for active travel, placemaking, and community wellbeing, while supporting the regeneration of the Cleeves site in alignment with the Limerick Development Plan objective of expanding formal open space and integrating cultural and recreational amenities into the urban core.

6.3.5.2 Education

The location of the proposed development is well served by education facilities across all levels. Within approximately 1km (inclusive of and just beyond the 10-minute neighbourhood), there is strong provision for early and primary education, with eleven national schools offering a mix of co-educational and single-sex options. While Catholic ethos schools are most common, multi-denominational alternatives and dedicated special education facilities ensure inclusivity for diverse family needs.

At post-primary level, the proposed development benefits from a broader network of fifteen secondary schools situated within the city and suburban area (Figure 6.1 insert map can be referred to for spatial reference of the city and suburban area). Provision is varied, with Catholic schools dominant but complemented by vocational, inter-denominational, and Gaelcholáiste options, ensuring capacity and choice for pre-adolescent and adolescent cohorts.

A capacity analysis undertaken of these schools within the Social Infrastructure Audit (enclosed with the planning application) has demonstrated fluctuation and capacity in the enrolment patterns of these schools during the last five years (2021/2022 – 2024-2025 enrolments years). Current (2024) enrolment figures include the facilitation of Ukrainian placements which are considered a temporary provision in light of the ongoing Ukrainian conflict. As of May 2023, 15, 589⁹ Ukrainian pupils had been enrolled in schools across Ireland with 10, 105 accommodated in primary schools and 5, 484 in post-primary schools.

In terms of future education demand, The “Projections of Enrolment 2023–2042,” report published by the Department of Education’s Statistics Section, (Government of Ireland) covering the period 2023–2042, presents analysis that indicates that primary school enrolments nationally are projected to decline from approximately 558,000 pupils in 2023 to 533,000 in 2026, and further to around 499,000 by 2030. In contrast, post-primary enrolments are expected to rise from approximately 417,000 pupils in 2023 to 430,000 in 2026, before declining again to around 418,000 by 2030. The report therefore anticipated a peak in primary enrolments in 2023 and a peak in post-primary enrolments around 2026, with approximately 5,000 fewer children projected to enter junior infants in 2026 compared with 2022 based on a likely (national) migration and fertility scenario influenced by a moderately high net migration and a stable fertility rate from 2025 onwards¹⁰.

The city also hosts five major higher and further education institutions, including the University of Limerick, Mary Immaculate College, TUS, Moylish, FET Kilmallock Rd, and FET Mulgrave St Campus which support lifelong learning, upskilling, and graduate opportunities. This higher education presence reinforces the area’s appeal to young professionals and adult learners, while also contributing to the wider economic and social fabric of Limerick

6.3.5.3 Childcare

Childcare needs are directly addressed within the proposed development, with on-site provision incorporated as part of the scheme. This approach intends to ensure that the development will meet its own requirements without placing additional pressure on existing local facilities, while also contributing positively to the overall childcare capacity of the neighbourhood. By integrating provision within the scheme, the proposed development seeks to support both prospective residents and the wider objective of delivering sustainable, family-friendly communities.

6.3.5.4 Health

The neighbourhood around Cleeves is, as demonstrated in the SIA, served by an extensive network of more than 40 GP practices and health centres located within close proximity to the site (as demonstrated in the separate SIA). This is aided somewhat by its central location adjacent to Limerick City Centre. These range from single-practitioner clinics to large multidisciplinary centres, alongside public health services and specialist inclusion health clinics, ensuring accessibility for all population groups by walking, cycling, or public transport. Beyond 1km of the proposed development, additional provision is available,

⁹ Department of Education (2025). <https://www.gov.ie/en/department-of-education/publications/department-of-education-statement-of-strategy-2023-2025/#:~:text=As%20outlined%20in%20our%20Projections,484%20in%20post%2Dprimary%20schools>.

¹⁰ Department of Education (2024) <https://assets.gov.ie/static/documents/projections-of-full-time-enrolments-primary-and-post-primary-level-2023-2042-8a51ec7c-.pdf>

most notably University Hospital Limerick, which offers access to acute and specialist care. Together, this establishes a high level of healthcare accessibility within the immediate and wider urban area.

6.3.5.4 Religious and Worship Facilities

This area and the adjacent city centre area benefits from, as established in the SIA, a diverse range of churches and religious buildings within a 10-minute walk of Cleaves, reflecting the community's cultural and spiritual institutions. Provision is predominantly Catholic, with multiple parishes including Our Lady of the Rosary, St. Munchin's, St. Michael's, St. Augustine's, Sacred Heart Institute, St. Joseph's, and the Redemptorist Church, offering accessible worship and pastoral services. Broader Christian denominations are also represented, such as St. Michael's Church of Ireland and the Abundant Life Christian Church, providing for faith groups beyond the Catholic majority. The concentration of these facilities within walking distance highlights both the accessibility and inclusivity of religious provision in the area, supporting community identity, social cohesion, and opportunities for interfaith engagement.

6.3.5.4 Community, Cultural, Retail & Entertainment Facilities

The subject site is located approximately 500 metres from Limerick City Centre, providing immediate access to a wide range of convenience and comparison retail outlets, commercial activities as well as cultural and entertainment facilities characteristic of a vibrant city core.

Arts and culture are recognised as essential to the sustainable development of communities, contributing to identity, social cohesion, education, and local economic growth. Social and community facilities in the city are varied, ranging from general civic services to those designed for specific community groups. Limerick has a particularly strong cultural network, supported by artists, performers, and musicians who promote a diverse programme of cultural activity. The Limerick City & County Council Arts Office plays a key role in facilitating this provision by supporting creative individuals and communities through research, events, funding programmes, and the development of both online and in-person resources.

6.3.6 Baseline Overview

The socio-economic evaluation indicates a vibrant, relatively young economic active and high accessible and connected neighbourhood with access to a diverse range of services. Proximity to the city centre, together with strong transport links and access to social, commercial, retail, education and health services, provides a solid foundation to accommodate population growth, consistent with compact growth principles and the need to achieve critical mass to support local services.

The area is characterised by a predominance of younger, working-age adults, many of whom are in pre-family households (27%). This points to flexibility and adaptability, with likely receptiveness to new housing, smaller unit types, and enhanced urban amenities. Employment levels are strong, with 59.8% of residents in work and low unemployment, reflecting economic stability. The area is classified as *Marginally Above Average* on the Pobal Deprivation Index, placing it in the middle range - neither disadvantaged nor affluent - suggesting resilience but not immunity to redevelopment pressures.

Perceptions of Change

For younger and pre-family cohorts, redevelopment of the Cleeves site is likely to be viewed positively as it could expand housing choice, improve amenities, and support vibrancy. In contrast, older residents, though fewer in number, may perceive change as disruptive to community continuity, neighbourhood identity, or sense of place. Concerns may also arise around affordability and tenure stability within the neighbourhood.

Residual Concerns

While the population profile indicates overall capacity to absorb change, sensitivities remain. Key risks include gentrification, pressure on existing services, and the erosion of established community character. Across all groups, there may be a shared caution about the impact of redevelopment on the existing community/neighbourhood arising from construction activity or long-term effects to the character of the area including on the natural and built heritage, reflecting a broader hesitation toward alterations to the familiar urban environment. This is considered further in the next section.

6.4 LIKELIHOOD OF SIGNIFICANT EFFECTS

This section presents an assessment of the potential and predicted impacts of the proposed development on population and human health.

6.4.1 Identification of Receptors, Pathways & Interaction affecting Population

The ways in which a proposed development may interact with population and human health depend on the specific features of the development. To frame the identification of baseline receptors and potential pathways, the key elements of the proposed scheme are summarised below from Chapter 2:

- » **Demolition:** Removal of a number of existing structures.
- » **Residential Development:** Construction and phased delivery of 234 units (205 apartments and 29 townhouses/triplex units) across four zones—Salesians, Quarry, Stonetown Terrace, and O'Callaghan Strand.
- » **Mobility Hub & Access:** Provision of bicycle parking, EV charging spaces, and a dedicated pedestrian/cycle link between North Circular Road and Condell Road.
- » **Public Realm:** Creation of new civic and green spaces, including the Reservoir/Quarry Park, Flaxmill Square, Riverside Corridor, and areas for formal and informal play.
- » **Ecological Measures:** Provision of three dedicated bat houses.
- » **Ancillary Works:** All associated site development and infrastructure works

Figure 6.10 identifies the main population receptors, the potential level of *significance*, and the main *pathways* through which effects may occur during different stages of the proposed development. This reflects both the nature of the development and the socio-economic profile of the surrounding area, and provides the basis for assessing likely significant effects on population and human health in more detail;

Potential Effects				
Receptor	Potential effect	Project Stage	Potential level of Significance ¹	Key pathway
Landuse & Settlement Pattern	Inappropriate or poorly integrated development could lead to inefficient use of zoned and serviced land, contrary to settlement objectives.	Operation	Slight - Moderate	• Sustainability of landuse • Soils/contamination • Water / flood risk (potential for increased runoff or capacity constraints)
Residential population	Local residents are sensitive to temporary construction impacts (dust, noise, vibration, traffic) and to operational changes affecting amenity and accessibility.	Construction	Moderate-Significant	• Air quality & dust • Traffic and Access • Noise & Vibration
	Longer-term operational impacts may arise from traffic, visual change, amenity pressures, and access to services	Operation	Not Significant – Significant	• Social & economic (employment, housing availability, displacement) • Amenities of future residents Traffic & Transport • Visual / landscape (loss of daylight/sunlight, overbearing impacts) • Noise & Vibration • Access to services
Healthcare & Community Services & Facilities	These receptors are highly sensitive to disruption, particularly from noise, dust, and access restrictions during construction. In operation, effects may relate to increased service demand from population growth	Construction,	Moderate – Significant	» Air quality & dust » Traffic & Transport » Noise & Vibration
		Operation	Not Significant – Significant	» Traffic & Transport » Capacity
Education Facilities	Students and staff are sensitive to construction traffic, access disruption, and noise. In the long term, population growth may increase pressure on places but may also generate opportunities	Construction	Moderate – Significant	» Air quality & dust » Traffic & Transport » Noise & Vibration
		Operation	Not Significant – Significant	» Traffic & Transport » Capacity

	for community integration.			
Open Space and Amenity	These areas are important for recreation, wellbeing, and active travel. They are sensitive to temporary loss of access or visual/landscape disruption or change	Construction,	Not Significant – Slight	» Air quality & dust » Traffic & Transport
		Operation	Slight	» Visual / landscape
Transport and Accessibility	While existing provision is generally good, construction may cause temporary disruption (closures, haul routes). In operation, regeneration may increase demand for access and public transport, with potential congestion effects	Construction,	Moderate	» Traffic & Transport
		Operation	Slight – Moderate	» Traffic & Transport » Capacity

Figure 6.10 Potential Effects

Note¹: 'Significance' value using the definition set out in Chapter Table 1.4

6.4.2 'Do-Nothing' Scenario

In advance of considering the impacts on the population receptors identified in the previous section, it is necessary to consider the 'do-nothing' scenario to describe the likely evolution of the environment if the proposed development were not to proceed. This provides a baseline comparison, illustrating the extent to which identified impacts arise solely as a result of the proposed development and to demonstrate the implications of maintaining the existing conditions without intervention.

A '**do-nothing**' scenario would leave the site in its current state - largely vacant and underutilised, with limited functionality in the context of the compact urban growth model missing an opportunity to support the economic growth of the city by contributing to addressing housing pressures. Maintaining vacancy and under-utilisation of serviced urban land, would be misaligned with the landuse zoning and strategic spatial development objectives applicable to the Cleaves site which are contained in the statutory **Limerick Development Plan 2022–2028**, and which prioritises urban renewal of the Cleaves site as part of the **Limerick World Class Waterfront** strategy. By impeding regeneration, the 'do-nothing' option would forgo the opportunity to revitalise and transform this strategic city-centre location for identified residential, commercial and economic development, in the absence of any alternative project or activity for the site being advanced. Such an outcome would also contribute little to the national, regional, and local policy objectives pursuing **consolidated compact growth**, or to the Cleaves masterplan's ambition to optimise this highly accessible serviced land in the metropolitan core of Limerick City.

In relation to conservation of built-heritage, while existing historic structures would physically remain in their current condition, the long-term preservation of these structures (including the mill building and chimney) is questionable. In the absence of a dedicated management and funding framework in place in

perpetuity for the safeguard of these structures in the current state, deterioration and dereliction of these heritage features as well as their setting, will continue and possibly accelerate with a loss over time, of their social and architectural value. Furthermore, the site's inaccessibility to the public would persist, limiting any meaningful appreciation of its heritage to external views of features such as the chimney and boundary walls which could otherwise be enhanced through active reuse and accessibility of the property.

In terms of **housing provision**, failure to redevelop Cleeves would displace the opportunity for much needed residential and centrally positioned student accommodation to more peripheral out of centre locations. Those peripheral areas may lack the equivalent level of accessibility or the level of supporting socio-economic services available at this site – by virtue of its city centre location.

With regard to the natural environment, the 'do-nothing' option offers no clear environmental advantage over the development scenario given that the Cleeves site is already highly modified and historically developed for urban anthropogenic activity, with no intact or protected habitats. Although the site is connected (hydrologically) to the **River Shannon** and supports fauna features of conservation value (with specific reference to *bats* as detailed in Chapter 7), the assessment confirms that the 'development' scenario avoids significant adverse effects on the natural environment achieved through best practice iterative design processes (i.e. through responsive design) and where necessary, appropriate mitigation measures to offset or negate effects to an appropriate or acceptable level. Furthermore, the 'do-nothing' scenario would fail to deliver on the statutory spatial policy for this site in terms of societal benefits re-development could otherwise achieve in terms of delivery of planned and forecasted commercial and residential use.

6.4.3 Examination of Impacts

Impacts on the Receptors (set out in Table 6.10) are considered further under the following sections using the scales of '*Effect*' set out in Tables 1.3 to Table 1.6 of Chapter 1 of this EIAR where relevant.

6.4.3.1. Landuse and Settlement Pattern

Consideration is given to potential significant effects to the Residential Population using the key pathways set out in Table 6.10 and discussed in the phases of the proposed development below;

Construction Phase

The proposed development is not considered to give rise to direct environmental impacts on land use and settlement patterns during the construction phase given primarily, the temporal nature of construction activity and given that construction is considered necessary of the site is to be developed in alignment with the statutory spatial objectives set out in the Limerick Development Plan. Consequently, no mitigation is considered necessary.

Operation Phase

In terms of **sustainability and landuse**, as presented and described in Chapter 3 of this EIAR, the Cleeves site represents a strategically significant opportunity for sustainable urban regeneration, aligning with national, regional, and local policy objectives. At the national level, the site supports the aims of the National Planning Framework (NPF) by promoting compact growth through the efficient use of previously

developed, underutilised, and brownfield land. Its redevelopment contributes to the delivery of sustainable urban growth, transport-oriented development, and high-quality placemaking.

At the regional level, the RSES identifies Cleeves as a key enabler of Limerick City's growth. The site's regeneration is positioned to achieve the economic and social objectives associated with targeted population growth while contributing to the city's ambition to become a world-class centre within Ireland and Europe. Within the Limerick Metropolitan Area Strategic Plan, Cleeves is highlighted as a strategic brownfield regeneration opportunity that integrates residential, employment, and amenity uses with high-capacity public transport infrastructure. Redevelopment of the site supports the reversal of urban sprawl, enhances liveability, and strengthens the city's role as a regional economic driver.

Within the city context, the Limerick Development Plan recognises Cleeves as a key strategic city centre site with transformational potential. That Plan encourages densification and mixed-use development, supporting the adaptive reuse of historic and protected buildings, and promoting tall building clusters at key locations to enhance the city skyline and gateway views. The site is designated as a Strategic Employment Location, ensuring that development supports both residential and economic objectives. The Development Plan is closely aligned with the *Limerick 2030 Economic and Spatial Plan*, a long-term framework guiding the city's economic, social, and physical renaissance and has been subject already to the higher level Strategic Environmental Assessment (SEA) process as part of the development plan preparation. Cleeves forms a central part of the World Class Waterfront project, which also encompasses the Riverside infrastructural works and the University of Limerick City Campus. This initiative seeks to regenerate brownfield land, increase population and employment density in the city centre, and deliver high-quality public realm improvements. The redevelopment is valued at approximately €450 million, with €175 million allocated to Cleeves. This investment underlines the site's importance in driving transformational change for the city centre, contributing to increased population and housing supply, urban renewal, and wider social benefits through a high-quality and accessible urban environment that enhances the quality of life for residents, workers, and visitors.

At a local level, the site comprises two zoning types: predominantly "City Centre" mixed uses, supporting commercial, residential, civic, cultural, leisure, and retail activity, with Stonetown Terrace zoned for existing residential use to protect and enhance amenity. The site represents the only major development opportunity on the right bank of the River Shannon, functioning as a gateway location with high visibility and connectivity. The proposed development is aligned with the Cleeves quarter masterplan that was prepared in 2023 to ensure phased, coherent, and sustainable development, balancing densification, mixed-use objectives, and the conservation of heritage assets of the site.

In summary, the Cleeves site embodies a strategic opportunity of multiple scale. At the national and regional levels, it advances compact growth, sustainable urban development, and transport-oriented development objectives. At the city level, it supports the densification, mixed-use, and placemaking priorities of the Limerick Development Plan and Limerick 2030 strategy. Locally, it presents a unique opportunity to transform a brownfield site into a vibrant, high-quality, and sustainable urban quarter, reinforcing Limerick City's role as a regional and international centre of economic, social, and cultural activity.

In terms of potential effects by way of **flood risk** and to **water**, the site has been assessed in accordance with the Planning System and Flood Risk Management Guidelines and a detailed Flood Risk Assessment

(ARUP, 2025). The FRA confirms that the principal risk arises from tidal flooding associated with the River Shannon, with certain parts of the site falling within Flood Zones A and B, while the majority of the lands lie within Flood Zone C (and not at risk of flood). Fluvial and groundwater risks are considered generally low. With that, flood risk mitigation measures include; setting finished floor levels in line with the 1 in 200-year tidal event plus allowances for climate change and freeboard – consistent with best practice and national planning guidelines; use of flood-resilient/resistant construction; and provision of safe access and egress (including raising sections of the North Circular Road). Residential uses are directed towards the lowest risk areas or raised floor levels, and site drainage measures are proposed to address potential overland flows. The FRA together with the mitigation measures set out in the Construction Environment Management Plan (CEMP) considered appropriate to protect water quality, are referenced in Chapter 11 of this EIAR for the assessment of effects to ground and surface waters.

Subject to the identified mitigation measures, the proposed development can be delivered in a manner consistent with settlement policy, representing an appropriate and sustainable use of serviced land. Accordingly, the effect on land use and settlement is assessed as **Significant, Positive and Permanent**, reflecting the scale and character of coordinated, plan-led regeneration and conservation, which contributes to an improved quality of the urban environment. In contrast, the effect on water and flood risk, following application of mitigation and compliance with design standards, is assessed as **Neutral and Imperceptible**, with no significant residual consequences for population or human health.

6.4.3.2 Residential Population

Residents in the immediate vicinity are sensitive to both short-term construction impacts (dust, noise, vibration, traffic disruption) and longer-term operational changes affecting amenity, access, and quality of life. Consideration is given to potential significant effects to the Residential Population using the key pathways set out in Table 6.10 and discussed in the phases of the proposed development below;

Construction Phase

The construction phase has the potential to generate temporary negative effects on the local population, primarily related to **traffic levels, traffic, noise, vibration, dust**, and waste generation. Construction traffic, including HGVs, will increase vehicle movements; however, designated haul routes avoiding the city centre and residential areas, alongside a Traffic Management Plan, will mitigate disruption as set out in *Chapter 18: Material Assets - Traffic & Transport*.

Noise, vibration, and dust will be monitored and controlled in line with best practice and statutory requirements, reducing potential nuisance to nearby residents as referenced to in *Chapter 13 Noise & Vibration* and *Chapter 14 Air Quality*. This includes inter-alia; use of quieter plant machinery, controlling noise at source, use of noise screens where appropriate, controlling hours of work, and liaison with public in more sensitive locations to provide advance warnings.

Waste management will follow a dedicated Construction and Demolition Resource Waste Management Plan (set out in Chapter 19), prioritising reuse and recycling to minimise environmental effects, with regulated licensed facilities used for off-site disposal where necessary. Security hoarding and controlled site access will protect public safety throughout works. While short-term impacts are anticipated, adherence to mitigation measures, monitoring protocols, and sustainable construction, demolition and

waste management practices will minimise potential adverse effects on the local population during construction.

During construction, worker safety will be managed through a detailed Health and Safety Plan, implementation of ISO 18001/14001-aligned management systems, and the appointment of qualified Project Supervisors for both design and construction. These measures will safeguard construction workers as well as pedestrians, motorists, and other third parties in proximity to the site.

Given the urban and residential context, construction activities have the potential to generate effects ranging from Moderate-Significant on the resident population (as per the matrix assessment set out in Figure 6.10) depending on the type and timing of specific works. Construction impacts on residential receptors have been identified in; Section 13.2.2 of Chapter 13 (Noise & Vibration) to include noise from construction plant and machinery that will operate over the course of the construction phase (taking account construction programming); potential impact of dust emissions to human health ranging from Moderate-Significant' depending on the construction sequence as discussed in Section 14.5.1.3 of Chapter 14 (Air Quality potential; climatic impacts as a result of GHG emissions and embodied carbon associated with the proposed demolition activities, construction materials and construction activities including construction transport as referenced in Chapter 15 (Climate). Chapter 18 (Traffic and Transport) does not consider that the construction phase will generate significant impacts as construction traffic is predicted to result in only a 2% increase in flows at the nearby Salesians roundabout during peak AM and PM periods.

However, the construction activities are planned and scheduled in the context of best practice including BS 5228-1 and BS 5228-2 (BSI 2019) which sets out the code of practice for noise and vibration control on construction and open sites addressing potential impacts on nearby communities and environments as referenced in Section 13.7 of this EIAR. Within this context, the potential for impacts is within expectations for a development of this scale and location. Any exceedance of operating standards would not occur by design, would be **Momentary** or **Brief** in duration, and **Reversible**.

Operation Phase

Taking account of the spatial development objectives for the site and the Housing Need and Demand Assessment (HNDA) submitted with the application, the regeneration of Cleeves will deliver substantial **social and economic benefits** through high-quality private housing and student accommodation in a central, highly accessible location. By increasing housing supply within the city core, the scheme supports **compact growth**, reduces pressure for peripheral development, and enhances population retention near existing services, employment, and public transport. The proposed housing mix (87.4% one- and two-bedroom units) directly responds to HNDA findings of demand for smaller households within the Castle C Electoral Division and wider Limerick City, helping to **rebalance a stock dominated by larger family homes**.

Provision of purpose-built **student accommodation** will relieve pressure on the wider rental market and support the local economy through increased expenditure, consistent with the Student Needs Demand Assessment. Collectively, these outcomes align with **national and local policy objectives for urban regeneration**, and the effect on economy and employment (both construction and operational phases) is assessed as **Significant, Positive, and Permanent**.

In terms of **residential amenities** for future occupants of the development, the scheme incorporates a crèche (capacity for 34 children, matching projected demand), private and public open space, and improved permeability through retention of historic boundary walls. These features will support families, improve community wellbeing, and provide heritage value by preserving key-built elements of social interest.

The **energy strategy** will deliver highly sustainable, low-carbon homes, designed to achieve minimum BER A2 ratings and targeting **Home Performance Index Gold** certification. Measures include passive solar design, high-performance insulation, efficient heating and ventilation systems, and renewable technologies such as roof-mounted air-to-water heat pumps. These will enhance indoor air quality, thermal comfort, and long-term resident wellbeing, while reducing carbon emissions. Additional mitigation of embodied carbon through local sourcing and material reuse is addressed in **Chapter 14 (Air Quality)** and **Chapter 15 (Climate)**.

The assessment in **Chapter 17 (Daylight/Sunlight & Shadow Analysis)** confirms a **Negligible impact** on daylight and sunlight access for both new and existing residents.

The proposed development involves also, the micrositeing of a telecommunications antenna by approximately 3m on the rooftop of Block 2a of the purpose-built student accommodation block. This adjustment is intended to optimise signal coverage and network performance without altering the overall design or height of the installation. The antenna will operate in full compliance with the exposure limits for electromagnetic fields set out in regulatory frameworks¹¹ as per the standard practice. As the 3m relocation does not materially affect exposure levels for residents or the wider public, the proposed micrositeing is considered to have a negligible impact on population and human health.

Overall, despite temporary construction-phase impacts, the proposed development is expected to result in **Significant, Positive, and Permanent** effects on the local population by addressing identified housing and childcare needs, delivering sustainable homes, supporting compact growth, and preserving cultural and heritage amenities through urban regeneration and sustainable reuse of brownfield land.

6.4.3.3 Healthcare & Community Services / Facilities

Healthcare and community facilities are regarded as highly sensitive receptors because of their function in serving vulnerable populations. Disruption to access during construction or increases in service demand during operation are potential pathways of effect.

Construction Phase

During construction, healthcare facilities in proximity to the site are - just in the same way as the local residential population - regarded as **highly sensitive receptors**, particularly to **air quality and dust**,

¹¹ *Wireless Telegraphy (Radio Link Licence) Regulations, 2009 (S.I. No. 370/2009), The Commission for Communications Regulation (ComReg) licensing regime (Wireless Telegraphy licences) and with regard to the (non binding) best practice guidance set by ICNIRP (and by EU Recommendation 1999/519/EC).*

traffic disruption, and **noise and vibration** from construction works. The nature of these impacts and the method of redress is similar to that set out in respect to the previous paragraphs. Similarly, these impacts will be temporary and such effects will be managed through the site-specific construction and environmental management regime and adherence to construction mitigation as referred to also in the previous sections which are considered equally applicable in this instance to avoiding, reducing or mitigating potential for adverse impact ensuring effects remain **Slight to Moderate, Short-term, and Reversible**.

Operation Phase

In the operational phase, potential impacts relate primarily to **increased demand for healthcare services** associated with additional population from private housing and student accommodation. However, given the city-centre location, accessibility to multiple healthcare providers within Limerick city and its urban environment (as referenced earlier in Section 6.3.5.4), the additional demand is not expected to exceed local service capacity. The effect on healthcare facilities is therefore assessed as **Neutral to Slight, Long-term, and Permanent**.

6.4.3.4 Education Facilities

Students and staff are sensitive to construction traffic, access disruption, and noise. In the long term, population growth may depending on tenure composition and population age profile of new residents, increase pressure on places but may also generate opportunities for community integration.

Construction Phase

Similar to that discussed under the previous two sections, but conscious of the proximity of the site to Salesians primary school, the potential type and magnitude of impacts to education facilities include **air quality and dust, traffic disruption**, and **noise and vibration** from construction works.

The nature of these impacts and the method of redress is identical to that set out in respect to the previous paragraphs regarding the same construction activities. Similarly, whilst such construction impacts will be temporary, they will be managed through the site-specific construction and environmental management regime and adherence to construction mitigation as referred to also in the previous sections. Of particular relevance in that mitigation regime and as set out under **Chapter 13** (Noise and Vibration) is the approach to liaison with the public and this can include liaison with Salesians primary school to provide enhanced notification of particular work practices or to schedule specific works times where possible and appropriate. Those measures are considered equally applicable to avoiding, reducing or mitigating potential for adverse impact ensuring effects during the construction phase remain **Slight to Moderate, Momentary to Brief**.

Operation Phase

The residential element of proposed development with a focus on smaller units more appropriate to smaller households, is likely to appeal and provide for a particular population cohort and dynamic comprising predominantly of younger people more likely to be in the 'pre-family' life cycle rather than larger family units and thus unlikely to generate significant additional demand for school places,

Section 6.3.5.2 confirms that within the catchment, there is already a wide range of educational provision, including eleven national schools within walking distance, with mixed-gender, single-sex, denominational, multi-denominational, and special education options available. At post-primary level, the city provides a balanced mix of Catholic, vocational, inter-denominational, and Gaelcholáiste schools, ensuring adequate capacity and choice for the existing adolescent population and for families as they mature locally. In addition, proximity to five third-level institutions, including the University of Limerick and TUS, offers strong opportunities for further and higher education, lifelong learning, and employment-linked training. As such, the development is expected to integrate well with local education infrastructure, supporting sustainable community growth while avoiding undue pressure on existing facilities and the long-term effects considered **Not Significant**.

6.4.3.5 Open Space & Amenity

Local open spaces, riverside areas, and recreational facilities are moderately sensitive to development.

Construction Phase

The construction phase will not directly affect open space or amenity, as no formal or designated areas or access to those areas will be lost, impeded or intentionally obstructed from access or use. While construction activity may be visible or audible from nearby amenity areas and spaces, these impacts will be temporary and are considered acceptable within an urban context. With adherence to the Construction Environmental Management Plan (CEMP), the overall effect is assessed as **Not Significant** and **Temporary to Short-term**.

Operation Phase

The operation of the development will not give rise to direct effects on open space or amenity, as no formal or designated areas will be impeded or altered. While the development will be visible within the urban environment, it is not expected to diminish the use, quality, or enjoyment of nearby open spaces.

The proposed landscape and public realm strategy is expected to add amenity use and value to the existing neighborhood and future occupants by enhancing recreational opportunities, social amenity, and community wellbeing. The provision of three new public spaces - the Reservoir/Quarry Park, Flaxmill Square, and the Riverside Corridor - together with landscaped open areas, natural play features, and a network of pedestrian and cycle links, will improve accessibility, connectivity, and opportunities for active travel. The integration of biodiversity measures, heritage interpretation, and high-quality urban design will further contribute to the attractiveness, functionality, and social value of the development, supporting both residential amenity and wider urban renewal objectives. In addition to the proposed on-site amenity and design, future occupants will have a high degree of provision and access to formal and informal parks and semi-natural amenity areas within the area, the extent of which within immediate proximity to the site (within the local neighborhood i.e. within the 10 minute walktime) is illustrated in Figure 6.11 below

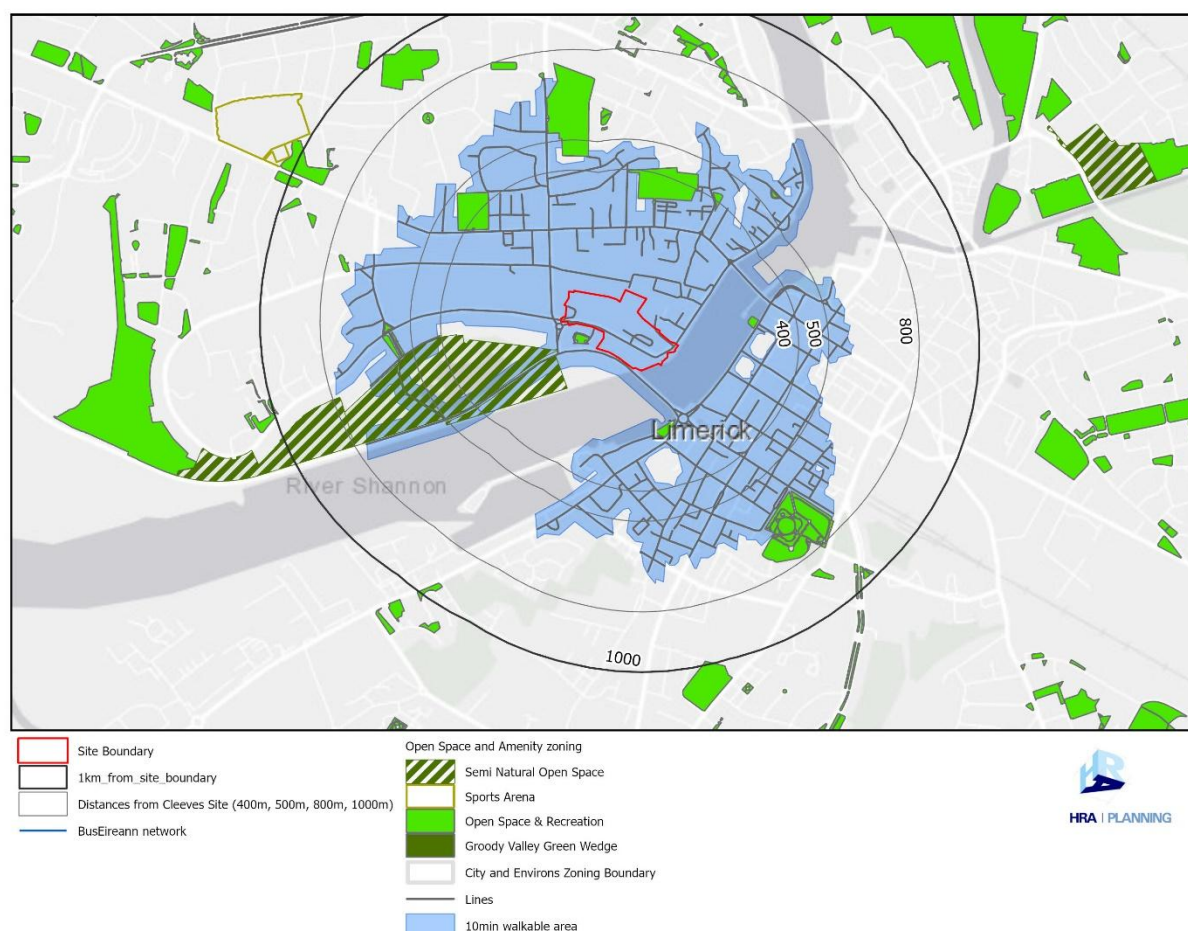


Figure 6.11 Existing amenity and open space provision

In addition, it is envisaged that the Shipyard Site will function as a temporary event space for cultural/arts/music events pending redevelopment of the site. The Shipyard site is capable of accommodating pop-up and community support uses and could include local markets should the demand exist. Similarly, the proposed area accommodating the Riverside Canopy has the potential to accommodate external exhibition space; events and social gatherings and to function as informal facility for ball games as the need arises. The Riverside Canopy will also accommodate heritage interpretative panels providing historical reference and understanding to the Cleeves site.

Collectively, the development is considered to contribute and enhance the existing cultural amenity infrastructure through the provision of amenity and cultural space for use by future residents and the local community without placing undue pressure on existing openspace, amenity or sports and leisure infrastructure considered earlier in section 6.3.5.1. Accordingly, operational effects on open space and amenity are assessed as **Significant, Positive** and **Permanent** as it will improve the provision and quality of amenity space within the local environment.

6.4.3.6 Transport & Accessibility

Construction Phase

Construction activities may generate temporary disruption through road closures, haul routes, and congestion and thus effects might be experienced on a very localised scale ranging from **Not Significant** to **Moderate, Brief** and **Temporary** in duration depending on level of local access required.

Operation Phase

The proposed development is expected to have positive effects on transport and accessibility for future occupants through the provision of a Mobility Hub and associated infrastructure that supports sustainable travel. The Hub will deliver dedicated facilities for bicycles, cargo bikes, and EV charging, serving both the development and the proposed TUS educational campus, with flexibility for relocation as part of future phases. Vehicular access is rationalised through new and replacement entrance points, with provision for emergency access where required.

Surrounding roads, including North Circular Road and Stonetown Terrace, will be traffic calmed and designed as pedestrian and cyclist-priority shared spaces, improving safety and active travel options. Flood mitigation works along North Circular Road will ensure continued emergency access and protect key development zones during extreme flood events. Car parking is limited and includes dedicated provision for the neighbouring Salesians Primary School, while residential parking meets Development Plan standards and incorporates EV charging in line with national policy.

Overall, the transport and access strategy emphasises sustainable mobility, connectivity, and resilience, contributing to the functionality and long-term accessibility of the development. Separate from that, the site is well served by public transport for future residents. Figure 6.12 below illustrates the availability and proximity of the public bus network within highly accessible walking distance to the site (which serves access to the wider metropolitan city area) and which demonstrates a Medium public transport accessibility level (PTAL) albeit with immediate proximity to the city centre which has a high level of service during peak travel periods.

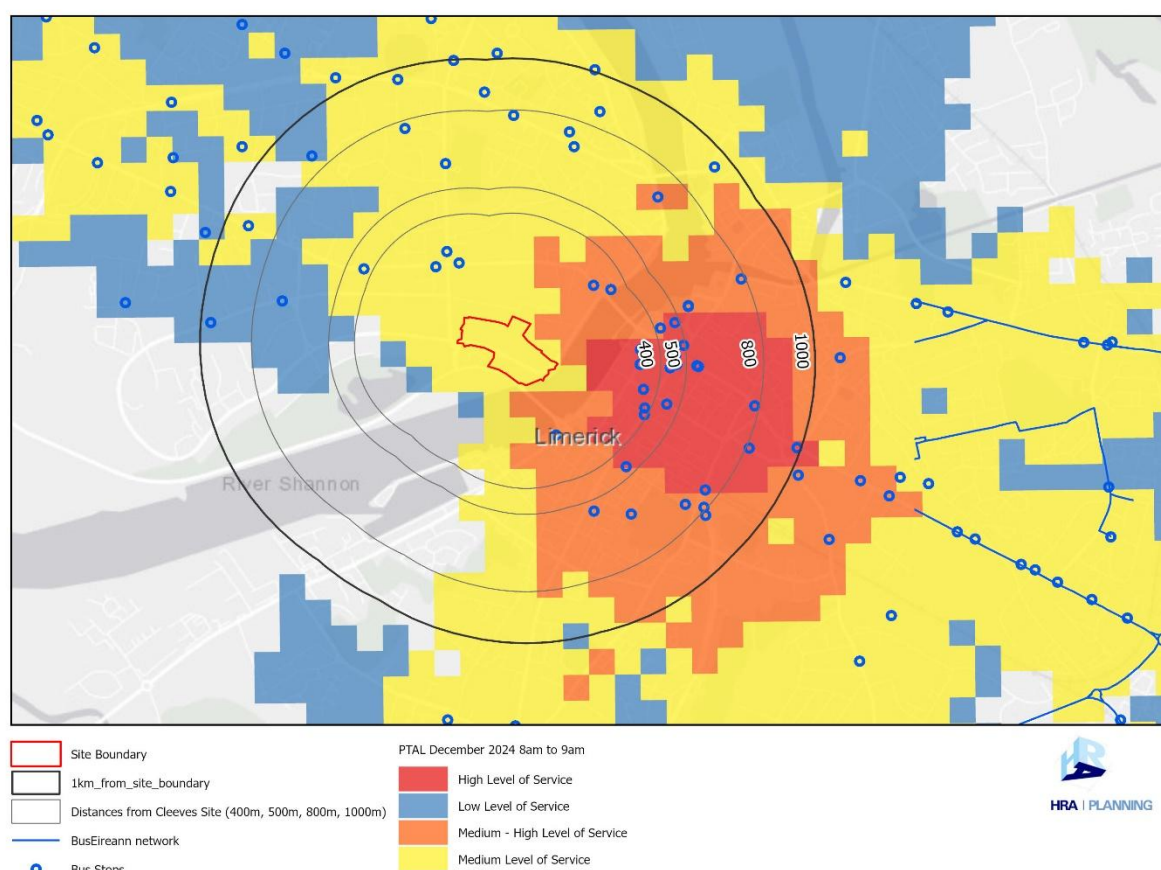


Figure 6.11 Public transit service access level

The separate Social Infrastructure Audit provides a detailed assessment of the public transport network, demonstrating the high level of connectivity accessible from the proposed development site, both within the city and to wider urban destinations. The analysis highlights frequent service levels and well-integrated inter- and intra-urban routes. In terms of capacity, it is important to note that most of these routes either originate from or terminate in the city centre, a major transport and activity hub, thereby enhancing the availability and practical utility of services for residents of the proposed development.

Further to the existing service provision, the proposed development is located within walking distance of key **BusConnects Limerick** routes, providing frequent services (every 10–30 minutes) connecting St. Nessian's Church, University Hospital Limerick, University of Limerick, and St. Mary's Park. The redesign of Limerick's bus network, published by the National Transport Authority in December 2023, is expected to deliver a 70% increase in service levels, extended coverage to previously underserved areas, enhanced Sunday timetables, and simplified fares to encourage seamless interchange.

From a population and human health perspective, these improvements once implemented are considered **positive** and **significant** on the operational phase of the project as they enhance accessibility to employment, education, healthcare, and recreational facilities, support modal shift from private vehicles to sustainable transport, and facilitate greater social inclusion. The proximity of the site to frequent, reliable bus services will particularly benefit residents without private transport, including students, pre-family adults, and older adults, while contributing to reduced transport-related emissions and improved local air quality. The phased delivery of the network from 2027, accompanied by a public information

campaign, ensures that benefits will accrue progressively while allowing adaptation to service modifications for efficient operation.

The operational phase of development will give rise to effects on Transport that are **Imperceptible** to **Significantly Positive** through increased permeability of the surrounding environment.

6.5 CUMULATIVE EFFECTS & IMPACTS

The potential in-combination effects of the proposed development with other ongoing and planned urban projects in the city centre have been considered against the baseline population, sensitive receptors, and pathways identified in this EIAR.

The proposed development is consistent with the site-specific objectives for Cleaves, as set out in the Limerick Development Plan 2022–2028. No other individual or grouped developments have been identified which, when considered in combination with the proposed development, are expected to materially alter receptors, their sensitivity, or the overall assessment of impacts on population and human health, as set out above. This assessment has considered the projects listed in Appendix 1.1 of this EIAR and there is no need to state them again in this chapter.

In considering the proposed development cumulatively with the overall masterplan¹², the potential for effects could occur during both construction and operational phases. Cumulative effects during construction can be expected to be identical to those identified earlier in Figure 6.10 given the same nature of construction activity and sensitivity and pathway of receptors for subsequent development phases. Those construction activities will be subject to similar construction management and best practice processes and adherence to relevant operating guidelines, and an appropriate level of mitigation as/where considered necessary to mitigate effects to within acceptable limits responsive to unique characteristics of that development detail. The cumulative effects during operational phases of the masterplan can be considered - insofar as the information is available at this time, to be **Permanent**, **Significant** and **Positive** given that; the masterplan development will accord also with the spatial development and land use zoning provisions for the site as set out in the Limerick Development Plan 2022-2028; it will result in the effective utilization of underutilized urban brownfield land that would contribute to the advocated concept of compact settlement growth (set out in National, Regional and local planning policy and programmes); and would, by reason on the anticipated commercial, education and office landuse types advocated in the masterplan, present synergies with the proposed development which are compatible also with this location and the surrounding area.

In relation to the '*Arthurs Quay Framework Plan*'¹³ - a high-level masterplan promoting redevelopment of the Arthurs Quay area of the city centre – the proposed development would not give rise to significant adverse effects in combination with that project, as both schemes are guided by the same land-use and spatial strategy set out under the Limerick Development Plan 2022–2028, which has been subject to

¹² As defined in Chapter 1.0 Figure 1.4, inclusive of St. Michael's Rowing Club, comprising Phases I – IV development, that being the same as the site defined in the Cleaves Riverside Quarter Illustrative Masterplan – Vision Document, Limerick Twenty Thirty, 2023

¹³ A Limerick City and County Council-led initiative in collaboration with Metropolitan Workshop to guide the comprehensive redevelopment of Limerick's Arthur's Quay area into a "world-class waterside destination"

Strategic Environmental Assessment to ensure redevelopment objectives in combination, do not give rise to potential for significant adverse environmental impacts.

In relation to the '*Limerick Flood Relief Scheme*'¹⁴ intended to alleviate the risk of flooding to the Community of Limerick City and environs, the proposed development would not give rise to significant adverse effects in combination with that project. Although detailed design of the scheme is pending, both the flood relief scheme and the proposed development are being planned in accordance with the National Flood Risk Management Guidelines for Planning Authorities (DoECLG, 2009). Notwithstanding that, the purposes of this EIAR, due regard has been given in Chapter 11 (Water & Hydrogeology) to the Flood Risk Assessment Report (ARUP, 2025) submitted as part of this planning application which employs a worst-case scenario – without the flood relief scheme in place - ensuring that any future implementation of the flood relief scheme would have either a negligible or significantly positive effects on population and human health in relation to flood risk in combination with the proposed development.

While cumulative urban activity within a city context could contribute to pressures on human health through air quality, noise, traffic, access, and socio-economic factors, this proposed development has been designed and assessed in accordance with best practice to minimise effects arising specifically from its actions. Furthermore, the Development Plan objectives have already been subject to strategic environmental assessment, ensuring that the environmental effects of the development patterns and land-use objectives for the urban area (which this proposed development aligns with) have been considered at the higher Plan tier.

The mitigation measures proposed have been tailored to the specific characteristics of this site and are aligned with recognised standards and methodologies, including WHO guidance, EPA EIAR guidelines, and national standards for air quality and noise. Consideration of other urban projects of comparable scale does not alter the conclusions of this assessment, nor does it indicate a requirement for alternative design or mitigation.

Accordingly, based on the site-specific assessment, adherence to best practice, and targeted mitigation, no significant residual in-combination effects on population or human health are anticipated. This approach is consistent with EPA guidance, which emphasizes focusing on likely significant effects and mitigation, with proportionate consideration of cumulative effects where other projects are unlikely to change the assessment outcome.

6.6 MITIGATION

The assessment in this chapter has considered, both individually and collectively, the mitigation measures presented in other chapters of this EIAR, as referenced in the preceding section. Based on the nature and scope of the proposed development, and in line with best practice aimed at minimising environmental effects and with specific acknowledgement to the mitigation measure (set out in Chapter 13, Section 13.7.1 in respect to 'noise & vibration'), to establish a community liaison plan between the developer and local residents and the adjacent Salesians School no additional impacts on population and

¹⁴ Limerick City & Environs Flood Relief Scheme <https://www.floodinfo.ie/frs/en/limerick/home/>

human health have been identified beyond those already addressed by the mitigation measures outlined elsewhere.

While unforeseen effects can arise, the proposed development has been designed and assessed to ensure that potential impacts are minimized to the greatest extent reasonably practicable. Consequently, no further mitigation is considered necessary.

6.6 RESIDUAL EFFECTS

The proposed development will generate a range of short-term construction phase impacts and long-term operational phase outcomes for the local population and human health.

During construction, temporary effects on the residential population, healthcare facilities, education institutions, and amenity spaces are anticipated, primarily relating to noise, dust, visual change, and construction traffic. These will be effectively managed and reduced to acceptable levels through the Construction Environmental Management Plan (CEMP), traffic management measures, and site-specific safeguards. Consequently, residual impacts during construction are expected to be **Slight, Negative, Momentary to Brief** and variable in nature across the receptors.

In the operational phase, the scheme will contribute significantly to the local housing supply, including student accommodation, while ensuring a high-quality public realm and strong urban design. This will deliver **Significant, Positive**, and **Permanent** effects for the residential population, enhance community and cultural facilities, and reinforce the efficient use of serviced urban land. Operational impacts on healthcare and education facilities are considered **Not Significant**, given the availability and capacity of existing provision. Open space and amenity will be improved through new high-quality public realm, green spaces, and improved connectivity, resulting in **Significant, Positive**, and **Permanent** effects.

Overall, the proposed development will provide lasting benefits for the local population and community by supporting compact urban growth, improving housing choice, and enhancing access to amenity and cultural infrastructure, with construction-related effects being short-lived and well mitigated. The summary of residual effects is tabulated in Figure 6.12 below.

Receptor	Project Stage	Potential level of Significance	Mitigation Measures	Residual Impact (Post-Mitigation)
Landuse & Settlement	construction	Medium	N/A	<i>Effective and efficient use of serviced land : Significant, Positive, Permanent</i>
	operation	Medium	Compliance with flood risk management and Chapter 10 and Chapter 11 recommendations	
Residential population	construction	High	Construction impacts (dust, noise, visual) reduced to minor levels through construction programmes including CEMP controls, with dust/noise monitoring, haul route management, phased and timed work programme.	<i>short term/temporary Slight and Negative effects during the construction phase offset with Long term Significant, Positive, Permanent effects with increased housing and student accommodation provision.</i>
	operation	High	Operational design safeguards and high standard of public realm and urban conservation ensure high quality living environment that would benefit the wider neighbourhood and appreciation of built heritage	
Healthcare and Community Infrastructure	construction	Very High	With noise and dust controls and traffic management, temporary construction effects are minimised during construction mitigated to within acceptable levels.	<i>Short term/temporary Slight and Negative effects during the construction, and long-term effects considered Not Significant given availability of healthcare provision.</i>
	operation	High		
Education facilities	construction	High	With noise and dust controls and traffic management, temporary construction effects are minimised during construction mitigated to within acceptable levels.	<i>Short term/temporary Slight and Negative effects during the construction, and long-term effects considered Not Significant given proximity, availability of education institutions.</i>
	operation			
Open space & amenity	construction	Medium	Maintain riverside access during construction; deliver enhanced green/public space	<i>Significant, Positive and Permanent as it will improve the provision and quality of amenity space within the local environment.</i>
	operation	Medium	Effects during construction may range from Imperceptible to Moderate depending on user experience, but can be management by way of transport management and CEMP program.	<i>Long term: Imperceptible effects to Significantly positive given public transport service level access (PTAL) and 'opening up' of the site improving connectivity in the area</i>
Transport & Accessibility	construction	Medium		

Figure 6.121 Summary of residual effects