Proposed Large Scale Residential Development at Rathgowan, Mullingar, Co. Westmeath

Applicant: Marina Quarter Ltd.

Volume II

Main Statement

CHAPTER 4

Population & Human Health

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4.1 Introduction

This chapter of the EIAR assesses the potential impacts of the proposed development on population and human health that are not covered elsewhere in the EIAR. It also details the proposed mitigation measures where necessary. The potential impacts on, and mitigation measures for, population and human health were assessed under the following headings: Do Nothing Scenario, Human Health (including health and safety), Population and Economic Activity, and Local Amenity.

4.2 Expertise and Qualifications

This chapter of the EIAR has been prepared by Saoirse Kavanagh, Executive Planning Consultant of McCutcheon Halley Planning Consultancy. Saoirse holds a bachelor's degree in Arts (International), majoring in Geography, and a Master's in Planning and Sustainable Development. She has over 4 years' experience working with multi-disciplinary teams and has provided input into a variety of projects. In particular, she has co-ordinated the preparation of the following three Environmental Impact Assessment Reports (EIARs) including the completion of the Introduction, Alternatives, and Population and Human Health chapters.

- Cooldown Commons Strategic Housing Development, Citywest, Dublin.
- Parkside 5B Strategic Housing Development, Belmayne, Dublin.
- Clonattin Strategic Housing Development, Gorey, Co. Wexford.

4.3 Proposed Development

A detailed description of the proposed development is provided in Chapter 2. To summarise, the applicant seeks permission for the construction of 181 no. residential units at Rathgowan, Mullingar, Co. Westmeath. The development will comprise Phases 1 and 2 for a three-phase residential development and will replace the separate Phase 1 and Phase 2 applications (Westmeath County Council References: 21/97 and 21/139) which were granted by the Council and appealed to An Bord Pleanála (ABP References: 312841 and 313091).

4.4 Methodology

This chapter has been prepared pursuant to Schedule 6 of the Planning and Development Regulations 2001 (as amended). Section 2 of Schedule 6 sets out the additional information relevant to the specific characteristics of the project required, which includes a description of the likely significant effects on the environment of the proposed development resulting from, among other things;

> *(IV) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters).*

The Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, 2022) state that:

"… in an EIAR, the assessment of impacts on population and human health should refer to the assessments of those factors under which human health effects might occur, as addressed elsewhere in the EIAR e.g., under the environmental factors of air, water, soil, etc."

Recital 22 to the EIA Directive provides that:

"in order to ensure a high level of protection of the environment and human health, screening procedures and environmental impact assessments should take account of the impact of the whole project in question, including, where relevant, its subsurface and underground, during the construction, operational and, where relevant, demolition phases."

4.4.1 Relevant Legislation and Guidance

This chapter has been prepared having regard to the following guidelines:

- Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, 2022)
- Guidelines on the Information to be Contained in Environmental Impact Statements (EPA, 2002)
- Advise Notes on Current Practice in the Preparation of Environmental Impact Statements (EPA, 2003).
- Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report (EU, 2017).

4.4.2 Study Methodology

The Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, 2022) state that:

"In an EIAR, the assessment of impacts on population and human health should refer to the assessments of those factors under which human health effects might occur, as addressed elsewhere in the EIAR e.g., under the environmental factors of air, water, soil, etc."

Recital 22 to the EIA Directive provides that:

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The EPA Advice Notes (EPA 2003) recommend considering the following issues when assessing the potential impacts and effects of a proposed development on Population and Human Health:

- Economic Activity Likely to Lead to Projects – Will the development stimulate additional development and/or reduce economic activity, and if either, what type, how much and where?
- Social Consideration – will the development change the intensity of patterns and types of activities and land use?
- Land Use – will there be severance, loss of rights of way or amenities, conflicts, or other changes likely to ultimately alter the character and use of the surroundings?
- Tourism – will the development affect the tourism profile of the area?
- Health – have the vectors through which human health impacts could be caused been assessed, including adequate consideration of inter relationships between those assessments.

For the purposes of this assessment impacts on tourism have been scoped as the proposed project comprises a residential development in a built-up area and the site does not have any intrinsic tourism value and is not in proximity to any important tourism or amenity resources.

The appraisal of the likely significant effects of the proposed development on population and human health was conducted by reviewing the current socio-economic environment in the EIAR study area. This comprised site visits and visual assessments of the proposed site and the surrounding area, as well as an analysis of aerial photography and Ordnance Survey (OS) mapping.

Information was gathered with respect to the demographic and employment characteristics of the resident population within the relevant catchment area, sourced from the 2011 and 2016 Censuses. At the time of writing, the full 2022 census data was not available and therefore could not be used to inform this chapter. The data included information on population, structure, age profile and household size, number of persons at work, and the unemployment profile. A desktop survey of the following documents and websites also informed this:

- Westmeath County Development Plan 2021-2027
- Mullingar Local Area Plan 2014-2020 (as extended)
- Central Statistics Office (CSO) website
- Department of Education website

Consultations with both the local authority and statutory bodies were also used to ensure that environmental issues, including socio-economic, recreational and amenity issues relating to the proposed development were addressed. Further information on the consultation process and responses received is provided in Appendix 1.1.

Westmeath Childcare Committee were also consulted in relation to the existing childcare capacity in the area. Phone surveys were completed with the primary and post-primary schools in Mullingar to determine their capacity.

4.4.3 Study Area

The Study Area for the assessment of potential impacts on Population and Human Health includes 3 no. Electoral Divisions (EDs) of Mullingar Rural, Mullingar Urban North, and Mullingar Urban South.

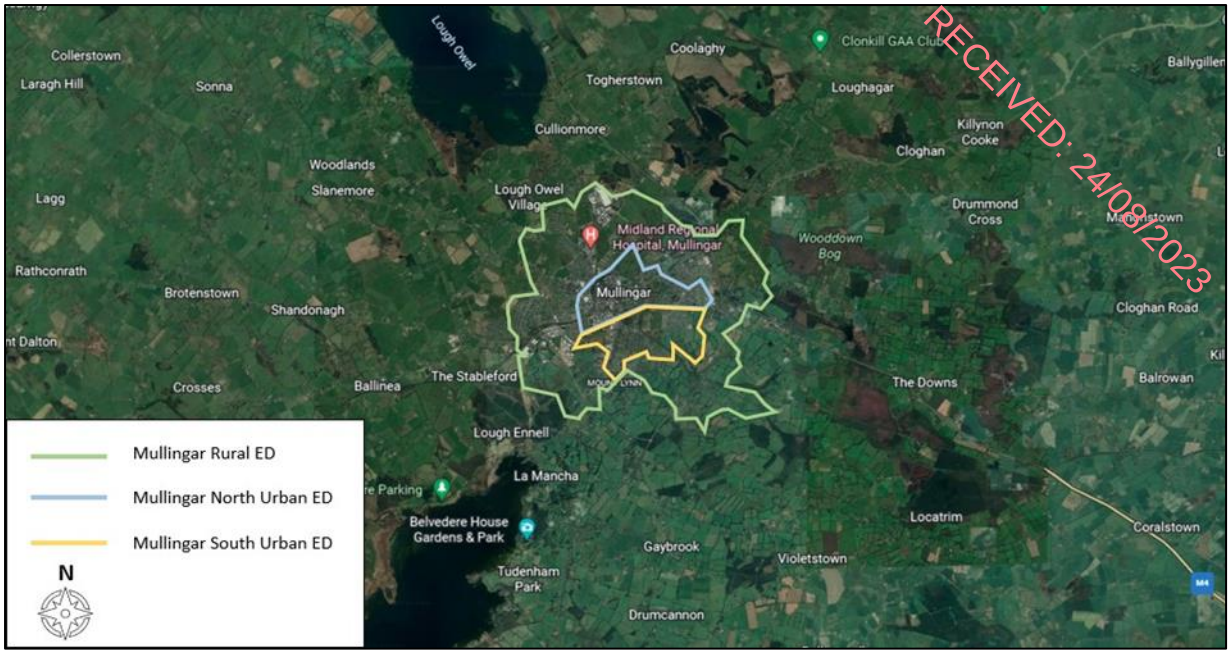

Figure 4.1 Study Area including Mullingar Rural ED, Mullingar North Urban ED, and Mullingar South Urban ED

4.4.4 Site Surveys/Investigation

The appraisal of the likely significant effects of the proposed development on population and human health was conducted by reviewing the current socio-economic environment in the EIAR study area. This comprised site visits and visual assessments of the proposed site and the surrounding area, as well as an analysis of aerial photography and Ordnance Survey (OS) mapping.

Information was gathered with respect to the demographic and employment characteristics of the resident population within the relevant catchment area, sourced from the 2011 and 2016 Census date. At the time of writing, the 2022 census data was not available. The data included information on population, age profile, household size, number of persons at work, and the unemployment profile. A desktop study of the following documents and websites was also undertaken:

- Westmeath County Development Plan 2021-2017
- Mullingar Local Area Plan 2014-2020 (as extended)
- Central Statistics Office (CSO)
- Department of Education

4.5 Difficulties Encountered

No significant difficulties were encountered in accessing information during the preparation of this chapter. However, the 2022 CSO Census Data was not available when completing this chapter. As a result, the demographic analysis has relied on the 2016 CSO Census Data.

4.6 Baseline Environment

The following provides a description of the receiving environment, with a focus on demography, land use and local amenity. The assessment of the effects on population and human health refers to those environmental topics under which human health effects may occur (e.g. noise, water quality, air quality, etc). Specific sections of this EIAR provide the baseline scenario relevant to the environmental effect being assessed.

4.6.1 Demography

Mullingar is a principal town in County Westmeath located within an hour's drive of the greater Dublin Area, Dublin Airport, and Dublin Port. This provides accessibility to city services for Mullingar residents, and further justifies the classification for Mullingar as a Key Town in the Westmeath County Council's Development Plan 2021-2027 (CDP). Under the CDP, a Key Town is classified as a:

> *Large economically active service and/or county towns that provide employment for their surrounding areas and with high-quality transport links and the capacity to act as growth drivers to compliment the Regional Growth Centres.*

As noted in the CDP, the Dublin-Sligo Railway Line serves the Mullingar. Mullingar also has access to the Galway to Dublin National Cycle Network (NCN) that is located along the existing Royal Canal greenway to Mullingar and connects to the Old Rail Trail that leads to Athlone. Further, the identification of Mullingar as a Key Town is reinstated in the Mullingar Local Area Plan 2014 – 2020 as this designation signifies the importance of ensuring accessibility through national and international connectivity, and strong business cores.

Therefore, the three Mullingar EDs provide an important contribution to County Westmeath as a whole, as it ensures a balance of development while providing sufficient infrastructure that provides connectivity and accessibility to Dublin City and the Greater Dublin Area. The Westmeath CDP notes under objective CPO 2.5 that its Core Strategy is to '*support the continued growth and sustainable development of Mullingar to act as a growth driver in the region and to fulfil its role as a Key Town in accordance with the principles and policies of the RSES'*.

4.6.2 Population

The Population and Labour Force Projection 2017 – 2051 Report released by the CSO in 2018 identifies that Ireland's population is projected to grow substantially by 2051. This growth is expected to occur from a population of 4.74 million in April 2016 to 6.69 million by 2051. Population growth will be influenced by inward migration and fertility, but even in the case of low inward migration and declining fertility, Ireland's population is still expected to reach at least 5.58 million in 2051.

The National Planning Framework (NPF) 2040 notes that the location of Westmeath and its relationship to Dublin has resulted in the county experiencing substantial growth. The NPF also notes that the Midlands is strategically important, as it's a central location in Ireland that can benefit from strategic investment that is supported by sustainable population growth, infrastructure, and economy. According to Westmeath County Development Plan 2021 – 2027, the population in

Mullingar is expected to increase by 24% between 2016 – 2027. Therefore, is its to be expected that the town will reach a total population of 26,003 by 2027.

Electoral Divisions (EDs) are the smallest legally defined administrative areas in the State for which Small Area Population Statistics (SAPS) are published from the Census. There are 3,440 legally defined EDs in the Irish State. For this assessment, statistical analysis and assessment will encompass the 3 no. of Electoral Divisions (ED) that are within Mullingar. These include Mullingar Rural ED, Mullingar North Urban ED, and Mullingar South Urban ED. The 3 Phase area is located within the ED of Mullingar Rural, however, the site is highly influenced by the demographics and trends that exist in Mullingar North and South (refer to Figure 4.1).

The Regional Spatial Economic Strategy (RSES) for the Eastern and Midland Region notes that although the Eastern and Midland Region is the smallest in terms of land area, it is the largest in population while acting as the primary economic region in Ireland. More specifically, the RSES notes Mullingar's role in providing the key employment hubs within its own hinterland. Further, the RSES notes that:

> *The provision of housing plays a fundamental role in the overall economic, social, and environmental success of the settlement. It is essential to ensure an effective supply of land for the provision of housing and that high quality development is secured in the right place at the right time. A range of well-designed housing types that meet the needs of a variety of households will help to sustain and enhance the settlement, contributing to the creation of a high-quality space.*

In The Mullingar Town Local Area Plan 2014 – 2020 identifies that there will be significant population growth in Mullingar and Westmeath as a whole. Mullingar is anticipated to experience a significant increase in population from 20,153 in 2016 to 26,003 in 2027. Therefore, the projected housing need that is expected in Mullingar in tandem with its projected population growth. According to the figures provided in the Westmeath County Development Plan 2021 – 2027, the Mullingar Town Local Area Plan 2014 – 2020, as well as the associated Census, calculations reveal that in order to cater to such rapid growth, an additional 2,974 residential units in total will be required to meet this population projection.

Table 4.1 Housing Requirement and Population Projection for Mullingar EDs

Area	2027 Population Target	Housing Requirement	New Housing Units Required	New Housing Requirements (ha)	Net Residential Area Zoned Land (ha)	Existing Household Yield
Mullingar North, South and Rural	26,003	729	4,471	193	207	1,497

4.6.3 Household Size

All of the Mullingar EDs recorded a total population of 20,928 in 2016. This is an increase of 3.8% from 2011 (i.e. 20,153 persons) and a 13% increase from 2006 (i.e. 18,416 persons). With regard to household size, an average of 2.9 was identified in Mullingar Rural ED, 2.5 in the North Urban ED, and 2.3 in the South Urban ED. When all EDs are combined, an average household size is 2.6 for all of

Mullingar Town. These figures are below both Westmeath County's average household size of 2.76 as well as the State's at 2.75. These figures reveal that the opportunity to accommodate for residential development that is allocated towards families and starter housing.

Table 4.2 Average Household Size in 2016

Area	Households	Persons	Average Household Size
Mullingar Rural ED	3,614	10,964	2.9
Mullingar North Urban ED	2,178	5,461	2.5
Mullingar South Urban ED	1,870	4,373	2.3
All 3 EDs	7,662	20,528	2.6
Westmeath County	31,813	87,887	2.76
State	1,702,289	4,676,648	2.75

It is important to note that the household figures are based on those persons who are considered as usual residents in Mullingar. This excludes visitors on census night, but the figures include people who were elsewhere in Ireland on Census Night but stated their place of usual residence is Ireland. This figure also excludes caravan and is only expressed as permanent private housing units.

4.6.4 Household Type

When considering all three Mullingar EDs, the 2016 Census found that 8.9% of the population were of preschool age (0-4) within the Mullingar Rural ED, 8.1% were in this category in the Mullingar North Urban, and 8.6% of the population in the Mullingar South Urban ED respectively. When all three EDs are amalgamated, a total of 8.6% of the population is of pre-school age. This is slightly higher than the figures identified in County-wide (7.2%) and across the State (6.9%).

The cohort identified as primary school children age is classified by ages 5-12 years, where this age group encompasses 14.0% of the Rural Electoral Division, 11.7% in the North Urban ED, as well as 7% of the South Urban ED. In total, this age group encompasses 12.8% of all 3 no. EDs in Mullingar, which is higher than the Westmeath and state average of average of 10.2% .

The post-primary age groups, ages 13-18, encompasses 9.2% of the population in the Rural ED, 7.5% in the North Urban ED, and 3.9% in the South Urban ED. In total, 7.8% of this age group are present in all 3 no. EDs. In all of Westmeath County, 7.2% of the population fall within this age group, which is slightly lower than the EDs and the state percentage of 9.2%.

There are 38.0% of adults (age 19-44) in the Rural ED and 38.7% of this age group in the North Urban ED. The percentage of residents in this age bracket for the South Urban ED are 31.8%. In total, 38.7% of the population in all 3 no. EDs are in this age bracket, which is generally consistent with Westmeath's figure at 35.0%. Further, all 3 no. EDs encompass a population percentage of 21.2% and is slightly lower than Westmeath's average of 24.2% of the county population.

The aging population, classified through age group 65+, represents 8.7% of the population in the Rural Urban ED, 12.4% of the North Urban ED, and 11.0% of the South Urban ED. Overall, about 10.2% of

the population in all 3 no. EDs are within this age cohort. This is slightly lower than Westmeath County at 12.8% as well as the state average of 13.4%.

Table 4.3 Demographic Breakdown of Age in All Mullingar EDs, Westmeath County, and the State, based on the 2016 Census.

Area	Age 0-4	Age 5-12	Age 13-18	Age 19-44	Age 45-64	Age 65+	Total
Mullingar Rural ED	966	1,514	996	4,103	2,259	945	10,783
% Total	8.9%	14.0%	9.2%	38.0%	20.9%	8.7%	100%
Mullingar North Urban ED	460	658	423	2,172	1,201	696	5,610
% Total	8.1%	11.7%	7.5%	38.7%	21.4%	12.4%	100%
Mullingar South Urban ED	381	398	220	1,787	967	489	4,422
% Total	8.6%	7.0%	3.9%	31.8%	17.2%	11.0%	100%
Westmeath County	6,464	9,123	6,445	31,152	21,526	11,370	88,770
% Total	7.2%	10.2%	7.2%	35.0%	24.2%	12.8%	100%
State	331,515	484,368	435,913	990,618	1,881,884	637,567	4,761,865
% Total	6.9%	10.2%	9.2%	20.8%	39.5%	13.4%	100%

4.6.5 Travel Trends

The demographic analysis of travel trends, as outlined in Table 4.4, indicate that the majority of people commute locally within all 3 no. EDs and other employment centres within 15 mins of the immediate area. It is noted that a total of 65.7% of the residents in all three EDs travel up to a ½ hour.

Table 4.4 Journey Time to Work, School, or College of Population Aged 5 Years and Over for all Mullingar EDs. Source: Census 2016

	Mullingar Rural		Mullingar North Urban		Mullingar South Urban	
Under 15 Min	3,040	43.2%	1,225	42.7%	1,075	42.6%
¼ hour – under ½ hour	1,520	21.6%	744	25.9%	561	22.2%
½ hour – under ¾ hour	739	10.5%	261	9.1%	266	10.5%
¾ hour – under 1 hour	327	4.64%	97	3.3%	123	4.8%
1 hour - 1 ½ hours	538	7.6%	152	5.3%	183	7.2%
1 ½ hours and over	353	5.0%	104	3.6%	124	4.9%
Not Stated	516	7.3%	282	9.8%	191	7.5%
Total	7,033	100%	2,865	100%	2,523	100%

This reveals that Mullingar provides access to sufficient services, employment, and amenities within the town, as most residents can access such amenities within a ½ hour time frame. The settlement's

position as an important residential base for workers and families within the three EDs is further reinforced when considering the level of aging population (65 years and over) is just 10.2%, which is lower than those for the County 12.8% and State (13.4%).

4.6.6 Tenure

Regarding tenure, 65.2% of residents in Mullingar Rural ED own their own home and 31.2% rent accommodation. The North ED presents a rent rate of 52.1% followed by an ownership rate of 44.1%. The Mullingar South ED has a total rent rate of 39.6% with an ownership rate of 56.6%. In reference to the table below, there is a total of 38% of rented accommodation and 58% of owner-occupied accommodation when all EDs are applied. The rented accommodation figures are above than that of the state, where 27.6% of households are renting as well as the county figures, where 26.7% of Westmeath are renting accommodation. However, the overall ED figures for owner occupied accommodation are slightly higher than that of the state (67.6%) at 68.7%.

It is noted that the table below does not account for households that are occupied free of rent and in addition, a small proportion of household did not state their tenure in the census.

This reveals that the majority of the residents in all Mullingar EDs own their home, which suggests that there are a high proportion of families buying homes within the town.

Table 4.5 Demographic Breakdown of Household Tenures. Source: Census 2016

	Total Households	Rented	Owned
Mullingar Rural ED	3,605	1063	2407
% total households	100%	29.5%	66.8%
Mullingar North Urban	2,178	1,136	961
% total households	100%	52.1%	44.1%
Mullingar South Urban	1,869	741	1,058
% total households	100%	39.6%	56.6%
Westmeath County	31,685	8,473	21,915
% total households	100%	26.7%	69.1%
State	1,697,665	469,671	1,147,522
% total households	100%	27.6%	67.6%

As referenced in the table below, the level of dwelling vacancy when all EDs are considered is 8.7% which is slightly below the county and state averages. This suggests that it is likely that residential demand is high, and that Mullingar is an attractive place to live long-term.

Table 4.6 Vacancy Levels. Source: Census 2016

	Total Permanent Dwellings	Vacant Dwellings	% Vacant Dwellings
Mullingar Rural ED	3,962	240	6.0%
Mullingar North Urban	2,507	267	10.6%
Mullingar South Urban	2,200	250	11.3%

	Total Permanent Dwellings	Vacant Dwellings	% Vacant Dwellings
Westmeath County	36,890	3,728	10.1%
State	2,003,645	183,312	9.1%

4.6.7 Economic Activity

As noted, Mullingar is located within County Westmeath and is designated as a Key Town. It is an objective within the RSES as well as the Westmeath County Development Plan 2021 – 2027 to accommodate for Mullingar's rapid population growth through residential development, as such development sustains Mullingar's role as an employment hub.

The CSO releases quarterly publications on labour force estimates for the state (Table 4.7).

The Labour Force Survey (LFS) is the official source of labour market statistics for Ireland. It includes the official rates of employment and unemployment, which are based on International Labour Organisation (ILO) Concepts and definitions.

Table 4.7 Labour force estimates. Source: Census 2016

Indicator	Q1 2023	Annual Change
Employed persons aged 15-89	2,608,500	+102,700
Employment Rate for those aged 15-64 years	73.6%	+0.8 percentage point
Unemployed person aged 15-74 years	110,700	-16,000
Unemployment Rate for those aged 15-74 years	4.1%	-0.7 percentage point
In Labour Force	2,719,100	+86,600
Not In Labour Force	1,468,300	+37,300

This table demonstrates the growth in the economy and the increasing employment levels at a national level.

4.6.8 Employment

The 2016 labour force participation figures for Westmeath County show a decline in employment and a slight increase of participation in the labour force, as can be expected due to the start of a period of economic recovery.

Table 4.8 Labour Force Participation Rate

Area	Factor	2011	2016
Westmeath County	Labour Force Participation Rate (%)	60.2%	60.8%
	Unemployment Rate (%)	19.4%	14.2%
State	Labour Force Participation Rate (%)	62.7%	61.6%
	Unemployment Rate (%)	14.8%	9.2%

According to the CSO data, the results are indicative of a growing economy that is recovery from the most recent downturn that was mainly caused by the Covid-19 pandemic.

4.6.9 Land Use and Amenity

Due to Mullingar's location within the Midlands Area, the town is close to many significant waterbodies and supports a range of diverse habitats and species. The most prominent area that is home to many of the significant flora and fauna include the Royal Canal and its canal corridors, the River Brosna, the railway corridors, and the Town Park. The River Brosna is 0.6km from the subject site and flows through Mullingar Town prior to discharging to Lough Ennell about 3.6 km south of the subject site. According to the Appropriate Assessment Screening Report by Enviroguide, Lough Ennel was assigned Water Framework Directive (WFD) status of 'Good' and the waterbody is deemed to be not at risk. The same status is classified for The Royal Canal Main line. It is important to note that there are various trees that are under a Tree Preservation Order. Due to Mullingar's presence along the Royal Canal in the study area, the Canal is located within 1.6 km from the subject site.

It is important to note that the proposed development site is not located within any European Site and there is no direct loss of habitat due to the development of the proposed scheme. Further, the site is not used by species that are listed as a Special Conservation Interests for the relevant Special Protection Area (SPA). Further, there are no Natural Heritage Areas (NHAs) are within or near the proposed development site, however, the nearest Proposed NHA (pNHA) is the Royal Canal. The proposed development does not create any impact on this pNHA. In total, there are 6 no. Special Areas of Conservation (SACs), 5 no. SPAs, 6 no. pNHAs and one NHA located within the 'precautionary zone of influence' of the proposed site. Based on the Ecological Impact Assessment conducted by Enviroguide, it is probable that the proposed development will not have a significant effect on any European sites.

4.7 Characteristics of the Proposed Development

The proposed development site is located within the townland of Rathgowan within the development boundary of the town of Mullingar. The site is located to the northwest of the town centre. It is located south of the R394 which connects to the N4 to the north and N52 to the south. The site is accessible via the existing entrance of the roundabout on the R394 which is located at the southwest corner of the site.

The proposed development consists of Phase 1 and 2 of a larger masterplan area. Phase 3 was permitted under the LRD process to the northwest of the site (reference: 22/515). The proposed application (phase 1 and 2) will provide 181 no. residential units. The permitted phase 3 development provides an additional 213 no. residential units and a creche. Overall, the masterplan area will provide a total of 394 no. residential units. The creche permitted in phase 3 was designed to cater for the overall masterplan area.

A full detailed description is provided in Chapter 2.

The area has a number of local services located within proximity of the site including schools, creches and medical facilities. A number of convenience stores are also located within a 5-kilometre radius of the site.

The proposed development will function as a natural extension to the town by consolidating development in the area and ensuring the retention of a compact settlement.

4.8 Identification of Principal Potential Receptors

In identifying potential impacts and receptors, consideration was given to the proposed residential scheme and the identified receiving environment. The principal potential receptors that will be affected by the development proposals have been identified in the following sections.

- Residential Areas in Proximity
- Community Facilities and Services, including schools and creches.
- Local Amenity
- Economic Activities

4.8.1 Residential Areas in Proximity

There are several existing residents surrounding the proposed site which have the potential to be impacted by the development, specifically the residents of:

- Existing Ashfield estate to north and east of the subject site.
- Raithín estate to south
- 12 no. existing dwellings to west of site, along R393.
- Existing dwelling to south of site, accessed off Ashe Road.

4.8.2 Community Facilities and Services

Mullingar has an abundance of community facilities and services within the town centre which are identified as potential receptors. Such services include pharmacies, post offices, dentists, banks, gyms, sport playing pitches, a community centre, as well as a selection of local convenience/comparison retail stores.

With regard to childcare facilities, a total number of 22 childcare facilities were identified within a 10-minute (drive) time of the EIAR study area. The closest childcare facilities to the proposed development includes Precious Angels Pre-School (277m south of the proposed development) and the Grange Community Childcare (553km east of the proposed development). A neighbourhood creche was permitted as part of the Phase 3 development to the northwest of the subject site.

It is important to note that the travel times and distance were determined based on the distance and average journey times from Google Maps.

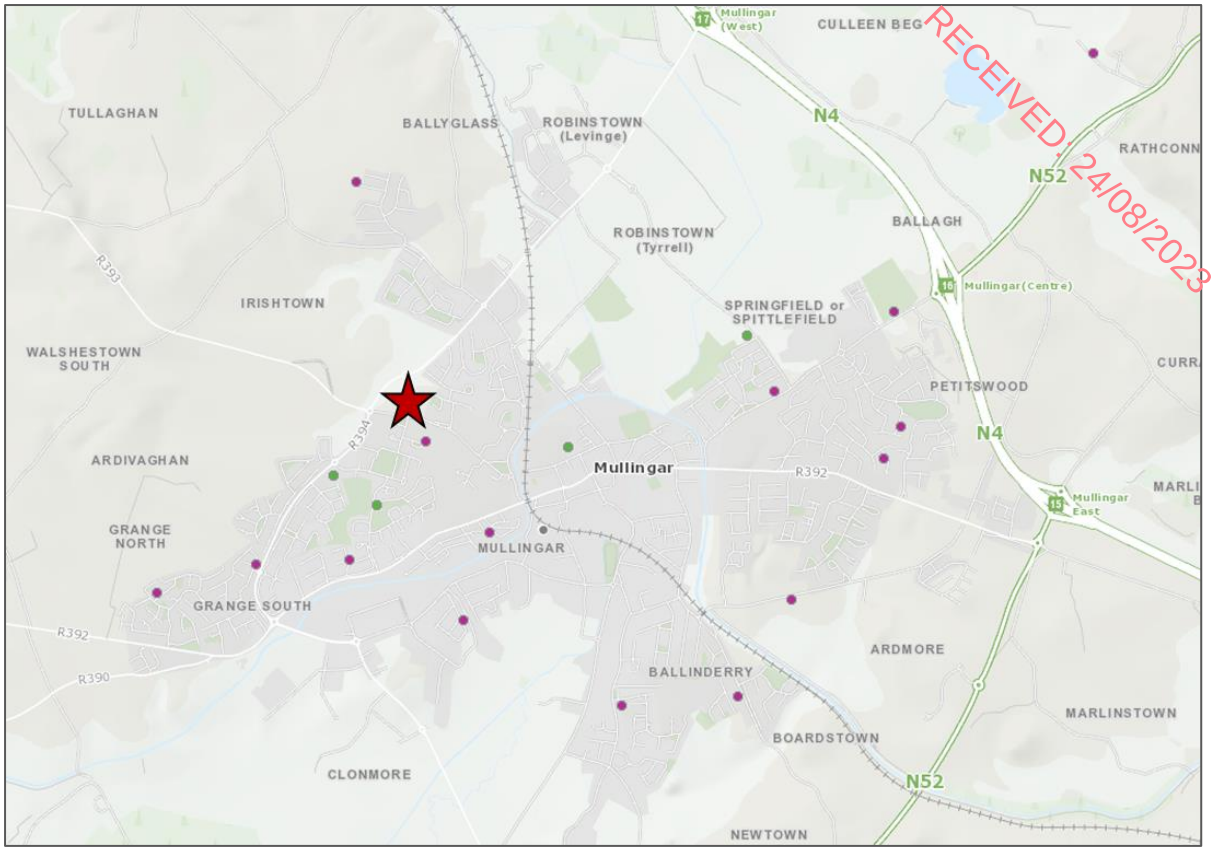

Figure 4.2 Location of Childcare Facilities in relation to Subject Site (indicated by red star).

Table 4.9 List of Childcare Facilities within 5km of the Subject Site.

No.	Childcare Facility	Distance	Walk	Cycle	Drive
1.	Precious Angels Pre-School (Marian Corbett & Valja McCabe Pre-School)	277m	4 min	2min	1min
2.	Grange Community Childcare	553m	13min	4min	4min
3.	Westmeath Community Development Ltd. (WCDL) Mullingar Afterschool – Rathgowan After School	582m	7min	2min	1min
4.	Réalta Beaga Childcare CLG	662m	11min	3min	4min
5.	Grovelands Childcare	913m	16min	5min	4min
6.	Women's Community Projects Associations	986m	21min	6min	4min
7.	Sunny Days Playschool	1km	17min	5min	4min
8.	Valecro EYS Limited (Step-by-Step)	1.25km	27min	8min	4min
9.	Green Park Montessori	1.3km	18min	5min	3min
10.	Scribbles & Giggles	1.32km	25min	7min	5min
11.	An Gairdin Scoil Montessori	1.8km	27min	7min	5min

No.	Childcare Facility	Distance	Walk	Cycle	Drive
12.	Dalton Community House (Laughs and Giggles Childcare)	2km	31min	8min	5min
13.	Sonas Montessori	2.15km	32min	9min	6min
14.	Belvedere Hills Nursery & Montessori	2.2km	34min	10min	6min
15.	Mullingar Montessori and Afterschool	2.55km	46min	14min	8min
16.	Mullingar Academy of Childcare and Education	2.62km	39min	11min	7min
17.	First Class Montessori	2.8km	40min	13min	9min
18.	Annie Apples	2.88km	50min	15min	7min
19.	Naionra An Muileann gCearr	2.93km	44min	12min	7min
20.	Bright Beginnings	4.46km	1hr26min	23min	9min

Mullingar is served by 11 no. primary schools, 4 no. post primary schools, and 2 no. special schools. All the primary schools are within 4km of the subject site, with 5 no. within 1km of the site. 3 no. primary schools are within a 11-minute walk from the site. All 4-no. post primary schools are located within 1.6km, and a 25minute walk, from the subject site. The two special schools – St. Brigid's Special School and Saplings Special School – are both within a 25minute walk from the subject site. The location of these schools is shown in Figure 4.3.

Figure 4.3 Locations of Schools within Mullingar

The following tables provide enrolment details for each school and outline the distance of each school from the subject site.

Table 4.10 List of Primary Schools in Mullingar

No	School Name	Distance	2021-2022 Enrolment	2022-2023 Enrolment
1.	Gaelscoil an Mhuilinn	114m	221	212
2.	Mullingar Educate Together	500m	393	391
3.	Scoil na mBraithre (St. Mary's)	775m	418	432
4.	Presentation Senior/Junior School	999m	290	274
5.	Scoil na Maighdine Mhuire	1km	324	321
6.	Rochfortbridge Convent Primary School	1.3km	228	233
7.	All Saints National School	1.3km	86	85
8.	Gaelscoil An Choillin	1.7km	87	102
9.	St. Coleman's National School	2km	471	467
10.	St. Kenny National School	3,2km	231	227
11.	Holy Family Primary School	2.9km	400	435

Table 4.11 Distance of Primary Schools from Subject Site

School Name	Distance			
	Km	Walk	Cycle	Drive
Gaelscoil an Mhuilinn	114m	2min	1min	1min
Mullingar Educate Together	500m	6min	2min	1min
Scoil na mBraithre (St. Mary's)	775m	11min	3min	5min
Presentation Senior/Junior School	999m	19min	6min	4min
Scoil na Maighdine Mhuire	1km	19min	6min	4min
Rochfortbridge Convent Primary School	1.3km	19min	6min	6min
All Saints National School	1.3km	19min	6min	6min
Gaelscoil An Choillin	1.7km	26min	8min	6min
St. Coleman's National School	2km	30min	9min	6min
St. Kenny National School	3,2km	45min	11min	5min
Holy Family Primary School	2.9km	48min	14min	9min

Table 4.12 List of Post Primary Schools in Mullingar

No	School Name	Distance	2021-2022 Enrolment	2022-2023 Enrolment
1.	Loreto College	750m	876	858
2.	Coláiste Mhuire	770m	794	837
3.	St. Finian's College	1km	839	838
4.	Mullingar Community College	1.6km	309	333

Table 4.13 Distance of Post Primary Schools from Subject Site

School Name	Distance			
	Km	Walk	Cycle	Drive
Loreto College	750m	19min	5min	3min
Coláiste Mhuire	770m	12min	3min	5min
St. Finian's College	1km	18min	5min	3min
Mullingar Community College	1.6km	25min	7min	7min

Table 4.14 List of Special Schools in Mullingar

No	School Name	Distance	2021-2022 Enrolment	2022-2023 Enrolment
1.	St Brigid's Special School	893m	83	83
2.	Saplings Special School	1.6km	36	36

Table 4.15 Distance of Special Schools from Subject Site

School Name	Distance			
	Km	Walk	Cycle	Drive
St Brigid's Special School	893m	21min	6min	4min
Saplings Special School	1.6km	24min	7min	6min

4.8.3 Local Amenity

Mullingar benefits from a strong network of community groups, clubs, and societies. The development is considered and designed to improve and protect the existing residential amenities by providing a series of open space play areas and a neighbourhood creche. Mullingar's town centre is distinctive, as it encompasses a strong town character with a unique setting, history, and community spirit as noted in the Westmeath County Development Plan 2021 - 2027. There is a total of 56 no. protected structures and 319 no. are recorded on the National Inventory of Architectural Heritage (NIAH) within or in close proximity to Mullingar, as the town contains a number of archaeological monuments that obtain historical significance. There are no protected structures or national monuments located on

the subject site. The proposed development will not have any impact on any national monuments or protected structures.

There are various recreational facilities and public realm interventions that occur mainly within Mullingar Town, approximately 2 km from the subject site. This includes the Táin Trail and the Westmeath Way within the town. It is an objective of the Mullingar Local Area Plan to enhance connectivity in the town in a sustainable manner, which is reflected in the proposed cycleway/walkway trail in the scheme. Mullingar also has a series of parks and sporting facilities such as Cusack Park, greyhound Track, as well as St. Loman's GAA grounds.

4.8.4 Economic Activities

Owners and employees of other commercial activities may be impacted by the proposed development i.e. local business owners, industries, and adjacent farms. Consideration is given under economic activity to the potential impact on other neighbouring commercial activities.

It is important to note that an increase of tourism is not expected from the proposed development and does not hinder on any existing tourism areas such as The Old Rail Trail Greenway and the Belvedere House Gardens and Park.

4.8.5 Temporary Receptors

In relation to temporary receptors, the proposed development is adjacent to the R394 and Ashe Road. Due to the topography of the EIAR study area and the surrounding land uses, there will be minimal natural screening of the proposed development while under construction. However, it is expected that there will be a neutral impact on passing drivers in terms of safety and accessibility. Potential impacts are thoroughly assessed in Chapter 9 Landscape and Visual Impact Assessment.

4.9 The 'Do Nothing' Scenario

If the development were not to proceed there would be no immediate impact on the existing population, economic activity, or community services and facilities in the town. However, if the development does not occur there will be a shortfall in housing supply in the area which may negatively impact the continued sustainable growth of the town.

The site is zoned as 'Proposed Residential' within the Mullingar Local Area Plan 2014-2020 (as extended). Due to the nature of the proposed development, the consideration of alternative sites is not necessary. The consideration of an alternative site would equate to a 'do-nothing' scenario, which in turn means the site will not be developed in accordance with its allocated zoning.

Both the Westmeath County Development Plan and the Mullingar Local Area Plan note the importance of prioritising town growth in a sustainable manner, where it is an objective in both plans to promote sustainable connectivity and modes of transportation. Therefore, the provision of additional housing within the town boundary will support compact growth and sustainable transport. If the 'do nothing scenario' is applied and the development is not implemented, there will be a lack of sustainable connections within the northwest of Mullingar Town, where residents will depend on a car to access the amenities, institutions, and services in the immediate area.

4.10 Potential Significant Effects

4.10.1 Construction Phase

General construction activities and excavations may give rise to emissions to air or surface water and may generate noise and vibration. The details of the construction phase of the project are provided in in the Preliminary Construction and Environmental Management Plan (CEMP) by Tobins Consulting Engineers (Appendix 13.2). To summarise, the development will be constructed and expected to be completed within 24 months in duration with each phase taking 18 months to complete. As this is as estimation, the construction of both phases is expected to overlap to be completed within the 2 year period.

Phase 3 of the development consists of the construction of 213 no. residential units, 1 no. neighbourhood creche and all associated ancillary development. Phases 1 and 2 will comprise 181 no. residential units and all ancillary development works.

The construction of the permitted Phase 3 development has commenced and is expected to be completed by Q4 2024. It is intended to begin construction of Phase 1 and Phase 2 in Q3 2024, assuming receipt of a final grant in Q1 2024. The expected hours of construction works will commence from 8:00 am to 18:00 from Monday to Friday (excluding bank holidays), and from 8:00 to 14:00 on Saturdays. For more information, please refer to the Preliminary Construction Environmental Management Plan prepared by Tobin Consulting Engineers.

4.10.1.1 Population and Settlement Pattern

The construction of this project will be short term and is not likely to result in any significant changes to the population and settlement patterns. Generally, the potential impacts arising during the construction phase relate to short term impacts to quality of life, including visual impact/amenity, noise, air quality, and transport. Where relevant, these impacts have been considered in the relevant chapters of the EIAR and will be minimised or mitigated where appropriate. It is unlikely that these impacts will be of a scale to either encourage people to move from the area or discourage people from moving to the area. No significant impacts are anticipated as a result of the construction phase of the development. The construction phase of the project is estimated to take 24 months and is not likely to result in any changes to the population and settlement patterns.

4.10.1.2 Economic Activity

The construction phase is anticipated to result in a temporary boost to the local economy as workers employed at the site can be expected to make use of local retail facilities and other services. If the application is successful, construction works will continue until the final phase of the development is completed by 2025. Approximately 5 - 100 workers will be employed on site for up to 2 years, and there will be indirect benefits to other industries as a result of demand for construction materials and services. The loss of the agricultural lands is anticipated to have a neutral effect as the lands were under the ownership of the applicant who is a residential developer and not engaged in farming.

It is anticipated that the construction phase of the project will result in likely positive short term moderate effects locally and within the wider Mullingar area.

4.10.1.3 Land Use and Amenity

The project is in accordance with the statutory zoning objective. There will be no severance of lands or loss of rights of way as a result of the proposed development. In general, the construction phase impacts on local amenity and receptors identified in proximity will be mainly related to noise, air quality and traffic. These are dealt with in the relevant chapters of this EIAR.

Potential impacts will mainly relate to noise from construction plant to traffic and perception of visual changes associated with the removal of trees and hedgerows and emerging plant and machinery.

Potential impacts from construction traffic are considered in Chapter 12 Material Assets: Traffic and Transport. An Outline Construction Traffic Management Plan (OCTMP) has been prepared by Tobin Consulting Engineers and will be implemented to avoid negative impacts by restricting the majority of HGV movements to local roads at off peak times and implement delivery of materials on site to avoid peak traffic periods. Please see the OCTMP and CEMP by Tobin Consulting Engineers for more information.

It is expected that the construction schedule is likely to have a maximum of 20 HGV movements into and leaving the site per day on average. It is estimate that 35 – 50 site operatives will be employed during construction works, increasing to 75-130 per day as construction nears completion. Please refer to Chapter 12 Material Assets Traffic and Transport for further details.

If the permitted Phase 3 development is occupied while the proposed phases 1 and 2 are under construction there may be short term impacts as a result of construction traffic, however given that development of the site will be on-going for approximately 2 years before the final phase is complete, residents can be expected to become somewhat habituated to background levels of traffic and disturbance. In general, the impact of construction traffic is assessed as moderate negative, but short term.

The assessment of potential impacts of noise and vibration is presented in Chapter 9. No impacts from vibration are anticipated. In general, the noise impact associated with the construction phase is to be temporary only and will be limited to agreed construction hours and limited beyond these hours as far as possible. The assessment identified that during construction the chief source of noise emissions will be from plant used onsite. Overall, the impacts from the Phase 1 and 2 construction phase will be slight to moderate, localized, and short term in duration.

4.10.1.4 Health

As with any construction site, there will be potential risks to the health and safety in terms of injury or death of construction personnel on-site due to the usage of large, mobile machinery as well as heavy equipment and materials. Proposed mitigation measures are outlined in the preliminary Construction and Environmental Management Plan, and in Chapter 9 Noise and Vibration to manage construction activities and traffic movements as well as limiting noise and disturbance.

Chapter 7 Air Quality identified that the greatest potential impact on air quality during the construction phase is from construction dust emissions and the potential nuisance dust, with potential for significant dust soiling 15m from the source. A number of mitigation measures are proposed and

following implementation of these measures potential significant impacts are unlikely and any effects will be negative, short-term and imperceptible with respect to human health.

The site will be made secure, and the public will be separated from the site by means of fencing and hoarding. All site facilities will be contained within the site area. The main entrance gate will be controlled by site personnel (gateman) for deliveries. Site Lighting and Camera security system may be used to secure the site in and out of hour times, and any proposed site lighting will be set up with consideration for adjoining properties.

A temporary construction compound will be established for each phase of the development and situated and secured to ensure safety of the public and construction workers.

Following implementation of these measures the construction phase of the project adverse effects will be unlikely, neutral, and short term.

4.10.2 Operational Phase

Due to the nature of the development, there will be few hazards associated with the operational phase of the project and therefore no potential significant negative impact in terms of health and safety.

The assessment of potential impacts of the fully built out Masterplan area (which assumes all 3 phases are built and occupied) are assessed in Section 4.10.3 Cumulative Impacts.

4.10.2.1 Population and Settlement Pattern

The proposed development is in line with the statutory land use zoning and will provide 181 no. residential units. The overall masterplan area (current proposal and the permitted phase 3 development) will provide a total of 394 no. residential units and a creche.

Based on the national average household size of 2.75 persons, the masterplan area will provide a population of c. 1,084 no. people. The demographic analysis demonstrates that 8.9% of the local area's population were aged 0-4, 12.8% were of primary school age, and 9.2% were of post primary school age in the 2016 census. Based on this, the proposed masterplan area is expected to provide c. 97 no. children aged 0-4, 139 no. primary school aged children, and 100 no. post primary school aged children.

4.10.2.2 Economic Activity

There will be an economic benefit to local business during operation. Residents will use local facilities and services, and it is anticipated that the additional population will result in increased business for the wider community and Mullingar, and will have a positive, slight, long-term impact on the services including dentist clinics, pharmacies, banks, and various retail outlets.

4.10.2.3 Land Use and Amenity

The proposed development is in line with the specific site-zoning objective for residential development (refer to Chapter 2 on the Project Description) and will consist principally of residential units and open space amenities for both the development and the wider community. This development will facilitate an appropriate, sustainable settlement pattern which will accommodate

residential, community, leisure and recreational facilities to satisfactorily match the anticipated level of population growth and household generation.

Community facilities identified the Social Infrastructure Audit Report prepared by McCutcheon Halley Planning Consultants are expected to benefit from the increased population in particular clubs and community centres, gyms as well as local services. Any potential impacts are anticipated to be long term, neutral and not significant.

4.10.2.4 Health

The baseline data for Mullingar indicates the at the general population is in good health. The proposed development will not result in any significant negative impacts to the health and wellbeing of the existing population. In particular, the design of the scheme ensures that both the current and future residents of the local environ will benefit from the proposed amenities.

The operational phase of the proposed development, in terms of recreation and amenity facilities will have a long term, moderate positive impact on the health and wellbeing of future residents and residents in the surrounding area who may make use of amenity spaces.

The development has been designed to incorporate the principles of Universal Design, to provide appropriate choice of accommodation to residents with diverse abilities and ages. A Design Statement has been prepared by John Fleming Architects which provides insight into the design concept. Overall, the design of the site can be accessed, understood, and used by the widest possible extent of people, regardless of their age, size, or ability. This includes all house types as well as the external spaces, pedestrian and cycle routes, as well as internal roadways within the site.

Potential impacts on population and human health as a result of the operational noise and vibration are assessed in Chapter 9.

4.10.2.5 Daylight and Sunlight Assessment

A Daylight, Sunlight, and Overshadowing Report has been prepared and submitted with this application which concludes that the proposed residential development achieves the best practice guidelines in relation to daylight, sunlight, and overshadowing.

4.10.2.6 Risk of Major Accidents and Disasters

The potential major risks and disasters as a result of the proposed development has been assessed and the findings are presented in Chapter 18 of this EIAR and by other disciplines within this EIAR. No risk of major accidents and disasters has been identified.

The proposed development comprises the construction of terraced and semi-detached houses, maisonettes, and apartments in a greenfield area at the northwest corner of Mullingar town. There are no sites in proximity which are subject to The Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015. A desktop study of the flood history at the Site was carried out in the Civil Engineering documents prepared by Tobin Consulting Engineers. According to the Office of Public Works (OPW), the proposed development site is not located in any Flood Zones and has not experienced any past flooding events. The Flood Risk Assessment conducted by Tobin Consulting Engineers has determined that there is a minimal risk to flooding on the site. It is important

to note that the Justification Test does not need to be applied as the Flood Risk Assessment concluded that there is no imperative risk to flooding and is appropriately located in Flood Zone C. For further information, please refer to Chapter 2: Description of Alternatives, Chapter 14: Biodiversity, as well as Chapter 6: Hydrology and Hydrogeology.

4.10.3 Cumulative Impact

4.10.3.1 Construction

Overall, the construction phase for the entire site is anticipated to be 2 years. The phasing sequence is presented in the CEMP prepared by Tobin Consulting Engineers. Cumulative impacts such as visual impact/amenity, noise, traffic and air quality are anticipated cumulative impacts. However, it is important to note that this will be temporary and will only occur over the course of construction.

4.10.3.1.1 Population and Settlement Patters

Generally, the potential impacts arising during the construction phase relate to quality of life including visual impact / amenity, noise, air quality and transport. Where relevant, these impacts have been considered in the relevant chapters of the EIAR and will be minimised or mitigated where appropriate. It is unlikely that these impacts will be of a scale to either encourage people to move from the area or discourage people from moving to the area.

4.10.3.1.2 Economic Activity

A key positive characteristic of the development of the Masterplan (Phases 1-3) area relates to its potential economic impact. The construction phases will generate increased employment and capital spend on materials and services, which will benefit the local economy. In addition to direct employment, there will be substantial off-site employment and economic activity associated with the supply of construction materials and the provision of services such as professional firms supplying financial, architectural, engineering, legal and a range of other professional services to the project.

The impact of the construction phase will at least extend to the county in terms of the requirement for labour, goods and services. The effect will be significant, positive and short-term.

4.10.3.1.3 Land Use and Amenity

There are few permitted and proposed development in the vicinity of the EIAR study area which are in combination with the proposed development that may have cumulative impacts. The cumulative impacts related to the following projects have been considered where relevant, in the context of the human environment.

Table 4.16 Permitted and Proposed Development in Vicinity

Reference	Application Description	Comment
22/515 (Phase 3)	Permission for a Large-Scale Residential Development comprising of the construction of 213 no. residential units, 1 no. creche, 1 no. pumping station and all associated ancillary development works including 2 no. ESB sub-stations, footpaths, cycle lane, car and bicycle parking, drainage, bin storage, landscaping/amenity areas and the undergrounding of existing 38KV overhead electricity lines at Rathgowan, Mullingar, Co. Westmeath. Access will be via the existing roundabout on the R394 (C-Link). This development will form Phase 3 of a larger (three-phase) residential development at this location. A Natura Impact Statement (NIS) and Environmental Impact Assessment Report (EIAR) has been submitted to the planning authority with the application.	Westmeath County Council granted permission in December 2022 and a final grant was issued on the 19th January 2023 subject to 26 no. conditions.
20/6350	Permission for the development of a new car park 120 no. spaces to serve the HSE and Primary Care Centre at Harbour Road/Martins Lane, Robinstown (Tyrell), Mullingar, Co. Westmeath, a site of 0.623 hectares. The proposed development proposed the use of the extended access road permitted under WCC ref no. 17/6068 and LA (M)76 (Part 8) with an amended and deflected run to access the proposed car park across Martins Lane. The proposed development will comprise of the construction of a new access road and barrier-controlled car park with pedestrian links to the developed Primary Care Centre (reg. ref. 11/5040 and 17/6270) complementary soft and hard landscaping treatments, boundary treatments and all ancillary site services and above and below ground works.	After an amendment under ref. no. 22/10, Westmeath Co. Council granted permission with 8 no. conditions on 10th May 2022.
19/6121	Permission for the construction of 18 Apartment units in 2 Blocks (Block A&B). The proposed development will also consist of new site entrance, shared access road, footpaths, car parking spaces, boundary wall and fence, covered cycle rack, recycling bin storage area, public and private open spaces, partial removal and trimming of existing hedgerows to accommodate proposed site entrance, landscaping and all associated site works and services.	Westmeath Co. Council granted permission with 19 no. conditions on 22nd January 2020.

4.10.3.1.4 Health

Human health may be impacted on in a variety of ways and by several environmental receptors including water, biodiversity, climate, flooding, air, and major accidents, etc. Exposure to contaminants or pollutants can have serious implications for human health. Potential impacts on population and human health include inadequate water and wastewater infrastructure, contamination of soils, excessive noise, flooding due to non-control of surface water, poor air quality in areas where there are large volumes of traffic and the health impacts associated with the storage of hazardous materials during the construction stage. These issues are addressed within the relevant discipline of the EIAR.

The proposed development is predominantly residential in character, and it is considered that the greatest health and safety risks will be posed during the construction phase of the proposed development.

The construction activities will occur in the context of a greenfield site, and there are no existing residents on-site that may be disrupted by these works. A CEMP has been prepared by Tobins Consulting Engineers and includes measures to mitigate impact on the wider residential amenities of the area (see Appendix 13.2)

As with any construction site, there will be potential risks to the health and safety in terms of injury or death of construction personnel on-site due to the usage of large, mobile machinery as well as heavy equipment and materials. The CEMP has been prepared by Tobins Consulting Engineers (Appendix 13.2) includes measures to minimise these risks. This plan will be further updated by the contractor and agreed with the Council prior to commencement of any construction works on site.

Potential impacts on Air Quality are assessed in Chapter 7, which identified that the greatest potential impact on air quality during the construction phase of the proposed development is likely to occur as a result of construction dust emissions and the potential for nuisance dust and PM10/PM2.5 emissions. Overall, the assessment of potential impacts found that there any impacts to air quality during the construction phase are likely to be imperceptible, negative and short-term.

Mitigation measures are proposed to further reduce the possibility of impacts. A dust management plan has been prepared according to best practice guidance, to ensure that no significant nuisance occurs at nearby sensitive receptors. Please refer to Chapter 7 Air Quality.

There is the potential for a number of greenhouse gas emissions to the atmosphere during the construction of the development. Construction vehicles, generators etc., may give rise to CO_2 and N_2O emissions, however the impact on climate is considered to be imperceptible, neutral and short term.

Best practice mitigation measures are proposed for the construction phase of the proposed development which will focus on the pro-active control of dust and other air pollutants to minimise generation of emissions at source. The mitigation measures that will be put in place during construction of the proposed development will ensure that the impact of the development complies with all EU ambient air quality legislative limit values which are based on the protection of human health. Therefore, the impact of construction of the proposed development with mitigation measures in place is likely to be short-term, negative and imperceptible with respect to human health.

4.10.3.2 Operational

4.10.3.2.1 Population and Settlement Patters

Measures to avoid negative impacts on population and settlement patterns have been fully considered in the design of the project and are integrated into the final layout and design. Compliance with the layout and design will be a condition of the permitted development. As such, no mitigation measures are required as there is no expected change in settlement patterns outside of the development that will occur. The operational stage recognises that there will be an increase of population as a result of all three phases of the development. However, the nature of the phasing plan will ensure that the increase is gradual in order for residents in close proximity and in the surrounding

area of Mullingar can adjust to an increase of population change. Further, the phasing implementation will allow for the local planning authority to meet its housing targets and population objectives as noted in the Westmeath County Development Plan 2021-2027 in a gradual manner also.

4.10.3.2.2 Creche

The 2001 Childcare Facilities Guidelines recommend the provision of 20 no. childcare spaces for every 75 no. residential units. Based on this standard, the 394 no. residential units within the overall masterplan area would require 105 no. childcare spaces. However, it is noted that the one bed units are unlikely to require childcare spaces. There are 29 no. 1 bed units provided throughout the masterplan area and when these are excluded the remaining 365 no. units would require 97 no. childcare spaces.

Based on the demographic analysis, the overall masterplan area is expected to generate 97 no. children aged 0-4 (8.9% of the projected population). However, it is noted that only 19% of children are likely to require private childcare which suggests that only 19 no. children within the proposed development will require private childcare.

The permitted creche within Phase 3 can cater for 97 no. children and is therefore considered sufficient for the entire masterplan area.

4.10.3.2.3 Schools

The proposed development will result in a demand for school places at both primary and post-primary level which will accrue over the proposed 5-year delivery time. The overall masterplan area will provide 394 no. residential units, constructed in 3 phases. Based on an average household size of 2.75 it is estimated that the development will accommodate c.1,084 residents.

In 2020 the Department of Education and Skills published a report detailing future demographic trends that will impact the primary and post-primary student numbers. The 'Projections of Full-Time Enrolment - Primary and Second Level, 2021 – 2040' report assessed demographic trends which will impact the future population growth or school age children including fertility rates, births and net migration.

The Department believes that the M1F2 scenario is the most likely outcome. This assumes slightly higher than current rates of migration, and fertility to remain at 1.6. Enrolments in primary schools in Ireland in 2020 stood at 561,411 down by almost 6,000 on 2019 (567,716). Enrolments are now projected to fall over the coming years under all scenarios, and under the M1F2 scenario will reach a low point of 440,551 by 2033. This is 120,860 lower than today's figure. Enrolments will rise again thereafter and are projected to stand at 474,888 by 2040, a rise of some 34,300 over the seven years 2033 to 2040.

Based on their research the Department of Education and Skills determined that the peak number of primary school age children was anticipated in 2018.

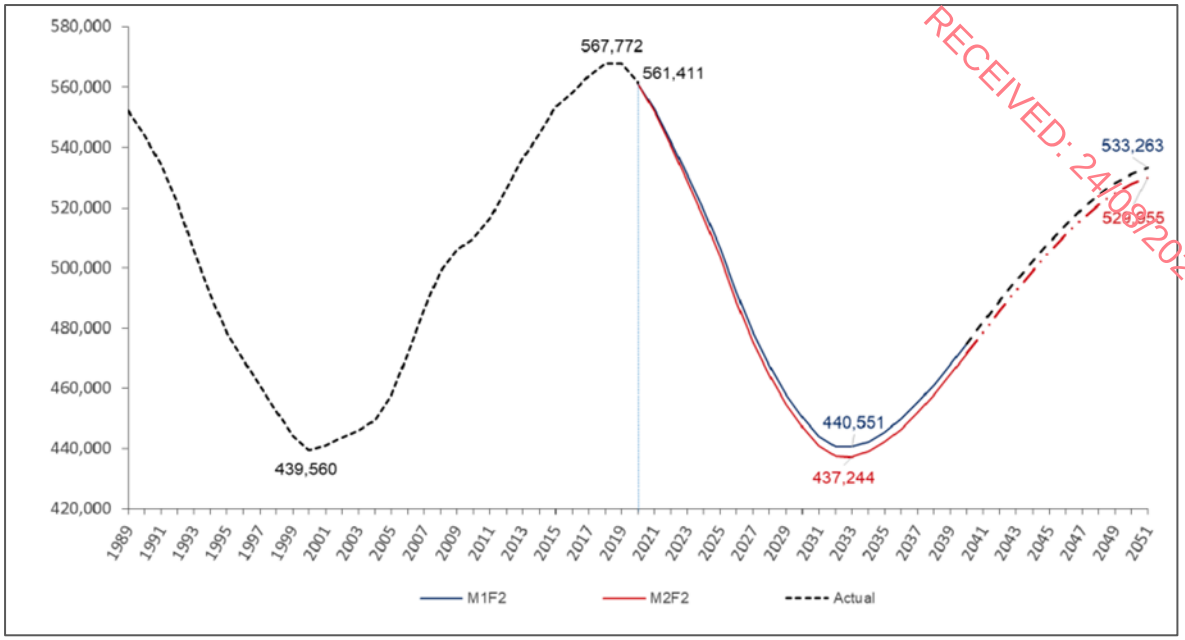

Figure 4.4 Actual vs Projected Enrolments in Primary Schools 1989-2051. Source: Department of Education

The post-primary student projections are a continuation of the primary school population projection with the peak of post-primary enrolments anticipated in 2024. The number of pupils entering first year is projected to rise by 996 in 2021, and then will begin to fluctuate slightly in 2022 and 2023 with a greater fall from 2024. By the end of the projection period there will be 17,000 fewer pupils entering first year than in 2021. Looking at LC2, Leaving Certificate, there will be 63,401 pupils enrolled in the 2021/22 academic, some 3,227 more than in 2020 while the projected peak year for Leaving Certificate sits is 2026 with 70,547 pupils.

Enrolments are projected to rise sharply over the coming years; there will be 11,133 more pupils in 2021 than in 2020, a further additional 7,520 in 2022 and by the peak year of 2024 it is projected there will be 29,600 more pupils in post-primary schools than today. The fall in pupil numbers after 2024 will be more gradual with numbers falling by 2,900 in 2026 and by 7,700 in 2029.

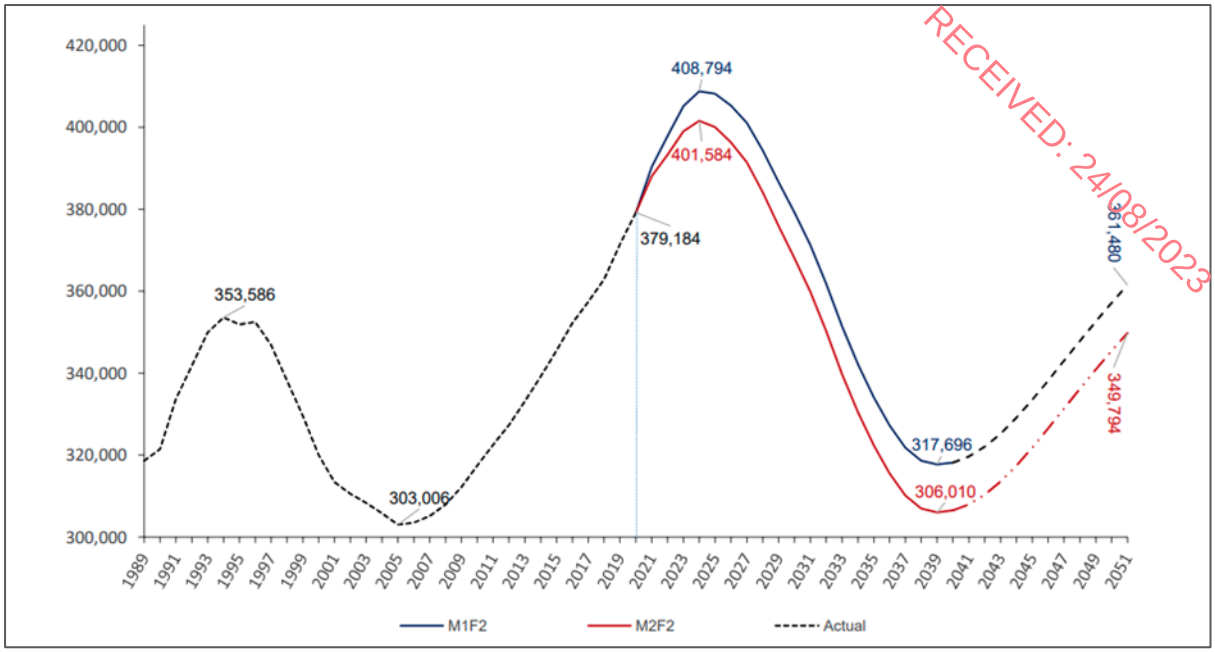

Figure 4.5 Actual vs Projected Enrolments in Post Primary Schools, 1989-2052. Source: Department of Education

In order to calculate the primary and post-primary school demand for the proposed development at Rathgowan.

- The household average of 2.6 represents the household average of the combined EDs within the catchment (refer to Table 4.2).
- The Primary Age Cohort (5-12 year olds) of 12.8% is applied consistent with the percentage for the combined EDs.
- The Post-Primary Age Cohort (13-18 year olds) of 7.8% is applied consistent with the percentage for the combined EDs.

The Forward Planning Unit of the Department of Education and Skills recommends that the estimated student population is determined using the following percentages:

- Primary School: 12%.
- Post-Primary: 8.5%.

It should be noted that the figure proposed for primary school exceed the actual proportion of the population which currently exists within the catchment area. Based on the assumptions outlined, an estimate of the student yield generated by the overall development has been estimated as follows:

Table 4.17 Projected Primary and Post Primary Students from Proposed Development

Cohort	Total 2+ Bed Units	Average Household Size	% Student Population	No. Students
Primary	365	2.6	12%	114
Post Primary			8.5%	81

It will take several years before the development is fully built out, and as the development is phased there is not likely to be a "peak" in demand for school places for a number of years as there will be a gradual transition between new school starters and school leavers.

Demand for school places may also be less than the maximum levels predicted, as some children's choice of school may be elsewhere in Mullingar Town and County Westmeath. Based on the social infrastructure audit conducted as part of the planning application submission, existing primary and post primary schools will provide capacity for new students generated in the short term. Therefore, the need for mitigation measures is not anticipated.

4.10.3.2.4 Economic Activity

In terms of the operational phase, the increase in population will result in increased demand for services which will support existing and new commercial and retail developments in Mullingar. Meeting the population targets set out in the Regional Spatial Economic Strategy (RSES) for the Eastern and Midland Region and the Westmeath CCDP 2022-2027 will help ensure that there is sufficient and gradual population growth that is in alignment with the economic growth and capacity of Mullingar.

4.10.3.2.5 Land Use and Amenity

During the operational phase, the change of the land use from greenfield/agricultural to primarily residential will permanently change the views currently enjoyed by adjacent properties and road users. This impact is visual and is dealt with in Chapter 10 Landscape and Visual Impact. Views from this location may be slight-moderate and negative in the short term, however as the existing trees and hedgerows continue to mature it is anticipated that this impact will lessen to slight and negative in the long term, as the proposed development is consistent with existing and emerging baseline trends in the area.

The amenity provision within the development is described in detail in the Architect's Design Statement. The landscaping within the development will frame the units, creating a user-friendly environment with a strong and attractive landscaping setting, defining the relationship and connectivity of the open spaces and beyond to the wider context. The future amenity value of the development is a positive consideration.

The development has been designed to incorporate the principles of Universal Design, to provide appropriate choice of accommodation to residents with diverse abilities and ages. Connectivity between the phases of the Masterplan development as well as with the existing built-up area is one of the key principles underpinning the design and layout. A Design Statement has been prepared by John Fleming Architects which provides insight into the design concept, and concludes that the development can be accessed, understood, and used by the widest possible extent of people, regardless of age, size and ability. This includes the houses and maisonette units as well as the external spaces, pedestrians and cycle routes and roads.

The primary source of noise with potential to cause a cumulative effect is traffic noise associated with the proposed phases of development. The operational traffic flow figures used in the assessment include traffic data for all three phases. In this way the potential cumulative effect has been assessed and determined to be imperceptible.

With regard to operational traffic, the proposed development (all 3 phases) is anticipated to have a slight negative long-term effect as a result of increased traffic flows on two of the junctions assessed (R394 and R393).

A vehicular access point will be provided off the C-Link Road for Phases 1-2 and Phase 3. This will include the provision of a footpath and cycleway to tie into the permitted facilities for the area.

Vehicular routes through the site will be calmed through various design measures including alignment, to reduce traffic speeds, with horizontal and vertical deflections introduced as required.

A design speed limit of 30 km/hour has been applied throughout the development in accordance with the Design Manual for Urban Roads and Streets (function – local road, context – neighbourhood, pedestrian priority).

A Traffic and Transport Assessment has been prepared by Tobin Consulting Engineers. The scope of the TTA was agreed with Westmeath County Council's Traffic and Transport Department.

The site layout has been informed by the Design Manual for Urban Roads and Streets (DMURS) issued by the Department of Transport, Tourism and Sport & Department of Environment, Community and Local Government, 2013, and in accordance with DMURS, provides a network of streets, pedestrian priority areas and traffic calming measures.

It is expected that the principal items of building and mechanical services plant that may generate operational noise will be associated with ventilation and heating of the creche. Plant will be selected to ensure no negative effects on receptors and designed to achieve the relevant noise criteria. Any impacts are likely to be negative, imperceptible and long-term.

4.10.3.2.6 Health

Due to the nature of the development, there will be few hazards associated with the operational phase of the development and therefore no potential significant negative impact in terms of health and safety. The potential impacts on cycling and pedestrians will be positive, given the additional infrastructure provided.

A lack of adequate recreation or amenity facilities has the potential to negatively impact human mental and / or physical health. The proposed layout provides for excellent public amenity and recreational facilities.

No likely negative impacts have been identified for the population or land use. Therefore, no mitigation measures are required.

The proposed development has been designed to avoid negative impacts in relation to local amenities and recreational facilities by incorporating amenity facilities within the layout, including a large open space area, play areas, kick about areas, as well as the provision for walking and cycling trails throughout the development that brings further connectivity to the town centre.

Accordingly, no further mitigation measures are required and no significant risks to human health have been identified within this discipline in relation to the operational phase of the development.

The provision of these amenity facilities within the proposed development will be of benefit to future residents and existing residents in the local environs. The operational phase of the proposed development, in terms of recreation and amenity facilities will, therefore, have a permanent significant positive impact on Human Health.

4.11 Mitigation

No likely negative impacts have been identified for population, or land use, accordingly no mitigation measures are required. Mitigation measures have been proposed by other disciplines within this EIAR. A summary of these measures is provided in Chapter 15 Schedule of Mitigation and Monitoring Measures.

The proposed development of all 3 Phases has been designed to avoid negative impacts in relation to local amenities and recreational facilities by:

- Incorporating the provision of a creche within the design proposal (i.e. Phase 3)
- Incorporating amenity facilities within the layout, including various open space play areas and provision for walking, and cycling throughout the development

Accordingly, no further mitigation measures are required.

4.11.1 Health and Safety Mitigation Measures

In relation to the pre-construction and construction phases, health and safety risks will be managed in accordance with Safety, Health, and Welfare at Work (Construction) Regulations, 2013. Measures also set out in the preliminary CEMP, and include:

- Securing the Site Boundary and erecting of fencing or hoarding/signage as required
- Minimizing the disruption of services through adequate engagement with utility and service providers
- Restriction of construction working hours and traffic access
- Site access and egress
- Preparation of an Emergency and Evacuation Plan
- Maintenance of Public Roads
- Communication with Local Authorities and Neighbours

The design of the proposed development will be subject to safety design reviews to ensure that all requirements of the project are safe. A project supervisor for construction stage (PSCS) will have been appointed as part of the process. When issues are identified, corrective actions will be implemented to amend design issues prior to the issuance of final design for construction.

4.11.2 Construction Phase

During the Construction Phase, safety will be a primary concern. It is anticipated that a Project Supervisor for the Construction process (PSCP) will be appointed to oversee site safety. A contractor safety management program will be implemented identifying potential hazards associated with the proposed works. Temporary contractor facilities and areas under construction will be fenced off from

the public with adequate warning signs of the risks associated with entry to these facilities. Entry to these areas will be restricted and they will be kept secure when construction is not taking place. Measures to ensure public safety, with respect to construction traffic will be included in the Construction Traffic Management Plan, to be agreed with the Planning Authority prior to commencement of development.

4.11.3 Operational Phase

Measures to avoid potential negative impacts on Population and Human Health have been fully considered in the design of the project and are integrated into the final layout and design. Compliance with the layout and design will be a condition of the permitted development. As such no mitigation measures are required.

4.11.4 Worst Case Scenario

In the event that all mitigation measures fail to hinder potential negative impacts, the possibility of an increase of traffic within the surrounding roads and junctions of the site can occur. Further, without these mitigation measures in place, noise caused by the construction of the proposed scheme may increase and can cause a disturbance to any residential dwellings and educational institutions in close proximity to the site. Further, when mitigation measures are not considered, there is the possibility of the impact on dust that can be carried throughout the site. Dust can expand beyond the site and create adverse effects on the neighbouring environment, including the neighbouring stream along the northwest of the subject site, residential dwellings, schools, as well as businesses within the study area. However, it is imperative that mitigation measures are implemented to ensure that the worst-case scenario does not occur. When considering the mitigation measures that will be in place, the event of a worst-case scenario is deemed to be unlikely.

4.12 Residual Impact Assessment

The proposed mitigation measures will avoid, prevent, or reduce impacts on the human environment during the construction and operational phases of the proposed development.

It is anticipated that the proposed development will result in significant positive overall economic and social benefits for the local community and the wider area. Strict adherence to the mitigation measures recommended within this EIAR will ensure that there will be no negative residual impacts or effects on the Population and Human Health from the construction and operation of the proposed scheme. Indeed, the delivery of much needed housing will have a positive effect for the local area.

4.13 Monitoring

No specific monitoring is proposed. In general, monitoring will be undertaken by the Building Regulations certification process and by the requirements of specific conditions of a planning permission. It is anticipated that monitoring of compliance with Health & Safety requirements will be undertaken by the Project Supervisor for the Construction Process (PSCP). Monitoring is outlined in Chapter 9 Noise and Vibration, and Chapter 12 Material Assets: Traffic & Transport.

4.14 Significant Interactions

Population and human health do not have a significant number of interactions with other topics.

The most significant interactions are between population and human health and air quality. An adverse impact due to air quality in either the construction or operational phase has the potential to cause health and dust nuisance issues. The mitigation measures that will be put in place at the proposed development will ensure that the impact of the proposed development compiles with all ambient air quality legislative limits and therefore the predicted impact is short term and imperceptible with respect to human health. For more information, please refer to Chapter 7: Air Quality.

Interactions between air quality and traffic can be significant. With increased traffic movements and reduced engine efficiency, i.e. due to congestion, the emissions of vehicles increase. The impacts of the proposed development on air quality is considered to be imperceptible.

Construction phase activities such as land clearing, excavations, stockpiling of materials etc., have the potential for interactions between air quality and biodiversity along with interactions between air quality and land and soils in the form of dust emissions. With the appropriate mitigation measures to prevent fugitive dust emissions, it is predicted that there will be no significant interactions between air quality and biodiversity.

It is also predicted that there will be no significant interaction between air quality and land and soils once mitigation measures are in place.

No other significant interactions with air quality and climate have been identified. A breakdown of these elements has been analysed further below.

4.14.1 Land and Soil

During construction works offsite removal of surplus soil will be required. The necessary mitigation measures will be implemented to address any nuisance issues associated with dust dispersion during this time. No public health issues associated with the land, soil, geology conditions at the site have been identified for the Construction Phase of the proposed development. Appropriate industry standard and health and safety legislative requirements will be implemented during the Construction Phase that will be protective of site workers.

4.14.2 Hydrology and Hydrogeology

No public health issues associated with the water (hydrology and hydrogeology) conditions at the proposed development site have been identified for the Construction Phase or Operational Phase of the proposed development.

Appropriate industry standards and health and safety legislative requirements will be implemented during the construction phase that will be protective of site workers.

4.14.3 Air Quality and Climate

Interactions between Air Quality and Population and Human Health have been considered as the Operational Phase has the potential to cause health issues as a result of impacts on air quality from dust nuisances and potential traffic derived pollutants. However, the mitigation measures employed at the proposed development will ensure that all impacts are compliant with ambient air quality standards and human health will not be affected. Furthermore, traffic related pollutants have been assessed and determined as imperceptible, therefore, air quality impact from the proposed development are not expected to have a significant impact on population and human health.

4.14.4 Noise and Vibration

The impact assessment of noise and vibration has concluded that additional noise associated with the operation of on-site machinery will be intermittent and will not create any major negative impacts beyond the site boundary. Mitigation and monitoring measures will be incorporated to further reduce the potential for noise generation form the proposed development.

4.14.5 Landscape and Visual

During the Construction Phase there will be visual changes associated with removal of some trees and hedgerows and emerging plant and machinery. During the Operational Phase there will be permanent visual changes to the landscape which may impact the residential dwellings surrounding the proposed development. A full impact assessment has been carried out in Chapter 9 Landscape and Visual Impact to quantify this impact.

4.14.6 Material Assets: Waste and Utilities

The improper removal, handling, and storage of hazardous waste could negatively impact on the health of construction workers. Extended power or telecommunications outages, or disruption to water supply or sewerage systems for existing properties in the area could negatively impact on the surrounding human population and their overall health.

4.14.7 Material Assets: Traffic and Transport

There can be a significant interaction between population and human health and traffic. This is due to traffic-related pollutants that may arise. In the current assessment, traffic derived pollutants which may affects Air Quality and thus Population and Human Health have been deemed as insignificant.

4.15 References & Sources

- Westmeath County Development Plan 2021-2027
- Central Statistics Office (CSO) Census 2016 Data. Available at: https://visual.cso.ie/?body=entity/ima/cop/2016&boundary=C03736V04484
- Primary School Enrolment Figures. Available at: https://www.gov.ie/en/collection/primary-schools/
- Post Primary School Enrolment Figures. Available at: https://www.gov.ie/en/collection/post-primary-schools/
- Pobal Maps Portal. Available at: https://maps.pobal.ie/