

Chapter 3

Population and Human Health

3.0 POPULATION AND HUMAN HEALTH

3.1 INTRODUCTION

This section of the EIAR identifies, describes and assesses the potential impacts and effects of the Proposed Development on human beings, population and human health and has been completed in accordance with the EIA guidance and relevant legislation.

This chapter of the EIAR was prepared by Stephen Blair, BA (Mod), MRUP, MIPI, MRTPI, Executive Director with John Spain Associates, Stephen has over thirty years' planning experience working at the EU, national, regional and local levels including preparation of EIARs, and in assessing population and human health impacts as part of the EIAR.

David Ferguson, BA, MRUP, MIPI, MRTPI, Senior Planner with John Spain Associates, Planning & Development Consultants also contributed to its preparation. David has over 5 years' experience in the preparation of large scale planning applications and the coordination of a number of EIARs in recent years.

This Chapter has been reviewed by John Spain, BA (Mod), MRUP, MIPI, MRTPI, Managing Director with John Spain Associates. John has over twenty five years' experience in planning and development in Ireland and the UK. In that time he has represented a large number of private and public sector clients and has been involved in a wide range of diverse projects including EIARs.

In preparing this chapter, consideration has been given to the other inputs to this EIAR including, in particular, the chapters addressing Air Quality and Climate prepared by TMS Environment Ltd, Noise and Vibration prepared by Redkite Environmental, Landscape and Visual Impact prepared by Model Works and the separate report Construction and Environmental Management Plan prepared by DBFL. In turn, other Chapters have given regard to interactions with other environmental factors. A matrix illustrating the interaction between various factors has also been include in Chapter 15 in accordance with the EPA Guidelines.

Population and Human Health comprise an important aspect of the environmental impact assessment to be undertaken by the competent authority. Any significant direct or indirect, positive or negative impact on the status of human health, which may be potentially caused by a project, must therefore be comprehensively addressed.

Population and Human Health is a broad ranging topic and addresses the existence, activities and wellbeing of people as groups or 'populations'.

3.2 STUDY METHODOLOGY

The European Commission's *Guidance on the preparation of the Environmental Impact Assessment Report* (2017)¹ references the requirement to describe and, where appropriate, quantify the primary and secondary effects on human health and welfare. Moreover, the European Commission guidance states the following in relation to the assessment of Human Health (page 40):

“Human health is a very broad factor that would be highly Project dependent. The notion of human health should be considered in the context of the other factors in Article 3(1) of the EIA Directive and thus environmentally related health issues (such as health effects caused by the release of toxic substances to the environment, health risks arising from major hazards associated with the Project, effects caused by changes in disease vectors caused by the Project, changes in living conditions, effects on vulnerable groups, exposure to traffic noise or air pollutants) are obvious aspects to study. In addition, these would

¹ https://ec.europa.eu/environment/eia/pdf/EIA_guidance_EIA_report_final.pdf

concern the commissioning, operation, and decommissioning of a Project in relation to workers on the Project and surrounding population.”

The EIAR has also been prepared in accordance with the following guidance:

- Environmental Assessments of Plans, Programmes and Projects - Rulings of The Court of Justice of The European Union (2020)
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (published in August 2018)
- Guidelines on the Information to be Contained In Environmental Impact Assessment Reports Draft 2017 published by the EPA
- the European Commission’s Guidance Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report (2017)
- Environmental Impact Assessment of Projects Guidance on Screening (2017)
- Environmental Impact Assessment of Projects Guidance on Scoping (2017)
- Environmental Impact Assessment of Projects Guidance on EIA report (2017)

The Guidelines on the information to be contained in environmental impact assessment reports, published by the EPA in 2017 states that ‘in an EIAR, the assessment of impacts on population & 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’. In compliance with this approach to Human Health espoused in the Commission Guidance, this chapter addresses human health in the context of other factors addressed elsewhere in further detail within the EIAR where relevant. Relevant factors identified include the chapters addressing Air Quality and Climate prepared by TMS, Noise and Vibration, Risk Management prepared by Redkite Environmental, Landscape and Visual Impact prepared by Model Works and the Construction and Environmental Management Plan prepared by DBFL.

Impacts have been assessed in accordance with Table 3.3 of the ‘Guidelines on the Information to be Contained in Environmental Impact Assessment Reports’ Draft 2017 which require that the direct, indirect, cumulative and residual impacts of the project for both the construction and operational stages are described. The identified quality, significance and duration of effects for each aspect are categorised within this Chapter. Quality refers to the nature of the impact, significance of effects refers to the degree that these will impact on the site and surrounding area and duration refers to how long the effects are likely to last for.

This chapter of the EIAR has been prepared in compliance with recent European Commission, national publications which provide guidance on the 2014 EIA Directive including the Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (2018) and the Draft Guidelines on the information to be contained in environmental impact assessment reports, published by the EPA in August 2017.

Moreover, the content of the Institute of Environmental Management and Assessment [IEMA] high level primer document (2017), which was prepared having considered the provisions of the 2014 EIA Directive, has also been considered in the preparation of this chapter. Other Chapters such as Air Quality and Climate, and Noise and vibration also address relevant considerations to Population and Human Health in more detail where not directly addressed in this Chapter.

To establish the existing receiving environment / baseline, site visits were undertaken in 2021 to appraise the location and likely and significant potential impact upon human receptors of this Project. A desk-based study was undertaken of published reference documents including:

- National Planning Framework 2018
- Regional Spatial and Economic Strategy for the EMRA, 2019

- The Fingal County Development Plan 2017-2023 (as Varied)
- Strategic Environmental Assessments (SEA) for the Fingal County Development Plan
- 2021 Labour Force Survey Q4 – www.cso.ie
- CSO statistical release: New Dwelling Completions Q4 2021, December 2021
- ESRI Quarterly Economic Commentary, Winter 2021
- Central Statistics Office www.cso.ie ([Census 2016 Published Results](#))
- Central Bank of Ireland - Population Change and Housing Demand in Ireland 10 December 2019

The Strategic Environmental Assessments (SEA) for the County Development Plan has also been reviewed, as it provides an assessment of Population and Human Health. The purpose of the SEA process was to ensure that environmental consequences of the plan (including policies and objectives) have been assessed and that relevant mitigation and monitoring measures have been incorporated into the final version of the plan. The Development Plan's Strategic Environmental Objective 3 aims to 'Protect Human Health'.

The preferred development scenario in the context of the SEA has a presumption against 'unnecessary greenfield development'. However, while there is some development on greenfield lands due to the need to align with the core strategy as set out in the Development Plan, growth is to be directed to areas that have public transport corridors and wastewater capacity, therefore ensuring protection of surface and groundwater systems and providing sustainable transport access for residents. Accompanying letters from Irish Water have confirmed capacity of existing water supply and wastewater networks to accommodate the proposed development. The capacity and frequency of the public transport itself has also been assessed as set out within Chapter 10 of this EIAR. Overall, this was considered positive for Human Health. The project location is entirely in accordance with the core and settlement strategy of the Development Plan which has been assessed in terms of its impact on Human Health.

The *Fingal County Development Plan 2017-2023* notes that capacity for additional population growth, based on availability of zoned lands, indicates a 5% growth rate is considered appropriate having regard to the need to manage growth in line with the existing population. As set out in the Development Plan, the Skerries area has ample capacity for the proposed SHD which provides for 345 no. residential units. Skerries is considered a 'Self Sustaining town capacity for 883 No. units. (as amended by Variation No. 2 to the Development Plan to align with the RSES and NPF). Please also see Community Infrastructure Audit prepared by JSA which demonstrates that Skerries is well served by community facilities and has the capacity to facilitate the needs of future residents in terms of open space, recreational, community centres, schools, healthcare and other ancillary facilities. Please also see the TTA prepared by DBFL which demonstrates that there is currently spare capacity within the public transport services serving this site.

Objective SS20 states – *“Manage the development and growth of Lusk, Rush and Skerries in a planned manner linked to the capacity of local infrastructure to support new development.”*

It should be noted that there are numerous inter-related environmental topics described throughout this EIAR document which are also of relevance to Population and Human Health. Issues such as the potential likely and significant impacts of the Project on air quality and climate, noise and vibration, including traffic and transport impacts, are of intrinsic direct and indirect consequences to human health. For detailed reference to particular environmental topics please refer to the corresponding chapters of the EIAR.

3.3 THE EXISTING RECEIVING ENVIRONMENT (BASELINE SITUATION)

Introduction

A description of the relevant aspects of the current state of the environment (baseline scenario) in relation to population and human health is provided below. Specific environmental chapters in this EIAR provide a baseline scenario relevant to the environmental topic being discussed. Therefore, the baseline scenario for separate

environmental topics is not duplicated in this section; however, in line with guidance provided by the European Commission, the EPA and the DHPLG, the assessment of impacts on population and human health refers to those environmental topics under which human health effects might occur..

An outline of the likely evolution without implementation of the project as regards natural changes from the baseline scenario is also provided. This is the “Do Nothing” scenario.

The existing environment is considered in this section under the following headings:

- Demographic Profile of the area;
- Economic Activity & Employment Activity
- Social Patterns;
- Land Use and Settlement Patterns;
- Health & Safety; and
- Risk of Major Accidents and Disasters.

3.3.1 Social Patterns

This section explores the characteristics of Fingal County and Skerries from a socio-economic perspective, drawing on the most recently available statistical information from Census 2016 (we note the more recent data was not available as the Census was postponed in 2021²) and other sources.

The project site is located in the townland of Milverton and partially within Townparks, Co. Dublin, and is situated within the Electoral division of ‘Holmpatrick, Fingal’ which overlaps with the Settlement area of Skerries. We have used the Electoral Division of Skerries and Holmpatrick as a basis for the population profile of the area.

²<https://www.cso.ie/en/csolatestnews/pressreleases/2020pressreleases/presstatementpostponementofcensus2021/>



Figure 3.1: Study Area (Shaded in blue with site location indicated by red star) (Source: CSO, 2016.)

The CSO data illustrates that the population of the Irish State increased between 2011 and 2016 by 3.8%, bringing the total population of the Irish State to 4,761,865. The rate of growth slowed from 8.1% in the previous census, attributable to the slower economic activity in the early part of the intercensal period resulting in a reduced level of immigration, albeit offset to a degree by strong natural increase. The economy subsequently recovered with consequent population growth predominantly attributed to natural increase, greater economic activity, increased job opportunities and continued immigration.

Area	Number of Persons		
	2011	2016	% change 11-16
Ireland - State	4,588,252	4,761,865	3.8
Dublin County	1,273,069	1,347,359	5.8
Fingal	273,991	296,600	7.6
Skerries ED	8,333	8,501	2.0
Holmpatrick, Fingal ED	3,224	3,458	6.8
Study Area	11,557	11,959	3.4

Table 3.1: Population change in the State, Dublin County, Fingal and Study Area 2011-2016 (Source: CSO, SAPMAP)

Population growth within Fingal at 7.6% was higher than the State average during the 2011-2016 intercensal period at 3.8%. Population growth within the study area was 3.4%, lower than national and regional growth levels. Fingal has experienced significant growth which may be attributed to natural increase and the considerable level of residential development seen in the wider study area, particularly in the latter part of the intercensal period.

Population growth in the Electoral District within which the development is situated at 6.8%, considering the scale of the ED this is considered modest and may be attributed to the residential development to the north of the subject site. Skerries itself has experienced only slight change.

The demographic trends for the study area are derived from the 2011 and 2016 Census and relate to the Settlement area of Skerries. The following areas are discussed:

- Population;
- Age Profile;
- Social Class and Employment;
- Educational Attainment.

	Skerries		State	
Year	Population	% Change	Population	% Change
2011	9,671		4,588,252	
2016	10,043	3.8	4,757,976	3.7

Table 3.2: Population Trends in Skerries, County and the State, 2011-2016.

As can be seen from Table 3.2 above, the population growth in the Skerries area is similar to the growth rate of the State.

Household Size

Table 2 below provides an overview of household size in the settlement of Skerries. The average household size is 2.8. Based on the average household size in Skerries the predicted population of the development is 995 No. persons.

Size of household	Households	Persons
1 person	672	672
2 persons	1,024	2,048
3 persons	616	1,848
4 persons	673	2,692
5 persons	385	1,925
6 persons	129	774
7 persons	20	140
8 or more persons	9	75
Total	3,528	10,174

Age Profile

	Skerries		State	
Age Group	2016 Pop.	% of Pop.	2016 Pop.	% of Pop.
0-19	2,987	29.7	1,309,368	27.4
20-39	2,285	22.2	1,322,467	27.7
40-59	2,923	29.1	1,253,607	26.3
60-79	1,588	15.8	727,831	15.2
80+	260	2.5	148,592	3.1
Total	10,043		4,761,865	

Table 3.3: Age Profile in Skerries and the State, 2016; Source: CSO.

The table above shows the age profile of the Skerries area in comparison to the State. The above figure shows that Skerries has a higher 0-19 population profile than the State average.

Principal Economic Status	Skerries		State	
	Pop.	%	Pop.	%
At work	4,209	54.5	2,006,641	53.4
Looking for first regular job	48	0.6	31,434	0.8
Unemployed having lost or given up previous job	357	4.6	265,962	7.0
Student	913	11.8	427,128	11.3
Looking after home/family	677	8.7	305,556	8.1
Retired	1,268	16.4	545,407	14.5
Unable to work due to permanent sickness or disability	223	2.8	158,348	4.2
Other	21	0.2	14,837	0.3
Total	7,716		3,755,313	

Table 3.4: Employment Statistics of Skerries and the State, 2016; Source: CSO.

The table above shows that the Skerries area has an above average amount of the population at work in similar to State, at 54.5.4% compared to the State average of 53.4%. The Skerries area has a high percentage of the population which are retired at 16.4%.

Social Class	Skerries		State	
	Pop.	%	Pop.	%
Professional workers	1,129	11.2	386,648	8.1
Managerial and technical	4,146	41.2	1,336,896	28
Non-manual	1,792	17.8	837,145	17.5
Skilled manual	1,013	10.0	671,890	14.1
Semi-skilled	614	6.1	501,103	10.5
Unskilled	189	1.8	170,391	3.5
All others gainfully occupied and unknown	1,160	11.5	857,792	18
Total	10,043		4,761,865	

Table 3.5: Social class of Skerries and the State, 2016; Source: CSO

The figures presented in Table 3.5 suggest that the Skerries area has a healthy employment trend when compared to the State average. In terms of social class, the above table demonstrates that the Skerries area has a high percentage of the population working as Managerial and Technical. For example, 41.2% of the Skerries population are employed as Managerial and technical, as compared to the State average of 28% and 11.2.5% of the Skerries population are Professional workers, compared to the State average of 8.1%.

The social class of an area is directly related to educational attainment. The high number of managerial and technical in the Skerries area suggests a strong educational attainment. This will be further discussed below.

Educational Attainment	Skerries		State	
	Pop.	%	Pop.	%
No Formal Education	59	0.9	52,214	1.6
Primary Education	413	6.3	334,284	10.7
Lower Secondary	665	10.2	449,766	14.5
Upper Secondary	1,331	20.5	573,643	18.5
Technical or Vocational qualification	471	7.2	271,532	8.7

Advanced Certificate/Completed Apprenticeship	364	5.6	182,318	5.8
Higher Certificate	374	5.7	153,351	4.9
Ordinary Bachelor Degree or National Diploma	671	10.3	237,117	7.6
Honours Bachelor Degree, Professional qualification or both	951	14.6	331,293	10.6
Postgraduate Diploma or Degree	826	12.7	284,107	9.1
Doctorate (Ph.D) or higher	93	1.4	28,759	0.9
Not stated	265	4.0	198,668	6.4
Total	6,483		3,097,052	

Table 3.6: Education Level in Skerries and the State, 2016; Source: CSO.

As can be seen from Table 3.6 above, the Skerries area has an above average level of educational attainment. For example, the percentage of the population with Honours Bachelor Degree or National Diploma in Skerries (14.65%) is above the State average (10.6%). Additionally, the percentage of the population in Skerries with a Postgraduate Diploma or Degree is above the State average, with figures of 12.7% and 9.1%, respectively.

3.3.2 Economic and Employment Activity

The CSO's Quarterly Labour Force Survey³ (which has now replaced the Quarterly Household Survey) for Q3 2021 (released 25 November 2021), indicated that employment increased by 9.8% to 2,471,200 in the year to Q3 2021 and absences from work were up by 19.5% to 303,200 which resulted in a 6.0% (4.3 million hours) rise in the number of hours worked per week.

Since March 2020, the CSO has been producing a supplementary measure of monthly unemployment in parallel with the routine Monthly Unemployment Estimates, which incorporates those in receipt of the Pandemic Unemployment Payment (PUP) into the calculation to produce a COVID-19 Adjusted Measure of Monthly Unemployment.

The sharp rise and reverse of long held employment growth can be associated with the ongoing COVID-19 crisis. Using the standard methodology, unemployment in Q1 2021 stood at 7.1%. However when adjusted for COVID-19, this rate rises to 25.7% (612,443).

The relatively elevated rates of unemployment for 2020 will place the public finances under further strain. The ESRI expect a deficit of just under €19 billion in 2021 or 4.7 per cent of GDP. The performance of the Irish economy in achieving positive growth in 2020 was remarkable. Most of this performance can be attributed to certain multinational intensive components of the export sector. In 2022, the Irish economy is expected to continue to grow strongly in the aftermath of the COVID-19 pandemic. As consumer confidence improves, some of the increased savings which have accumulated over the past year are likely to be spent and contribute to the recovery. The pace of growth is likely to increase next year as vaccines become more widely distributed on an international basis. The ESRI expect the Irish economy to grow by 5.2 per cent next year.

³ <https://www.cso.ie/en/csolatestnews/pressreleases/2021pressreleases/pressstatementlabourforcesurveyq32021/>



Figure 3.2: Seasonally adjusted Unemployment by Quarter (Source: ESRI, 2021).

The CSO also provides quarterly housing completion data⁴ (27 January 2022). In Q4 2021 there 6,937 new dwelling completions in Q4 2021 bringing the total for the whole of 2021 to 20,433, just 0.5% less than the 20,526 completions in 2020. For quarter four, there was a 5.3% drop from 7,326 completions in Q4 2020. The impact of the pandemic and the public health-related restrictions on dwelling completions are evident. These figures show the impact of COVID-19 and associated restrictions in 2020 and 2021. With the first set of restrictions in spring 2020 and all construction essentially paused, there were only 395 completions in April of this year down 72.9% from 1,455 in April 2019. Completions then rose from this trough but were still below 2019 figures for further months until September before reaching a high of 2,830 in November - 30.6% above 2019 figures.

As part of the Quarterly Economic Commentary, Winter 2021⁵ The ESRI forecast that a total of 26,000 new dwelling completions will be recorded in 2022. The quarterly commentary states:

“...Taking into account the rise in commencements, albeit against this year’s backdrop of a Q1 2021 lockdown and the lower-than-expected completions in Q3, it is likely that continued growth in completions will occur in 2021. Our forecast for the number of new completions for 2021 is approximately 21,000 units, rising to 26,000 next year

The ESRI also note any decline in housing completions is unwelcome given the ongoing issue of undersupply in the market; however the current quarter drop may be a timing issue and relate to the public health restrictions which were in place earlier in the year.

3.3.4 Land Use & Settlement Patterns

The subject lands are located to the south of Skerries town centre, Hacketstown, in the townland of Milverton, Hacketstown and Townparks, Co. Dublin. The lands are bound to the north recently completed housing known as ‘Ballygossan Park’, to the west by the Dublin – Belfast railway line, to the south and east by Golf Links Road and a number of one off rural dwellings. Further to the south lands are zoned ‘GB - Greenbelt’. To the east of the subject lands there is a map based objective for a future school.

This application has been preceded by 2 No. separate applications. The first for advance infrastructure (FCC Reg. Ref. F21A/0287; ABP Reg. Ref. 312189-21) in order to facilitate future residential development on LDA lands and other residential lands to the north at Ballygossan Park was subject to a decision to grant by FCC and is now subject to appeal. The second application is for road improvements (ABP Reg. Ref. 309409-21; FCC Reg. Ref. F20A/0324) in the area, which was granted permission on appeal by the Board.

The site is served by an existing access from Ballygossan Park to the Golf Links Road which links the site to Skerries town centre to the North. The site is within 850m or 10 minute walking distance at it’s the northern point to Skerries train station . 103 no. dwellings were developed on the lands immediately north of the site under FCC

⁴ <https://www.cso.ie/en/releasesandpublications/er/ndc/newdwellingcompletionsq42021/>

⁵ <https://www.esri.ie/publications/quarterly-economic-commentary-winter-2021>

Reg Ref: F11A/0309/E1. It is understood that a future residential application as part of 'Ballygossan Park Phase 2' is to be made by Noonan Construction on lands to the west of this site. There are 2 No. agricultural entrances to the east and to the south east.

The subject site is located within the administrative area of Fingal County Council and is therefore subject to the objectives and policies contained within the Fingal County Development Plan 2017-2023.

The project entails a high quality, residential development on residentially zoned lands which are of a suitable density to optimise the use of the lands. Skerries provides a broad range of facilities and social infrastructure required by the future population of the lands. Please also see Community Infrastructure Audit prepared by JSA which demonstrates that Skerries is well served by community facilities and has the capacity to facilitate the needs of future residents in terms of open space, recreational, community centres schools, healthcare and other ancillary facilities.

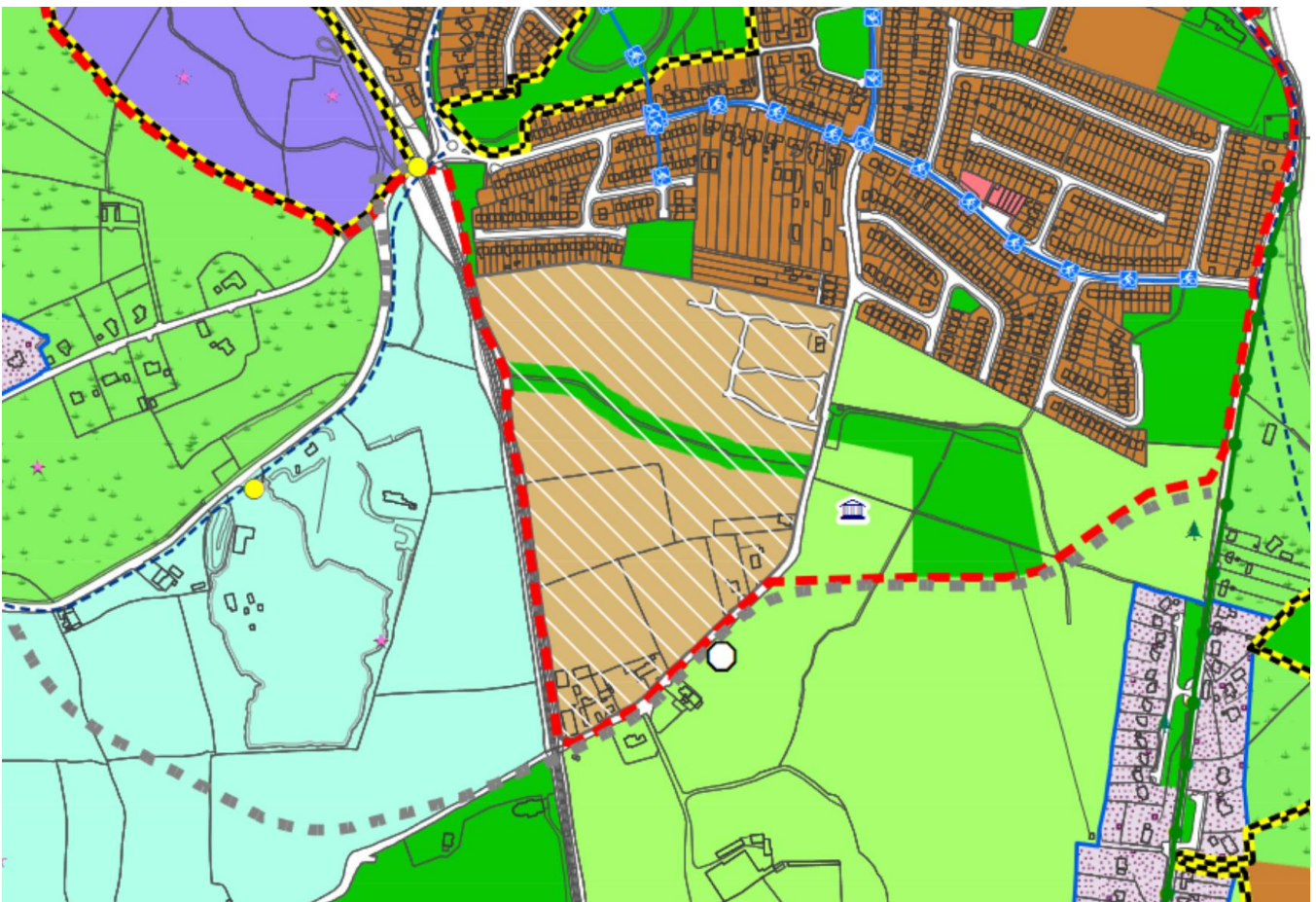


Figure 3.3 Land Use Objectives of the subject site (Source: Fingal Development Plan 2017-2023 Sheet 5 'Skerries' with project boundary highlighted in red)

3.3.5 Housing

In terms of housing delivery, the project will enable the future development of lands zoned for residential development and which is appropriate for the residential use proposed (childcare use also proposed). There is a significant and established housing need in the immediate Skerries area; the greater Dublin area and the State as a whole, as recognised within Government housing and planning policy, including the 2016 Rebuilding Ireland Plan for Housing and Homelessness.

The population for Fingal was 296,600 at the time of the 2016 Census. The Fingal Development Plan predicts an estimated growth to a population between 327,000 and 333,000 by 2026..

Recent trends show that population growth is set to continue in the wider Eastern and Midlands Region having regard to the Region's young demographic profile and a return to net inward migration as the country returned to economic growth after a severe economic downturn from 2007. In fact, the level of in-migration to Ireland experienced over the last two years was in the order of 30,000.

There is a significant and established housing need in the Eastern and Midlands Region and the State as a whole, as recognised within Government housing and planning policy, including the 2016 Rebuilding Ireland Plan for Housing and Homelessness and the Housing for All – A New Housing Plan for Ireland 2021.

Recent trends show that population growth is set to continue in the wider Eastern and Midlands Region having regard to the Region's young demographic profile and a return to net inward migration as the country returned to economic growth after a severe economic downturn from 2007. The level of in-migration to Ireland experienced over the last two years was in the order of 30,000. This trend is set to continue due to the ongoing impacts of the Covid-19 pandemic.

While the number of residential units being completed yearly nationally has rebounded, the level of completions remains significantly less than the estimated equilibrium demand for housing in the State. Moreover, the current level of housing need and demand is not at equilibrium, being significantly augmented by the extremely low level of housing completions in the decade since 2010. Over this period, a significant shortfall in housing has amassed year on year, which is reflected in the data collected in Census 2016 – which revealed overcrowding and increasing numbers of households living in cramped conditions.

It is further noted that the number of housing completions in the state is reduced significantly in 2020, due to Covid-19, recovering well in 2021, with ESRI noting an expectation of close to 21,000-unit completions in 2021, with estimated growth of c. 26,000 units in 2022. This is dependent on the availability and costs of labour and materials which are contributing to a challenging industrial environment at present. While the level of house building has increased, it is still well below the target of c. 33,000 units per annum envisaged in Housing for All (2021).

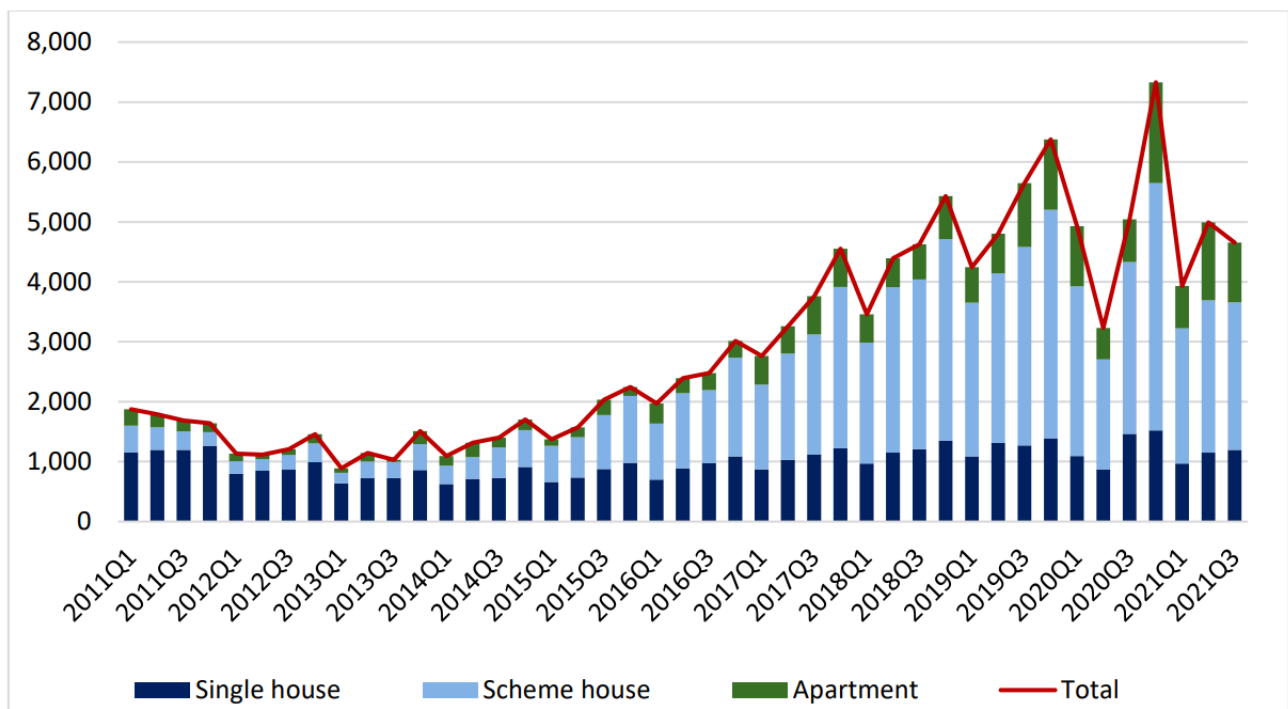


Figure Error! No text of specified style in document..4 – Yearly residential completions for the State (ESRI Quarterly Commentary Winter 2021)

ESRI's Quarterly Commentary for Winter 2021 noted a marked decline in housing commencements in Q2 2020, rebounding strongly at Q1 2021 before falling thereon.

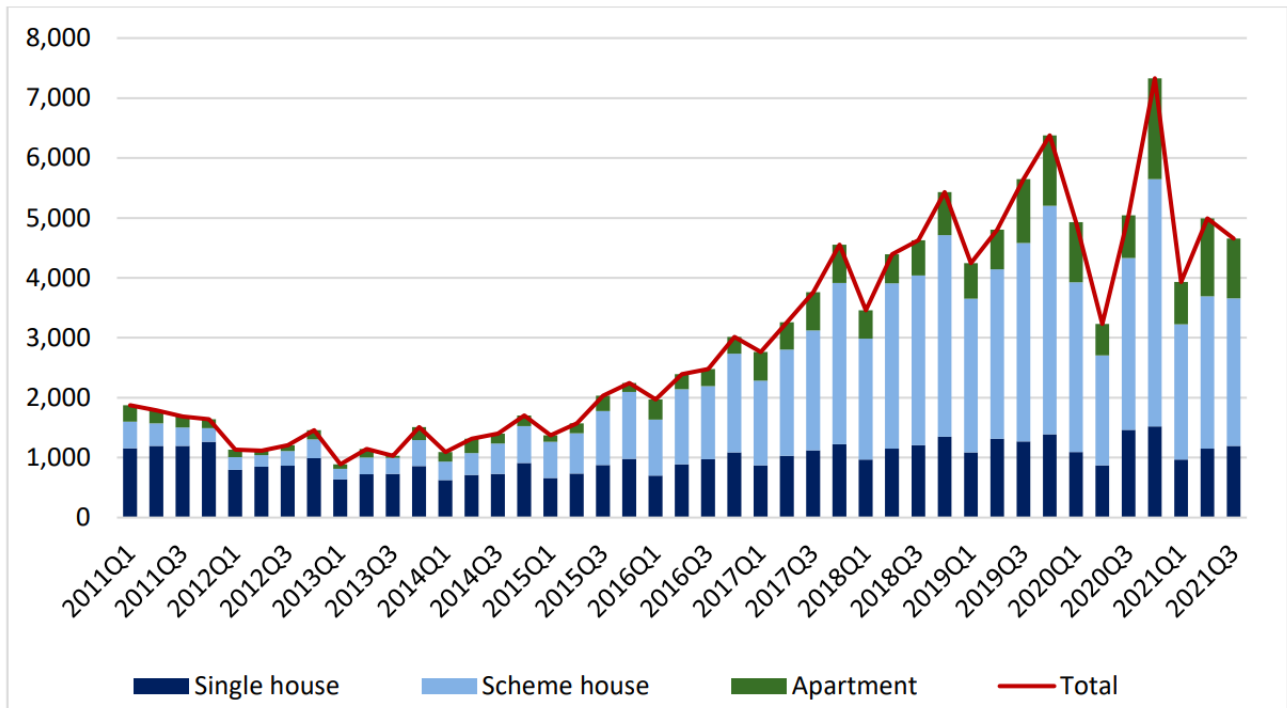


Figure Error! No text of specified style in document..5 – Residential Commencements 2017-2021 in the state (ESRI Quarterly Commentary Winter 2021)

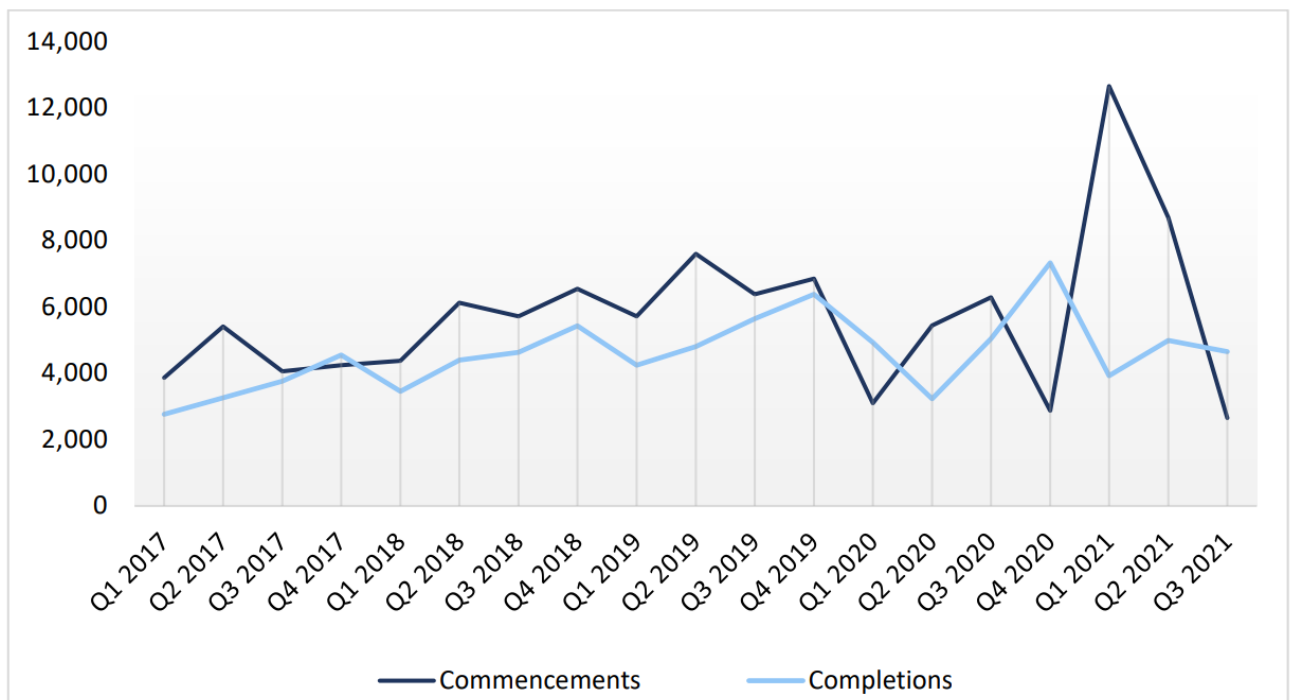


Figure 3.6 – commencements and completions of housing in the state (ESRI Quarterly Commentary Winter 2021)

This is notable given the increase in population seen concurrently (173,613 or 3.8%). Furthermore, almost 40% of these additional units were one off houses, the majority of which would never have come to market. Census 2016 also revealed a rise in the average household size (from 2.73 to 2.75) (CSO, 2017). This was attributed to household formation falling behind population growth, another indicator of lacking housing availability and increasing housing need.

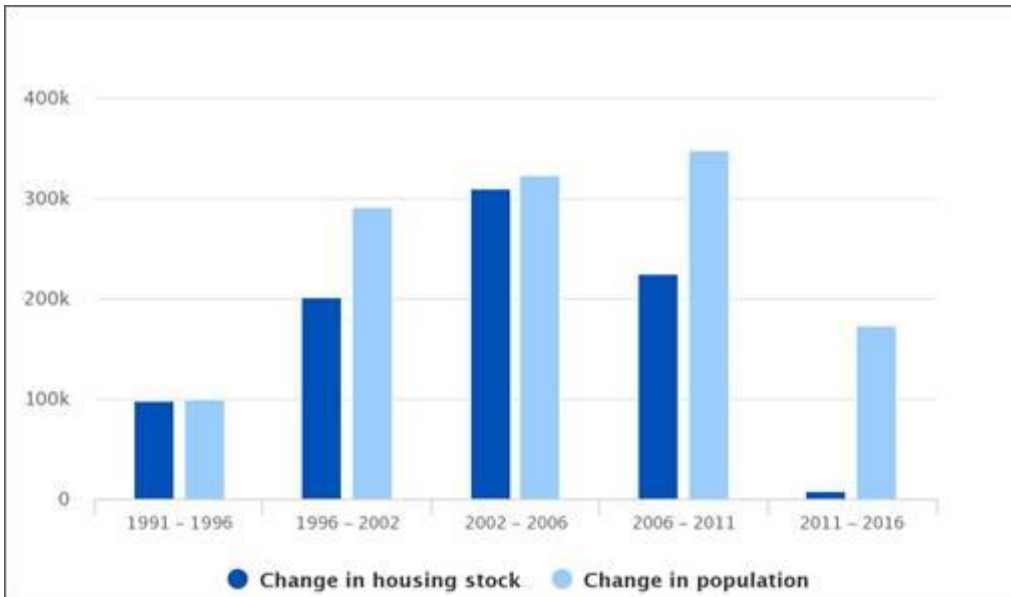


Figure 3.7: Changes in population and housing stock for Ireland, 1991-2016 (data from the Central Statistics Office, 2017)

The 2011-2016 intercensal period also saw a notable increase in the number of households with more persons than rooms in their dwelling (see figure below). There were 95,013 permanent households with more persons than rooms according to Census 2016, a 28 per cent rise on the equivalent number in 2011 (73,997).

Close to 10 per cent of the population resided within these households in 2016 at an average of 4.7 persons per household. This is an indicator of increased overcrowding (and housing need) which may be attributed to lack of housing availability and rising costs.

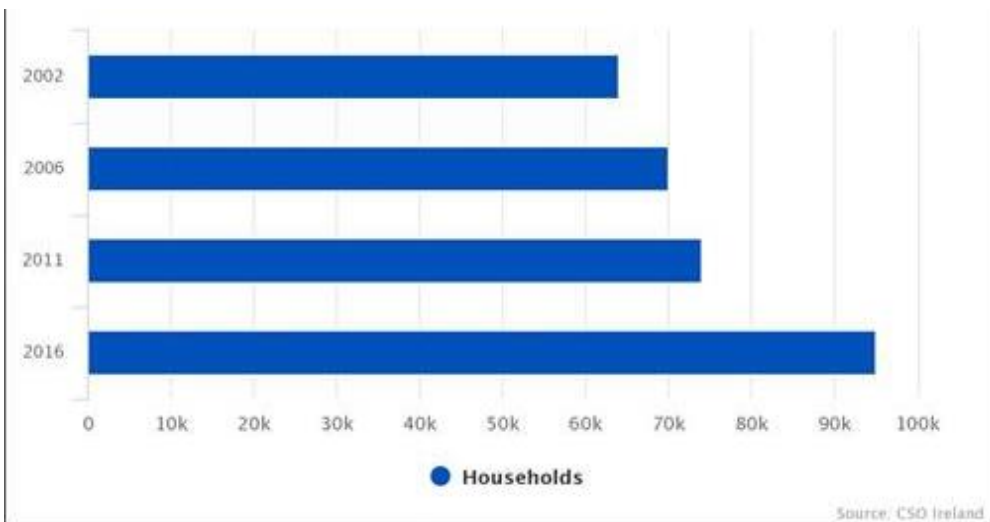


Figure 3.8: Number of households with more persons than rooms (data from the Central Statistics Office, 2017)

These figures set out above all point to a significant and increasing housing need in the state which is not being met at present.

The Central Bank of Ireland has published a study entitled ‘Population Change and Housing Demand in Ireland’⁶, which includes the following key points:

- *“Growth in population has significantly exceeded the increase in the housing stock since 2011 and the average household size has risen, reversing a previous long-running trend.*
- *To keep pace with population growth and changes in household formation, our estimates indicate that an average of around 27,000 dwellings would have been required per annum between 2011 and 2019.*
- *Assuming unchanged household formation patterns and net inward migration close to current levels, around **34,000** new dwellings would be required each year until 2030.”*

⁶ Available at: <https://www.centralbank.ie/news-media/press-releases/press-release-economic-letter-population-change-and-housing-demand-in-ireland-10-december-2019>

3.4 CHARACTERISTICS OF THE PROJECT

The project, which is the subject of assessment in this EIAR is the proposed Strategic Housing Development consisting of 345 residential units and a creche on a 6.7 ha. site. It will be facilitated by advance infrastructural works. These works are currently on appeal to An Bord Pleanála (ABP Reg. Ref. 312189). They consist of a connecting road to the north, drainage infrastructure, cycle and pedestrian facilities, and associated landscaping (the “AI Works”). The Project, is assessed in this EIAR to ensure that all cumulative and in combination effects of the Project itself and any cumulative and in combination effects of the Project with other plans and projects within the study area, have been fully assessed in order to enable the competent authority to undertake a lawful environmental impact assessment (“EIA”).

A full project description is set out in Chapter 2 however a summary of the project is set out below:

The SHD Project

The Strategic Housing Development entails 345 no. residential units comprising of 84 no. 1-bed units, 104 no. 2-bed units (68 no. 2-bed apartments and 36 no. 2-bed duplexes), 157 no. 3-bed units (118 no. 3-bed duplexes and 39 no. 3 - bed houses) ranging in height from 2 no. – 4 no. storeys.

The SHD project is set out in 8 blocks which comprise the following:

- Block A1 comprises 39 No. units at 4 storeys in height (Comprising a mix of 26 No. apartments & 13 No. Duplexes)
- Block A2 comprises 33 No. units at 4 storeys in height (Comprising a mix of 22 No. apartments & 11 No. Duplexes)
- Block B1 comprises 16 No. units at 3 storeys in height (Comprising all 3 bed Duplexes)
- Block B2 comprises 16 No. units at 3 storeys in height (Comprising all 3 bed Duplexes)
- Block C comprises 42 No. units at 2-3 storeys in height (Comprising 15 No. apartments & 27 No. Duplexes)
- Block D comprises 32 No. units at 2-3 storeys in height (Comprising 12 No. apartments and 20 No. houses)
- Block E comprises 62 No. units at 2-3 storeys in height (Comprising 38 No. apartments & 24 No. Duplexes)
- Block F comprises 66 No. units at 2-3 storeys in height (Comprising 39 No. apartments & 27 No. Duplexes)
- Block G comprises 25 No units at 2-3 storeys in height. (Comprising 20 No. Duplexes and 5 No. houses)
- Block H comprises 14 No units at 2-3 storeys in height. (Comprising 14 No. houses)
- Public Open Space of c.16,670 sqm (25% of net developable area) is proposed including the parkland and main public square, in addition to the linear park of c.2,427 sqm;
- c.2,272 sqm communal open space is proposed to serve the apartments;
- 414 car parking spaces in total are proposed including 40 visitor spaces, 3 for creche set down and 2 for creche staff parking within undercroft and at surface level.
- 802 No. bicycle parking spaces comprising including 128 No. visitor spaces and 10 No. to serve the creche;
- Childcare and community facility of c.377 sqm. located in Block C;
- Upgrades to the Golf Links Road including new pedestrian and cycle infrastructure with frontage on Golf Links Road;
- Vehicular access off the Golf Links Road is to be provided to the south east of the subject site;
- In addition the proposal will provide a new internal link road. This internal link road will connect to the adjacent lands to the north, for which a separate planning application has been made to Fingal County Council under Reg. Ref. F21A/0287 (ABP Reg. Ref. 312189-21);

Please see below table showing a summary of the relevant site/development statistics:

Site Area	6.7 ha
SHD Net Developable Area	6.6 ha
No. Units	345 no. units
Gross Density	51.3 uph
Net Density	52 uph
Building Height	2 - 4 storeys
Plot Ratio	0.46
Dual Aspect	100%
Part V	68 units (20%)
Public Open Space	16,670 sqm (25% of total site area)
Communal Open Space	2,277 sqm
Car Parking	414 spaces
Bicycle Parking	802 spaces (including 128 visitor spaces)

Ultimately the development strategy for the landholding will deliver a significant number of residential units, wider improvements to public realm, open space, access and amenities in accordance with national and local planning policy objectives (except where identified in the material contravention statement), which advocates for suitable densities at appropriate locations.

3.5 'DO NOTHING' IMPACT

In order to provide a qualitative assessment of the project, this section considers the project in the context of the likely impacts upon the receiving environment should the project not take place.

A 'do nothing' impact would result in the subject lands remaining in a greenfield undeveloped state. The site is currently in agricultural use..

This would be an underutilisation of the site from a sustainable planning and development perspective, particularly considering the location of the lands adjacent to high quality public transport, close to Skerries town centre and within an area which is zoned residential, identified as a suitable location for residential development and population growth. The status of the environmental receptors described throughout this EIAR document would be likely to remain unchanged. The potential for any likely and significant adverse environmental impacts arising from both the construction and operational phases of the project would not arise.

In terms of the likely evolution without implementation of the project as regards natural changes from the baseline scenario, it is considered there would be limited change from the baseline scenario in relation to population (human beings) and human health.

Similarly the potential for any likely and significant positive environmental impacts arising from both the construction and operational phases of the project would also not arise. The wider lands are zoned for residential purposes within the Fingal Development Plan with an objective to "Provide for new residential communities subject to the provision of the necessary social and physical infrastructure", and the proposed use of the site is considered to be in accordance with the proper planning and sustainable development of the area.

A 'do nothing' scenario would involve the subject site, which is zoned 'RA-Residential' under the Fingal County Development Plan 2017 - 2023. The landholding comprises a series of agricultural fields traversed by hedgerows , remaining in its current state, and remaining underutilised.



Figure 3.9: Views from within the site.

This would represent a sub-optimal use of zoned and highly accessible land which is identified for residential development. The Fingal Development Plan (as varied) states the following in relation to housing delivery over the plan period:

“The emphasis of this Plan is to continue to consolidate the existing zoned lands and to maximise the efficient use of existing and proposed infrastructure. In this way the Council can ensure an integrated land use and transport strategy in line with national and regional policy. It will also ensure that the Council is in a strong position to influence infrastructure providers at national level, including Irish Water, in that there will be clear evidence of the Council’s commitment to maximising investment in infrastructure through its policy of consolidation. The development of larger areas of residential or mixed use lands will only take place subject to the necessary infrastructure being available and to this end it will be subject to a Local Area Plan. It is through the LAP process that, within the towns and villages, the detailed phasing and distribution of housing will be determined in line with the population and housing targets established at a strategic level.

Fingal has a significant quantum of land zoned to achieve the Regional Spatial and Economic Strategy’s targets...”

The Development Plan goes on to state the 2026 high range population target of 333,000 persons provides for a population growth per annum of 3,679 persons per year. Extrapolating this figure to the year 2023 provides for a population projection of 321,964 persons. Dividing this figure by the projected household size in 2023 which is 2.68 persons provides for an overall housing unit requirement of 120,136 units or a growth of 15,285 units to the end of the Fingal Development Plan in 2023.

The policy documents including: ‘Housing For All – Ireland’s New Plan for Housing’, the National Planning Framework, and the Regional Spatial and Economic Strategy for the EMRA all promote the delivery of housing in appropriate locations in order to meet the considerably shortfall of housing in the state, which is precipitating gravely negative impacts in terms of population and human health, with an increasing portion of the population living in overcrowded conditions (as confirmed in the 2016 Census) which can be attributed to a lack of housing supply.

As set out above CSO figures point to a significant and increasing housing need in the state which is not being met at present. The Central Bank of Ireland has published a study in December 2019 entitled ‘Population Change

and Housing Demand in Ireland’, which includes stated ‘*Assuming unchanged household formation patterns and net inward migration close to current levels, around 34,000 new dwellings would be required each year until 2030.*’ In the do-nothing scenario, the absence of the project would perpetuate the housing shortfall in the area, contrary to the aims and objectives of national, regional, and local planning and housing policy, all of which promote the delivery of additional housing at locations such as the subject site.

The local economy would not experience the direct and indirect positive effects of the construction phase of development, including employment creation. The local construction sector and associated industries and services would be less viable than they might otherwise be.

Failure to deliver the project would result in housing need and demand remaining unmet, at a location where public transport is available. The new pedestrian and cycle links, the public open space, childcare facility, to be provided in the development would also not be provided.

3.6 POTENTIAL IMPACT OF THE PROJECT

3.6.1 Introduction

This section provides a description of the specific, direct and indirect, impacts that the project may have on human health and population during both the construction and operational phases of the project. As stated, guidance documents from the EPA, the European Commission, and the Department of Housing, Planning and Local Government outline that the assessment of impacts on population and human health should focus on the health issues and environmental hazards arising from the project. Additionally, this section addresses the population and socio-economic impacts of the project.

For a more detailed assessment of potential impacts associated with other environmental factors, please refer to specific chapters of the EIAR which assess the environmental topics outlined in the EIA Directive. The Construction and Environmental Management Plan, which is included as a standalone report with this application, also provides a more detailed assessment of the construction and waste proposals for this development.

3.6.2 Human Health

Construction Phase

Various elements associated with the construction phase of the proposed development have the potential to impact local ambient air quality, however the potential construction phase impacts shall be mitigated as detailed in Chapter 7 (Air Quality and Climate) written by TMS Environment Ltd. The proposed construction works associated with the development proposed in this planning application is expected to take circa. 5 years to complete.

Potential air quality impacts during Construction can occur as a result of the following areas:

- Dust emissions associated with excavations and demolition works
- Construction transport emissions
- Aspergillus emissions from excavation and earthmoving activity

The potential air quality impacts during Construction are summarised as follows, Chapter 7 states:

“There are no demolition works proposed for the proposed development. The most significant of the potential air quality impacts associated with the construction site is dust.”

Overall Chapter 7 characterises the potential impact as follows:

“There will be a short-term, slight impact on the closest receptors during the excavation programme and a short-term, not significant impact on the closest receptors during the construction works. Construction traffic impacts will be not significant and experienced in the short-term. In the absence of mitigation measures, the overall impact of dust arising during the construction phase is considered to be short term in duration and its significance will vary from not significant to slight”

Further, in relation to construction traffic: *“In the absence of mitigation measures the construction phase activities will range from an imperceptible to slight impact on local air quality depending on the activities occurring and in all cases will be short-term in duration.”*

In relation to human health the overall impact in terms of noise and vibration can be summarised as follows. The site development and construction phases can potentially give rise to temporary to short term noise and vibration impact and effects through the use of mobile and non-mobile heavy machinery and equipment.

As described by Redkite:

A significant effect is deemed to have occurred where an impact of major or moderate magnitude (i.e. where the threshold value is exceeded) will occur for a duration exceeding:

- 10 or more days or nights in any 15 consecutive days or nights;
- A total number of days exceeding 40 in any 6 consecutive months.

In relation to Noise, Redkite describe potential impacts of construction as follows:

The short-term site development and construction phases will involve works such as site preparation works, construction of buildings, road surfacing and landscaping etc., all of which will result in the use of noisy machinery as well as the movement of Heavy Goods Vehicles (HGVs) on and off the site. It is anticipated that the Project will be constructed in two main phases over a 5-year period in total.

Works will commence in the northern portion of the site initially and then advance southwards. Pre-cast driven piling will be required throughout the site.

The existing NSRs most likely to be affected by the site development and construction phases are identified on Figure 10.5.

Construction related noise will exceed the threshold value at the nearest NSRs when works take place close to the boundary. Therefore, mitigation measures in terms of limiting duration and/or other measures will apply as set out in chapter 7.

In relation to construction traffic, as reported by Redkite in Chapter 10: *“During the period of excavation, it is estimated that up to 4 no. truck trips per hour (on average) will be generated by vehicles removing unsuitable spoil from the site over a total 6-9 month period.*

During later stages, deliveries will arrive at a steady rate during the course of each day. It is estimated that peak delivery rates would be in the region of 1 - 2 deliveries per hour throughout the day.”

In terms of noise related to construction traffic, the impact magnitude is estimated as minor negative considering the proximity of NSR1, an existing dormer directly to the south of the site.

In relation to vibration, as reported by Redkite in Chapter 10: *“Based on the data in BS5228:2, the potential exists for negative vibration impacts on human beings however the exact impact will be dependent on the soil*

conditions, project requirements and type of equipment used. Precautionary mitigation measures are proposed in Section 10.8.1 of this report.”

In summary, during the construction phase of the proposed development there will be some dust impacts experienced at the nearest receptors to the subject site. It is predicted that the mitigation measures proposed will ensure that the air quality impacts are kept to a minimum. The predicted air quality impacts on the receiving environment during the construction phase are considered to be slight and short term and only affecting a small number of properties.

Operational Phase

The only predicted air quality impacts associated with operation of the development are emissions to atmosphere from traffic associated with the development. As set out in Chapter 7: *“The potential impact on air quality associated with a traffic volume change of this magnitude is considered not significant in a local context and imperceptible in an overall context particularly considering the advanced developments made in cleaner and more efficient vehicle engines...”*

The operational phase activities will have a not significant impact on local air quality.”

As set out in Chapter 10: *“Additional traffic arising from the proposed Development can give rise to increased traffic noise impact at existing NSRs in the long term. Accordingly, the potential long-term effect of additional traffic related noise impact on existing NSRs has been considered. As a general rule of thumb, a doubling of traffic flow will likely result in a 3 decibel increase in traffic noise levels. In order to assist with the interpretation of the noise impact associated with vehicular traffic on public roads, Table 10.15 below offers guidance as to the likely noise impact and effect.”*

Further Redkite, summarises this impact as follows: *“As can be seen from Table 10.17 above, traffic levels will increase during peak hour on the Golf Links Road as a result of the proposed Development. The traffic will effectively double at Point A which correlates to a 3 dB increase. Based on Table 10.15, this equates to a magnitude rating of slight negative long-term. This will be perceptible to NSRs along the roadside based on Table 10.15. At Point B, the effect will be less and will be long-term imperceptible based on peak hour flows.”*

As identified in Table 10.18 of Chapter 10 this is *‘The greatest percentage change equates to a 3.0 – 4.9 decibel increase which is rated as a minor negative long-term impact.’*

In summary there is the potential for effects on human health once operational. As set out in further detail within Chapter 7 this is considered not significant in terms of Air Quality and imperceptible in terms of climate impacts. In regard to noise, while a long term effect is possible as a result of an increase in traffic on Golf Link Road this is considered to be a minor negative impact.

3.6.5 Population

Economic Activity

Construction Phase

The construction phase of the project is likely to result in a positive net improvement in economic activity in the area of the project site particularly in the construction sector and in associated secondary building services industries. The construction sector (including associated services) was documented as one of the most adversely impacted sectors of the Irish economy following the economic downturn in 2008 and Covid-19 downturn in 2020-21. The sector has recovered during 2021, however the emergence of new variants contributed to a 7.7% decline on residential completions in Q3 2021 and a 14% decline in housing (ESRI Quarterly Report Winter 2021), with commencements peaking in Q1.

The construction of the 345 No. Units and all associated infrastructure will precipitate a positive impact on construction-related employment for the duration of the construction phase.

The construction phase will also have secondary and indirect 'spin-off' impacts on ancillary support services in the area of the site, such as retail services, together with wider benefits in the aggregate extraction (quarry) sector, building supply services, professional and technical professions etc. These beneficial impacts on economic activity will be largely temporary but will contribute to the overall future viability of the construction sector and related services and professions over the construction period.

The project could have a slight, short term, negative economic impact on the surrounding area during the construction phase due to traffic and associated nuisance, dust and noise. These issues and appropriate mitigation measures are addressed in Chapters 7 Air Quality and Climate, Chapters 10 - Noise and Vibration, Chapter 11 Traffic, and Chapter 12 - Waste of the EIAR, the Traffic and Transport Assessment, Construction and Environmental Management Plan and Management Plan which accompany the application. A Construction Traffic Management Plan will be implemented for the site during the construction process which will minimise disruption to the surrounding road network. The Construction Management Plan submitted with the application includes outline construction traffic management measures to be implemented on site.

Operational Phase

The operational phase of the development will result in the delivery of additional housing to support planned and projected population growth which will support a wide range of additional local businesses, services, transport infrastructure and employment opportunities. Skerries Town Centre will benefit from the increased local populace and allow for improved local generation of job opportunities. Economic opportunities will also be provided for within the crèche.

The project will help to meet established housing need and demand within the Dublin area, at a location which will encourage public transport and active transit modes due to its proximity to high quality public transport provision, and a range of existing and permitted uses, facilities and amenities.

The proposal includes an element of Part V provision in accordance with the requirements of the Planning Authority, which will provide for an enhanced mix of tenures, and add to the existing social housing stock. The overall benefit to the economic activity of the surrounding area resulting from the development can be considered moderate, long term, and positive.

3.6.6 Social Patterns

Construction Phase

The construction phase of the project is unlikely to have any significant impact on social patterns within the surrounding area. Some additional temporary additional local populations may arise out of construction activities. However, these impacts are imperceptible, temporary in nature and therefore not considered significant.

It is acknowledged that the construction phase of the project may have some short-term negative impacts on local residents. Such impacts are likely to be associated with construction traffic and possible nuisances associated with construction access requirements. These impacts are dealt with separately and assessed elsewhere in the EIAR, including Chapter 2 - Project Description and Alternatives Examined, Chapter 7 - Air Quality and Climate and Chapter 10 - Noise and Vibration and also in the Traffic and Transport Assessment.

Such impacts will be short term and in the longer term, the completed scheme will have beneficial impacts for local businesses, residents and the wider community. Any disturbance is predicted to be commensurate with the

normal disturbance associated with the construction industry where a site is efficiently, sensitively, and properly managed having regard to neighbouring activities. The construction methods employed and the hours of work proposed will be designed to minimise potential impacts to nearby residents. A Construction and Environmental Management Plan is submitted with this planning application. In addition please also see Chapter 2 for detail of construction stage.

Operational Phase

The addition of new residents will improve the vibrancy and vitality of the area and will help to support existing community and social infrastructure to further supporting nearby Skerries Town Centre and commercial businesses. As set out within the Social and Community Infrastructure Audit submitted as a standalone report with the application and prepared by John Spain & Associates, there is a good range of existing community and social infrastructure within a 2km radius of the subject site, which the project will be able to avail of. The purpose of the community audit is to determine if the Skerries area is well served by community related facilities to support the future residents of the proposed development.

The Social and Community Infrastructure Audit also assesses the potential demand created by the proposed development. The total number of primary school pupils enrolled in the schools currently amounts to 1,762, with the total number of secondary school pupils amounting to 1,003. On this basis it is considered the increased demand from the population projected, as identified by the Skerries area, of 119 primary and 84 secondary places can be accommodated within the existing and planned school provision in the area.

It is considered that Skerries is accessible to a range leisure facilities including; football/ rugby / GAA clubs, a number of public parks; a number of education facilities and a quantum of community facilities located throughout the town centre. As such the facilities that Skerries currently offers is very good and will be able to support the future residents of Skerries. The proposed development will include high quality public open space including playing pitches, walkways, and play areas.

The proposed SHD also includes the provision of a childcare facility.m. As set out within the Community and Social Infrastructure Audit report, this childcare facility will accommodate the likely demand arising from the proposed SHD based on the calculation methodology within the 2001 Childcare Facility Guidelines.

Once operational, the SHD will give rise to much needed additional residential accommodation. Residents will spend a portion of their income locally which would not happen without the project. The project will provide job to those construction and development jobs provided during the construction phase.

Having regard to the fact that the area within which the development is situated benefits from a good level of social and community infrastructure, and noting the elements of the project which will improve and strengthen this infrastructure, it is concluded that the project will precipitate a moderate, positive, long term impact on social patterns in the operational phase.

3.6.7 Land-Use & Settlement Patterns

Construction Phase

The construction phase of the project will primarily consist of site clearing, excavation and construction works, and the erection of the proposed new buildings on site and has the potential to impact adversely and result in the temporary degradation of the local visual environment on a short-term basis. The visual impacts precipitated by the project are assessed in greater detail in Chapter 6 of the EIAR 'Landscape and Visual Impacts'.

The site is currently greenfield in nature occupied by a series of agricultural fields and hedgerows. The wider area. The site is bound by a riparian corridor to the north including a stream which traverses the site east to

west. This corridor is to serve as the basis for a regional drainage facility which is intended to serve this development and future adjacent development to the north.

Further to the south, east and west comprise a mix of agriculture, single rural dwellings a cemetery and a quarry. To the east of the lands there is a map based objective for a future school. Further to the north lands are suburban in nature.

103 no. dwellings which form Phase 1 of a Noonan Construction development have been built on the lands immediately north of the site under FCC Reg Ref: F11A/0309/E1. It is understood that the Proposals for Phase 2 will be subject of a separate residential application.

The construction phase may result in a marginally increased population in the wider area due to increased construction employment in the area, however, this would be temporary in nature and the impact would be imperceptible.

Operational Phase

The operational phase of the project will result in the introduction of residential development at a suitable density, delivering wider public realm and road upgrades, local connectivity and linkages, in accordance with national and local planning policy objectives which seeks to deliver compact growth at suitable locations. The proposed development will provide housing for the growing population of the immediate area and the Eastern and Midlands Region in general. In addition, a significant quantity of open space consisting of recreational and amenity space is also provided in addition to the childcare facility.

The adequate provision of high-quality housing to serve the existing and future population of the county and the wider Dublin area is an important pre-requisite and contributor to the establishment and maintenance of good human / public health. The high quality design of the project, including individual units which meet and exceed the relevant standards for houses and will contribute to a positive impact on the wellbeing of future residents.

The location of the development, nearby to the Skerries town centre, the existing provision of social and community infrastructure will result in a positive, permanent and moderate impact on the wellbeing of future residents.

3.6.8 Housing

Construction Phase

The project will not result in any impact in terms of loss of housing stock during the construction stage.

Operational Phase

The operational phase of the project will see the delivery of 345 residential units. This represents a large-scale development in the context of the housing delivery within Fingal County, with housing completions numbering c. 1,386 units in the County for 2020⁷.

The project will respond to established housing need and demand in the area of the project, and the wider region. The proposed residential units will assist in addressing the significant shortfall of residential development, which has been further impacted by the ongoing Covid 19 crisis.

⁷ <https://www.cso.ie/en/statistics/construction/newdwellingcompletions/>

The project delivers a range of housing unit sizes, including one, two, and three bedroom apartments and semi-detached and mid-terrace three bed units. The scheme also benefits from a creche, high level of good quality communal and public open space, with new linkages provided through the site improving connectivity.

The delivery of 345 no. well designed residential units at an appropriate location will have a direct, positive, and significant impact on the future residents of the project and will support the population growth targeted for the area and Dublin as a whole.

3.6.9 Employment

The impact of the project in relation to employment has been discussed under economic activity and in Section 3.6.6.

3.6.10 Risk of Major Accidents or Disasters

The EIA Directive states that an EIAR must include the expected effects arising from the vulnerability of the project to risks of major accidents and/or disasters that are relevant to the project and the potential for the project to cause major accidents and disasters (e.g. construction and operation of the development flooding other lands).

In this respect, taking cognisance of the other chapters contained within this EIAR document, the project site is not vulnerable to, nor does it present, risks of major accidents or disasters, from external man made or natural disasters. Please also see Chapter 14 Risk Management for overview in this regard.

A Site Specific Flood Risk Assessment has been carried out by DBFL in accordance with the requirements of *“the Planning System and Flood Risk Management Guidelines for Planning Authorities”*, November 2009. Following the flood risk assessment stages, it was determined that the site is within Flood Zone C as defined by the Guidelines and based on the ECFRAMS mapping. Therefore, the development of housing on the subject site is appropriate for the site’s flood zone category and a justification test as outlined in the Guidelines is not required. The Guidelines sequential approach is met with the ‘Justify’ & ‘Mitigate’ principals being achieved.

A Site Specific Flood Risk Assessments has been included as part of this planning application. The Engineering Services Report summarises these findings below:

“This Site Specific Flood Risk Assessment for the proposed LDA SHD Scheme and Ballygossan Park Phase 2 residential developments was undertaken in accordance with the requirements of the Planning System and Flood Risk Management Guidelines for Planning Authorities”, November 2009. Following the flood risk assessment stages, it was determined that both of these proposed developments are within Flood Zone C as defined by the Guidelines and based on the ECFRAMS mapping.”

The SSFRA outlines flood mitigation measures in Section 5.5. It is considered that the flood risk mitigation measures once fully implemented are sufficient to provide a suitable level of protection to the project and will not cause an increased risk of flooding to external properties or to the downstream watercourse. A regularly maintained drainage system would ensure that the network remains effective and in good working order should a large pluvial storm occur.

In the event of extreme pluvial flooding then overland flood routes would direct water towards the open space areas and the proposed Regional Drainage Facility to the north. Should extreme pluvial flooding occur in excess of the development’s drainage capacity i.e. exceeding 1% AEP, then overland flood routes towards the on-site open spaces and Regional Drainage Facility would protect the development and houses with lowest proposed floor levels.

While residential development constitutes ‘highly vulnerable’ development, it is appropriate for this flood zone and the scheme has been designed to ensure that the risk of flooding of the development is reduced as far as is reasonably practicable. The development does not increase the risk of flooding to adjacent area and roads once mitigation measures are implemented.

3.6.11 Health & Safety

The surrounding context consists of residential, agricultural and recreational uses. It does not include any man-made industrial processes (including COMAH Directive/ Seveso III Directive sites) which might result in a risk to human health and safety. It is not within the consultation zone of a COMAH Directive/ Seveso III Directive Site as defined by the Health and Safety Authority. It is not proximate to Dublin Airport Noise or Safety Zones.

Construction Phase

The construction methods employed and the hours of work proposed will be designed to minimise potential impacts. The development will comply with all Health & Safety Regulations during the construction of the project. Where possible, potential risks will be omitted from the design so that the impact on the construction phase will be reduced. A Construction and Environmental Management Plan (CEMP) has been prepared by DBFL Consulting Engineers and the measures specified therein will be complied with during the construction phase of the project.

No significant health and safety effects are envisaged during the construction phase of the project. The Health and Safety policy, procedures and work practices of the project will conform to all relevant health and safety legislation both during the construction stage of the project. The project will be designed and constructed to best industry standards, with an emphasis being placed on the health and safety of employees, local residents and the community at large.

Operational Phase

No significant health and safety effects are envisaged during the operational phase of the project.

The operational stage of the development is unlikely to precipitate any significant impacts in terms of health and safety. The design of the project has been formulated to provide for a safe environment for future residents and visitors alike. The paths, roadways and public areas have all been designed in accordance with best practice and the applicable guidelines including Design Manual Urban Roads Streets (please see Statement of DMURS Compliance prepared by DBFL). A Road Safety Audit has also been carried out and submitted with the application.

The project will not result in any significant impacts on human health and safety once completed and operational.

3.7 AVOIDANCE, REMEDIAL & MITIGATION MEASURES

Avoidance, remedial and mitigation measures describe any corrective or mitigative measures that are either practicable or reasonable, having regard to the potential likely and significant environmental impacts.

Construction Phase

A range of construction related remedial and mitigation measures are proposed throughout this EIAR document with reference to the various environmental topics examined and the inter-relationships between each topic. Readers are directed to Chapter 16 of this EIAR document which summarises all of the remedial and mitigation measures proposed as a result of this EIAR. In particular we note the mitigation measures set out in Chapter 7 Air Quality and Climate, Chapter 10 Noise and Vibration which primarily relate to the Construction and Environmental Management Plan. Further, the design of the construction programme and the location and layout of the construction compound and the storage of materials will be carefully planned to ensure that air quality impacts are minimised

For population and human health the following Mitigation Measure is proposed:

The Construction and Environmental Management Plan, which the building contractor will be contractually obliged to implement, will be implemented during construction of the development. It will remain a live document and may be updated as required. This Plan will reduce the impacts of the construction phase on local residents and ensure the local road network is not adversely affected during the course of the construction project, while methods such as those outlined in the pollution control section shall be implemented to mitigate any potential pollution events.

The Construction and Environment Management Plan has been prepared as part of the planning application which incorporates a range of integrated control measures and associated management activities with the objective of minimising the construction activities associated with the development.

Operational Phase

A package of integrated mitigation measures has been identified to off-set the additional local demand that the project at the subject site could potentially generate as a result of the forecast increase in vehicle movements by residents of the scheme.

A Mobility Management Plan (MMP) is to be compiled with the aim of guiding the delivery and management of coordinated initiatives by each of the two schemes' promoters. The MMP's ultimately seeks to encourage sustainable travel practices for all journeys, by residents and visitors travelling to and from the project.

The operation phase is considered to have likely positive impacts on human beings in relation to the provision of high quality housing including specifically open space, footpaths and cycle paths will improve the area. No further specific mitigation is required having regard to the mitigation included within the other chapters of this EIAR.

3.8 POTENTIAL CUMULATIVE IMPACTS

The potential cumulative impacts of the project on population and human health have been considered in conjunction with the ongoing changes in the surrounding area and in terms of the various element of the project itself. Visits to the subject site in 2021 and surrounding area and desk-based review of online planning files have been undertaken to identify the existing pattern of development, nearby uses, and any permitted / ongoing developments of relevance to the current proposals in the context of population and human health.

The surrounding area is defined by a predominately agricultural to the west, south and east; and residential to the north with the urban extent of Skerries adjacent.

The purpose of the application is to deliver residential development on appropriately located and zoned land at a suitable density to meet the levels of housing demand currently existing within Dublin County as a whole.

Following an assessment of the Fingal County Council's online planning register, we do not note any other significant permitted or future developments in the immediate area. The project should not be considered in isolation, in particular we have considered the cumulative impact of the future development of the Ballygossan Phase 2 which will be the subject of a residential housing development application in the near future for c.149 units. This EIAR considers the cumulative impact of the advanced infrastructure works currently before the Board on appeal which was submitted to FCC under Reg. Ref. F21A/0287 and the permitted road improvements application under FCC Reg. Ref. F20A/0324 (ABP Reg. Ref. 309409).

Noonan Construction intend to complete the existing Ballygossan residential development in the near future located directly to the north of the project site. We note the previously submitted Pre-Application Consultation

Request ((Ref. 308583-20) to An Bord Pleanála. This application was described on ABP’s website as follows ‘149 no residential units (33 no. houses, 116 no. apartments), creche, and associated site works’. ABP considered the application as a ‘reasonable application basis’. The following site statistics were also provided within the Inspector’s Report:

Site Area	Total site area 4.8ha (nett area of 2.97ha)
Proposal	149 Residential Units (116 no. Aprt. & 33 no. Hse) in 3 no. phases (Phase 1: the riparian corridor, cycle and pedestrian paths. Phase 2: apartment block and 33 no. houses. Phase 3: 16 duplex and creche).
Density	50uph (based on 2.97ha)
Unit type & Height	4 storey Apartment block (100 units), 2 no. 3 storey blocks of Duplex (16 units), 33 no. terraced/semi-detached houses.
Open Space	Public OS (25,333sq.m), Communal OS, 2 no. playing pitches, playgrounds, pedestaling/cycle links.
Parking	<u>Car:</u> Duplex (20 & 4 visitor), Houses (66 & 10 visitor), apartments (100 at basement & 16 visitor at surface), childcare (2 and 1 set down space) <u>Bicycle:</u> Duplex (32 includes 8 visitor), Houses (10 private & 14 visitor), apartments (186 at basement & in a bicycle store/gym building of 130sq.m in the communal OS & 50 visitor) childcare (8)
Childcare Part V	355.4sq.m (63 no. children) 16 units (10.7%).
Access	Main access is via Golf Links Road. Links to existing Ballygossan scheme at various points. Links to lands to the south Temporary construction access adjacent to Ballygossan Park.

Figure 3.10 – Overview of residential application subject to pre-application consultation as included in the Inspector’s Report 308583-20 (Source: ABP, 2022).

We understand this application is to be progressed under the Large-scale Residential Development process applying directly to FCC. The potential cumulative impact of this development has been assessed in relation to the respective environmental factors, in specific relation to Human Health and Population the following is considered relevant.

As set out in Chapter 7, in terms of dust: *“In the event that the construction phase of the proposed development coincides with the construction of any of the other identified developments within the zone of influence of the subject site (< 350m) there is the potential for cumulative dust impacts to the nearby sensitive receptors. While the zone of potential influence extends to 350m for the purpose of the overall assessment, the magnitude and significance of any impacts decreases with distance from the site with the maximum impacts observed within < 50m of the site boundaries. The dust mitigation measures outlined in this chapter will be applied throughout the construction phase of the proposed development and with similar mitigation measures applied for other permitted developments in accordance with best practice guidance then this will prevent any significant cumulative impacts on air quality. With appropriate mitigation measures in place, the predicted cumulative impacts on air quality and climate associated with the construction phase of the proposed development are deemed slight and short-term..”*

In regard to the impact on Air Quality and Climate as a result of traffic impact Chapter 7 also states: *The proposed residential developments for the local area have the potential to add further additional vehicles to the local road network and additional heating systems to local area. The traffic and heating impact for the proposed*

development has been predicted to have a not significant impact on air quality and climate and it is considered likely that the proposed Ballygossan Park (Phase 2) development and any other future developments of similar scale would give rise to a not significant impact during the operational stages of those projects.

We note the cumulative assessment contained within Chapter 10 in this regard, which states: “*existing NSRs in Phase 1 of Ballygossan Park (NSR3 as indicated on Figure 10.5) may experience potential cumulative temporary to short-term site development and construction noise impacts from the development of the Project and Phase 2 of Ballygossan Park. The closest works in the Project to Phase 1 of Ballygossan Park will be approximately 65m from Ballygossan Park (Phase 1). Works associated with Phase 2 of Ballygossan Park will directly adjoin Phase 1. Therefore, the Ballygossan Park Phase 2 works will likely present the highest potential for noise impact compared to the Project. Cumulatively, the impact will likely derive predominantly from Ballygossan Phase 2 works due to proximity.*”

The cumulative impact of the proposed development, along with other anticipated and existing developments in the vicinity, will be a further increase in the population of the wider area. The greenfield lands will provide for 345 no. new residential units across a variety of units and tenure types. This will have a moderate impact on the population (human beings) in the area when considered in the context of other developments in the area. This impact is likely to be long term and positive, having regard to the zoning objective for the subject lands, and their strategic location within Skerries town, which is designated for growth.

With regard to human health, the cumulative impact of the proposed development in conjunction with other nearby developments will provide for the introduction of a high-quality new neighbourhood in the area with a high level of accessibility and amenity, with a significant public open space proposed, combining with that at Ballygossan Phase 1 and 2. The overall cumulative impact of the proposed development will therefore be long term and positive with regard to human health, as residents will benefit from a high quality, visually attractive living environment, with high quality opportunities for active and passive recreation and strong links and pedestrian permeability.

3.9 RESIDUAL IMPACTS OF THE PROJECT

This section allows for a qualitative description of the resultant specific direct, indirect, secondary, cumulative, short, medium and long-term permanent, temporary, positive and negative effects as well as impact interactions which the proposed development may have, assuming all mitigation measures are fully and successfully applied. It should be noted that in addition to remedial and mitigation measures, impact avoidance measures have also been built into the project design processes through the assessment of alternatives described in Chapter 2 of this EIAR.

Population

Construction

It is acknowledged that the construction phase of the project may have some short-term negative impacts on local residents. Such impacts are likely to be associated with construction traffic and possible nuisances associated with construction access requirements. In regard to economic activity, the phase may result in a marginally increased population in the wider area due to increased construction employment in the area; however, this would be temporary in nature and the impact would be imperceptible. The project could have a slight negative economic impact on the surrounding area during the construction phase due to traffic and associated nuisance, dust and noise.

Such impacts will be short term and any disturbance is predicted to be commensurate with the normal disturbance associated with the construction activity where a site is efficiently, sensitively, and properly managed having regard to neighbouring activities. The construction methods employed and the hours of work proposed will be designed to mitigate potential impacts to nearby residents. A Construction and Environmental

Management Plan has been prepared by DBFL and is submitted with this planning application and reflects the mitigation measures set out within. Therefore it is considered that no negative impacts are predicted.

Operation

The project will result in a permanent positive impact on the population through additional housing at a suitable density on appropriately located and zoned site. It also includes, public and communal open space, completion, creche, lighting, landscaping, water services, pedestrian and bicycle paths.

Once complete the addition of new residents and an additional element employment to the area will improve the vibrancy and vitality of the area and will help to support existing community and social infrastructure. The delivery of well-designed residential units at an appropriate location which will be facilitated by the proposed infrastructural development will have a direct, positive, and significant impact on the future residents of the project will support the population growth targeted for the Skerries area

The project will result in a significant permanent change to the lands. The adequate provision of high-quality housing to serve the existing and future population of the county and the wider Dublin area is an important prerequisite and contributor to the establishment and maintenance of good human / public health there will positively impact the population. High quality open space, footpaths, bicycle paths, childcare facilities are also provided with new linkages provided through the site improving connectivity.

Future residents will spend a portion of their income locally which would not happen without the project. The SHD also provides for a childcare facility. The project will provide some long term job opportunities for people living in the area, in addition to those construction and development jobs provided during the construction phase.

Having regard to the fact that the area within which the development is situated benefits from a good level of social and community infrastructure, and noting the elements of the project which will improve and strengthen this infrastructure, it is concluded that the project will precipitate a moderate, positive, long term impact on social patterns in the operational phase.

Human health

Construction

The construction phase of the project will primarily consist of site clearance, excavation and construction works. Notwithstanding the implementation of remedial and mitigation measures there will be some minor temporary residual impacts on human health most likely with respect to nuisance caused by construction activities, predominantly related to noise, dust and traffic as detailed.

In terms of air quality, Chapter 7 states:

“In summary, During the construction phase of the proposed development there will be some dust impacts experienced at the nearest receptors to the subject site. It is predicted that the mitigation measures proposed will ensure that the air quality impacts are kept to a minimum. The predicted air quality impacts on the receiving environment during the construction phase are considered to be slight and short term and only affecting a small number of properties.

The only predicted air quality impacts associated with operation of the development are emissions to atmosphere from traffic associated with the development. The change in traffic movements will have no quantifiable impact on air quality. The predicted air quality and climate impacts on the receiving environment during the operational phase are considered to be not significant and long-term.

As detailed within Chapter 10 prepared by Redkite, during the construction phase of the project there will be a short-term noise impact on nearby noise sensitive properties from site activities in proximity to Noise Sensitive Locations. The application of binding noise limits, hours of operation, along with implementation of appropriate noise and vibration control measures will ensure that noise and vibration impacts are kept to a minimum in so far as practicable. The overall impact in terms of noise and vibration can be summarised as follows.:

Site development and construction noise arising from the proposed project will cause a temporary elevation of ambient sound levels in the vicinity of the existing NSRs at times when works are close to the boundary, but this will be controlled to comply with standard criteria or limit values for construction works. The criteria, by necessity, are higher than existing ambient levels as construction works are temporary to short term in nature. The mitigation measures as part of best practice will ensure that the limits combined with duration limits where applicable are not exceeded. As works move away from NSRs and/or as new buildings provide screening, construction noise levels will reduce to well below threshold value for the majority of the duration of the total works.

In summary, based on the above considerations, it is anticipated that subject to the careful implementation of the remedial and mitigation measures proposed throughout this EIAR document, and as controlled through the Construction and Environmental Management Plan (CEMP), prepared by DBFL, any adverse likely and significant environmental impacts will be avoided. The overall predicted likely and significant impact of the construction phase will be short-term, temporary and likely to be neutral.

Operation

The proposed development will result in a positive alteration to the existing undeveloped site in terms of the provision of residential units, and a childcare facility. Positive impacts on population and human health will include health benefits associated with the provision of a significant quantity of open space, a highly permeable layout which encourages walking and cycling, amenity and recreational facilities.

As set out by Redkite within Chapter 10: *“In the long term, the operational phase will not significantly impact on existing NSRs given its nature. Cumulative road traffic noise increases on the Golf Links Road will be minor adverse in the long term during peak hour flow but is likely to be less during the remainder of the day.*

External amenity criteria as specified in Pro-PG will be achieved in the proposed communal amenity areas and private amenity associated with apartment blocks.

External amenity criteria as specified in Pro-PG will be achieved in the proposed communal amenity areas associated with apartment blocks.

It is envisaged that the development will achieve good internal noise conditions for resting, sleeping etc with open or partially opened windows throughout 94% of the proposed development. The remainder will achieve reasonable to good conditions internal noise conditions for resting, sleeping etc with open or partially opened windows. Nevertheless, a minimum moderate level of sound insulation for glazing will be installed to future proof the development.

In terms of Air Quality Chapter 7 states: *“The operational phase activities will have a not significant impact on local air quality and will be long-term in duration.”*

In summary the implementation of the range of remedial and mitigation measures included throughout this EIAR document are likely to have the impact of limiting any adverse significant and likely environmental impacts of the operational phase of the project on human health. As such the project will result in a positive impact on housing and is not likely to result in any significant adverse effects on human health, and will result in some other positive impacts, including settlement patterns of a sustainable density at an appropriate location.

3.10 MONITORING

In relation to the impact of the development on population and human health it is considered that the monitoring measures outlined in regard to the other environmental topics such as water, air quality and climate and noise and vibration sufficiently address monitoring requirements.

3.11 REINSTATEMENT

There are no reinstatement works proposed specifically with respect to population and human health.

3.12 INTERACTIONS

As referenced throughout the chapter, there are numerous inter-related environmental topics described in detail throughout this EIAR document which are of relevance to human health. This chapter of the EIAR has been instructed by updated guidance documents reflecting the changes within the 2014 EIA Directive. These documents include the EU and Irish guidelines for preparation of an EIAR and carrying out an EIA⁸. Therefore, in line with the guidance documents referred to, this chapter of the EIAR focuses primarily on the potential likely and significant impact on Population and Human Health in relation to health effects/issues and environmental hazards from the other environmental factors and interactions that potentially may occur.

The overall predicted likely impact of the construction phase will be short-term and neutral. The measures set out in the Outline CEMP and above in Section 3.6 will seek to address any potential residual impact from the construction stage.

Noise and Vibration

The potential impacts associated with Noise and Vibration are contained within Chapter 10 written by Redkite Environmental.

The relevant chapter in this EIAR contains a more detailed assessment in respect of the interaction of noise and vibration with human health although summarised findings are contained within this chapter.

Construction activities, traffic flows can give rise to effects on human health through noise and vibration. The potential effect of this has been described in throughout this chapter.

Air Quality & Climate

The potential impacts associated with Air Quality and Climate are contained within Chapter 7 written by TMS Environmental Ltd. The relevant chapter in this EIAR contains a more detailed assessment in respect of the interaction of air quality and human health although summarised findings are contained within this chapter.

Where there are identified associated and inter-related potential likely and significant impacts which are more comprehensively addressed elsewhere in this EIAR document, these are referred to. However, the relevant

⁸ Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (published in August 2018); Guidelines on the Information to be Contained In Environmental Impact Assessment Reports Draft 2017 published by the EPA; and the European Commission's Guidance Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report (2017)

environmental topic chapter of this EIAR document contains a more detailed assessment in respect of the interaction of each environmental topic with population and human health.

3.13 DIFFICULTIES ENCOUNTERED IN COMPILING CHAPTER

No significant difficulties were experienced in compiling this chapter of the EIAR document.

3.14 CONCLUSION

This chapter of the EIAR has provided an appraisal of the likely impact of the project on population and human health. As set out above, the project will result in a positive impact through the provision of essential infrastructure to enable the delivery of housing and community facilities and is not likely to result in any significant adverse effects on population and human health. The project is likely to result in some other positive impacts, including settlement patterns of a sustainable density at an appropriate location. There are likely to be some economic benefits derived from the employment opportunities childcare facility proposed will offer. Through facilitating the generation of additional economic activity in the area and enabling the subsequent provision of high standard residential accommodation, there will be a significant positive impact on population and human health arising from the project.

3.15 REFERENCES

- National Planning Framework 2018
- Regional Spatial and Economic Strategy for the EMRA, 2019
- The Fingal County Development Plan 2017-2023 (as Varied)
- 2021 Labour Force Survey Q4 – www.cso.ie
- CSO statistical release: New Dwelling Completions Q4 2021, December 2021
- ESRI Quarterly Economic Commentary, Winter 2021
- Central Statistics Office www.cso.ie
- Central Bank of Ireland - Population Change and Housing Demand in Ireland 10 December 2019