

Strategic Environmental Assessment

Environmental Report

Kilmartin Local Area Plan

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Non Technical Summary of Environmental Report

1.1 Introduction

Fingal County Council commenced the preparation of the Kilmartin Local Area Plan, North Blanchardstown on the 1st December 2011 by advertising its intention to prepare a Local Area Plan for the lands at Kilmartin. A Strategic Issues Paper was prepared in order to aid and inform the making of submissions. The public were invited to make submissions on the proposed Local Area Plan between 1st December 2011 and 2nd February 2012. A total of 13 no. submissions were received during the pre-draft stage. Details of the consultation are set out in Section 2.3 of this report.

The EU Directive 2001/42/EC on Strategic Environmental Assessment was passed into Irish Law by means of the Planning and Development (SEA) Regulations 2004 - 2011. The Directive requires all European Union Member States to systematically evaluate the likely significant environmental effects of implementing certain plans or programmes before a decision is made to adopt the plan or programme.

Strategic Environmental Assessment (SEA) provides for more sustainable development through the methodical appraisal of policy options, considering alternative means of developing an area, by raising awareness of the environmental impacts of plans and the inclusion of quantifiable targets and indicators.

The Environmental Report documents the application of SEA to the Local Area Plan for Kilmartin. The purpose of the Non-Technical Summary is to ensure that the key issues and findings of the Environmental Report will be readily understood by decision-makers and by the general public.

The LAP lands are primarily greenfield and agriculture in nature, predominantly flat and largely featureless. To the east of the R121 the land is

gently rolling. To the west of the R121 the land is relatively flat. The current environmental challenges facing the LAP lands include the following:

- Maintaining and improving the ecological importance of the Pinkeen/Tolka Rivers
- Avoidance of habitat loss
- Identification of flood-risk zone

Without the implementation of the plan or programme, the current environmental challenges would remain the same.”

1.2 Methodology

The Environmental Report describes the environmental assessment process as applied to the LAP. The main steps taken in the process involved the carrying out of a baseline study, the consideration of alternatives and the assessment of the environmental impacts of the objectives of the LAP.

The methodology utilised consisted of a number of sequential steps summarised as follows:

1. Consideration of relevant plans and programmes at regional, national and international level.
2. Collation of baseline information.
3. Establishment of sustainable objectives, targets and indicators.
4. Consideration of alternatives.
5. Assessment of preferred option.
6. Identification of mitigation measures.
7. Identification of a monitoring programme.

1.3 The Baseline Environment

The baseline data involved collation of currently available and relevant environmental data with regard to the following issues: Population and Human Health, Noise, Biodiversity, Flora and Fauna, Soil, Water, Air Quality and Climatic Factors, Material Assets, Cultural Heritage and Landscape.

1.4 Environmental Assessment Conclusions

Population and Human Health

The Plan lands are located in the Ward Electoral Division which experienced high population growth between 2006 and 2011. The LAP will ensure that facilities and services are planned in tandem with the future population increase on the Plan lands, and in tandem with the necessary physical infrastructure in terms of roads and water/waste water services to cater for the Plan lands.

Noise

The main sources of noise in relation to the Plan lands relate primarily to traffic noise, both within the Plan lands and externally from the M3-N2 link road. Noise associated with Dublin Airport is an environmental issue, and will be mitigated for through the location of residential development away from sensitive noise zones and suitable noise insulation measures.

Biodiversity, Flora and Fauna

The LAP preserves the existing tree-line/hedgerow along the northern boundary of the site adjoining the Hollystown Golf Course. A stream along the eastern side of the site is also proposed to be protected. The Plan will create a network of green corridors to link open space areas both within the lands and to the surrounding environment.

Soil

The settlement strategy of the Plan has the capacity to maintain soil quality and agricultural resources of the area surrounding the settlement footprint due to the urban containment policies. The Plan provides for increased provision for passive recreational pursuits in the form of public open space and green corridors thereby maintaining the local soil resource.

Water

The water supply serving Kilmartin comes from the Liffey with its abstraction point at Leixlip via the low level reservoirs at Ballycoolin, boosted by the Cruiserath pumpstation. Plans to expand the Leixlip plant by the end of 2014 will increase production capacity to 225Ml/day. Following the expansion, no additional capacity is available in the river Liffey to allow further abstractions. A Sustainable Drainage System (SuDS) as outlined in the Greater Dublin Strategic Drainage Study will be implemented in the LAP area, as outlined in Appendix 3 of the LAP. A Flood Risk Assessment has been carried out and is included in Appendix 4 of the LAP.

Air and Climatic Factors

Public transport and sustainable modes of transport such as walking and cycling will be promoted in the Plan with knock-on improvements in air quality and reduced traffic emissions. Renewable energy and reduced CO2 emissions will be promoted by the incorporation of renewable energy policies in the Plan.

Material Assets

Transportation - Access to the Plan lands is proposed east of the R121 with three links proposed and west of the R121 with a further three links proposed. The Plan incorporates a network of pedestrian and cycle routes connecting to the Local Centre, schools, community services and public open space.

Cultural Heritage

The Plan provides for enhanced protection for the archaeological heritage of the settlement through policy protection. The Plan also provides for protection or replacement of a townland boundary which may be impacted upon by development.

Landscape

The Plan provides for containment of urban development within the existing Blanchardstown Development Boundary with consequent benefits for the surrounding rural landscape.

1.5 Consideration of Alternatives

As part of the LAP preparation process a range of alternatives were considered for the development of Kilmartin, and are detailed in Section 16 of the Environmental Report. These are as follows:

Each option was considered and assessed against the Sustainable Environmental Objectives to provide an insight into possible impacts. Option 2 Mixed Density Development is the preferred option.

1.6 Mitigation Measures

The SEA process indicated that a number of mitigation measures were required in order to ensure that the LAP provides for sustainable development. These measures include mitigation in the following areas:

- Biodiversity, Flora and Fauna
- Soil
- Noise
- Water
- Cultural Heritage – Architectural and Archaeological
- Material Assets - Transportation
- Air Quality and Climatic Factors

1.7 Monitoring

Article 10 of the SEA Directive requires that monitoring be carried out in order to identify at an early stage any unforeseen adverse effects due to the implementation of the Plan.

In this context Fingal County Council has identified a monitoring programme for the lands at Kilmartin and it is intended to monitor the LAP after five years, following adoption of the Plan.

1.8 Conclusion

The application of a Strategic Environmental Assessment to the LAP process has ensured that the Plan will provide the optimal strategic framework for the future sustainable development of the lands at Kilmartin.

ENVIRONMENTAL REPORT

1.0 INTRODUCTION

1.1 Requirement for Strategic Environmental Assessment (SEA)

This is the Environmental Report of the Strategic Environmental Assessment (SEA) for the proposed Local Area Plan (LAP) for Kilmartin, North Blanchardstown. The purpose of the report is to set out the likely significant environmental effects of the local area plan (LAP) on the lands of Kilmartin over the lifetime of the LAP.

The purpose of the Environmental Report is:

- to assess the likely significant environmental effects from the implementation of the Kilmartin LAP
- to develop mitigation measures to reduce identified significant impacts of the LAP and
- to identify monitoring procedures to assess the impact of the LAP over its lifetime.

The following report has been prepared to comply with the provisions of the SEA Regulations [the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004), and the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011 (S.I. 201 of 2011), amending the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I.436 of 2004)]. This report should be read in conjunction with the Kilmartin Local Area Plan and Appropriate Assessment screening documents.

1.2 Integration of Environmental Report with the Kilmartin Local Area Plan (LAP)

The preparation of the environmental report was integral to the preparation of the Kilmartin Local Area Plan (LAP). The baseline environment was the starting point for the environmental report and this information identified the key environmental issues which then formed the environmental objectives which were integrated with the objectives of the LAP.

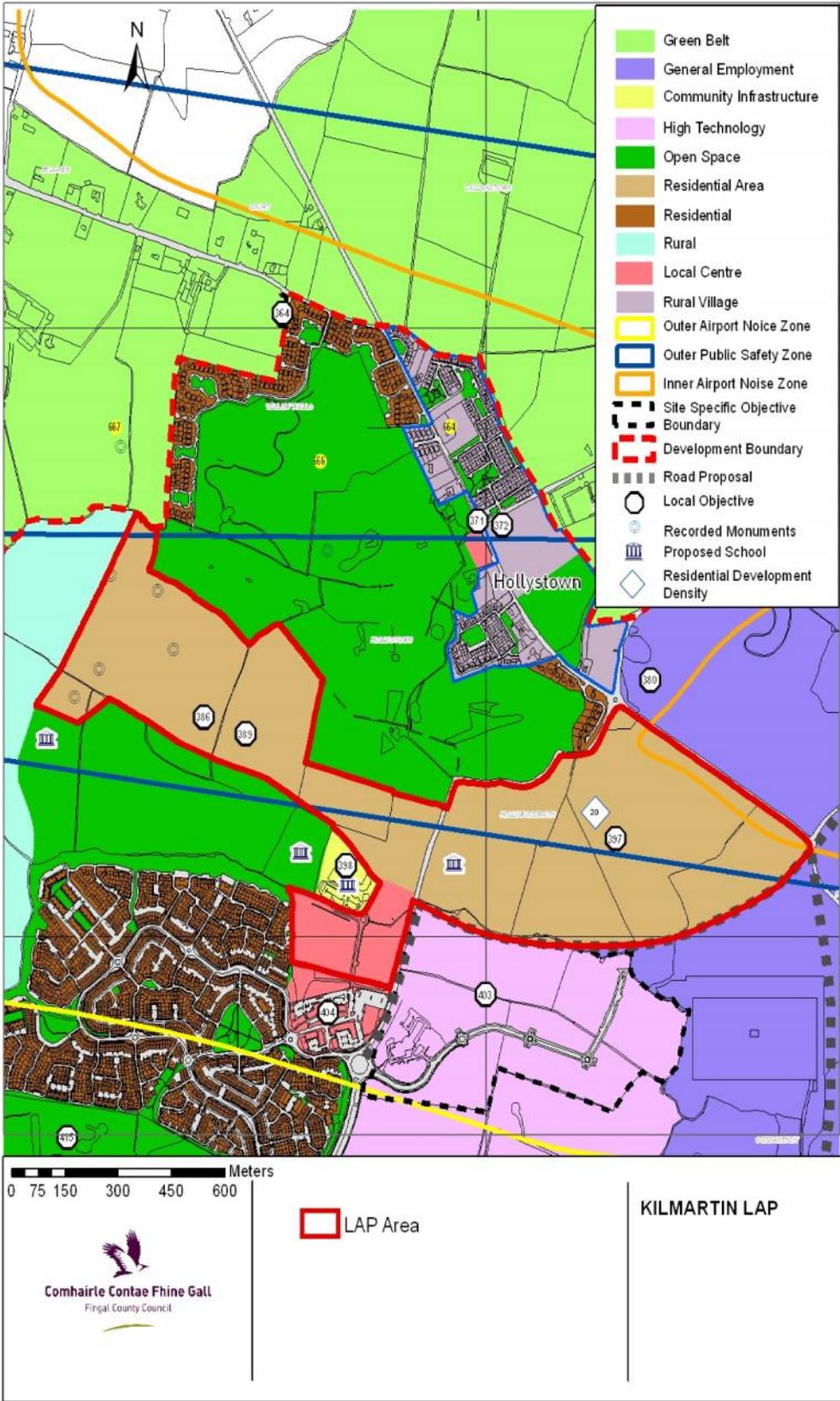
1.3 Requirement for the Local Area Plan

In the Fingal Development Plan 2011-2017 the LAP lands are zoned 'RA' – *'Provide for new residential communities in accordance with approved local area plans and subject to the provision of the necessary social and physical infrastructure'* and 'LC' – *'Protect, provide for and/or improve local centre facilities.'* There is also a Specific Objective on the 'LC' lands whereby the lands are 'Subject to a Local Area Plan.' As such Fingal County Council is required to prepare a Local Area Plan for the subject lands. The LAP will be prepared in accordance with the requirements of Sections 18-20 of the Planning and Development Act 2000-2011, which sets out the provisions for the preparation of LAPs. No development can take place on these lands prior to the adoption of a Local Area Plan (LAP) by Fingal County Council.

1.4 Description and Extent of the Local Area Plan

The Kilmartin Local Area Plan lands comprise approx. 78.51 hectares (c.194 acres) in area and are situated along the north-western development boundary in North Blanchardstown. The lands are situated approximately 11.5km from Dublin City centre and 4km from Blanchardstown Town Centre. The extent of the local area plan lands are outlined on the accompanying map entitled Map 1: *Proposed Local Area Plan for Kilmartin*. Details of the Local Area Plan are set out in Section 3.0 of this report.

Map No.1: Proposed Local Area Plan for Kilmartin.



1.5 Appropriate Assessment for the Local Area Plan

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as “The Habitats Directive”, provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000. These are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/ECC).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment (AA):

Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

Article 6(4) states *‘If, in spite of a negative assessment of the implications for the [Natura 2000] site and in the absence of alternative*

solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted'.

Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. The Habitats Directive is implemented in Ireland by the European Communities (Natural Habitats) Regulations SI 94/1997.

Appropriate Assessment Screening has been carried out pursuant to Article 6 of the Habitats Directive for the LAP lands, with all Natura 2000 sites within a 15km radius of the site being considered.

TABLE 1.1: SPAs and SACs located within 15km of the site.

Site Code	Site Name	Appropriate distance from Proposed Plan	Status
004015	Rogerstown Estuary SPA	14.7km	SPA
004025	Broadmeadow/Swords Estuary SPA	12.25km	SPA
004006	North Bull Island SPA	14.85km	SPA
004024	South Dublin Bay and River Tolka Estuary SPA	14.78km	SPA
000208	Rogerstown Estuary SAC	14.7km	SAC
000205	Malahide Estuary	12.25km	SAC
000206	North Dublin Bay	12.3km	SAC
000210	South Dublin Bay	14.78km	SAC
001398	Rye Water Valley/Cartron	9.6km	SAC

The main findings of the Appropriate Assessment Screening are as follows:

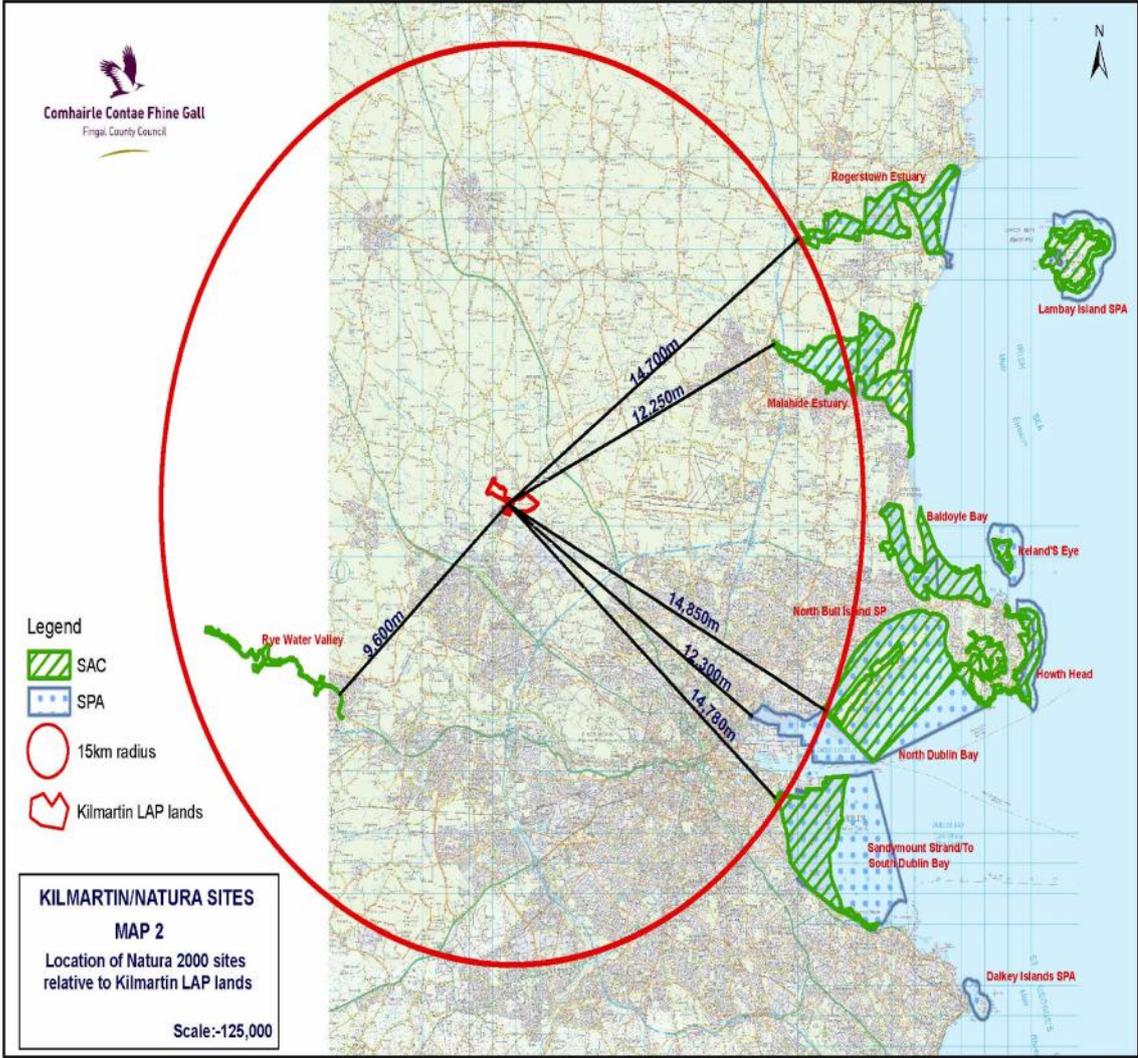
- There are 9 sites within 15km of the Plan lands.
- None of the Natura 2000 sites lie within the boundaries of the Plan lands, therefore no direct impacts will occur through landtake or fragmentation of habitats.
- The site is approximately 9.6km from the closest Natura 2000 site (Rye Water Valley/Cartron SAC), therefore no significant impacts through direct disturbance of habitats and species will occur from the development of the land.
- The potential for cumulative and in-combination impacts on any Natura 2000 site is surface water entering the Pinkeen river, a tributary of the Tolka river which flows directly into North Dublin Bay. Significant plans/projects in the vicinity of the site are the M2-N3 Link Road (currently under construction) and the

Cherryhound Local Area Plan adopted December 2012. Sustainable Drainage Systems (SuDS) as outlined in the Greater Dublin Strategic Drainage Study are an integral component of the Kilmartin LAP, the M2-N3 Link Road and the Cherryhound Local Area Plan. SuDS is a measure to manage surface water run-off generated by a development in terms of quantity and quality. There is no potential for cumulative and in-combination impacts on North Dublin Bay, given the implementation of SuDS in all three plans/projects.

The Screening concluded that the proposed development of the LAP lands would not have a significant effect on the Natura 2000 network and a Stage 2 Appropriate Assessment is not required.

This SEA for the Kilmartin LAP should be read in conjunction with the Appropriate Assessment Report and accompanying map in addition to the LAP document and map. Refer to Map 2 entitled: *Location of Natura 2000 Sites relative to Kilmartin LAP lands.*

Map 2: Location of Natura 2000 Sites relative to Kilmartin LAP lands.



2.0 Strategic Environmental Assessment (SEA) Methodology

2.1 Legislative Context

Strategic Environmental Assessment is a requirement under European Law. The SEA Regulations transposed the *European Union Directive 2001/42/EC* (more commonly referred to as the Strategic Environmental Assessment (SEA) Directive) into Irish planning law. The SEA Directive and SEA Regulations require that planning authorities determine whether the implementation of landuse plans, or modifications thereof, will be likely to have significant effects on the environment. This determination process is referred to as an environmental assessment and defined as:

...the preparation of an environmental report, the carrying out of consultations, the taking into account of the environmental report and the results of the consultations in decision-making and the provision of information on the decision in accordance with Articles 4 to 9...

The Planning and Development (Strategic Environmental Assessment) Regulations, 2004 -2011 (S.I. 436 of 2004) and (S.I.201 of 2011) specifically deal with the procedures for the assessment of the likely significant effects on the environment of certain plans and programmes prior to their adoption, with SEA being mandatory for:

- Regional Planning Guidelines
- City and County Development Plans
- Local Area Plans where:

- (a) the population or target population of the area of a local area plan is 5,000 persons or more or
- (b) the area covered by the local area plan is greater than 50 sq kilometres or
- (c) the local area plan is being prepared for a town and its environs area, or

(d) where the planning authority determines under article 14A (3) or (5) that the implementation of a local area plan, an amended plan or an amendment to a local area plan would be likely to have significant effects on the environment.

Where a plan/ programme does not fall within the specific parameters stated above, a screening process must take place to determine whether the plan will result in significant environmental impacts, with reference to Schedule 2A of the Planning and Development Regulations 2004 (Annex 2 of the SEA Directive). Where it is determined that likely significant impacts on the environment will occur, an SEA is required.

In terms of the Kilmartin LAP, Fingal County Council decided that a Strategic Environmental Assessment (SEA) should be undertaken as the population projection for the LAP lands was close to the threshold of 5,000. There is the potential to provide for an additional population of circa 4,000 persons as a result of the proposed LAP for Kilmartin.

2.2 SEA Process

In the context of the preparation of a LAP, the SEA process comprises the following principal stages:

Table 2.1: Stages in the SEA Process

STAGE	ACTION IN SEA PROCESS
Pre-Draft Stage	Screening the draft LAP to determine whether a SEA is required to be undertaken.
Initial Scoping Consultation	Where SEA is required, scope for the nature and detail of information to be contained within the Environmental Report, in consultation with environmental authorities.
Preparation of Documentation	Prepare the Environmental Report.
Public Consultation	Public display of Environmental Report and consideration of submissions.
Adoption or Amendment of LAP	Identify any significant environmental effects of such material amendments. Decision making on adopting the proposed LAP.
Final LAP	Final Environmental Report & SEA Statement, incorporating conditions for monitoring of the significant environmental effects.
Post-plan	Monitoring of the plan and preparation of a Monitoring Report

The development of the Local Area Plan (LAP), Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) required as per the Habitats Directive are conducted concurrently and each process contributes to the development of each document at each stage. The process used in the preparation of the LAP, SEA and AA is presented in Figure 1 below entitled 'Local Area Plan Process'.

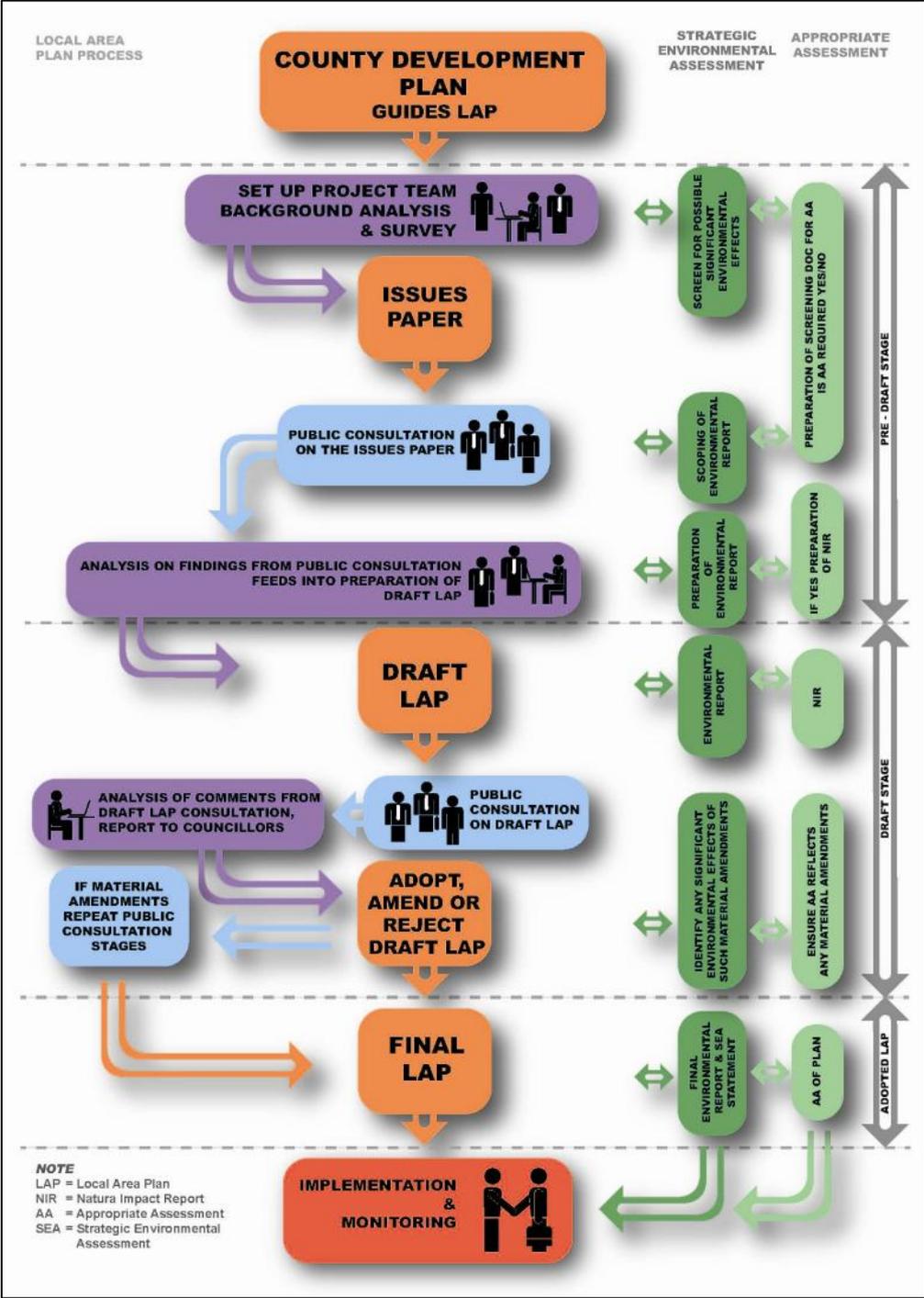


Figure 1: Local Area Plan Process

2.3 Scoping of Environmental Report and Consultation

The SEA Directive provides for a high level of consultation as part of the SEA process. The purpose of scoping is to determine the nature and level of detail of information to be included in the Environmental Report. The scoping process develops an understanding of the potential impact on the different aspects of the environment, if any, and ensures that the relevant environmental issues are highlighted and addressed appropriately in the Environmental Report. Scoping should also ensure that the Planning Authority remains focused upon the important issues when undertaking the environmental assessment.

2.3.1 Scoping Report prepared by Fingal County Council

Fingal County Council prepared a Scoping Report for the LAP in March 2012 (Appendix 2 of Environmental Report). It provided information on the context of the Local Area Plan and the potential capacity of these lands. The LAP lands are also discussed in the context of the Fingal Development Plan 2011-2017 and in terms of international, national, regional and local policy.

2.3.2 Submission from the Prescribed Bodies on the Scoping Report

Article 5 (4) of the SEA Directive requires that the prescribed Environmental Authorities be consulted when deciding on the scope and level of detail to be included in the Environmental Report. The SEA Directive and more recently the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011 (S.I. No.201 of 2011) makes provision for consultation with the following authorities during the SEA process:

- Prescribed environmental authorities.
- Transboundary consultation – If a plan or programme is being prepared that is likely to have significant effects on the environment in another Member State, or where a Member State likely to be significantly affected so requests, the Member State in whose territory

the plan or programme is being prepared shall, before the plan or programmes adoption or submission to the legislative procedure, forward a copy of the draft plan or programme and the relevant environmental report to the other Member State.

▪ General public
It was concluded that consultation with prescribed environmental authorities and the general public was required. Transboundary consultation was not required as part of the Kilmartin LAP.

The bodies that were consulted for the preparation of this SEA and circulated with the SEA Scoping Report were:

- The Environmental Protection Agency (EPA),
- The Department of the Environment, Community and Local Government (DoECLG),
- The Department of Agriculture, Fisheries and Food,
- The Department of Communications, Energy and Natural Resources,
- The Department of Arts, Heritage and the Gaeltacht
- Meath County Council.

The Scoping Report and associated documentation were sent to the relevant authorities on the 22nd March 2012. Two responses were received and are set out below:

Environmental Protection Agency (EPA)

The Environment Protection Agency responded on the 2nd April 2012 and included a copy of the SEA Pack. The EPA highlighted the importance of up-to-date data, consideration of GIS Systems, Appropriate Assessment, scoping meetings/workshops, consideration of reasonable and realistic alternatives, public consultation, range of likely significant effects, mitigation, monitoring and proper procedural process. The response further highlighted the application of the Water Framework Directive particularly given the quality classifications with regard to the Tolka and Pinkeen rivers. Drinking water, waste water treatment,

ground water protection, flood risk and water conservation were also highlighted. The integration of infrastructure, zoning and development was considered. Biodiversity, air, noise, energy conservation/renewable energy, landscape character assessment, human health and quality of life, transportation, tourism, infrastructure planning, waste management were also noted as items for consideration.

The Department of Arts, Heritage and the Gaeltacht responded on the 23rd April 2012. The response recommends that the biodiversity Strategic Environmental Objectives (SEOs) in the SEA cover habitats and species both within and outside of designated sites. In terms of SEOs for water the needs of protected species such as crayfish, salmon and lamprey species should be considered in relation to water quality, while the objectives and targets should be compatible with the relevant River Basin Management Plans. The Guidelines relating to the Planning System and Flood Risk Management should be taken into account. Ground and surface waters, adequate sewage treatment facilities, water supplies, impact of water abstraction schemes on the natural heritage were also highlighted for consideration.

2.3.3 Environmental Report

The Environmental Report is the principal document which is at the heart of the SEA process. The preparation of the Environmental Report was carried out in tandem with the Kilmartin LAP, so that the plan was informed by environmental considerations from the very beginning.

As part of the preparation of the Local Area Plan for Kilmartin, Fingal County Council has prepared an Environmental Report of the likely significant effects on the environment of implementing the plan. The Environmental Report is required to include the information that may reasonably be required, taking into account -

- i) current knowledge and methods of assessment

- ii) the contents and level of detail in the Plan
- iii) the stage of the Plan in the decision making process and
- iv) the extent to which certain matters are more appropriately assessed at different levels in the decision-making process in order to avoid duplication of environmental assessment.

The Environmental Report contains the information required by Article 5 and Annex 1 of the Directive, as follows:

(a) an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes.

(b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.

(c) the environmental characteristics of areas likely to be significantly affected.

(d) any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.

(e) the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.

(f) the likely significant effects* on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including

architectural and archaeological heritage, landscape and the interrelationship between the above factors.

*These effects should include secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects.

(g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.

(h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.

(i) a description of the measures envisaged concerning monitoring in accordance with Article 10.

(j) a non-technical summary of the information provided under the above headings.

3.0 Kilmartin Local Area Plan (LAP) 2013-2019

3.1 Introduction

The purpose of the Local Area Plan (LAP) for Kilmartin is to provide an updated strategy on how the area should be developed and managed in a sustainable way to meet the needs of its residents. The LAP will focus in particular on the policies and mechanisms that deliver necessary physical, social and environmental infrastructure for the proper planning and sustainable development of the area.

The Kilmartin LAP will be prepared in the context of the policies and objectives of the Fingal Development Plan 2011-2017 and in accordance with the requirements of Sections 18-20 of the Planning and Development Acts 2000-2011. The level of development envisaged will likely exceed the lifetime of the LAP, which is 6 years unless extended, in year 5 of the LAP, for a further 5 years.

The two zoning objectives relevant to the area as set out in the Fingal Development Plan 2011-2017, are as follows:

‘RA’ – Residential Area

‘Provide for new residential communities in accordance with approved local area plans and subject to the provision of the necessary social and physical infrastructure’

The Vision Statement for zoning objective ‘RA’ reads:

‘Ensure the provision of high quality new residential environments with good layout and design, with adequate public transport and cycle links and within walking distance of community facilities. Provide an appropriate mix of house sizes, types and tenures in order to meet household needs and to promote balanced communities.’

'LC' – Local Centre

Zoning Objective -

'Protect, provide for and/or improve local centre facilities.'

The Vision Statement for zoning objective 'LC' reads:

'Provide a mix of local community and commercial facilities for the existing and developing communities of the County. The aim is to ensure local centres contain a range of community, recreational and retail facilities, including medical/dental surgeries and childcare facilities, at a scale to cater for both existing residential development and zoned undeveloped lands, as appropriate, at locations which minimise the need for use of the private car and encourage pedestrians, cyclists and the use of public transport. The development will strengthen local retail provision in accordance with the County Retail Strategy.'

Local Objectives:

Objective 386: The LAP will specify a programme for the phasing of construction of residential and commercial development in tandem with the delivery of appropriate augmentation of the road network and public transport provision, preparation of a public drainage and water supply infrastructure plan, as well as provision of recreational, community, and educational infrastructure.

Objective 389: Having regard to the deficit in key community infrastructure, in particular schools and recreational amenities, preparation of the LAP shall be dependent on the advance delivery of the following: minimum 15.4 ha (38 acres) exclusive of any pylon corridor lands (to provide for the proposed public park), minimum 4.5 ha (11 acres) site for a Post Primary School, minimum 2.0 ha (5 acres) site for an additional Primary School.

Objective 397: Provide for a density of 20 units per hectare (8 units per acre) at Hollywoodrath (eastern portion of lands).

Objective 398: Provide a community and sports facility in tandem with educational and public open space provision.

Objective 404: Facilitate and provide community, family, and youth facilities within the Tyrrelstown Town Centre Complex.

Specific Objectives

Schools: There is a 'school symbol' located on the Plan lands east of the R121.

There are two school symbols located directly south of the LAP lands, west of the R121, at both the eastern and western extremity of the designated 'open space' lands.

M2/N3 Road: The M2/N3 Link Road runs along the southern boundary of the lands east of the R121, in addition to forming the boundary east of the 'LC' zoning.

Inner Airport Noise Zone: applies to a small area of land in the northern section of LAP lands (c.2.43 hectares).

Outer Airport Noise Zone: applies to all the LAP lands.

Outer Public Safety Zone: applies to the majority of the LAP lands.

3.2 Overview of the LAP Lands

The subject lands comprise c. 78.51 hectares in area (c.194 acres) as follows:

- c.40.47 hectares of land east of the R121; (RA zoned lands) (subject to 20 housing units per hectare restriction).
- c.31.97 hectares of land west of the R121; (RA zoned lands).
- c.6.07 hectares of land north of the existing Tyrrelstown Local Centre (LC zoned lands)

The LAP lands are primarily agricultural in nature. In terms of topography, the land is flat and largely featureless, containing a number of hedgerows with a number of individual trees, none of which are identified in the Development Plan for preservation. A number of streams traverse the site. The land bank has a good orientation, the east-west configuration gives good exposure to southern sunlight. The site is crossed by overhead lines and pylons which have a significant negative visual impact. The lands are located in a transitional zonal area, situated between the existing built up residential area of Tyrrelstown and the rural area. Hollystown Village a low density residential development and Hollystown Golf Course are located to the north of the LAP lands. To the south are open space lands, Tyrrelstown residential development and Tyrrelstown local centre and community facilities. To the south east and east are industrial lands zoned for high technology and general employment uses. To the west the land is in agricultural use.

In terms of access, the existing road network serving Kilmartin consists of the following:

The R121

The development lands are bisected by the R121 which links Hollystown to Mulhuddart. Traffic capacity is limited due to the narrow nature of the road and to a number of existing sharp bends. The road has no verge or footpath and on its own cannot sustain the transport needs for access to the major scale of development which could be facilitated at Kilmartin. Urbus is the only public transport facility utilising the R121 between Tyrrelstown and Hollystown.

The Ratoath Road

The development lands lie partially to the south of the Ratoath Road. This is a country road running from Hollystown and beyond to northern

Blanchardstown. This road will connect with the M2/N3 link road, which will run along the southern part of the development lands east of the R121. An agricultural entrance off this road currently services the Local Area Plan lands. Directly to the north of this road lies land associated with the Cherryhound LAP. The road as it exists has no verge or footpath. The facilities for cyclists and pedestrians will require improvement. The road will form an important route around the development lands.

The M2/N3 Link Road

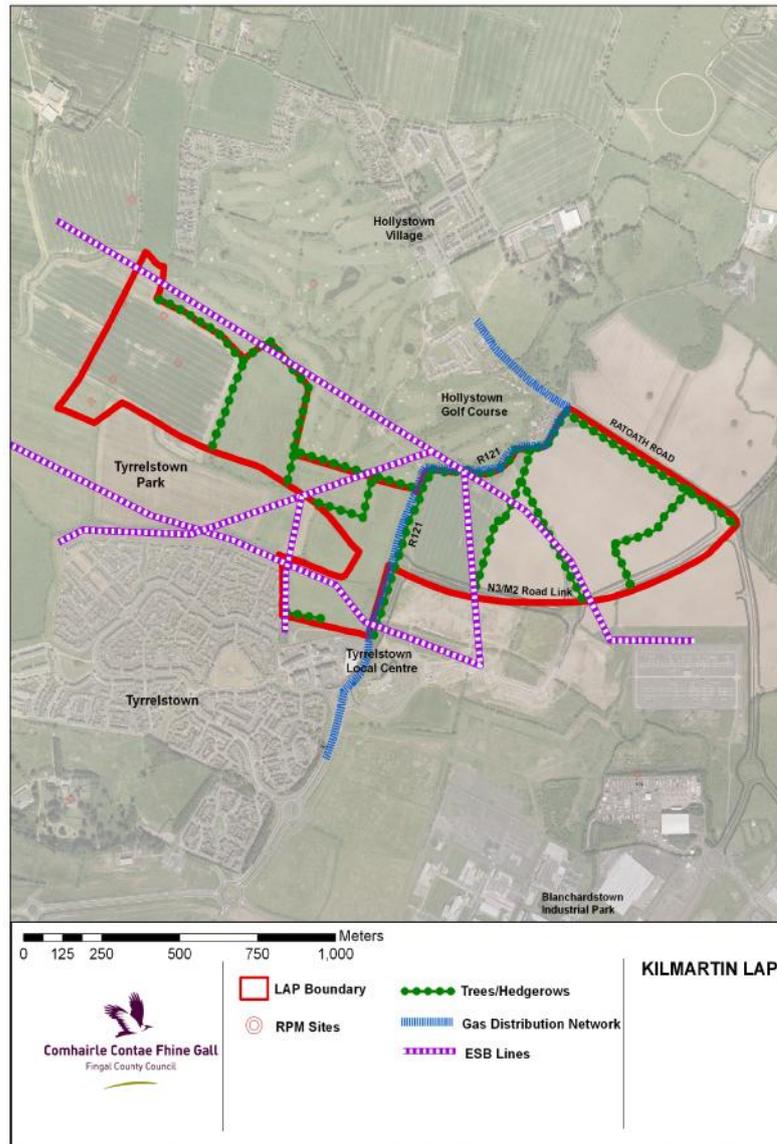
The section of road under construction represents the final section of the vehicular route connecting Mulhuddart on the N3 with Cherryhound on the M2. This is an essential piece of public infrastructure which is required to underpin and sustain existing public investment in employment/economic development in North Blanchardstown and the wider Dublin Metropolitan Area. This road will define the southern boundary of the eastern part of the development lands east of the R121 and will connect two of the main arterial routes to/from the city, the M2 and N3. This road, due for completion in Spring 2013, will remove a substantial amount of vehicular traffic from the local road network.

The majority of the lands to the east of the R121 formed part of the Hollywoodrath Local Area Plan which was adopted on the 13th November 2006. The Kilmartin LAP includes the Hollywoodrath LAP lands as the density increased from 12 to 20 units per hectare in the 2011-2017 Fingal Development Plan and the amount of RA zoning increased. There is also an extant permission on the Hollywoodrath lands (F07A/0973) for 331 no. residential units.

It is estimated that the Kilmartin LAP will facilitate approximately c.1400 residential units at an average net density of 32 units per hectare, equating to a population in the region of 4,000 persons. The LAP lands

will be developed predominantly for residential use. In addition areas will be reserved as part of the LAP process to provide for schools and local services (including retail and commercial use) as well as for public open space and community facilities to serve the future residents of this area.

Map 3: Contextual Map of Kilmartin LAP lands.



In terms of educational facilities, the primary and post primary educational needs of the future community living within Kilmartin have been provided for by the identification of school sites. An assessment of existing schools was undertaken as part of this LAP process.

Discussions were held with the Department of Education and Skills. The Department requires the reservation of a site for a 24 classroom Primary School and a 600-800 pupil Post Primary School.

These facilities are in addition to the existing Tyrrelstown Educate Together National School and St Luke's National School and to the reserved primary and post-primary school sites located on the zoned 'OS' land situated south of the LAP.

In terms of open space and recreational amenities, there is a large area of zoned open space to the south of the LAP lands, currently being developed as a public park to serve the existing Tyrrelstown residential population and the proposed residential population at Kilmartin. The LAP lands will also include Open Space areas.

Cherryhound LAP was adopted in December 2012. These lands are located to the east of the Plan lands. The lands are zoned objective 'GE – General Enterprise and Employment'. The LAP area comprises 240 hectares (593 acres) of which 170 hectares (420 acres) (71%) remain undeveloped.

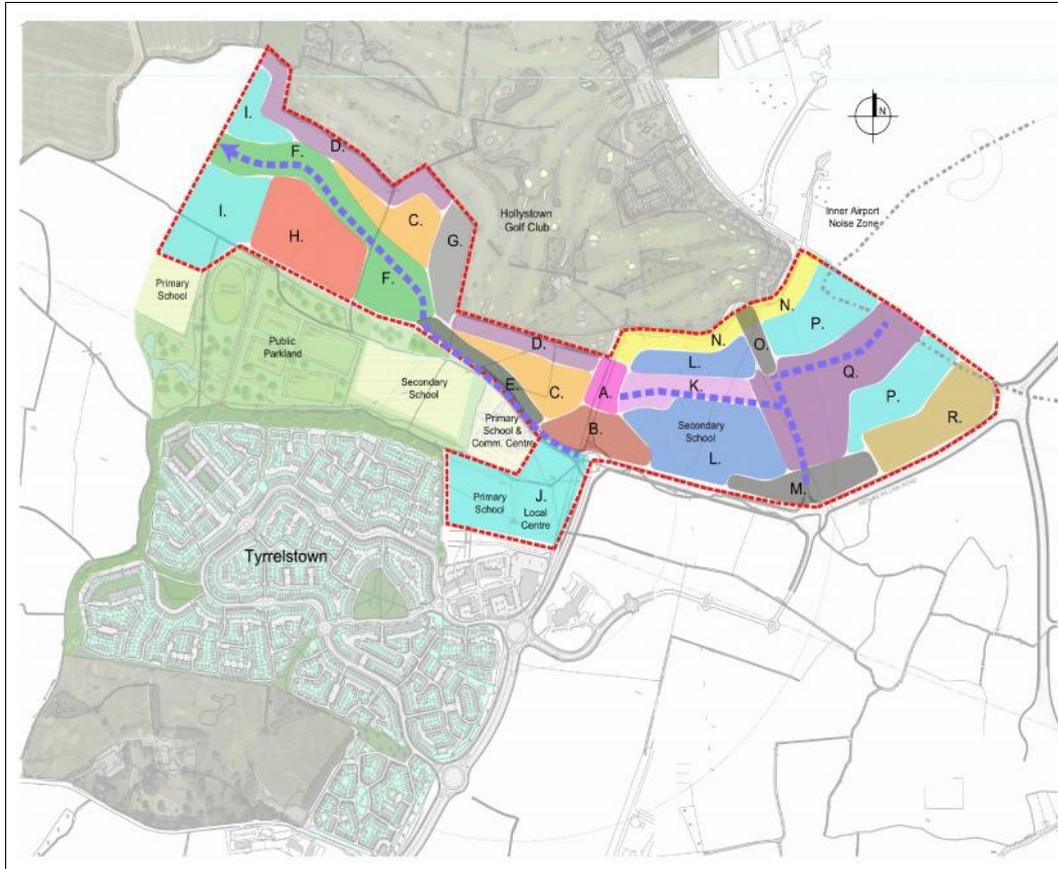
3.3 Development Envisaged on LAP lands

The urban design concept is structured around eighteen Character Areas. These are illustrated on *Map 4: Character Areas*. Areas close to the Local Centre zoning, and including this zoning, will support higher density development, while medium density development is proposed over the majority of the lands, and lower density in the eastern and western extremities of the Plan lands.

A wide tree-lined avenue with a strong street edge is proposed on either side of the Plan lands. A key consideration in the overall design is provision for strong pedestrian and cycle linkages from the Plan lands to public transport, schools, park, local centre, existing community of

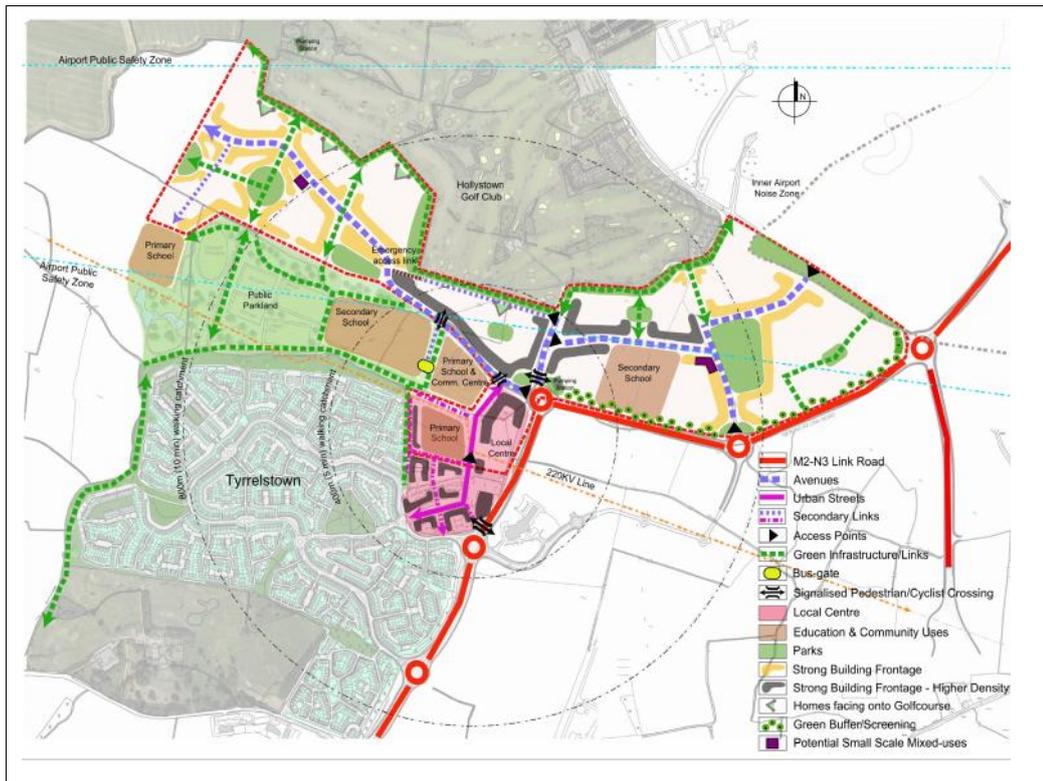
Tyrrelstown and the wider Blanchardstown area. A primary and secondary school are proposed on the Plan lands.

Map 4: Character Areas



The Local Centre will be designed within an urban village street pattern connecting with the surrounding street network. Residential/office over retail/commercial units will be supported. Stand-alone, single-storey supermarket buildings are not considered appropriate. Building heights will range in general from 3/5 storeys.

Map 4a: Urban Structure Masterplan



3.4 Key Objectives of the LAP

The key objectives of the LAP include the following;

- Phased and integrated development of LAP lands, primarily for residential use, with a supporting level of mixed uses in an extended and existing local centre.
- Creation of a permeable and legible movement network for all modes of transport linking the site internally and with the surrounding area.
- Provision of high quality recreational open space and amenity facilities.
- Increase in community facilities and health care facilities, in particular provision of additional schools.
- Enhancement and preservation of existing archaeological sites.
- Enhancement and protection of existing environmental features within the plan lands and in Tyrrelstown Park, located directly south of the Plan lands.

4.0 Relevant Plans and Programmes and their Relationship with the Local Area Plan

The Local Area Plan is a lower-level plan which sets out the development context at the local level. The Local Area Plan must be consistent with the Fingal Development Plan 2011-2017 and must also comply with national and regional spatial planning guidance in the form of the National Spatial Strategy 2002-2020 and the Regional Planning Guidelines for the Greater Dublin Area 2004-2016.

The SEA Directive requires an analysis of the plan's 'relationship with other relevant plans and programmes' (Annex 1a) and of the 'environmental protection objectives...which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation (Annex 1e).'

In this regard, this Chapter outlines the relevant plans and programmes and their relationship with the Local Area Plan. A more detailed analysis of their relationship to the Local Area Plan is provided in Appendix 1.

4.1 Legislation

- Planning and Development Acts 2000-2011
- Directive 2001/42/EC on the Assessment of the effects of certain plans and programmes on the environment
- The European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2011(S.I. 200 of 2011)
- The European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004)
- Planning and Development (Strategic Environmental Assessment) Regulations 2011, (S.I. 201 of 2011), amending the Planning and

Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004)

- Environmental Liabilities Directive (2004/35/CE)
- Water Framework Directive (2000/60/EC)
- Groundwater Directive (2006/118/EC)
- European Communities (Energy Performance of Buildings Regulations 2006) S.I 666 of 2006. (as amended)
- European Communities (Birds and Natural Habitats) Regulations 2011 (S.I.No. 477 of 2011).
- Environmental Objectives (Surface Water) Regulations 2009 (S.I.) 272 of 2009).
- European Communities (Drinking Water)(No. 2) Regulations 2007.

4.2 National Plans and Policy

- Infrastructure and Capital Investment 2012-2016
- National Development Plan 2007-2013.
- National Spatial Strategy 2002-2020.
- Transport 21 (2005).
- Smarter Travel – A New Transport Policy for Ireland, 2009-2020.
- National Cycle Policy Framework 2009-2020
- Maximising Ireland's Energy Efficiency – The National Energy Efficiency Action Plan 2009-2020
- Sustainable Development – A Strategy for Ireland (1997).
- Towards Sustainable Local Communities: Guidelines on Local Agenda 21 (2001).
- National Climate Change Strategy, 2007-2012
- Ireland's Pathway to Kyoto Compliance
- Delivering a Sustainable Energy Future For Ireland – The Energy Policy Framework 2007-2020
- The Green paper 'Towards a Sustainable Energy Future for Ireland' (2006)

- National Heritage Plan (2002).
- Actions for Biodiversity 2011-2016 – Irelands National Biodiversity Plan.

4.3 Planning and Environmental Guidelines

- Strategic Environmental Assessment Guidelines - Implementation of SEA Directive (2001/42/EC)
- Development Plan Guidelines (2007)
- Appropriate Assessment of Plans and Projects in Ireland – Guidance for Local Authorities (Dec. 2009)
- The Planning System and Flood Risk Management –Guidelines for Planning Authorities (2009)
- Draft Landscape and Landscape Assessment, 2000
- Spatial Planning and National Roads Guidelines January 2012
- Retail Planning Guidelines for Planning Authorities, 2012
- Sustainable Residential Development Urban Areas – Guidelines for Planning Authorities (May 2009)
- Urban Design Manual A Best Practice Guide (2009)
- Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities DOEHLG (2007)
- The Provision of Schools and the Planning System
- Childcare Facilities-Guidelines for Planning Authorities, 2001.
- Development Management Guidelines
- Local Area Plan Guidelines

4.4 Regional Planning Context

- Regional Planning Guidelines for the Greater Dublin Area 2010-2022.
- Retail Strategy for the Greater Dublin Area 2008-2016
- Dublin Transportation Office - Platform for Change - Strategy, 2000-2016.
- Greater Dublin Area Draft Transport Strategy 2011-2030.

- Greater Dublin Strategic Drainage Study (GDSDS).

4.5 Fingal Planning Context

- Fingal Development Plan 2011-2017.
- Cherryhound Local Area Plan 2012-2018
- Hollywoodrath Local Area Plan 2006.
- Connecting People, Places and Prosperity – An Economic Strategy for Fingal 2006-2011 (Fingal Development Board).

5.0 Baseline Environment of the Kilmartin Lands

5.1 Introduction

This section of the Environmental Report gives a summary of the current physical environment (baseline) of the Kilmartin LAP lands and sets out the environmental issues affecting the lands. A detailed description of the baseline environment and the key environmental issues facing the LAP lands is set out in Sections 6.0 to 14.0 under the following headings:

- Population and Human Health,
- Noise,
- Biodiversity, Flora and Fauna,
- Soil,
- Water,
- Air Quality & Climatic Factors,
- Material Assets,
- Cultural Heritage,
- Landscape.

5.2 Current Physical Environment

The LAP lands are primarily greenfield and agricultural in nature, predominantly flat and largely featureless. They can be divided into two distinct parcels of land bisected by the R121. To the east, topographically the land is gently rolling and the significant feature is the distant view of the Dublin Mountains. The land is crossed by overhead lines and pylons (110kV, 10Kv) which have a significant negative visual impact. West of the R121, the land is relatively flat with short-distance views to the west over agricultural land.

Population and Human Health

The Plan lands are located in the Ward Electoral Division which was included in the top ten Electoral Divisions which experienced high population growth between 2006 and 2011. The Plan will ensure that facilities and services are planned in tandem with the future population increase on the Plan lands, and in tandem with the necessary physical infrastructure in terms of roads and water/waste water services to cater for the Plan lands.

Noise

The main sources of noise in relation to the Plan lands relate primarily to traffic noise, both within the Plan lands and externally from the M2-N3 link road. Noise abatement measures will form part of planning applications. Noise associated with Dublin Airport is also an environmental issue, and will be mitigated for through the location of residential development away from sensitive noise zones and suitable noise insulation measures.

Biodiversity, Flora and Fauna

The Plan preserves the existing tree-line/hedgerow along the northern boundary of the site adjoining the Hollystown Golf Course. The Plan will create a network of green corridors to link open space areas both within the lands and to the surrounding environment.

Soil

The settlement strategy of the Plan has the capacity to maintain soil quality and agricultural resources of the area surrounding the settlement footprint due to the urban containment policies. The Plan provides for increased provision for passive recreational pursuits in the form of public open space and green corridors thereby maintaining the local soil resource.

Water

The water supply serving Kilmartin comes from the Liffey with its abstraction point at Leixlip via the low level reservoirs at Ballycoolin, boosted by the Cruiserath pumpstation. Lands within the LAP area above 64m OD will be supplied by gravity from the Ballycoolin Water Tower. The subject lands will be served by the 300mm diameter distribution main to Tyrrelstown via the Tyrrelstown-Cherryhound Interchange Link Road to be completed in Spring 2013. Plans to expand the Leixlip plant by the end of 2014 will increase production capacity to 225ML/day. Following the expansion, no additional capacity is available in the river Liffey to allow further abstractions. New development must be adequately serviced with a suitable quantity and quality of drinking water supply. Development will be limited to that which can be provided for, based on available water supply. Proposals for all new hard and soft developments will need to demonstrate that the existing network and associated way leaves are protected from impacts to prevent network damage. New watermain layouts must be in accordance with the most recent version of Fingal County Council's "Guidelines for the laying of Distribution Watermains" and "Guidelines for Drinking Water Supply". In order to limit unnecessary water usage, leakage and excessive consumption, a Water Management and Conservation Plan detailing how best practice in water conservation will be required to include both water mains and internal plumbing. New development should, where feasible, install suitable water conservation measures. The use of rainwater harvesting, particularly in commercial developments, is to be encouraged.

Air Quality and Climatic Factors

Public transport and sustainable modes of transport such as walking and cycling will be promoted in the Plan with direct effects on improving/maintaining air quality within the area and reducing traffic

emissions. Renewable energy and reduced CO2 emissions will be promoted by the incorporation of renewable energy policies in the Plan.

Material Assets

Transportation - Access to the Plan lands is proposed east of the R121 with three links proposed and west of the R121 with a further three links proposed. The Plan incorporates a network of pedestrian and cycle routes connecting to the Local Centre, schools, community services and public open space.

Cultural Heritage

The Plan provides for enhanced protection for the archaeological heritage of the settlement through policy protection. The Plan also provides for protection or replacement of a townland boundary which may be impacted upon by development.

Landscape

The Plan provides for containment of urban development within the existing footprint with consequent benefits for the surrounding rural landscape.

5.3 Current Environmental Issues

The current environmental issues/challenges facing the LAP lands include the following:

- Maintaining and improving the ecological importance of the Pinkeen/Tolka Rivers.
- Avoidance of habitat loss
- Identification of a flood-risk zone

5.4 Difficulties compiling Data

During the preparation of the Environmental Report, existing data was not always available at the appropriate scale for the LAP area, so a mix of local, county and regional baseline data has been used. Having determined the scope of the environmental report, there were deficiencies in information in relation to areas where significant environmental impacts were identified. This was largely overcome by the undertaking of specific baseline studies in the areas of biodiversity and archaeology. A SuDS Strategy and a Flood Risk Assessment (FRA), were also carried out.

In terms of difficulties compiling data for specific sections of the report, under the *Air and Climatic Factors* section, no historical air quality data was available as such the assessment is based on the available air quality data which only allows for the previous seven days data. There were no gaps in information with regard to the remaining sections.

6.0 Population and Human Health

6.1 Introduction

Blanchardstown is designated as a Metropolitan Consolidation Town in both the Regional Planning Guidelines for the Greater Dublin Area 2010-2022 (RPG's) and the Fingal Development Plan 2011-2017. Blanchardstown is the largest commercial and residential centre within the Metropolitan Area of Fingal, and will continue to be promoted as a key urban settlement within the County providing retail, social, cultural, leisure and administrative services catering for a population of c. 100,000. The Development Strategy for Blanchardstown in the 2011-2017 Fingal Development Plan is to promote the planned and sustainable development of Blanchardstown, positioning it as an important residential, service, employment, retail and leisure centre.

The LAP will assist in delivering the strategic long term growth of Blanchardstown. It is intended, in conjunction with existing development at Tyrrelstown, to develop a self-sustaining community. Currently it is estimated that the population of the area is 6,200 persons. As provided for in the Fingal Development Plan 2011-2017, the undeveloped lands the subject of this LAP, have the potential to provide for an additional population of circa 4,000 persons. Such an increase in population will inevitably put pressure on existing resources, such as wastewater treatment, road infrastructure, water supply and waste disposal. The remainder of this chapter describes the existing baseline environment in terms of population and human health, the existing environmental issues arising and evolution of the environment from a population and human health viewpoint both with and without implementing the Plan.

6.2 Current Baseline Environment - Population

6.2.1 Current Population

The LAP lands fall into the Electoral Division (ED) The Ward, which encompasses a significant area in North Blanchardstown, including large residential areas such as Tyrrelstown, Hollystown Park and Demesne and Redwood. This ED recorded a 57.9% population increase between 2006 and 2011, while the adjoining Blanchardstown-Tyrrelstown ED (which includes Ladyswell Road, Church Road, Parlickstown and Wellview all in Mulhuddart) recorded a population increase of 36%. The actual figures are set out in Table 6.1 below.

Table 6.1: Census Population Data 2002 to 2011

Area	2002	2006	2011	% Change 2002- 2006	% Change 2006- 2011
The Ward (ED)	1,308	5,181	8,241	296%	59.1%
Blanchardstown- Tyrrelstown (ED)	1,653	1,559	2,112	-6%	35.5%
Blanchardstown- Blakestown (ED)	24,404	32,288	36,057	32%	11.7%
Fingal	196,413	239,992	273,991	22%	14.2%
State	3,917,203	4,239,848	4,588,252	8%	8.2%

Source: Census 2002 -2011

From Table 6.1 it is apparent that The Ward Electoral Division has grown significantly more than the county for the intercensal period 2006-2011. The Ward ED experienced high population growth between 2006 and 2011.

The population of Fingal grew by 14.2% in the intercensal period 2006 to 2011, nearly twice the growth rate of the State. Fingal continues to have

the youngest population with an average age of 32.9, this compares to the State average of 36.1. The average number of persons per private household in Fingal is 2.9, higher than the national average of 2.73. While the national average is decreasing, the average occupancy rate in Fingal has remained relatively constant since 2006. This reflects the number of young families in Fingal. Fingal has a vacancy rate of 7%, less than half that of the State average and a decrease since 2006. All of these factors have implications in relation to the provision of housing and related facilities in order to cater for the population increases which are occurring, particularly within The Ward ED and surrounding ED's.

6.2.2 Current Facilities and Services

Schools

An assessment of existing schools was undertaken as part of the LAP and discussions were held with the Department of Education and Skills. The Department requires the reservation of a site for a 24 classroom Primary School and a 600-800 pupil Post Primary School. These facilities are in addition to the existing Tyrrelstown Educate Together National School and St Luke's National School and to the reserved primary and post-primary school sites located on the zoned 'OS' land situated south of the LAP.

Retail and Community Facilities

Tyrrelstown is currently served by a local centre which has a total net retail convenience floorspace in the region of c. 5,000 sq m. A Community Centre is located to the south of the Plan lands which will serve the future population of these lands.

6.3 Current Baseline Environment - Human Health

The main consequences of an increase in population on human health relate to the quality of the water supply and the impact of increased

traffic generation on the local air quality. Water Supply and Air Quality are described in detail in Sections 10.0 and 11.0 of this report respectively.

6.3.1 Seveso Site

There is a Seveso Site to the south of the subject lands, which is the Bristol Myers Squibb facility at Cruiserath Road, Mulhuddart. The facility is located approximately 1km distance from the Plan lands. The Planning and Development Regulations 2001 Section 137 (1) (b) and Table 1 and 2 of Schedule 8 set out the relevant consultation distances for which developments in the vicinity of Seveso developments have to be referred to the HSA. In the case of the Plan lands and the Bristol Myers Squibb site, all planning applications proposed for the Plan lands will be referred to the HSA for consultation.

6.4 Key Environmental Issues

- An increase in population will impact on both the immediate Plan lands and on adjoining lands. The LAP lands are located in close proximity to Tyrrelstown, a large residential development and local centre. The LAP lands must take cognisance of Tyrrelstown when determining the design and densities to ensure that the existing population does not experience a decrease in their quality of life either directly or indirectly as a consequence of implementing the LAP for Kilmartin.

- The Local Centre zoning will need to be examined in detail in terms of proposed uses for this area, so that the uses complement rather than compete with the existing Local Centre at Tyrrelstown. Encouraging local shopping provision within the Local Centre will reduce car usage, congestion and pollution, therefore improving quality of life and human health of the existing and future populations.

- Future consolidation of the area may have detrimental effects on the environment unless carefully planned and managed. The phasing of the LAP should ensure that the necessary infrastructural facilities are provided in tandem with development.
- There will also be impacts outside the LAP boundary. These include an increase in waste which will impact on landfill sites located outside the LAP boundary. Further details of waste generation are included in the Material Assets section (section 12.0 of this report).

7.0 Noise

7.1 Introduction

The most significant piece of legislation dealing with Noise is the EU Directive 2002/49/EC – ‘The Assessment and Management of Environmental Noise’. The objective of the Directive is to define a common approach across the EU to avoid, prevent or reduce on a prioritised basis the harmful effects of environmental noise. Environmental Noise is defined as unwanted or harmful outdoor sound created by human activities including road, rail, air traffic and industry. It does not include noise from neighbours, work place noise or noise inside vehicles.

Directive 2002/49/EC was transposed into Irish Law in March 2006 as SI 140 of 2006 ‘Environmental Noise Regulations’. The EPA is designated as the National Authority for the purposes of these regulations. The four local authorities within the agglomeration of Dublin have produced Noise Maps and Action Plans to manage environmental noise. Recommendations relating to noise are set out in the *‘Dublin Agglomeration Action Plan Relating to the Assessment and Management of Environmental Noise, 2008-2013.’*

The main sources of noise in relation to the Plan lands relate primarily to traffic noise, both within the Plan lands in terms of internal roads and externally the impact from the M2-N3 Link Road (located to the south of the Plan lands) and noise associated with Dublin Airport.

7.2 Current Baseline Environment

There are constraints placed on the Plan lands in relation to airport noise. Two noise zones are shown on the Development Plan maps, an Outer Noise Zone within which inappropriate development will be restricted and an Inner Noise Zone within which new provisions for residential development and other noise sensitive uses will be actively resisted.

7.2.1 Noise and Safety Zones

The Fingal Development Plan acknowledges that aircraft noise can have a significant effect on the environment and on the quality of life enjoyed by individuals and communities. The Development Plan acknowledges that there is a need to minimise the adverse impact of noise without placing unreasonable restrictions on development, and to avoid future conflicts between the community and the operation of the airport.

A number of Fingal Development Plan Objectives relate specifically to Noise and Safety, as follows:

Objective EE51 *'Strictly control inappropriate development and require noise insulation where appropriate within the Outer Noise Zone, and actively resist new provision for residential development and other noise sensitive uses within the Inner Noise Zone, as shown on the Development Plan maps, while recognising the housing needs of established families farming in the zone.'*

Objective EE54 *'Restrict development which would give rise to conflicts with aircraft movements on environmental or safety grounds on lands in the vicinity of the airport and on the main flight paths serving the airport, and in particular restrict residential development in areas likely to be affected by levels of noise inappropriate to residential use.'*

A piece of land (c.2.43 hectares) in the northern section of the Plan lands lies within the Inner Airport Noise Zone, while the majority of the lands are located within the Outer Airport Noise Zone associated with Dublin Airport. In terms of the Inner Airport Noise Zone, it is proposed as part of the LAP to designate this area as open space. With regard to the remainder of the Plan lands contained within the Outer Zone, the Fingal Development Plan objectives should be adhered to in the

development of the lands. Aspects such as façade construction/orientation, room usage, window construction, use of active or passive air vents, and site boundary noise mitigation measures can all reduce exposure to noise.

Safety Zones

The purpose of Public Safety Zones is to protect the public on the ground from the small but nevertheless real possibility that an aircraft might crash in a populated area. A Public Safety Zone is used to prevent inappropriate use of land where the risk to the public is greatest. Public Safety Zones were drawn up in 2003 by ERM for the Department of Environment, Heritage and Local Government and the Department of Transport but guidelines for their implementation have not yet been issued. The LAP lands are located within the confines of the Outer Public Safety Zone around Dublin Airport.

Development Plan objectives in relation to Public Safety Zones are as follows:

Objective EE57

'Promote appropriate land use patterns in the vicinity of the flight paths serving the Airport, having regard to the precautionary principle, based on existing and anticipated environmental and safety impacts of aircraft movements.'

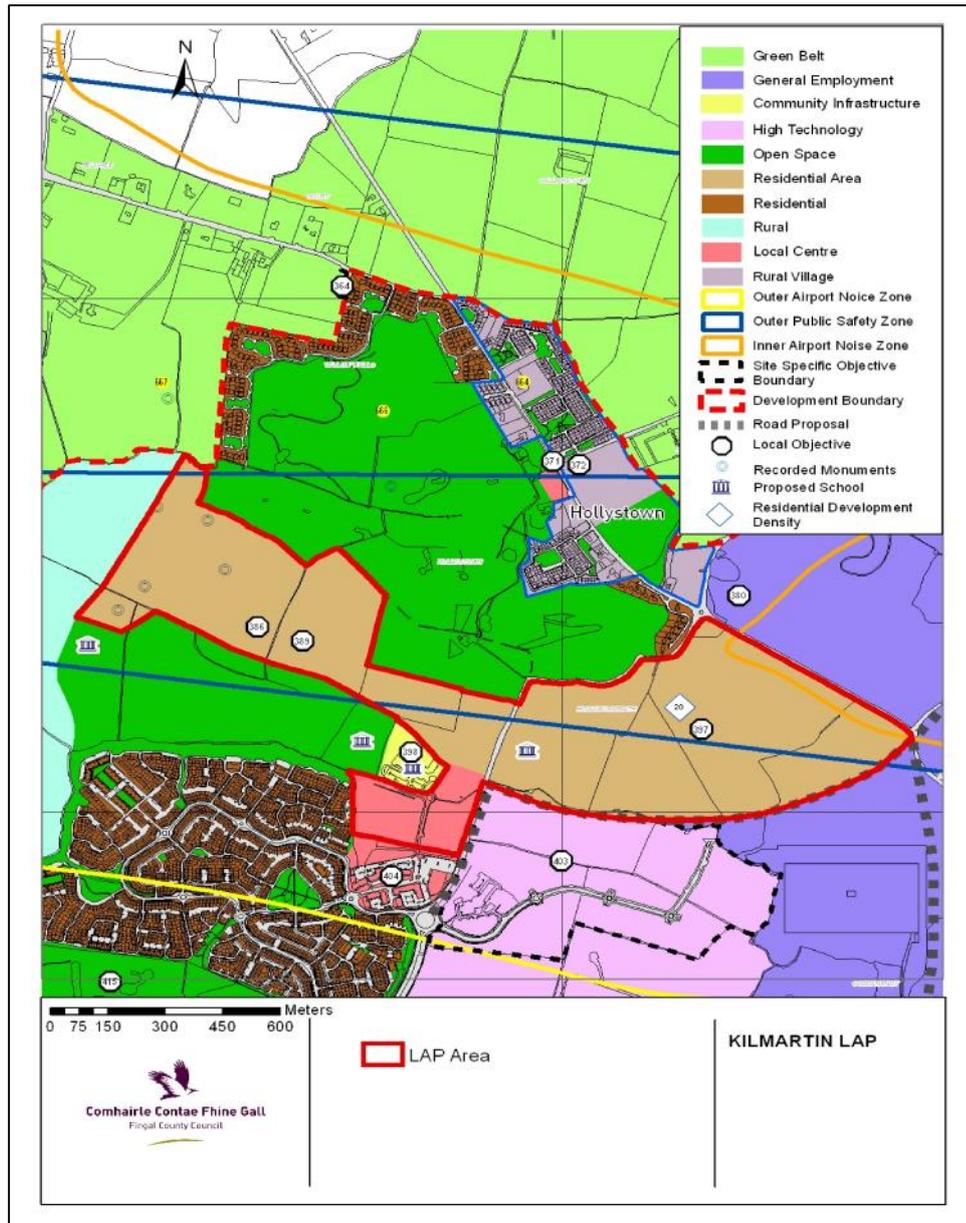
Objective EE58

'Implement the policies to be determined by the Government in relation to Public Safety Zones for Dublin Airport.'

Objective EE59

'Continue to take account of the advice of the Irish Aviation Authority with regard to the effects of any development proposals on the safety of aircraft or the safe and efficient navigation thereof.'

Map 5: Airport Noise Zones and Public Safety Zones for the Plan lands.



7.2.2 Traffic Noise

In terms of traffic noise, the existing noise levels are typical of a semi-rural area in the vicinity of busy roads. An Environmental Impact Statement (EIS) was undertaken for the *Tyrrelstown to N2 (Cherryhound Interchange) Link Road* which concluded that noise levels with the road in place have been predicted to be in excess of the design goal as set down in the NRA Guidelines at a number of receiver locations.

A set of barriers to reduce noise levels from the road have been specified. None of the receiver locations close to the Plan lands exceeded noise levels and therefore did not require noise mitigation measures to be put in place. Noise levels will be required to be analysed further at the EIS and planning application stages of the planning process.

7.3 Key Environmental Issues

- Inner Airport Noise zone to accommodate open space.
- Necessary abatement measures to reduce traffic noise from the M2-N3 link road.

8.0 Biodiversity, Flora and Fauna

8.1 Introduction

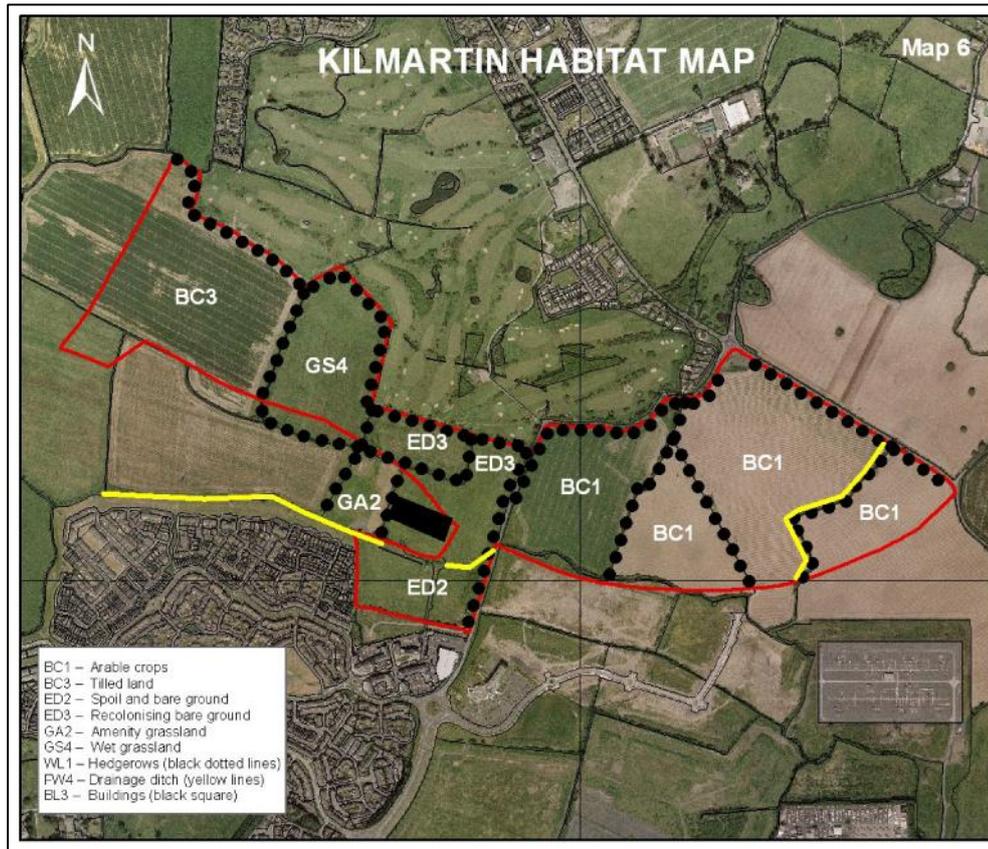
Biodiversity includes the entire natural world both plants and animals, and is not confined to rare or threatened species, but instead ranges from the most common species right up to the critically endangered ones. Biodiversity also includes the places where plants and animals live, such as a local park or a large woodland area. Biodiversity is recognised as a vital part of our environment and its conservation and sustainable use is advocated at national and international levels.

8.2 Current Baseline Environment

No part of the Kilmartin LAP lands is covered by a conservation designation or a proposed designation and none of the lands adjoining the Plan lands contain any such designation. In accordance with Article 6 of the Habitats Directive, all Natura 2000 sites within a 15km radius of the LAP lands were subjected to an Appropriate Assessment Screening. On the basis of this screening, it was concluded that the proposed development of the LAP lands would not have a significant effect on the Natura 2000 network and a Stage 2 Appropriate Assessment was not required.

An ecological survey was undertaken. The area is poor in overall plant species except for a few remaining roadside hedges and tree-lines at townland boundaries and at the margins of Hollystown Golf Course. A bat study was not undertaken. Bat roosting sites are unlikely to be present due to the lack of large trees. Bats may, however, use the sheltered parts of hedgerows when feeding.

Map 6: Habitats Map



8.3 Key Environmental issues

- No rare or protected plant species were found.
- A bat study was not undertaken. Bat roosting sites are unlikely to be present due to the lack of large trees. Bats may, however, use the sheltered parts of hedgerows when feeding.
- Hedgerows, where possible, should be retained and protected. Experience shows that many hedgerows are not of sufficient quality and structure to survive within an urban environment.
- Green corridors, including hedgerows, linking green spaces to be provided.
- Preserve and extend the length and width of the existing tree-line/hedgerow and its associated grassy margin around Hollystown Golf Club.
- Provide verges a minimum of five metres as buffers on either side of the preserved hedgerows/tree-lines. Any removal of

hedgerows/tree-lines to be balanced with native re-planting of equal or greater area.

- A minimum ten metre wide green buffer zone to be created on both sides of the stream at the eastern end of the LAP lands and around the newly created drain in the central part of the LAP. In addition, buffers to be maintained around all feeder streams of the Pinkeen river.

9.0 Soil

9.1 Introduction

Soil is a biologically active complex mixture of weathered minerals, organic matter, organisms, air and water which provides the foundation for life in terrestrial ecosystems. It can be considered a non-renewable natural resource because it develops over very long timescales. (Towards Setting Environmental Quality Objectives for Soil –Developing a Soil Protection Strategy for Ireland, EPA 2002)

9.2 Current Baseline Environment

The Geographical Survey of Ireland (GSI) provides information available on bedrock and subsoil. With regard to bedrock, the LAP lands are located in a significant area of Dinantian Mixed Sandstones, Shales and Limestones (DMSSL) and Dinantian Upper Impure Limestones. In terms of subsoils, the vast majority of the LAP lands have a 'till derived chiefly from limestone' subsoil. There is a small piece of land containing 'bedrock outcrop and subcrop' at the north-eastern tip of the LAP lands adjacent to the golf course. With regard to aquifer classification, there are two aquifers listed pertaining to the LAP lands identified as PI – Poor Aquifer – Bedrock which is Generally Unproductive except for Local Zones and LI – Locally Important Aquifer – Bedrock which is Moderately Productive only in Local Zones. Groundwater vulnerability ranges from low to extreme, with extreme being one small portion in the north-west of the site and one area adjacent to the LAP lands.

9.3 Key Environmental issues

- The development of greenfield lands may result in an increase in surface water runoff into the Pinkeen River or groundwater pollution. However, the proposed development will be in line with the Greater Dublin Strategic Drainage Study (GDSDS) and will implement Sustainable Drainage Systems (SuDS) to deal with the threat of pollution from surface water runoff.

- Identifying areas of environmental sensitivity and biodiversity value serve to strengthen protection of the soil resource of both the immediate settlement and the wider area.

10.0 Water

10.1 Introduction

On 22 December 2000, the European Union (EU) passed the Water Framework Directive (WFD). The European Communities (Water Policy) Regulations, 2003 (SI No. 722 of 2003) and SI 41 of 2005 Water Policy (Amendment) Regulations transposed the Water Framework Directive into Irish Law. The overall objective of the Water Framework Directive (WFD) is to prevent deterioration in the status of any 'waters' and achieve at least 'good status' by 2015.

It establishes a framework for the protection of all waters including rivers, lakes, estuaries, coastal waters and groundwater, and their dependent wildlife/habitats under one piece of environmental legislation. Specifically the WFD aims to:

- protect/enhance all waters (surface, ground and coastal waters)
- achieve "good status" for all waters by December 2015
- manage water bodies based on river basins (or catchments)
- involve the public
- streamline legislation

The Water Framework Directive (WFD) was transposed into Irish Law in 2003. The governance of water in Ireland is carried out through eight (8) River Basin Districts (RBDs). Fingal is part of the Eastern River Basin District (ERBD) formed as per the requirements of the WFD.

10.2 Current Baseline Environment

The Kilmartin LAP area falls within the Eastern River Basin District (ERBD), Liffey Hydrometric Area 09 (HA09). The Eastern River Basin District comprises of rich agricultural land, coastline, the city of Dublin and the towns which form the Greater Dublin Area and its commuter belt. With land area of around 6,300 km², the Eastern River Basin

District covers about one tenth of the entire country and has 350 km² of marine waters.

A stream serving the Pinkeen River flows through the western portion of the LAP lands and is a tributary of the Tolka river, which itself flows directly into North Dublin Bay (Special Area of Conservation). According to the Eastern River Basin Management Plan (ERBMP), the Pinkeen and Tolka (Lower) Rivers are classified as being of 'bad status'.

10.2.1 Water Supply

The water supply serving Kilmartin comes from the Liffey with its abstraction point at Leixlip via the low level reservoirs at Ballycoolin, boosted by the Cruiserath pumpstation. Lands within the LAP area above 64 m OD will be supplied by gravity from the Ballycoolin Water Tower. The subject lands will be served by the 300mm diameter distribution main to Tyrrelstown via the Tyrrelstown-Cherryhound Interchange Link Road to be completed in Spring 2013.

Plans to expand the Leixlip plant by the end of 2014 will increase production capacity to 225MI/day. Following the expansion, no additional capacity is available in the river Liffey to allow further abstractions.

New development must be adequately serviced with a suitable quantity and quality of drinking water supply. Development will be limited to that which can be provided for, based on available water supply.

Proposals for all new hard and soft developments will need to demonstrate that the existing network and associated way leaves are protected from impacts to prevent network damage.

New watermain layouts must be in accordance with the most recent version of Fingal County Council's "Guidelines for the laying of Distribution Watermains" and "Guidelines for Drinking Water Supply".

In order to limit unnecessary water usage, leakage and excessive consumption, a Water Management and Conservation Plan detailing how best practice in water conservation will be required to include both water mains and internal plumbing. New development should, where feasible, install suitable water conservation measures. The use of rainwater harvesting, particularly in commercial developments, is to be encouraged.

10.2.2 Surface Water

New development has the potential to add to flood risk in an area if it increases surface water run-off. In keeping with the Greater Dublin Strategic Drainage Study (2005), Sustainable Drainage Systems (SuDS) techniques will be incorporated into the development of the LAP lands. SuDS offer a comprehensive design approach to the management of water on a site, to delay run-off and encourage filtration through the use of porous surfaces, detention ponds, green roofs, rainwater harvesting etc. in ways which enhance amenity and biodiversity and minimise pollution effects. Therefore, the use of SuDS provides benefits in what is described as the SuDS triangle; water quality, water quantity and amenity/biodiversity. By designing systems well it is possible to incorporate all three benefits. A treatment train approach is to be adopted in the design of the proposed surface water regime by utilising suitable SuDs mechanisms in providing source, site and regional control. The surface water discharge rate from the development land should not exceed existing greenfield run-off rates. Run-off from all sites must pass through at least one level of treatment using a SuDS component prior to the final level of treatment in the public realm areas.

Given Fingal County Councils' commitments under the Water Framework Directive to improve the quality of the water in the Tolka River and the international and national designations which apply to Dublin Bay, the criterion of Water Quality is a key factor in the design of the storm water system to serve the development.

It is a requirement of the Greater Dublin Strategic Drainage Study that surface-water discharge rates are limited to green-field rates for the development area. This complies with the Flood Risk Management Guidelines for surface-water discharge for up to the 1% AEP pluvial event. Incorporating SuDS techniques into the design is key to achieving green-field rates.

A SuDS Strategy for Kilmartin, prepared by DBFL Consulting Engineers on behalf of the Council, identifies various measures that may be employed throughout the development taking into account the existing surface water infrastructure in place across the site. These SuDS measures shall, where feasible, be incorporated into the development in line with appropriate sustainable drainage practices.

Like all drainage systems, SuDS components should be designed for inspection and future maintenance ensuring efficient operation and preventing failure. Usually, SuDS components are on or near the surface and most can be managed using landscape maintenance techniques. For below-ground SuDS, such as permeable paving, the manufacturer or designer should provide maintenance advice. A Maintenance Plan for the routine and long term maintenance of the drainage system should be established at the early stages in the planning process. Each Maintenance Plan should be submitted with each individual planning application within the LAP lands.

10.2.3 Foul Drainage

The LAP lands are part of the 9C sewer catchment in Blanchardstown which ultimately discharges to the Regional Waste Water Treatment Plant at Ringsend via The Liffey Siphons. Ringsend Waste Water Treatment Plant, at present, is operating at its design capacity. Dublin City Council is currently finalising proposals to increase the capacity of the plant from 1.64 million PE (population equivalent) to 2.15 million PE, with a target completion date of 2015. In the longer term The Greater Dublin Drainage Project, which is currently underway, aims to provide strategic drainage infrastructure required for the Greater Dublin Area (GDA). It is currently estimated that construction of a new regional wastewater treatment plant in the Fingal area and the orbital pipelines to serve the GDA will be completed by 2021.

The Urban Wastewater Treatment Directive requires the collection and high level treatment of wastewater, specifically those to be discharged to sensitive waters such as Dublin Bay. The terms of the recent EPA discharge license (2010) granted to Dublin City Council in respect of Ringsend Waste Water Treatment Plant reinforces this requirement. The *Waste Water Discharge (Authorisation) Regulations 2007 (SI No. 684 of 2007)* also require that the Water Service Authority satisfies itself that there is drainage capacity available in the network prior to granting a planning permission for any development. This requirement will apply to all developments within the LAP.

The natural drainage of the LAP lands is in a southerly direction towards the 9C sewer along the Tolka Valley. The 9C sewer has limited capacity and suffers greatly from the effects of infiltration during intense rainfall events. Duplication of the sewer is estimated to cost circa €80 million. It is not included in the Department of Local Government Water Services Investment Programme WSIP(2010-2013).

The sewer is further constrained at the Liffey Siphon. Plans are underway to refurbish the Liffey Siphon during 2013.

Development will be limited pending the progress of the various improvement works and will be subject to the agreement of the Water Services Department. Interim solutions may be required to facilitate development in the short term.

All development must be drained on separate systems, i.e. foul and surface water flows should be directed to separate pipes. This reduces the possibility of flooding of the foul pipelines during times of extreme rainfall events, All surface water run-off must be attenuated where possible and sustainable drainage systems utilised. The use of sustainable drainage systems produces multiple benefits in terms of enhanced bio-diversity, reduced peak flows, water quality improvements and improved ecology.

10.2.4 Ground Waters

The Geological Survey of Ireland (GSI) has recently completed Ground Water Mapping for Fingal. The mapping indicates that the site has a poor to locally important aquifer in a east to west direction and a vulnerability classification ranging from high on the east of the lands to moderate and low in a westerly direction.

Groundwater and water catchment areas have an inherent ecological and economic value and are a major resource that needs to be protected. Groundwater contributes to rivers and lakes and influences their amenity and recreational value. The Council is responsible for the protection of all waters including rivers, lakes and groundwater sources. The responsibilities include implementation of pollution control measures, licensing of effluent discharges, implementing and

monitoring compliance with environmental regulations and the drawing up of pollution contingency measures.

10.3 Strategic Flood Risk Assessment

In accordance with the 'Planning Systems and Flood Risk Management Guidelines for Planning Authorities' (DoEHLG, 2009), the preparation of the LAP was the subject of a Strategic Flood Risk Assessment (SFRA). The SFRA identifies a number of measures to ensure flood risk is incorporated into the planning of this area. The Assessment recommends that development proposals for a number of areas within the plan boundary be subject to site-specific flood risk assessment appropriate to the nature and scale of the development. The Assessment identifies a small portion of lands at the north western boundary of the lands within Flood Zones A and B. The areas should form part of the open space provision. The Assessment also recommends that drainage channels and watercourses are retained and that riparian strips are provided. Appendix 4 of the LAP sets out the full Strategic Flood Risk Assessment report.



10.4 Key Environmental Issues

- There is sufficient water supply to serve the Plan lands.
- A Sustainable Drainage System (SuDS) will be implemented in the LAP area to reduce surface water run-off, minimise the risk of flooding and prevent pollution.
- Foul drainage is to the Tolka Valley 9C sewer which flows to the Ringsend Wastewater Treatment Plant, which has limited capacity.
- Ground water vulnerability ranges from low to extreme, with extreme being one small portion in the north-west of the site.
- The Pinkeen and Tolka (Lower) Rivers are classified as being of 'bad status', a target date for achieving 'Good Status' in these water bodies is 2015.
- The majority of the Kilmartin LAP lands are within Flood Zone C i.e. outside the 1000 year flood extents. However the existing drainage channels and watercourses serving the lands are important features for the conveyance and containment of run-off up to the 1000 year event.

11.0 Air Quality and Climatic Factors

11.1 Introduction

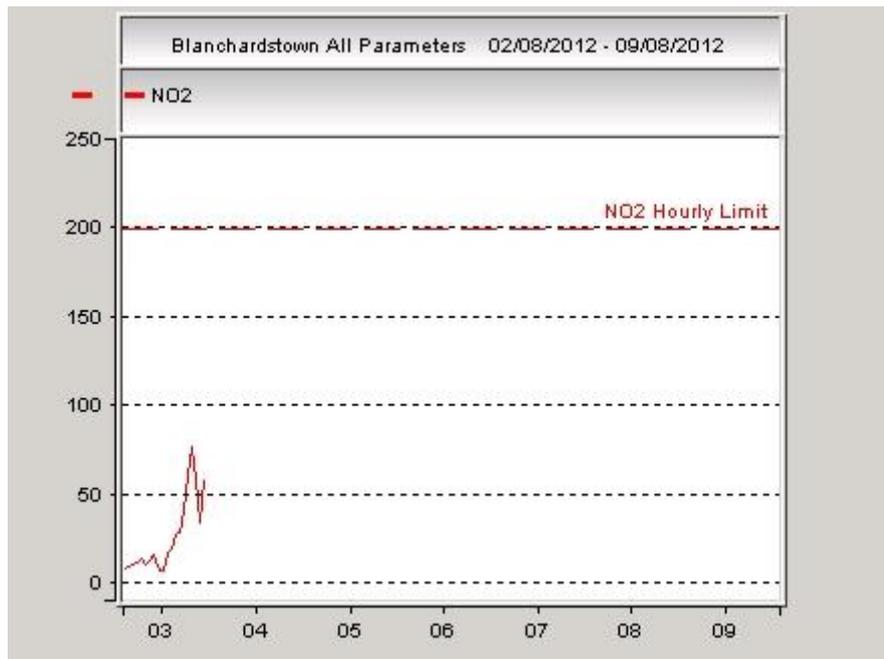
EU Directives set down air quality standards in Ireland and other member states for a variety of pollutants, in order to protect our health, vegetation and ecosystems. Ambient air quality monitoring is carried out in the Dublin Region by the four local authorities under the direction of the Environmental Protection Agency. This involves monitoring for a range of air pollutants specified under European Union rules to ensure that legal standards for air quality are met. For the purposes of air quality classification, the Dublin conurbation is designated as one Zone i.e. Zone A, which includes the Plan lands.

11.2 Current Baseline Environment

11.2.1 Air Quality

The overall air quality in Zone A is considered to be 'Good'. (Five bands are used in the Irish index – Very Good, Good, Fair, Poor and Very Poor). The index is based on the latest available measurements of ozone, nitrogen dioxide, PM₁₀ and sulphur dioxide in Zone A. Monitoring is done using continuous monitors for nitrogen oxides. There are five air quality monitoring stations located throughout Fingal (Blanchardstown, Balbriggan, Cloghran, Malahide, Airport). Figures 11.1 and 11.2 indicate the Nitrogen Dioxide levels over a seven-day period from the 2nd -9th August 2012 and PM10 levels measured at Blanchardstown from the 1st June to 30th June 2012.

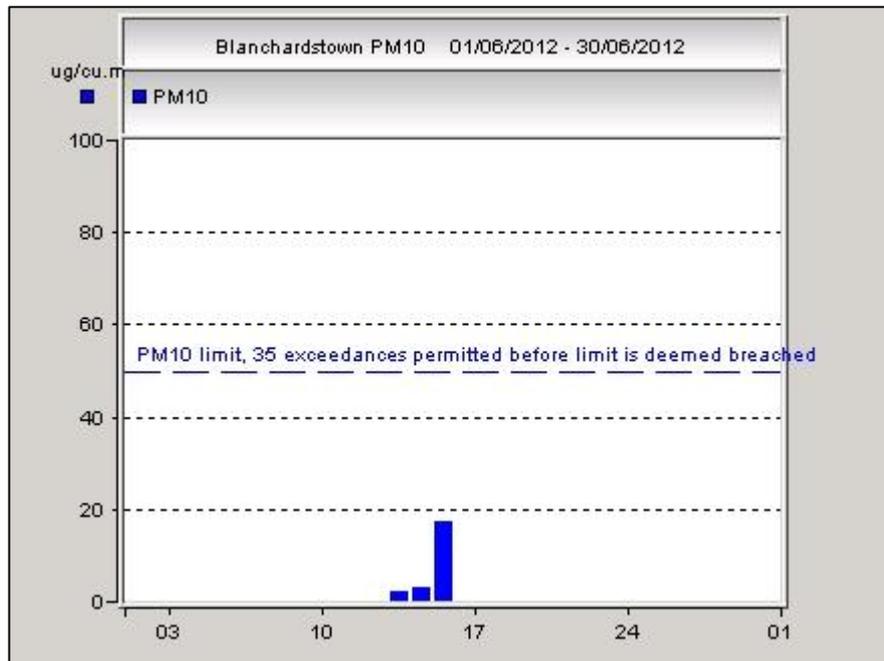
Figure 11.1: Nitrogen Dioxide Levels in Blanchardstown



Notes: The NO₂ hourly limit of 200 ug m⁻³ is deemed breached if more than 18 exceedances have occurred. There have been 0 exceedances at this site to date in 2012. The Graph shows the latest available results over the last 7 days

Source: Environmental Protection Agency, 2012

Figure 11.2 PM10 Measured at Blanchardstown



Notes: The PM₁₀ limit of 50 ug m⁻³ is deemed breached if more than 35 exceedances have occurred. There have been no exceedances at this site to date in 2012.

Source: Environmental Protection Agency, 2012

11.2.2 Climatic Factors

The causes and consequences of climate change pose an immense global challenge which is addressed at an international level under the UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol. At an EU level the *Climate and Energy Package* and the forthcoming *Adaptation Strategy* provide the context for actions in Ireland.

Ireland's GHG emissions rose rapidly between 1990-2000 remained relatively stable up to 2008 and then show a sharp decline, due largely to the effects of the economic downturn (EPA, 2012a). For compliance purposes the Kyoto Protocol limit is calculated as the total greenhouse gas emissions over the period 2008–2012. The EPA state that Ireland is on track to meet its Kyoto commitment with regard to GHG emissions.

11.3 Key Environmental issues

The most relevant aspects of the Plan for assessment in the context of air quality and climatic factors are Traffic Generation and Energy Use.

11.3.1 Traffic Generation

In terms of the spatial strategy of the Plan, efficient use of land is promoted through development in key areas that encourages sustainable movement patterns such as walking, cycling and public transport. In terms of public transport, a proposal is put forward in the Plan whereby the existing bus routes serving Tyrrelstown would extend into the Plan lands to cater for the future population at Kilmartin. It is acknowledged however that the provision of public transport is not solely within the remit of the Local Authority. However, it is important to propose alternative transport options to the private car, if at all possible. It is the case however that the completion of the M2/N3 link road will increase the attractiveness of car-based transport. Within the

Plan, the Transportation Strategy proposed encourages and prioritises sustainable modes of transport with reduced reliance on the use of the private car.

In terms of the levels of traffic-derived air pollutants, air quality modelling was undertaken for the EIS for the Tyrrelstown to N2 (Cherryhound Interchange) Link Road. The EIS concluded that levels of traffic-derived air pollutants will not exceed the ambient air quality standards both with and without the scheme in place for both the opening and scheme year. Although the scheme may increase ambient concentrations for some pollutants and averaging periods at some receptors, levels will still be within the ambient air quality limit values under all traffic speeds. Air quality monitoring of the Plan lands should be carried out through the planning applications/Environmental Impact Statement stages. The free flow of the generated traffic in the vicinity of the development will minimise the generation of traffic related greenhouse gases.

11.3.2 Energy Use and Efficiency

The national policy document *Delivering Homes Sustaining Communities 2007* supports the adoption of new technology and innovative approaches to design and construction of dwellings leading to enhancing their quality and energy performance over their lifetime. There is now a requirement for all new buildings to become more energy efficient, in line with documents such as the EU *Energy Performance of Buildings Directive 2002/91/EC* and the various *Building Regulations*.

It is recommended that all development in the LAP lands would contribute positively towards reduced energy consumption and the associated carbon footprint. In order to achieve this, relevant policies

and objectives should be incorporated into the LAP document at all stages of design and construction.

In terms of climate impacts, due to the size and nature of the development, green house gas emissions resulting from the development will be imperceptible in terms of Ireland's obligations under the Kyoto Protocol.

12.0 Material Assets

12.1 Introduction

Resources that are valued and that are intrinsic to specific places are called 'material assets'. They may be of either human or natural origin and the value may arise for either economic or cultural reasons. *(Source: Advice Notes on Current Practice in the preparation of EIS – EPA).*

This section deals with the following sub-sections relating to Material Assets:

Transport Infrastructure

Municipal Waste

12.2 Current Baseline Environment

12.2.1 Transport Infrastructure

The LAP lands are served by a number of roads as follows:

R121

The development lands are bisected by the R121 which links the roundabout at Hollystown to Mulhuddart. Traffic capacity is limited firstly due to the narrow nature of the road and secondly due to a number of existing sharp bends. The road has no verge or footpath and on its own cannot sustain the transport needs for access to the major scale of development which could be facilitated at Kilmartin. Urbus is the only public transport facility utilising the R121 between Tyrrelstown and Hollystown.

Ratoath Road

The development lands lie partially to the south of the Ratoath Road. This is a country road running from Hollystown and beyond to northern Blanchardstown. This road will connect with the M2-N3 link road, which will run along the southern part of the development lands east of the R121. An agricultural entrance off this road currently services the Local

Area Plan lands. Directly to the north of this road lies land associated with the proposed Cherryhound LAP. The road as it exists has no verge or footpath. The facilities for cyclists and pedestrians will require improvement. The road will form an important route around the development lands.

The M2-N3 link road

The section of road under construction represents the final section of the vehicular route connecting Mulhuddart on the N3 with Cherryhound on the M2. This is an essential piece of public infrastructure which is required to underpin and sustain existing public investment in employment/economic development in North Blanchardstown and the wider Dublin Metropolitan Area. This road will define the southern boundary of the eastern part of the development lands east of the R121 and will connect two of the main arterial routes to/from the city, the M2 and N3. This road due for completion in Spring 2013 will remove a substantial amount of vehicular traffic from the local road network. In addition to catering for vehicular traffic the route will include provisions for pedestrians and cyclists. An Environmental Impact Statement (EIS) was carried out by O'Connor Sutton Cronin & Associates for the link road entitled *Tyrrelstown to N2 (Cherryhound Interchange) Link Road*.

Sustainable Transport

A key objective of National Transport policy as set down in *Smarter Travel A Sustainable Transport Future 2009-2040* and the development of the LAP lands is the provision of effective sustainable transport modes. Within the LAP lands a network of pedestrian and cycle routes shall be provided to ensure good quality connections within the lands and the wider area.

Public Transport

In terms of public transport, Tyrrelstown is served by the no. 40D bus route which travels from Tyrrelstown to Parnell St in the city centre via Finglas (every 15 mins at peak time, 30 mins at off-peak time). The no. 238 bus route travels from Tyrrelstown to Blanchardstown Town Centre via Mulhuddart (every hour). There will be increased traffic demands resulting from the scale of the proposed development. Given the location of the subject lands the increase in population and hence public transport demand will be serviced by public transport in the main. Walking and cycling will be promoted as sustainable modes of transport within the LAP lands and between these lands and adjoining areas.

12.2.2 Municipal Waste

Under the Waste Management Acts 1996 to 2008, local authorities are required to prepare detailed plans on the management of waste. The current *Waste Management Plan for the Dublin Region 2005-2010* has been developed jointly by the four Dublin Local Authorities.

In terms of construction and demolition (C&D) waste a high proportion of this waste goes directly to landfill. It is an objective of Fingal County Council to increase the level of recycling of C&D waste in line with Central Government Policy. The proportion of this waste recycled will be increased to 85% by 2013 (in accordance with national policy guidance). Construction and demolition waste management plans will be required to be submitted as part of any planning application for projects in excess of certain thresholds, as follows:

- New residential development of 10 units or more.
- New developments other than above, including institutional, educational, health and other public facilities, with an aggregate floor area in excess of 1,250 sq m.

- Demolition/renovation/refurbishment projects generating in excess of 100 m³ in volume, of C&D waste.
- Civil engineering projects in excess of 500 m³ of waste materials used for development works on the site.

12.3 Key Environmental issues

- The issue of cycling and pedestrian routes linking the LAP lands to the surrounding lands should be incorporated into the plan. This would not only link the new community to the existing but would also increase the permeability of the LAP lands and may encourage a shift away from car usage.
- Traffic calming measures within the plan will also need to be introduced.
- Construction and demolition waste management plans will be required to be submitted for planning applications in order to deal with waste generated during the construction phase.

13.0 Cultural Heritage – Architectural and Archaeological

13.1 Introduction

The Record of Monuments & Places (RMP) is a list of all archaeological sites known to the National Monuments Service. The Record of Monuments & Places includes RMP maps based on OS 6" Sheets, which indicate the location of each recorded site. The RMP list is based on The Sites and Monument Record (SMR) files housed in the National Monuments Services Offices.

13.1.1 Historical Context of Lands

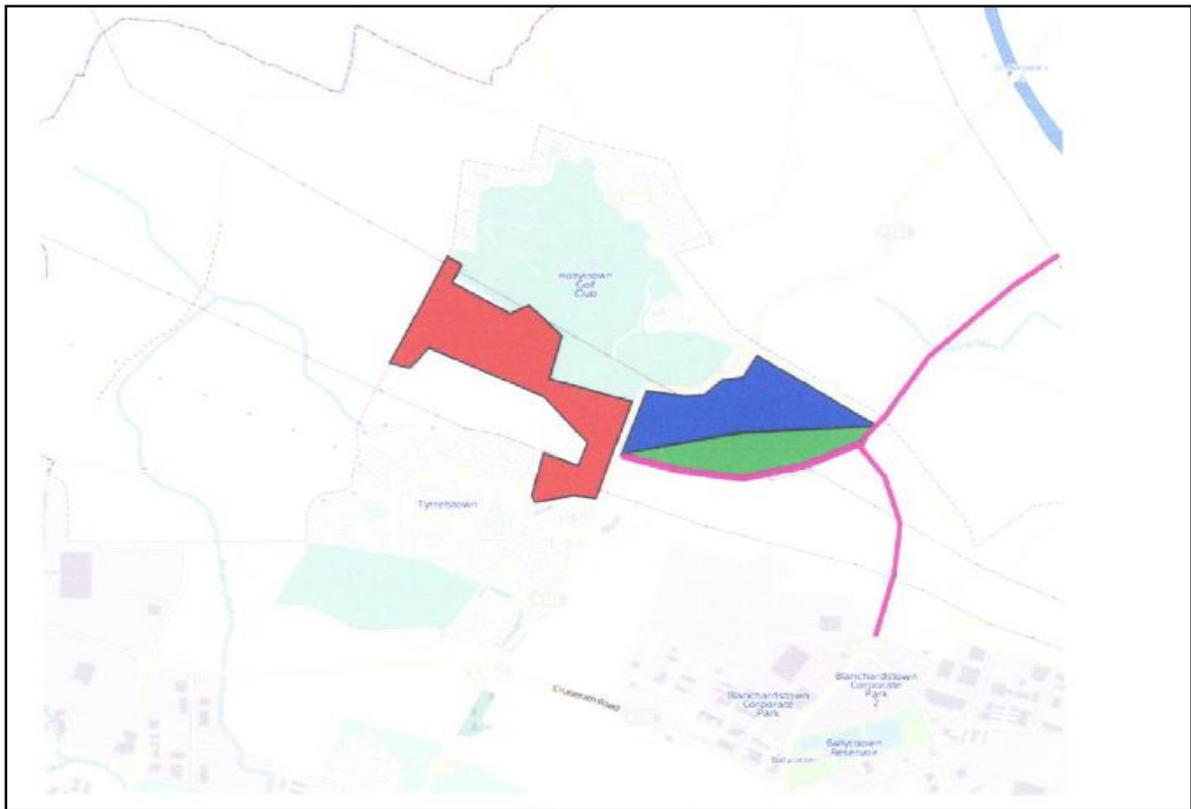
The earliest evidence for human activity in the immediate vicinity of the proposed development site comes from the documented remains of the enclosures (DU013-032) and mounds (DU013-003/004); monuments which can date to the prehistoric period. Unfortunately no trace of these monuments survives above ground, due primarily to centuries of agricultural activity and the development of Hollystown Golf Course. The 1st Edition Ordnance survey depicts a church in ruins on the site but it is generally accepted that early ecclesiastical settlements from the fifth to the ninth century would have been dominated by wooden or sod-walled churches which no longer survive.

13.2 Current Baseline Environment

Archaeological Assessment of the LAP lands has been carried out to identify any archaeological potential within the plan lands and to propose mitigation measures where necessary.

Figure 2 indicates the Archaeological Assessment of the Plan Lands which are divided by section depending on who carried out the various assessments. These are described as follows:

Figure 2: Archaeological Assessment of Plan lands by section



Red Section: carried out by Icon Archaeology Limited.

Blue Section: assessment carried out as part of the Hollywoodrath Local Area Plan

Green Section: Field inspections were carried out in this section as part of the Archaeological assessment carried out for the Tyrrelstown to N2 (Cherryhound Interchange) Link Road EIS 2006.

Purple Section: These lands will form part of the M2/N3 (Cherryhound Interchange) Link Road, through the townlands of Bay, Cherryhound, Cloghran, Cruiserath, Goddamendy, Hollywoodrath and Kilamonan. An archaeological assessment report was carried out in 2008 by ACS Ltd.

Red Section

An initial desk based assessment and field survey was completed during September 2011 which surveyed four fields to the west of the R121. These fields were chosen as there are 5 recorded monuments in

the extreme western portion of the Plan lands. The fields which were surveyed are detailed below.

Field 1 is located off the R121 and is broadly rectangular in shape with a triangular extension to the south extending west. The field is flat and was cleared of scrub some time ago but is now covered with weeds. No features of archaeological interest were noted, although the townland boundary runs along the western side of the field. The boundary is defined by a substantial drainage ditch approximately 4m wide and 3m deep and is heavily overgrown. Ditches such as these can mirror the line of older territorial boundaries and can be of significant archaeological importance.

Field 2 is located further to the west and is rectangular in shape and is accessed through a causeway over the townland boundary ditch. The field is flat and is heavily overgrown with tall grasses, weeds, bushes and small trees. Nothing of archaeological interest was noted but the high grasses over 1m in height could have obscured any surface anomalies.

Field 3 is also broadly rectangular in shape and is heavily overgrown with a similar array of grasses, weeds and bushes. Nothing of archaeological interest was noted but again the high grasses obscured the view.

Field 4 at the rear of the site is extremely flat and is currently used for tillage crops. The recorded monument DU013-032 extends across the western half of this field covering approximately 25-30 acres. No trace of this monument(s) was visible at the time of inspection and no surface anomalies were noted.

Key Findings of Red Section

The study identified a large recorded monument (DU013-032) described as a series of four enclosures and a ring-ditch located at the western end of the development area. The 5 Recorded Monuments listed in the Record of Monuments and Places (RMP) are as follows:

DU013-032 – Enclosure

DU013-036 - Enclosure

DU013-037 - Enclosure

DU013-038 – Ring ditch

DU013-039 – Enclosure

DU013-032 is the site of several enclosures covering a large lozenge shaped area (L;300M, w;200m) at the western end of the development site. The five sites, four enclosures and a ring-ditch, were identified from aerial photography taken in the 1980's. The sites are not depicted on any of the Ordnance Survey editions and no trace of these sites is visible today.

The sites were identified from aerial photographs taken in the 1980's but no upstanding remains are visible today. Two additional monuments (DU013-003/04) classed as barrows were located close to the northern boundary of the site. As part of the investigation, a geophysical survey was undertaken in December 2011 (11R0152) to attempt to locate the five monuments identified from aerial photography and to assess the archaeological potential of the remainder of the fields one and four. The survey responses were generally weak but possible traces of three of the five monuments were found. Traces of other possible curved linear features and the probable remains of disused field systems were also found. A test excavation was recommended to ascertain the nature and extent of these remains. The following is a summary of the findings:

Field 1: remains of disused field systems found.

Field 2 & 3 – no indication of archaeological features/sites.

Field 4: tentative traces of 3 archaeological sites found through test excavation.

Blue Section: assessment carried out as part of the Hollywoodrath Local Area Plan 2006. Section 8.3 Archaeology & Protected Structures of this LAP states the following:

'There are no recorded monuments or protected structures on the subject lands. The Department of Environment, Heritage & Local Government recommend that the area be subject to an inspection by a suitably qualified archaeologist in advance of development.'

Green Section: Field inspections were carried out in this section as part of the Archaeological assessment carried out for the Tyrrelstown to N2 (Cherryhound Interchange) Link Road EIS 2006. Nothing of archaeological or architectural significance was identified in this area.

Purple Section: These lands will form part of the new M2 to N3 (Cherryhound Interchange) Link Road, through the townlands of Bay, Cherryhound, Cloghran, Cruiserath, Goddamendy, Hollywoodrath and Kilamonan. An archaeological assessment report was carried out in 2008 by ACS Ltd.

The assessment of the proposed development involved the mechanical excavation of 198 test trenches (Licence No. 07E1147). Fourteen fields were tested, and four archaeological sites were identified that will require further excavation. These included: Bay 1 (cremation pits), Bay 2 (kiln, ringditch, cremation pit), Bay 3 (kiln and possible field system associated with RMP DU014:089) and Hollywoodrath 1 (prehistoric settlement). Full archaeological excavation is proposed in each of these cases unless an engineering solution can be agreed with the relevant authorities to mitigate the impact of the proposed development.

The M2-N3 link road to the south of the Plan lands is currently under construction. In respect of the road construction, it was advised by the National Monuments Service that the requirement for the provision of archaeological monitoring of the topsoil was not a requirement of the Department of Arts, Heritage and the Gaeltacht. However, it was a requirement that in accordance with the National Monuments Act, any discovery of archaeological material must be reported to the National Monuments Service and the National Museum of Ireland. No discoveries have been made to date.

13.3 Key Environmental issues

The Red Section study provides a number of recommendations with regard to the findings on the Plan lands. These are:

- Fields 1, 2 and 3 shall be subject to archaeological monitoring of topsoil removal under licence from the DAHG. If substantial archaeological remains are identified in these areas further mitigation measures will be required.
- Five 50m x 50m squares shall be stripped of topsoil around the location of the sites identified from aerial photography in Field 4 to be carried out prior to the commencement of construction to allow adequate time for resolution/mitigation. Work to be carried out under licence from DAHG.
- It is recommended that the area be subject to an inspection by a suitably qualified archaeologist in advance of development.

14.0 Landscape

14.1 Introduction

The Development Plan classifies the county into 6 Landscape Character Types. Each landscape type is given a value through the consideration of such elements as aesthetics, ecology, historical, cultural, religious or mythological. The LAP lands are located within '*Low Lying Character Type*'. This character type has an open character combined with large field patterns, few tree belts and low roadside hedges, with few protected views or prospects. The area is characterised as having a modest value and a low sensitivity. These landscapes can absorb a certain amount of development once the scale and forms are kept simple and surrounded by adequate screen boundaries and appropriate landscaping to reduce impact on the rural character of the surrounding roads. The protection of views and riparian corridors from inappropriate development is of paramount importance in these areas.

Table LC01 below from the Fingal Development Plan 2011-2017 shows how this character type compares with the other landscape character types within Fingal in terms of character, value and sensitivity.

Table LC01: Landscape Character Assessment Summary – Character, Value and Sensitivity.

Landscape Character Types	Landscape Value	Landscape Sensitivity
Rolling Hills Type	Modest	Medium
High Lying Type	High	High
Low Lying Type	Modest	Low
Estuary Type	Exceptional	High
Coastal Type	Exceptional	High
River Valley and Canal Type	High	High

Source: Fingal Development Plan 2011-2017

14.2 Current Baseline Environment

The Plan lands are primarily agricultural in nature and in terms of topography are flat and largely featureless. There is a small gradual slope away from the north-east towards the south-west. The lands contain a number of hedgerows with a number of individual trees, none of which are identified in the Development Plan for preservation. A number of field drains traverse the site which feed into the Pinkeen River. The land bank has a good orientation, the east-west configuration gives good exposure to southern sunlight.

The Plan lands can be divided into two distinct areas bisected by the R121. To the east, topographically the land is gently sloping and the significant feature is the distant view of the Dublin Mountains. The land is crossed by overhead lines and pylons which have a significant

negative visual impact, especially on the designated 'LC' portion. West of the R121, the land is relatively flat with short-distance views to the west over agricultural land.

14.3 Key Environmental issues

- The subject lands are predominantly agricultural in nature, located between a large built-up area known as Tyrrelstown to the south and Hollystown Golf Course to the north, while lands to the west are in agricultural use and to the east are industrial lands.
- The development of the LAP lands will result in the urbanisation of lands currently used for agriculture. However, these lands have been zoned for development and therefore efforts should be made in the LAP to respect the existing topography and transitional nature of the LAP lands, through appropriate scale and densities to respect the transition between urban and rural boundaries and existing development.
- The Plan lands are classified with a Modest landscape value and a Low landscape sensitivity, as such this landscape type can absorb a certain amount of development, provided that appropriate screen boundaries and landscaping are provided.
- In its present condition the landscape of the Plan lands provides limited amenity value to any visual receptors.
- Overhead lines and pylons traverse the Local Centre zoning. Efforts should be made to underground these pylons as they contribute negatively to the visual amenity of the Plan lands.
- The use of existing vegetation on site, notably the field hedgerows and ditches, has value in integrating future development into the existing landscape. Important trees, hedgerows and townland boundaries should be preserved where it is desirable to do so.
- The design and implementation of a high quality landscape plan and a sympathetic urban design is recommended to mitigate the adverse impacts of any development;

- Landscaping will be particularly important along the boundary of the Plan lands with the M2-N3 Link Road, due to the unavoidable removal of hedgerows.

15.0 Strategic Environmental Objectives, Targets and Indicators

15.1 Introduction

An accepted method to determine the environmental effects of a plan, is to devise environmental or SEA objectives for inclusion in the environmental report. Objectives and targets set aims and thresholds which should be taken into consideration to effectively assess the impact of proposed plans on the environment. Indicators are used to illustrate and communicate this environmental impact in a simple and effective manner.

This Chapter presents the environmental objectives that have been identified for the environmental assessment process, against which the different LAP alternatives outlined in Section 15 will be assessed.

The SEA objectives have been devised having regard to the baseline information, environmental issues that are apparent and to policies and objectives in place in other plans or national or European policy documents. Importantly, the selection of SEA objectives is required to be relevant to the context of the proposed LAP.

The SEA objectives used in this report take the form of a general statement referring to a general direction of change, which can be measured by an indicator and given specific targets. A target usually underpins an objective often having a time deadline that should be met. Indicators are measurements of variables over time, which are often used to measure or demonstrate the achievement of objectives. The objectives outlined in this section will be used for the initial assessment of the alternatives and then refined in Section 16, when the preferred alternative is chosen.

15.2 SEA Objectives and Indicators

Environmental objectives and corresponding indicators have been identified and devised for each of the major components of the environment as presented in Sections 5.0-14.0 having regard to the nature of the LAP. These are presented in Table 15.1 below.

Table 15.1 SEA Objectives, Targets and Indicators

SEA OBJECTIVES	TARGETS	INDICATORS
Population and Human Health		
PH1 Improve people’s quality of life based on high-quality residential and recreational environments.	<ul style="list-style-type: none"> • Provide a range of residential dwellings of an appropriate size and type. • Provide a high quality recreational environment within the lifetime of the plan 	<ul style="list-style-type: none"> • Planning application stage. • Number of new open spaces and recreational facilities available following development of the plan lands.
PH2 Ensure the provision of high quality connected open spaces with linkages to adjoining green spaces outside the Plan lands.	<ul style="list-style-type: none"> • Provide for attractive areas of open space in accordance with Development Plan standards. • Creation of green corridors linking the Plan lands to adjoining green corridors outside the Plan lands. 	<ul style="list-style-type: none"> • Amount in ha. of open space, pocket parks and green corridors available following development of the plan lands.
PH3 Facilitate provision of necessary facilities to serve the future population, in terms of schools, crèches, retail services.	<ul style="list-style-type: none"> • Provision of necessary facilities to be shown in the LAP document. 	<ul style="list-style-type: none"> • Planning application stage
PH4 Facilitate integration of development into the existing urban environment through sustainable growth.	<ul style="list-style-type: none"> • Sympathetic development at appropriate densities. 	<ul style="list-style-type: none"> • Planning application stage.

Noise		
N1 Minimise environmental and transport related noise	<ul style="list-style-type: none"> Maintain daytime noise levels to less than 70 d B Maintain night-time noise levels to 55 d B 	<ul style="list-style-type: none"> Number of complaints from households. Incorporation of noise reduction measures (for buildings and roads) and increased levels of insulation in construction of buildings, as part of planning application process.
Biodiversity, Flora and Fauna		
B1 Maintain and enhance the biodiversity of habitats and protected species.	<ul style="list-style-type: none"> Incorporate biodiversity into the landscape and building design of the LAP lands. Preservation of the existing tree-line/hedgerow around the Hollystown Golf Club and the adjacent R-121 corridor. Any removal of hedgerows to be replaced with an equal or greater area of native trees and shrubs. 	<ul style="list-style-type: none"> Landscaping and biodiversity proposals contained in planning applications. Reported levels of increase/ decrease in habitat diversity and protected species
Soil		
S1 Minimise the amount of waste soil sent to landfill and reuse on site	<ul style="list-style-type: none"> Reuse as much existing soil as possible for landscaping of site. No incidents regarding contamination. 	<ul style="list-style-type: none"> Quantity of soil retained on site for landscaping and other uses. Incidents of contaminated soil to be recorded and the quantity of such soil removed from site.
Water		
W1 Achieve and maintain good ecological and water	<ul style="list-style-type: none"> Improvement or at least no deterioration 	<ul style="list-style-type: none"> Changes in water quality of Pinkeen River as identified

quality to status objectives as set out in the Water Framework Directive (WFD)	<p>in water quality by 2015, particularly within the Pinkeen River.</p> <ul style="list-style-type: none"> Improvement or at least no deterioration in ground water quality by 2015. 	<p>during water quality monitoring for the WFD.</p> <ul style="list-style-type: none"> Biotic quality rating of river waters at EPA monitoring locations. Changes in groundwater quality as identified in monitoring programmes.
W2 Ensure that any new development is adequately serviced by foul drainage infrastructure	<ul style="list-style-type: none"> No new development to commence until adequate foul drainage infrastructure available. 	<ul style="list-style-type: none"> Planning application stage.
W3 Promote sustainable use of available water resources	<ul style="list-style-type: none"> SuDS to form a major part of all surface water proposals Planning applications to include minimum water use efficiency measures. 	<ul style="list-style-type: none"> Planning applications to incorporate SuDS. Planning applications to include minimum water use efficiency measures.
Air and Climatic Factors		
AC1 Protect and enhance ambient air quality and contribute to national climate change policy.	<ul style="list-style-type: none"> Promote public transport, walking and cycling and reduce reliance on private car. No air quality limit values to be exceeded. 	<ul style="list-style-type: none"> Increase in the number of pedestrian/cycle routes and linkages within the Plan lands. EPA air monitoring station in Blanchardstown to monitor air quality.
Material Assets – Transport, Energy		
MA1 Encourage and prioritise sustainable modes of transport such as walking, cycling and public transport and reduce reliance on the use of private cars	<ul style="list-style-type: none"> High percentage of people using bus, cycling and walking as modes of transport. 	<ul style="list-style-type: none"> Percentage of population using public transport, new cycle and walking paths. Percentage use of bicycle shelters provided.

	<ul style="list-style-type: none"> Ease of movement through site for pedestrians and cyclists. 	
MA2 Improve pedestrian access and permeability throughout the LAP lands and to adjoining lands.	<ul style="list-style-type: none"> Provide safe and attractive pedestrian routes throughout the Plan lands and to adjoining areas. 	<ul style="list-style-type: none"> Increase in number of pedestrian walkways/ routes are made available to the public following development of the Plan lands.
MA3 Promote sustainable energy by maximising renewable energy sources.	<ul style="list-style-type: none"> High energy efficiency of new buildings. 	<ul style="list-style-type: none"> Number of new buildings with A1-B3 BER Rating.
Cultural Heritage		
CH1 Protect all recorded archaeological sites from inappropriate development that would adversely affect the site or setting.	<ul style="list-style-type: none"> Archaeological monitoring of topsoil removal prior to construction to allow for resolution and/or further mitigation. 	<ul style="list-style-type: none"> All relevant planning applications referred to DoECLG. Monitoring of planning conditions attached to grants of planning permission.
Landscape		
L1 Ensure that new development assimilates with and respects the natural form and character of the landscape.	<ul style="list-style-type: none"> Design of all new development is sympathetic and appropriate to its surroundings. Provide for the protection of existing trees/hedgerows on site. 	<ul style="list-style-type: none"> Appropriate scale and densities permitted, ensuring appropriate transition between urban and rural boundaries and existing development Percentage of existing trees/hedgerows being retained.

16.0 Consideration of Alternatives

16.1 Introduction

The SEA Directive requires the Environmental Report to consider *'reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme.'* (Article 5 of SEA Directive).

16.2 Do-Nothing Scenario

The 'do-nothing' Scenario is an estimate of how current environmental conditions would change over time without implementation of the plan, i.e. how would the environment evolve if there were no plan in place. The 'do-nothing' scenario represents a continuation of present trends, without any policy changes or infrastructural improvements – which may be proposed in the plan. It forms the basis of comparison against which the environmental effects of the plan will be measured.

Fingal County Council is required to prepare a Local Area Plan for the subject lands. The LAP will be prepared in accordance with the requirements of sections 18-20 of the Planning and Development Acts 2000-2011, which sets out the provisions for the preparation of LAPs. No development can take place on these lands prior to the adoption of a Local Area Plan (LAP) by Fingal County Council and development must comply with the provisions of the LAP. As the LAP is required by the provision of the Fingal Development Plan 2011-2017 a 'Do-Nothing' scenario is not a reasonable alternative and would not be in accordance with the principle of the proper planning and sustainable development of the area.

16.3 Planning Constraints to Development

The development of strategic options are limited by the policies and objectives contained in the Fingal Development Plan 2011-2017, which include the zoning context of the LAP lands. In this regard the LAP lands have a number of zoning objectives and planning constraints as follows:

- Objective 'RA' – *'Provide for new residential communities in accordance with approved local area plans and subject to the provision of the necessary social and physical infrastructure'*
- Objective 'LC' – *'Protect, provide for and/or improve local centre facilities.'* There is also a Specific Objective on the 'LC' lands whereby the lands are 'Subject to a Local Area Plan.'
- Eastern section of the site – a specific objective is included on the land – No. 397: *'Provide for a density of 20 per hectare (8 houses per acre) at Hollywoodrath.'* This density relates to c.40.47 hectares of land.
- Planning permission Reg. Ref. F05A/0338 includes Condition no. 5 which states that 1.42 acres (0.57 ha) of Class 1 Public Open Space be provided on the eastern section of the site in order to achieve the open space requirements for F05A/0338.
- Specific Objective for a School Site.
- Inner Airport Noise Zone – this applies to a small strip of land in the northern section of the LAP lands, 2.43 hectares in area. This area is proposed as a Public Open space area.
- Outer Airport Noise Zone – applies to all the LAP lands. The Fingal Development Plan proposes to strictly control inappropriate development and require noise insulation where appropriate within the Outer Noise Zone.
- Outer Public Safety Zone - applies to the majority of the LAP lands.

The policies and objectives above have influenced the extent to which alternative scenarios were considered as part of the LAP.

16.3.1 Local Constraints

In terms of local constraints these relate to the context of existing surrounding development, existing and proposed transportation, natural heritage, existing environmental features (including streams and hedgerows).

Proposed Transportation Infrastructure

Access to the lands east of the R121

Three links are proposed:

- 1 from the R121 (Church Road) on the western boundary of the site
- 2 from the Ratoath Road to the north of the subject lands
- 3 from the M2-N3 link accessed off a roundabout to the south

A main avenue street is planned connecting access 1 and 2 above. The connection will be designed as a calmed 'Park Avenue', incorporating measures to minimise through-traffic.

As the aforementioned access routes are developed and when the M2/N3 Link Road is opened, the priority of the existing R121 forming the northern boundary of the lands will be reduced. The future function of the R121 at this location will be a green route, primarily for pedestrian/cycling/bus uses only with limited access for cars. This will be achieved by creating a cul-de-sac. This will require a formal resolution by the Members of the Council. The overall green route will provide safe and convenient pedestrians/cyclists facilities forming a continuous link between Tyrrelstown and Hollystown.

Access to the lands west of the R121

Three links are proposed:

1. From the R121 (Church Road) just south of Hollystown Golf Club.
This will also act as an emergency access link in the event of the closure of the 'Park Avenue' to the south.

2. From Tyrrelstown Local Centre. This will run to the east of Tyrrelstown Educate Together National School. A possible 'bus gate only' route may be incorporated into the transport network to the west of the Educate Together National School. This will be determined in discussions with the public transport service provider.
3. From the R121 (Church Road) via the roundabout linking the M2/N3 road with the R121.

Natural Heritage

On the western side of the site there are 5 recorded monuments.

Existing Environmental Features

The main channel of the ditches and watercourse system runs approximately east to west for approximately 2km before it turns to the south-west to discharge to the Pinkeen River east. A SuDS strategy has been prepared, which will have additional benefit of creating new habitats, while also enhancing and linking in with existing habitats where feasible.

16.4 Alternatives and Assessment of Alternatives

The detailed options for the future development of Kilmartin were derived following consultations in house with relevant departments of Fingal County Council.

In the following sub-sections, two alternative development options are presented. These are a 'High to Low Density Development' option (Option 1) and a 'Mixed Density Development' option (Option 2).

The environmental assessment consists of both alternative development scenarios being assessed against the SEA objectives to identify any potential effect or impact on different aspects or components of the environment. The assessment is presented in matrix form with an associated explanatory text. The potential impacts for each alternative are determined as being significant or insignificant and,

where identified as being significant, as having either a positive or an adverse effect. The assessment of the impacts is both qualitative and quantitative, and is based on experience to date and consultation with relevant professionals within the Planning Authority and in relevant agencies.

Following the environmental assessment of the two alternative development scenarios, the preferred alternative will be selected and described in greater detail. Then a further assessment of the chosen alternative including the identification of any significant impacts of implementing this alternative on the different components of the environment will be outlined.

16.4.1 OPTION 1: HIGH TO LOW DENSITY DEVELOPMENT

Option 1 considers the implications of developing the Kilmartin lands based on higher densities located over the majority of the site with low densities located within walking distance of the Local Centre zoning. No residential development is proposed within the Local Centre zoning. Option 1 is illustrated on Map 7. Option 1 includes the following key elements to help provide for the new residential developments in line with the necessary social and physical infrastructure.

The key aspects of this option are as follows:

- Facilitate the provision of a primary school to the west of the Plan lands.
- Facilitate the provision of a post primary school to the east of the Plan lands.
- Facilitate the provision of a series of connected open spaces throughout the plan lands, linked by pedestrian routes.
- Facilitate the provision of 15.4 ha of Class 1 Open Space exclusive of any pylon corridor lands to provide for the proposed public park.

- Facilitate the provision of a local services area (local centre) to the south of the plan lands.
- Facilitate the provision of the new M2/N3 link road to the south of the Plan lands.
- Facilitate the provision of a number of Green corridor links between the Plan lands and lands to the north and south.
- Incorporate the use of Urban Design Principles.

Key to Matrices:

Significant positive impact: +

Significant negative impact: _

No relationship/insignificant (positive or negative) impact: 0

Matrix 1: Option 1

SEA Objectives	Impacts
Population and Human Health	
PH1 Improve people's quality of life based on high-quality residential and recreational environments.	-
PH2 Ensure the provision of high quality connected open spaces with linkages to adjoining green spaces outside the Plan lands.	0
PH3 Facilitate provision of necessary facilities to serve the future population, in terms of schools, crèches, retail services.	0
PH4 Facilitate integration of development into the existing urban environment through sustainable growth.	-
Noise	
N1 Minimise environmental and transport related noise	-
Biodiversity, Flora and Fauna	
B1 Maintain and enhance the biodiversity of habitats and protected species.	0
Soil	
S1 Minimise the amount of waste soil sent to landfill and reuse on site	0
Water	
W1 Achieve and maintain good ecological and water quality to status objectives as set out in the Water Framework Directive (WFD)	0
W2 Ensure that any new development is adequately serviced by foul drainage infrastructure	0

W3 Promote sustainable use of available water resources	0
Air Quality and Climatic Factors	
AC1 Protect and enhance ambient air quality and contribute to national climate change policy.	-
Material Assets – Transport, Energy	
MA1 Encourage and prioritise sustainable modes of transport such as walking, cycling and public transport and reduce reliance on the use of private cars	-
MA2 Improve pedestrian access and permeability throughout the LAP lands and to adjoining lands.	0
MA3 Promote sustainable energy by maximising renewable energy sources	0
Cultural Heritage – Architectural and Archaeological	
CH1 Protect all recorded archaeological sites from inappropriate development that would adversely affect the site or setting.	0
Landscape	
L1 Ensure that new development assimilates with and respects the natural form and character of the landscape	-

In promoting high densities over the majority of the Plan lands with a certain amount of low density residential development within walking distance of the Local Centre, it is considered that this level of development would be generally inappropriate for this area. Such densities would be unlikely to deliver sufficient choice in the housing market to cater for the need of future populations. Higher densities would not be in keeping with the transitional nature of the land and would not be sympathetic to the existing housing in the area or the Hollystown Golf Course, located to the north of the lands. Locating low density residential development close to the Local Centre would be considered unsustainable. As the commercial/retail/community elements of the Plan lands will be concentrated within the Local Centre zoning, it is important that high density development be located within walking distance of these facilities. Option 1 does not allow for this and therefore encourages more car trips to the Local Centre instead. More car trips have a knock on effect on environmental noise and pollution.

High density located to the east of the Plan lands would contravene a local objective which limits the density on this side to 20 units per hectare.

16.4.2 Option 2 Mixed Density Development

Similar to Option 1, Option 2 also refers to the lands zoned RA as per the Fingal Development Plan 2011-2017. This option would include all the key elements outlined for Option 1 above, however the key difference would be range of densities proposed.

A high density arrangement would be supported within the Local Centre, along the R121 and associated Park Avenue Streets leading off this road. The high density areas are confined to those areas within the 400m walking catchment band, with a limited amount of higher density areas located beyond this band but contained within the 800m walking catchment band. Medium density would be supported across the majority of the lands, with lower density located towards the eastern and western extremities of the LAP. When the proposed densities are applied to the lands, it is aimed to achieve net densities of 35 units per hectare on RA lands to the west of the R121 representing c.866 units, and 20 units per hectare to the east (in compliance with the Development Plan objective) representing c. 524 units.

In promoting a mix of high, medium and low density development, it is considered that this level of development would be appropriate for the Plan lands for a number of reasons. Firstly, locating high residential density development within walking distance of the Local Centre is compatible with sustainable principles and will encourage walking and cycling as opposed to car trips for commercial, retail and community purposes. Secondly, higher density close to the Local Centre will also maximise the use of land in proximity to public transport, local schools and other facilities. Thirdly, a mixture of densities and variety in housing type will create a more diverse and interesting residential environment

within the Plan lands, thus improving people’s quality of life based on high-quality residential environment. Option 2 is shown on Map 8: In order to facilitate Option 2 Mixed Density Development, it is recommended that the phasing plan for the LAP begin at the local centre/within walking distance of the centre by concentrating on higher density development at these locations, and working outwards with medium density and lower density at the extremities.

Matrix 2: Option 2

SEA Objectives	Impacts
Population and Human Health	
PH1 Improve people’s quality of life based on high-quality residential and recreational environments.	+
PH2 Ensure the provision of high quality connected open spaces with linkages to adjoining green spaces outside the Plan lands.	+
PH3 Facilitate provision of necessary facilities to serve the future population, in terms of schools, crèches, retail services.	+
PH4 Facilitate integration of development into the existing urban environment through sustainable growth.	+
Noise	
N1 Minimise environmental and transport related noise	+
Biodiversity, Flora and Fauna	
B1 Maintain and enhance the biodiversity of habitats and protected species.	+
Soil	
S1 Minimise the amount of waste soil sent to landfill and reuse on site	+
Water	
W1 Achieve and maintain good ecological and water quality to status objectives as set out in the Water Framework Directive (WFD)	+
W2 Ensure that any new development is adequately serviced by foul drainage infrastructure	+
W3 Promote sustainable use of available water resources	+
Air Quality and Climatic Factors	
AC1 Protect and enhance ambient air quality and contribute to national climate change policy.	+

Material Assets – Transport, Energy	
MA1 Encourage and prioritise sustainable modes of transport such as walking, cycling and public transport and reduce reliance on the use of private cars	+
MA2 Improve pedestrian access and permeability throughout the LAP lands and to adjoining lands.	+
MA3 Promote sustainable energy by maximising renewable energy sources	+
Cultural Heritage – Architectural and Archaeological	
CH1 Protect all recorded archaeological sites from inappropriate development that would adversely affect the site or setting.	+
Landscape	
L1 Ensure that new development assimilates with and respects the natural form and character of the landscape	+

16.4.3 SELECTION OF PREFERRED ALTERNATIVE

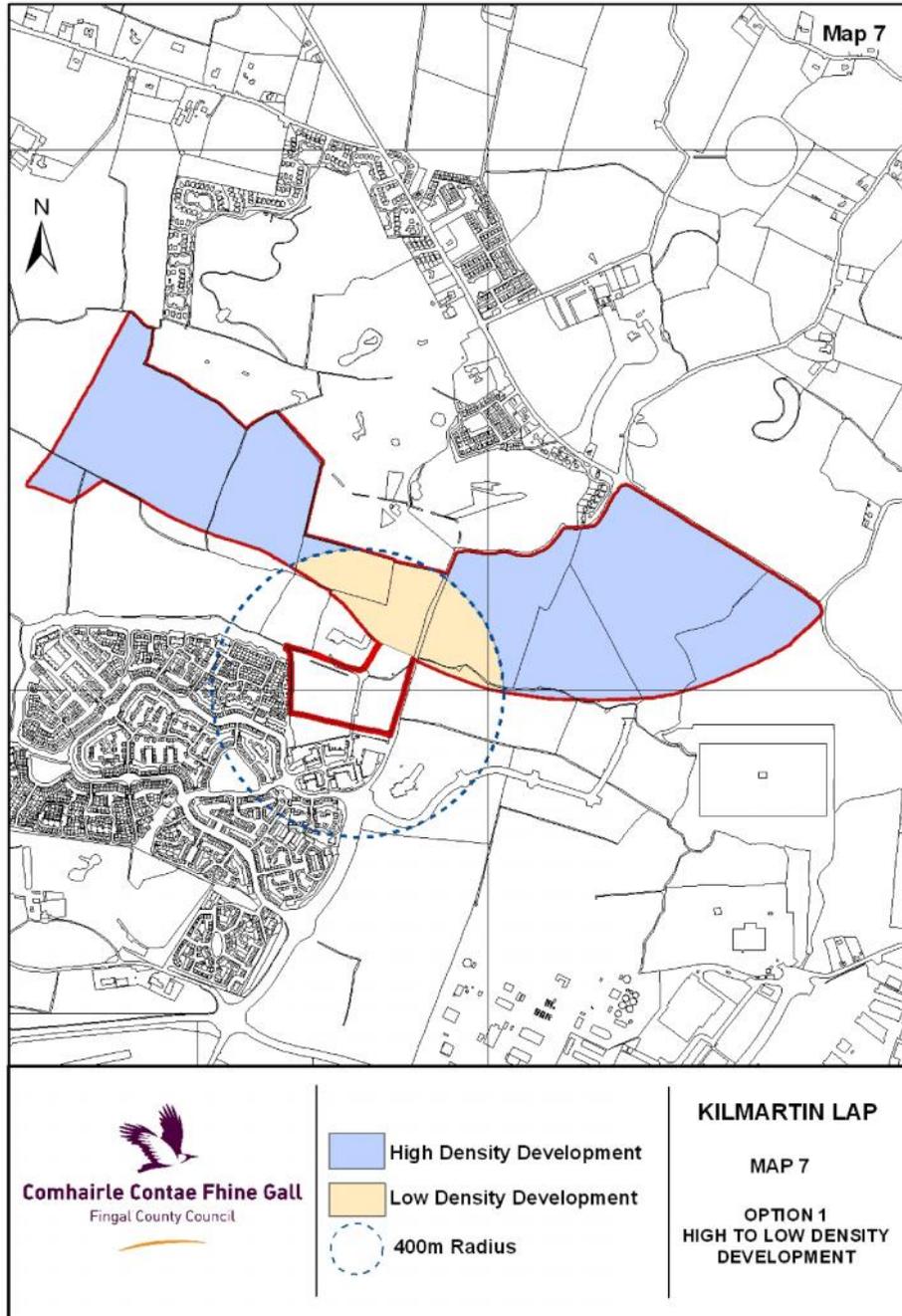
A summary of the scoring/ rating of each of the development alternatives against the SEA objectives is provided in Table 16.1. Each development alternative was totalled and the scores were compared against each other, from this it is clear that Option 2 is the preferred alternative. Examination of the previous matrices, that assessed the alternatives against the SEA objectives, indicates a preferred alternative in the form of the ‘Mixed Density Development’.

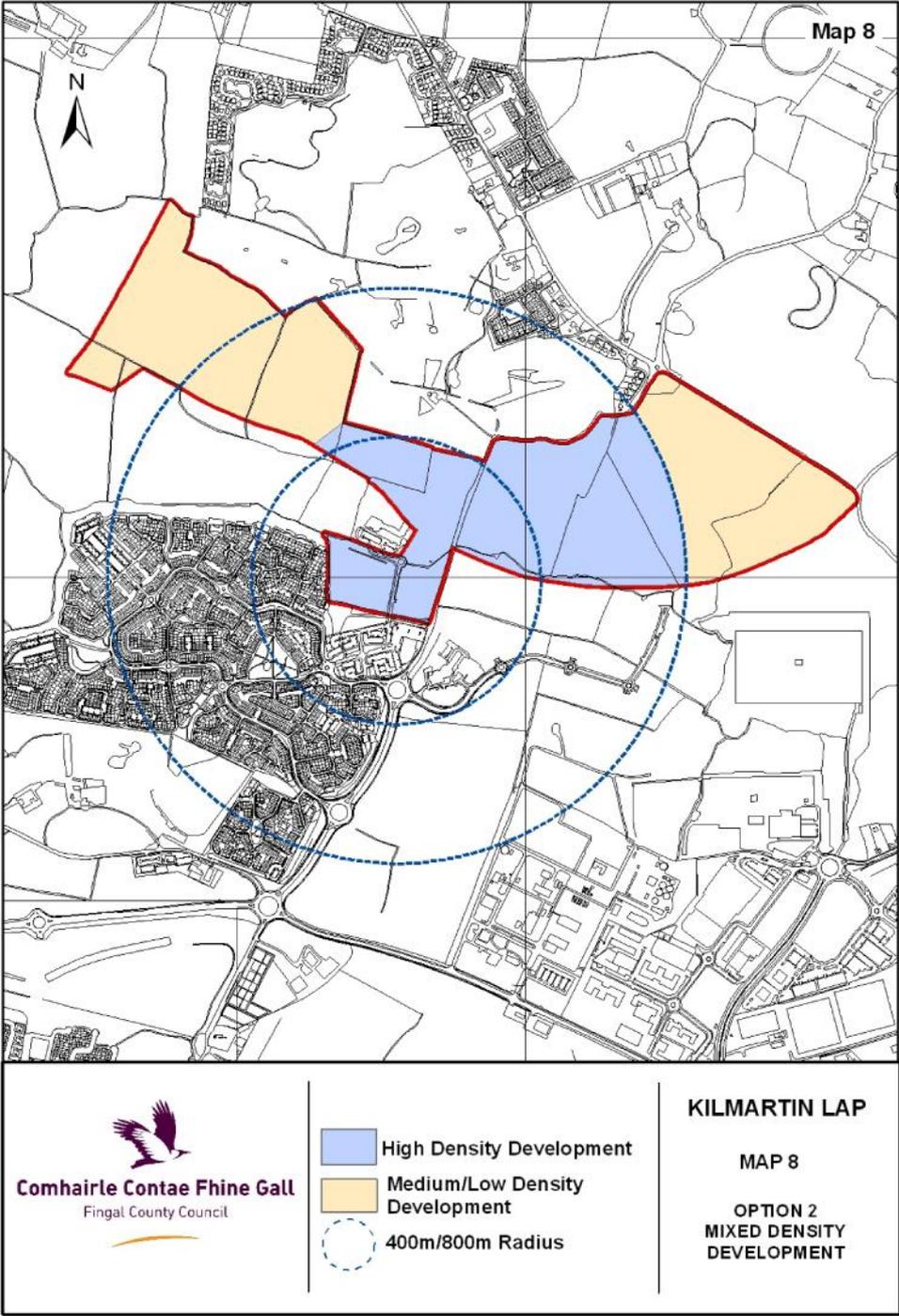
Table 16 .1 Scoring / Rating of Development Alternatives

Alternative Development Scenario	+	X	0	Total
	Significant positive impact	Significant negative impact	No relationship/ insignificant (positive or negative) impact	
Option 1	0	6	10	16

Option 2	16	0	0	16
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Mixed Density Development offers the most favourable results in terms of the environment and is considered to be in the best interest of the development of the Plan lands at Kilmartin. It allows for sustainable levels of population growth while remaining sympathetic to existing communities in the area. It also allows for growth which is matched by physical infrastructure provision. The range of densities provided for, in conjunction with urban design principles, will help create a sense of place and contribute positively to the built environment of Kilmartin.





16.5 Preferred Alternative

Taking Mixed Density Development as the preferred option for Kilmartin further studies were carried out to see how the objectives of the LAP could be achieved with minimal cost to the environment.

16.6 Conclusion

This section has outlined the alternative development options chosen as part of the SEA and indicates how the preferred alternative was chosen, and hence the LAP itself. It then described the proposed zoning and objectives of the LAP. Following on from this the next section will assess the likely impacts of the preferred alternative on the environment.

16.7 Environmental Assessment of Preferred Alternative

Following selection, Development Option 2 was advanced through the formulation of Local Area Plan objectives. The objectives were derived from the selected option and were informed by the provisions of the Fingal Development Plan, other plans referred to in Section 4, and the outcome of the pre-plan consultation process.

Further assessment was considered necessary to ensure that:

- (a) The Environmental Objectives derived are compatible with each other,
- (b) The detailed local objectives of the LAP are compatible with the Environmental Objectives.

16.7.1 Compatibility of Environmental Objectives

The methodology involves the use of a matrix assessing the environmental objectives against each other to determine whether or not they are compatible. This process enables an overview of where potential conflicts may result and allows the objectives to be revised where necessary. Where difficulties occur mitigation measures will be put in place and monitoring during and post construction will ensure there is no deterioration in environmental quality.

16.8 Compatibility of Environmental Objectives:

As part of the SEA, the Environmental Objectives were tested for compatibility with each other. This is illustrated in the matrix below.

✓	Likely to have a positive impact on the environment	X	Likely to have a negative impact on the environment	0	No impact or neutral. Impact on the environment is neither Significantly Positive nor Significantly Negative.	?	Likely impact on the environment is uncertain, due to limited or insufficient information.
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Environmental Objectives	PH1	PH2	PH3	PH4	N1	B1	S1	W1	W2	W3	AC1	MA1	MA2	MA3	CH1	L1
PH1 Improve people's quality of life based on high-quality residential and recreational environments.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	✓
PH2 Ensure the provision of high quality connected open spaces with linkages to adjoining green spaces outside the Plan lands.	✓	✓	✓	✓	✓	✓	0	0	0	0	✓	✓	✓	0	0	✓
PH3 Facilitate provision of necessary facilities to serve the future population, in terms of schools, crèches, retail services.	✓	0	✓	✓	0	0	0	0	0	0	0	✓	✓	0	0	0
PH4 Facilitate integration of development into the existing urban environment through sustainable growth.	✓	✓	✓	✓	0	✓	✓	✓	✓	✓	✓	0	0	0	0	0
N1 Minimise environmental and transport related noise	✓	0	0	0	✓	0	0	0	0	0	✓	0	0	0	0	0

B1 Maintain and enhance the biodiversity of habitats and protected species.	√	√	0	0	0		0	√	0	√	0	0	0	0	0	0
S1 Minimise the amount of waste soil sent to landfill and reuse on site	0	0	0	0	0	0		0	0	0	0	0	0	0	0	√
W1 Achieve and maintain good ecological and water quality to status objectives as set out in the Water Framework Directive (WFD)	√	0	0	0	0	0	0		0	√	0	0	0	0	0	0
W2 Ensure that any new development is adequately serviced by foul drainage infrastructure	√	0	√	√	0	√	0	√		√	0	0	0	0	0	0
W3 Promote sustainable use of available water resources	√	0	0	0	0	√	0	0	0		0	0	0	0	0	0
AC1 Protect and enhance ambient air quality and contribute to national climate change policy.	√	0	0	0	0	0	0	0	0	0		0	0	0	0	0
MA1 Encourage and prioritise sustainable modes of transport such as walking, cycling and public transport and reduce reliance on the use of private cars	√	0	√	√	√	0	0	0	0	0	0		√	0	0	0
MA2 Improve pedestrian access and permeability throughout the LAP lands	√	0	√	√	√	√	0	0	0	0	0	√		0	0	0

and to adjoining lands.																	
MA3 Promote sustainable energy by maximising renewable energy sources	√	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
CH1 Protect all recorded archaeological sites from inappropriate development that would adversely affect the site or setting.	√	0	0	0	0	0	0	0	0	0	0	0	0	0			0
L1 Ensure that new development assimilates with and respects the natural form and character of the landscape	√	0	0	0	0	√	√	0	0	0	0	0	0	0	0	0	

16.9 Compatibility of Local Area Plan Objectives and Environmental Objectives

It was also considered necessary to test the detailed local objectives contained in the Kilmartin Local Area Plan against the devised Environmental Objectives.

√	Likely to have a positive impact on the environment	X	Likely to have a negative impact on the environment	0	No impact or neutral. Impact on the environment is neither Significantly Positive nor Significantly Negative.	?	Likely impact on the environment is uncertain, due to limited or insufficient information.
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Environmental Objectives	PH1	PH2	PH3	PH4	N1	B1	S1	W1	W2	W3	AC1	MA1	MA2	MA3	CH1	L1
Local Area Plan Objectives																
<p><i>Objective L01</i> Protect existing trees and hedgerows which are of amenity or biodiversity value and/or contribute to landscape character and ensure that proper provision is made for their protection and management.</p>	√	√	0	√	√	√	√	√	0	0	√	0	√	0	√	√
<p><i>Objective L02</i> Ensure that any development which impacts on a townland boundary, roadside hedgerow or a hedgerow which forms a link with other habitats retains such features or replaces such features with equal or greater area of native trees and shrubs.</p>	√	√	√	√	√	√	√	√	0	0	√	0	√	0	√	√
<p><i>Objective L03</i> Ensure that adequate measures are taken to protect residential amenities adjacent to roads.</p>	√	√	√	√	√	0	√	0	0	0	0	√	√	0	0	√
<p><i>Objective AAH01</i> Protect as yet undiscovered archaeological sites or features that survive subsurface in accordance with the National Monuments Legislation. Developers will make provision to allow for and fund whatever archaeological work needed on site if any remains are noted following topsoil removal. All required additional archaeological investigations, including monitoring</p>	0	0	0	0	0	√	√	0	0	0	0	0	0	0	√	√

<i>during removal of topsoil and during construction phase, to be carried out by a suitably qualified archaeologist at the developer's expense, under licence and in consultation with the Department of Arts, Heritage and Gaeltacht.</i>																
<i>Objective AAH02 Locate, where feasible, identified archaeological sites and monuments within open space areas.</i>	√	√	0	0	0	√	0	0	0	0	0	0	√	0	√	√
<i>Objective AAH03 Require a place-naming scheme which reflects the heritage of the Kilmartin area.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Objective B01 Ensure that all development proposals include measures to protect and enhance biodiversity.</i>	√	√	0	0	0	√	0	0	0	0	0	0	0	0	0	√
<i>Objective B02 Protect a riparian corridor along all watercourses within the LAP lands and widen such corridors to incorporate passive and small active parks where feasible.</i>	√	√	0	√	√	√	√	√	0	√	√	0	√	0	0	√
<i>Objective B03 Preserve and extend the length and width of the existing tree-line/hedgerow margin around Hollystown Golf Club and the adjacent R-121 corridor.</i>	√	√	0	√	√	√	0	0	0	0	√	√	√	0	0	√

<p><i>Objective B04</i> Integrate provision for biodiversity with public open space provision and sustainable water management measures (including SuDS) where possible.</p>	√	√	√	√	0	√	0	√	√	√	√	0	0	0	0	√
<p><i>Objective B05</i> Provide green links between Hollystown Golf Course, the internal open space provision within the LAP lands and the surrounding public parkland and existing agricultural land.</p>	√	√	√	√	√	√	0	0	0	0	√	√	√	0	0	√
<p><i>Objective B06</i> Maintain verges of five metres or more on either side of hedgerows and tree-lines as buffers, to promote their use as wildlife corridors and to facilitate the development of grassland communities.</p>	√	√	0	√	√	√	√	0	0	0	√	√	√	0	0	0
<p><i>Objective POSR01</i> Provide a wide variety of public open spaces on a hierarchical basis throughout the LAP lands in order to achieve a choice of open space facilities.</p>	√	√	√	√	√	√	0	0	0	0	√	√	√	0	√	√
<p><i>Objective POSR02</i> Require a minimum public open space provision of 2.5 hectares per 1000 population. For the purposes of this calculation, public open space requirements are to be based on residential units with an agreed occupancy rate of 3.5 persons in the</p>	√	√	√	√	√	√	√	0	0	0	√	√	√	0	√	√

<p><i>case of dwellings with three or more bedrooms and 1.5 persons in the case of dwellings with two or fewer bedrooms.</i></p> <p><i>Note: In calculating open space provision for RA lands west of R121, an allowance of 6 heactares of land should be given for the public park being provided immediately south.</i></p>																
<p>Objective POSR03 Require a minimum 10% of the LAP 'RA' area be designated for use as public open space. (Fingal Development Plan 2011-2017 Objectives OSO2A and OSO2B apply). The above requirement applies indepenently to both parcels of RA lands east and west of the R121.</p>	√	√	√	√	√	√	√	0	0	0	√	√	√	0	√	√
<p><i>Objective POSR04</i> <i>Ensure every home within a new residential scheme is located within 100 metres walking distance of a pocket park, small park, local park, urban neighbourhood park or regional park.</i></p>	√	√	√	√	√	√	0	0	0	0	0	√	√	0	0	0
<p><i>Objective POSR05</i> <i>Provide for the development of quality open space areas and facilities to meet the recreational needs of residents.</i></p>	√	√	√	√	√	√	√	0	0	0	0	√	√	0	0	0
<p><i>Objective POSR06</i> <i>Maximise the accessibility of the</i></p>	√	√	√	√	√	√	0	0	0	0	√	√	√	√	0	√

<i>recreational amenities by developing a network of key cycle and pedestrian routes.</i>																
<i>Objective POSR07 Provide passive supervision to new open spaces.</i>	√	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Objective POSR08 Two children's playgrounds shall be provided within the LAP lands at the developer's expense, one either side of the R121.</i>	√	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Objective POSR09 Provide appropriately scaled children's playground facilities. Playground facilities shall be provided at a rate of 4 sq m per residential unit. A minimum of one piece of play equipment shall be provided for every 50 sq m of playground.</i>	√	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Objective POSR10 Encourage active uses such as tennis courts in public open space or in the public park located to the south of the LAP.</i>	√	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Objective WS 1 Ensure that priority is given to the provision of water supply in the LAP lands corresponding to the area's strategic designation in the Regional Planning Guidelines as being within the Metropolitan Area of the Greater Dublin Area and as set out in the core</i>	√	0	0	0	0	√	√	√	0	√	0	0	0	0	0	√

<i>strategy of the Development Plan.</i>																
<p><i>Objective WS2</i> <i>Ensure that new development is adequately serviced with a safe and secure water supply. Where deficiencies exist, development will be limited to that which can be provided for, based on available water supply.</i></p>	√	0	0	0	0	√	0	√	0	√	0	0	0	0	0	0
<p><i>Objective WS3</i> <i>Promote water conservation to reduce the overall level of water loss in the public supply and require that new domestic developments provide for water supply metering.</i></p>	√	0	0	0	0	√	0	√	0	√	0	0	0	0	0	0
<p><i>Objective WS4</i> <i>Require that a Water Management and Conservation Plan, detailing how best practice in water conservation shall be applied to include both watermains and internal plumbing, be prepared for development on these lands in order to limit unnecessary water usage, leakage and excessive consumption.</i></p>	√	0	0	0	0	√	0	√	0	√	0	0	0	0	0	0
<p><i>Objective WS5</i> <i>Encourage the adoption of water saving measures in future development. Such measures will increase the extent of development capable of being serviced by the existing water treatment plant. Such measures to include:</i></p> <ul style="list-style-type: none"> • <i>Water butts to collect rainwater</i> • <i>Low flush and dual flush toilets</i> 	√	0	0	0	0	0	0	√	0	0	0	0	0	0	0	0

<ul style="list-style-type: none"> • Low water use appliances • Rainwater harvesting 																
<p><i>Objective WS6</i> Ensure that water main layout for new development is in accordance with the most up-to-date version of Fingal County Council's 'Guidelines for the Laying of Distribution Watermains' and 'Guidelines for Drinking Water Supply'.</p>	√	0	0	0	0	0	0	√	0	0	0	0	0	0	0	0
<p><i>Objective WW1</i> Permit new development only where it can be clearly demonstrated that there is adequate capacity in the wastewater disposal infrastructure in accordance with applicable requirements and standards, including urban wastewater treatment disposal standards.</p>	√	0	√	0	0	√	0	√	√	√	0	0	0	0	0	0
<p><i>Objective WW2</i> Ensure the separation of foul and surface water effluent through the provision of separate foul sewerage and surface water run-off networks.</p>	√	0	√	0	0	√	0	√	√	√	0	0	0	0	0	0
<p><i>Objective WW3</i> All foul infrastructure shall be designed and constructed in accordance with the Greater Dublin Regional Code of Practice for Drainage Works and comply with the Greater Dublin Strategic Drainage Study (GSDS).</p>	√	0	√	0	0	√	0	√	√	√	0	0	0	0	0	0

<p><i>Objective WM1</i> <i>Require that surface water attenuation is provided generally in locations identified in the SuDS Strategy. Design of surface water attenuation shall be based on the requirements of the Greater Dublin Strategic Drainage Study. Particular reference shall be made to Volume 2, Appendix E, which provides guidance on attenuation design and best practice cases (as may be updated).</i></p>	√	0	0	0	0	√	0	√	√	√	0	0	0	0	0	√
<p><i>Objective WM2</i> <i>Require all planning applications to submit details of compliance with the SuDS Strategy for the LAP (appendix 3) which shall include proposals for the management of surface water within sites and runoff rates from sites, to protect the water quality of the River Tolka.</i></p>	√	0	0	0	0	√	0	√	√	√	0	0	0	0	0	√
<p><i>Objective WM3</i> <i>Require local/site specific SuDS measures in tandem with development.</i></p>	√	0	0	0	0	√	0	√	√	√	0	0	0	0	0	√
<p><i>Objective WM4</i> <i>Ensure urban areas are designed to accommodate surface water flood flow at times of extreme events through the dual use of roads and pathways as flood conveyance channels and appropriate areas (parkland, car parks, large paved areas etc) are designed for use as temporary flood</i></p>	√	0	0	0	0	√	√	√	0	√	0	0	0	0	0	√

<i>ponding areas.</i>																
<i>Objective WM5 Ensure that all trees planted in/adjacent to hard paved areas (footpaths, parking areas etc) incorporate tree root structural cell systems.</i>	√	0	0	0	0	√	0	√	0	√	0	0	0	0	0	0
<i>Objective WM6 Require that surface water discharge from the development replicates existing greenfield run-off rates by means of flow control devices constructed to the requirements of Fingal County Council.</i>	√	0	0	0	0	0	0	√	0	0	0	0	0	0	0	0
<i>Objective WM7 Require that proposals for sustainable drainage systems include provisions for future maintenance. In this regard, Maintenance Plans shall be submitted with each planning application.</i>	√	0	0	0	0	√	0	√	√	√	0	0	0	0	0	0
<i>Objective FRM1 Implement the provisions of the DoEHLG/OPW publication 'The Planning System and Flood Risk Management: Guidelines for Planning Authorities' 2009 or any superseding document in relation to flooding and flood risk management and facilitate flood management measures, as appropriate</i>	√	√	√	√	0	√	0	√	√	√	0	0	0	0	0	√

<i>Objective WQ1 Ensure that the EU Water Framework Directive is implemented.</i>	√	0	0	0	0	0	0	0	√	√	√	0	0	0	0	0	
<i>Objective WQ2 Development shall only be permitted where it can be clearly demonstrated that the proposal does not conflict with the aims and objectives of the Water Framework Directive. Implement the relevant recommendations and measures as outlined in the Eastern River Basin Management Plan 2009-2015 or any other plan that may supersede same during the lifetime of this Local Area Plan. Development shall only be permitted where it can be clearly demonstrated that the proposal would not have an unacceptable impact on the water environment, including surface water, groundwater quality and quantity, river corridors and associated wetlands.</i>	√	0	0	0	0	0	0	0	√	√	√	0	0	0	0	0	√
<i>Objective WQ3 Seek the rehabilitation of the Pinkeen and Tolka Rivers to good water status and their restoration as a natural amenity.</i>	√	√	0	0	0	√	0	0	√	√	√	0	0	0	0	0	√
<i>Objective WQ4 Protect riparian corridors through the LAP area.</i>	√	0	0	0	0	√	0	0	0	0	0	0	0	0	0	0	√
<i>Objective WQ5 Implement the SuDS Strategy for the LAP lands.</i>	√	0	0	0	0	√	0	0	√	√	√	0	0	0	0	0	0

<i>Objective GVP1 Protect existing ground water sources from pollution during construction/development works.</i>	√	0	0	0	0	√	0	√	√	√	0	0	0	0	0	0
<i>Objective MS1 Prioritise sustainable modes of transport including walking, cycling and public transport and reduce reliance on the use of private cars where possible within Kilmartin.</i>	√	0	√	√	√	√	√	0	0	0	√	√	√	√	0	√
<i>Objective MS2 Ensure existing junctions and roads external to the lands are designed to maximise transportation efficiency and movement. A Traffic Management Plan shall be prepared for the area containing the LC lands/Phase 1 (east and west) taking cognisance of schools to be completed prior to the lodgment of any planning application.</i>	√	0	√	√	√	√	0	0	0	0	0	0	0	0	0	0
<i>Objective MS3 Develop a hierarchical street network comprising a number of new street links, supporting internal permeability, with links to the surrounding environment.</i>	√	0	√	√	√	√	0	0	0	0	0	√	√	0	0	0
<i>Objective MS4 Cul-de-sac the R121 (Church Road) just south of Hollystown Roundabout to through vehicular traffic.</i>	√	√	0	0	√	√	0	0	0	0	0	√	√	0	0	0

<p><i>Objective MS5</i> Facilitate a bus gate on the pedestrian/cycle connection located west of the 2 no. existing primary schools linking the LAP lands to the Local Centre.</p>	√	√	√	√	√	√	0	0	0	0	0	0	√	√	√	0	0
<p><i>Objective MS6</i> Prepare a detailed design plan for the primary east/west main avenue streets</p>	√	√	√	0	√	√	0	0	0	0	0	0	√	√	0	√	√
<p><i>Objective MS7</i> Ensure trip intensive commercial developments with requirements for significant car-parking are concentrated to the east of the main urban street in the Local Centre.</p>	√	0	√	√	√	0	0	0	0	0	0	0	0	0	0	0	0
<p><i>Objective CO1</i> Provide for an urban environment within Kilmartin where priority is given to legibility and permeability for cyclists and pedestrians, with safe, direct and easy access provided to public transport points, schools, park, local centre, existing community of Tyrrelstown and to the Greater Blanchardstown area.</p>	√	√	√	√	√	√	0	0	0	0	√	√	√	√	√	0	0
<p><i>Objective CO2</i> Ensure that all pedestrian and cycle routes within Kilmartin are overlooked by residential development.</p>	√	√	√	0	0	0	0	0	0	0	0	0	√	0	0	0	0
<p><i>Objective CO3</i> Encourage direct walking and cycle routes through pocket parks and open</p>	√	√	0	√	√	0	0	0	0	0	0	√	√	√	0	0	0

<i>space areas to provide direct linkages between the character neighbourhoods, local centre, schools, parks and public transport.</i>																	
<i>Objective BO1 Facilitate and promote the development and use of an enhanced quality and integrated public transport network with bus as the primary facility to serve the existing and future residents of Kilmartin/Tyrrelstown</i>	√	0	√	0	√	0	0	0	0	0	0	√	√	√	√	0	0
<i>Objective DHM01 Promote a sustainable mix of housing types, sizes and tenures to reflect the diversity of needs in an expanding community set in a high quality well designed environment.</i>	√	0	√	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Objective DHM02 Promote the provision of family sized residential units.</i>	√	0	√	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Objective BH01 Building height will primarily range between 3-5 storeys within the Local Centre and between 2-3 storeys elsewhere on the LAP Lands. Local landmark and feature building elements over the stated building heights are acceptable at important locations, where they contribute to the visual amenity, civic importance and legibility of the area. These locations are to be agreed with the Planning Authority at application stage.</i>	√	0	√	0	0	0	0	0	0	0	0	0	0	0	0	0	0

<p><i>Objective W01</i> All future residential schemes shall include appropriate design measures for refuse bins, within convenient distance of all units, details of which are to be clearly identified at planning application stage.</p>	√	0	√	0	0	0	0	0	0	0	0	0	0	0	0	0
<p><i>Objective W02</i> Ensure refuse bins are not situated immediately adjacent to the front door or ground floor windows, unless adequate screened alcoves or other such mitigation measures are provided.</p>	√	0	√	0	0	0	0	0	0	0	0	0	0	0	0	0
<p><i>Objective W03</i> Ensure the maximum distance between a residential unit and a communal bin storage area does not exceed 50 metres.</p>	√	0	√	0	0	0	0	0	0	0	0	0	0	0	0	0
<p><i>Objective W04</i> Recycling facilities such as 'Bring Banks' shall be provided on the undeveloped Local Centre lands or existing Local Centre lands prior to the occupation of any new retail development on the Local Centre lands. These facilities shall be of an unobtrusive design and situated where they are easily accessible, serviced and maintained.</p>	√	0	√	0	0	0	0	0	0	0	0	0	0	0	0	0
<p><i>Objective SA01</i> Promote the integration of social/affordable housing with private housing.</p>	√	0	√	√	0	0	0	0	0	0	0	0	0	0	0	0

Objective EC101 Where reservations for schools are no longer required, the sites will revert to a residential land use designation.	√	0	0	√	0	0	0	0	0	0	0	0	0	0	0	0
Objective CF01 Childcare facilities shall include outdoor play space or have safe and easy access to a safe outdoor play area.	√	0	√	√	0	0	0	0	0	0	0	0	0	0	0	0
Objective HC01 Facilitate the development of health care facilities.	√	0	√	√	0	0	0	0	0	0	0	0	0	0	0	0
Objective LC01 Promote the clustering of retail, service, office, educational, healthcare, recreational and community facilities within the Local Centre zoning to meet the demands of the future residents of the area.	√	0	√	√	√	0	0	0	0	√	√	√	0	0	0	0
Objective LC02 Facilitate the development of the Local Centre having regard to the retail and service needs of its catchment population.	√	0	√	√	0	0	0	0	0	0	0	√	0	0	0	0
Objective LC03 Ensure retail applications, where deemed necessary by the Planning Authority, are accompanied by a Retail Impact Assessment.	√	0	√	√	0	0	0	0	0	0	0	0	0	0	0	√

17.0 MITIGATION MEASURES

17.1 Mitigation Measures Incorporated

Mitigation measures are measures envisaged to prevent, reduce and as fully as possible offset any significant adverse impacts on the environment of implementing the Local Area Plan. Mitigation involves ameliorating significant negative effects. Where there are significant negative effects, consideration is given in the first instance to preventing such effects or, where this is not possible for stated reasons, to lessening or offsetting those effects. Mitigation measures can be roughly divided into those that: *avoid* effects; *reduce* the magnitude or extent, probability and/or severity of effect; *repair* effects after they have occurred, and; *compensate* for effects, balancing out negative impacts with other positive ones.

Biodiversity, Flora and Fauna

To minimise the impact on the Biodiversity value of the lands of the proposed developments within the LAP area, the following measures are proposed:

- Ecological features such as the remaining tree groupings and hedgerow copses should be incorporated in the open space, without impacting upon these habitats. By including these features in the open space these habitats can be protected and further enhanced for wildlife by Fingal County Council. Any development and boundary treatment should be set back, where practical at least 10m from the tree groupings and the hedgerows.
- It is recommended that the open space provision in the area be linked by green corridors to ensure that wildlife can migrate to and from the different open spaces. The key ecological features should be included in this green corridor. Such a connection is

not only beneficial for wildlife, but it also allows local residents to walk and cycle through the new development along green routes.

- Planting schemes within the development should take into account the native species already in the area. Preference should be given to the planting of Hawthorn, Blackthorn and Ash. Other useful species for wildlife include Birch, Holly, Alder, Willow, Guelder Rose and Dog Rose. Ideally the above species would be planted in small copses, rather than in lines within new developments.
- Develop ponds and reedbeds as part of the SuDS in the new housing developments. These ponds and reedbeds filter, clean and store the surface water run-off and provide valuable wetland habitat for species such as frogs, otters, bats and various wetland birds. The filtered and cleaned water from the ponds and reedbeds can discharge into the local watercourses. It is important that drainage and SuDS design be combined with the design of the open spaces to ensure that the ponds and wetland are appropriately sited within the development.
- A bat survey will be carried out, as part of planning applications where deemed necessary by the Planning Authority. If bats are identified on site bat boxes will be required to be installed at an appropriate location, to encourage the bats to roost at an alternative location, while protecting their presence in the area.

Specifically, the following objectives relating to biodiversity are incorporated within the LAP:

Objective B01

Ensure that all development proposals include measures to protect and enhance biodiversity.

Objective B02

Protect a riparian corridor along all watercourses within the LAP lands and widen such corridors to incorporate passive and small active parks where feasible.

Objective B03

Preserve and extend the length and width of the existing tree-line/hedgerow margin around Hollystown Golf Club and the adjacent R-121 corridor.

Objective B04

Integrate provision for biodiversity with public open space provision and sustainable water management measures (including SuDS) where possible.

Objective B05

Provide green links between Hollystown Golf Course, the internal open space provision within the LAP lands and the surrounding public parkland and existing agricultural land.

Objective B06

Maintain verges of five metres or more on either side of hedgerows and tree-lines as buffers, to promote their use as wildlife corridors and to facilitate the development of grassland communities.

Soil

The soils have been determined to be generally uncontaminated. As much soil as possible will be reused on site for landscaping purposes. The construction management plan will address issue of re-use of soil, including storage. A waste management strategy and a construction waste management strategy shall be submitted with all applications for

substantial development.

Water

All planning applications will be required to adhere to the comprehensive SUDS strategy, addressing water quantity, quality, amenity and habitat enhancement aspects of natural drainage, and ensuring that no threat is posed to the water quality status of the Pinkeen River as a result of the development of the lands. In order to limit unnecessary water usage, leaks and excessive consumption of the water supply a Water Management and Conservation Plan detailing how best practice in water conservation shall be applied will be required in all planning applications.

The LAP contains the following objectives to ensure mitigation of the above issues:

Objective WS3

Promote water conservation to reduce the overall level of water loss in the public supply and require that new domestic developments provide for water supply metering.

Objective WS4

Require that a Water Management and Conservation Plan, detailing how best practice in water conservation shall be applied to include both watermains and internal plumbing, be prepared for development on these lands in order to limit unnecessary water usage, leakage and excessive consumption.

Objective WS5

Encourage the adoption of water saving measures in future development. Such measures will increase the extent of development capable of being serviced by the existing water treatment plant. Such measures to include:

- *Water butts to collect rainwater*
- *Low flush and dual flush toilets*
- *Low water use appliances*
- *Rainwater harvesting*

Objective WS6

Ensure that water main layout for new development is in accordance with the most up-to-date version of Fingal County Council's 'Guidelines for the Laying of Distribution Watermains' and 'Guidelines for Drinking Water Supply'.

Objective WW3

All foul infrastructure shall be designed and constructed in accordance with the Greater Dublin Regional Code of Practice for Drainage Works and comply with the Greater Dublin Strategic Drainage Study (GDSDS).

Objective WM2

Require all planning applications to submit details of compliance with the SuDS Strategy for the LAP (appendix 3) which shall include proposals for the management of surface water within sites and runoff rates from sites, to protect the water quality of the River Tolka.

Objective WM3

Require local/site specific SuDS measures in tandem with development.

Cultural Heritage – Architectural and Archaeological

All planning applications which will have an impact or potential impact on a Recorded Monument will be required to have an archaeological test carried out on site prior to the commencement of construction. The results will be recorded and kept on record.

The LAP contains the following objective to ensure mitigation of the above issue:

Objective AAH01

Protect as yet undiscovered archaeological sites or features that survive subsurface in accordance with the National Monuments Legislation. Developers will make provision to allow for and fund whatever archaeological work needed on site if any remains are noted following topsoil removal. All required additional archaeological investigations, including monitoring during removal of topsoil and during construction phase, to be carried out by a suitably qualified archaeologist at the developer's expense, under licence and in consultation with the Department of Arts, Heritage and Gaeltacht.

Material Assets -Transportation

Effective mitigation measures in terms of air quality will involve active mobility management to encourage high usage of walking, cycling and public transport through good traffic management plans.

Objective MS1

Prioritise sustainable modes of transport including walking, cycling and public transport and reduce reliance on the use of private cars where possible within Kilmartin.

Objective MS2

Ensure existing junctions and roads external to the lands are designed to maximise transportation efficiency and movement. A Traffic Management Plan shall be prepared for the area containing the LC lands/Phase 1 (east and west) taking cognisance of schools to be completed prior to the lodgment of any planning application.

Objective MS3

Develop a hierarchical street network comprising a number of new street links, supporting internal permeability, with links to the surrounding environment

Objective MS4

Cul-de-sac the R121 (Church Road) just south of Hollystown Roundabout to through vehicular traffic.

Objective MS5

Facilitate a bus gate on the pedestrian/cycle connection located west of the 2 no. existing primary schools linking the LAP lands to the Local Centre.

Objective MS7

Ensure trip intensive commercial developments with requirements for significant car-parking are concentrated to the east of the main urban street in the Local Centre.

Objective C01

Provide for an urban environment within Kilmartin where priority is given to legibility and permeability for cyclists and pedestrians, with safe, direct and easy access provided to public transport points, schools, park, local centre, existing community of Tyrrelstown and to the Greater Blanchardstown area.

Objective C02

Ensure that all pedestrian and cycle routes within Kilmartin are overlooked by residential development.

Objective C03

Encourage direct walking and cycle routes through pocket parks and open space areas to provide direct linkages between the character neighbourhoods, local centre, schools, parks and public transport.

Objective B01

Facilitate and promote the development and use of an enhanced quality and integrated public transport network with bus as the primary facility to serve the existing and future residents of Kilmartin/Tyrrelstown.

Material Assets – Waste

Waste infrastructure with appropriate capacity will be planned for the area and waste management plans will be required in the assessment of all planning applications.

Noise

Given the location of the lands within the Inner (small portion) and Outer Noise zones, suitable noise insulation measures must be incorporated into the design of buildings to ensure that noise does not become either a nuisance or health issue. Noise from building operations will be temporary and suitable limitations can be applied by condition at planning application stage. All future developments must ensure that residential amenity is given high priority when considering design and noise mitigation.

All future developments must ensure that residential amenity is given high priority when considering design and noise mitigation.

Landscape

Having regard to the transitional nature of the plan lands, the LAP includes objectives to mitigate the impact of development on the visual amenity of the area. The development of a high quality designed landscape masterplan with the integration of SuDS elements will be the primary mitigation on the LAP lands.

The LAP incorporates the following mitigation objectives with regard to Landscape:

Objective L01

Protect existing trees and hedgerows which are of amenity or biodiversity value and/or contribute to landscape character and ensure that proper provision is made for their protection and management.

Objective L02

Ensure that any development which impacts on a townland boundary, roadside hedgerow or a hedgerow which forms a link with other habitats retains such features or replaces such features with equal or greater area of native trees and shrubs.

Air Quality and Climatic Factors

Mitigation measures will include dust minimization plans during construction. Improvements in air quality are anticipated over the next number of years as a result of on-going comprehensive vehicle inspection and maintenance program, fiscal measures to encourage the use of alternatively fuelled vehicles and the introduction of cleaner fuels. In relation to fuel quality, EU Fuel Directive (98/70/EC has introduced significant reductions in both sulphur and benzene content of fuels. All of these measures will ensure improved air quality in the future.

18.0 MONITORING PROPOSALS

18.1 Purpose of Monitoring

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. This environmental report puts forward proposals for the monitoring of the LAP, with 5 year reviews.

Monitoring is based around the indicators which were chosen earlier in the process. These indicators allow quantitative measures of trends of

progress over time relating to the SEOs (strategic environmental objectives) used in the evaluation. Focus is given to the indicators which are relevant to the likely significant environmental effects of implementing the LAP and existing monitoring arrangements are used in order to monitor the selected indicators where possible. Each indicator to be monitored is accompanied by the relevant target(s) which were identified with regard to the relevant legislation.

Monitoring enables, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action. In addition to this, monitoring can also play an important role in assessing whether the LAP is achieving its environmental objectives and targets and whether the proposed mitigation measures are being implemented.

18.2 Monitoring Proposals

The monitoring programme for the implementation of the LAP is outlined in Table 18.1.

Table 18.1: Monitoring Programme

Environment	Monitoring Objectives and Indicators	When?	By Whom	Source / Method of Monitoring
Population and Human Health	<p><i>Improve people's quality of life based on high-quality residential and recreational environments</i></p> <ul style="list-style-type: none"> • Good quality design, setting and finishes, showing a mix of unit types • Amount (in sq.m.) of open spaces and recreational facilities available to the public following adoption of the LAP 	<p>This will be addressed during the lifetime of the plan</p> <p>4 year review</p>	<p>FCC Planning Department</p> <p>FCC Planning Department/ Parks Division</p>	<p>Planning Applications</p> <p>Open space and recreational facilities Survey of the lands to be carried out at the monitoring stage</p>
	<p><i>Ensure the provision of high quality open spaces with linkages to adjoining green spaces outside the Plan lands.</i></p> <ul style="list-style-type: none"> • Amount in ha. of open space and pocket parks made available to the public following development of the plan lands 	4 year review	FCC Planning Department	Open space and recreational facilities survey of the lands to be carried out at the monitoring stage
	<p><i>Facilitate provision of necessary facilities to serve the future population, in terms of schools, crèches, retail services.</i></p>	4 year review	FCC Planning Department	Planning Applications

	<p><i>Facilitate integration of development into the existing urban environment through sustainable growth</i></p> <ul style="list-style-type: none"> • Development is in accordance with the density and urban design objectives set out in the LAP 	4 year review	FCC Planning Department	Planning Applications
Noise	<p><i>Minimise environmental and transport related noise</i></p>	4 year review	FCC Planning Department	Planning applications
Biodiversity	<p><i>Maintain and enhance the biodiversity of habitats and protected species</i></p> <ul style="list-style-type: none"> • Number of approved applications with landscape plans/ conditions • Loss of any hedgerows/ linear planting. 	<p>4 year review</p> <p>At planning application and planning consent stage</p>	<p>FCC Planning Department</p> <p>FCC Planning Department / Parks Division</p>	<p>Planning Applications</p> <p>Comparison to baseline Ecological Survey</p>
Soil	<p><i>Minimise the amount of waste soil sent to landfill and reuse on site</i></p>	<p>4 year review</p> <p>At planning application and planning consent stage</p>	FCC Planning Department	Planning applications
Water	<p><i>Achieve and maintain good ecological and water quality to status objectives as set out in the Water Framework Directive (WFD)</i></p>	4 year review	FCC Water Services/Planning Dept	Improvement/no disimprovement of water quality as

				tested prior to the commencement of development.
	<i>Ensure that any new development is adequately serviced by foul drainage infrastructure</i>	4 year review	FCC Water Services/Planning Dept	Monitoring progress and provision of infrastructural proposals.
	<i>Promote sustainable use of available water resources</i>	4 year review	FCC Water Services	Monitoring progress and provision of infrastructural proposals.
Air and Climatic Factors	<i>Protect and enhance ambient air quality and contribute to national climate change policy</i>	4 year review	FCC Planning Dept	Planning applications
Material Assets Transport	<i>Encourage and prioritise sustainable modes of transport such as walking, cycling and public transport and reduce reliance on the use of private cars</i> <ul style="list-style-type: none"> • LAP road network together with pedestrian and cycle routes made available for use within the lifetime of the adopted LAP 	4 year review	FCC Planning Department/ Transport Department	Pedestrian and Cycle Route Survey to be carried out at the monitoring stage
	<i>Improve pedestrian access and permeability throughout the LAP lands and to adjoining lands</i> <ul style="list-style-type: none"> • Amount (in sq m) of pedestrian walkways/routes are made available to the public following development of the Plan lands. 	4 year review	FCC Planning Department/ Transport Department	Walkway survey to be carried out at the monitoring stage

	<ul style="list-style-type: none"> Number of traffic calming and traffic management measures implemented by the study following adoption of the LAP 			
Material Assets Energy	<i>Promote sustainable energy by maximising renewable energy sources</i>	4 year review	FCC Planning Department	Planning applications
Cultural Heritage	<i>Protect all recorded archaeological sites from inappropriate development that would adversely affect the site or setting</i>	4 year review	FCC Planning Department/ Conservation Officer The Planning Dept will ensure at planning application and consent stage that the necessary consultation takes place with the DoAHG. The DoAHG will ensure monitoring takes place at site clearance stage	Planning applications
Landscape	<i>Ensure that new development assimilates with and respects the natural form and character of the landscape.</i>	4 year review	FCC Planning Department	Planning Applications

19.0 CONCLUSIONS AND RECOMMENDATIONS

The methodology employed in undertaking this SEA for the LAP at Kilmartin has been carried out in accordance with the relevant planning legislation and guidance issued by the DoECLG. Through the SEA process, the LAP has been assessed in order to evaluate the environmental implications of developing the land.

The SEA process has comprised a number of distinct stages, one of the most important of which has been the preparation of this Environmental Report. The Environmental Report, which is the principal document produced during the SEA process, presents information on the LAP, on the proposed LAP's context with other relevant plans, and on baseline information for the different categories within the receiving environment.

In the environmental assessment, two alternative development scenarios, were assessed. The environmental assessment consisted of each alternative development scenario being assessed against the SEA objectives to identify any potential significant effect or impact on the different categories of the environment.

Following the environmental assessment of the alternative scenarios, the preferred alternative was selected. A further assessment of the LAP was undertaken to identify any significant effects or impacts on the environment from implementing the LAP. Importantly, mitigation measures have been formalised to ameliorate any negative impacts, and finally appropriate monitoring proposals have been developed to monitor the significant effects and also the relevant mitigation measures.

It is proposed to monitor the effects of the LAP at least every five years following adoption of the plan.

APPENDICES

APPENDIX 1: Relevant Plans and Programmes and their Relationship with the Local Area Plan (see Section 4.0 of Environmental Report)

National Plans and Policy

Infrastructure and Capital Investment 2012 – 2016

Launched in November 2011, the Investment Plan was prepared to underpin the development of a dynamic competitive economy over a 4-year period 2012-2016. It is an economic plan, which sets out the governments infrastructural development spending plans for the country in areas such as housing, public transport, industry, water supply, education and health. It includes a number of strategic objectives for the Eastern Region and the Dublin Gateway. In terms of public transport, the following is relevant to the Kimartin LAP lands.

'Public Transport is afforded high priority in the Programme for Government. This is due to the contribution that an attractive public transport system can make not only to economic renewal and to the climate change agenda but importantly also to the citizen's daily lives. Investment in public transport facilitates alternatives to car transport, helping to reduce congestion and emissions and enabling the transport sector to cater for the demands associated with longer term population and employment growth in a sustainable manner.'

The Local Area Plan is considered to be consistent with this Investment programme.

National Development Plan 2007-2013

The National Development Plan, which was launched in December 2007 integrates strategic development frameworks for regional development, for rural communities, for all-island co-operation, and for protection of the environment with common economic and social goals. It is an

economic plan (not a land use plan), which sets out the governments infrastructural development spending plans for the country in areas such as housing, public transport, industry, water supply, education and health. The Local Area Plan is considered to be consistent with this National Development Plan 2007-2013.

National Spatial Strategy 2002-2020

The National Spatial Strategy (NSS) sets out the vision and strategic framework for achieving sustainable and balanced regional development in Ireland. The NSS was launched in 2002 and embodies a 20-year spatial framework to achieve more balanced regional development in Ireland. The vision underlying the NSS is a better balance of social, economic, physical development and population growth between regions. The NSS envisages thriving Gateway centres driving the development of their wider regions, including surrounding towns, villages and rural areas.

The Strategy seeks to establish a framework for appropriate development at a regional level, which makes provision for strategically located urban centres, particularly 'Gateways' and to unlock potential for progress, growth and development in a more balanced way across Ireland, supported by more effective planning.

Two of its key principles are intended to minimise transport related energy consumption and are central to the principles of the Kilmartin Local Area Plan i.e.:

- maximising access to, and encouraging use of, public transport, cycling and walking; and
- developing sustainable urban and rural settlement patterns and communities to reduce distance from employment, services and leisure facilities and to make use of existing and future investments in public services; including public transport.

Transport 21 (2005)

Transport 21 is a capital investment framework under the National Development Plan through which the transport system in Ireland will be developed, over the period 2006 to 2015. This framework will address the twin challenges of past investment backlogs and continuing growth in transport demand. The projects and programmes that make up Transport 21 will aim to:

- increase accessibility – making it easier for everybody to get to and from work, school, college, shopping and business.
- ensure sustainability – recognising that a modern transport system must be sustainable from an economic and environmental perspective.
- expand capacity – addressing existing deficiencies and providing for future growth.
- increase use - managing the transport network and seeking to increase the use of public transport
- enhance quality – improving safety, accessibility, integration, reliability, speed and comfort.

Transport 21 is made up of two investment programmes – a national programme and a programme for the Greater Dublin area. The policies and objectives of the Local Area Plan are consistent with the provisions of Transport 21.

Smarter Travel – A New Transport Policy for Ireland 2009-2020

Smarter Travel: A New Transport Policy for Ireland 2009 - 2020 sets out Government's policy objectives with respect to promoting a significant modal shift from private transport to public transport and sustainable transport modes over the period up to 2020. Although the Policy contains 49 actions, they can be grouped into essentially four overarching ones:

- Actions to reduce distance travelled by private car and encourage smarter travel, including focusing population growth in areas of employment and to encourage people to live in close proximity to places of employment and the use of pricing mechanisms or fiscal measures to encourage behavioural change,
- Actions aimed at ensuring that alternatives to the car are more widely available, mainly through a radically improved public transport service and through investment in cycling and walking,
- Actions aimed at improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies, and
- Actions aimed at strengthening institutional arrangements to deliver the targets.

Actions set out to achieve the above in the context of Kilmartin LAP include the development of high quality bus links to ensure efficient and connected public transport options and a network of pedestrian and cyclist routes within the LAP lands.

National Cycle Policy Framework 2009-2020

This document aims to deliver a new culture of cycling in Ireland by 2020, with 10% of all trips to work being made by bicycle within the next twelve years. In order that these goals can be achieved and to ensure that we have sustainable travel and transport by 2020, the following targets have been established by the government: -

- Future population and employment growth will predominantly take place in sustainable compact forms, which reduce the need to travel for employment and services.
- Reduce the share of car commuting.
- Alternative modes of transport such as walking cycling and public transport will be supported.

- Reductions in the number of kilometres travelled per car and reductions in greenhouse gas emissions.

Maximising Irelands Energy Efficiency –The National Energy Efficiency Action Plan 2009-2020

The Government has committed to achieving by 2020 a 20% reduction in energy demand across the whole of the economy through energy efficiency measures. The Action Plan identifies policies and measures that can help achieve the 20% target. The Action Plan builds upon the Energy Efficiency Action Plan that was submitted to the European Commission in September 2007; required as part of Ireland's obligations under the Energy Services Directive (ESD), which requires Member States to deliver energy savings of 9% by 2016.

Energy efficiency in buildings and the use of green forms of transport including cycling, walking and buses will contribute to the achievement of these targets. The Local Area Plan has taken into consideration the objectives of the Action Plan.

Sustainable Development – A Strategy for Ireland (1997).

The national strategy for sustainable development provides a framework for the achievement of sustainability at a local level. It provides that planning authorities take account of sustainable development considerations in the preparation of development plans.

The Strategy encourages coordination between land use, transport, and infrastructure planning so that policies and objectives support 'sustainable development'. The Planning and Development Acts 2000-2011 give effect to the sustainable provisions of the Strategy. The principal of sustainable development is an intrinsic element of the Kilmartin Local Area Plan.

Sustainable Development - International, European and National Context

The Irish Government is obliged to promote and implement sustainable development as part of their EU commitments, as first developed at the 1984 'World Commission on Environment and Development' which set about preparing 'a global programme of change'. This was confirmed in the 1987 Bruntland Report which aimed to analyse the linkages between a number of global issues, which included population, depletion of species, energy, industry and human settlement.

The aims of the Bruntland report were further progressed within the Rio Declaration (1992) and Amsterdam Treaty (1997). The improvement of all aspects and quality of peoples living environment, together with social equality (Agenda 21) is prioritised and promoted. In response to these commitments Ireland drew up a national strategy in 1997, which endorsed and promoted Agenda 21, 'Sustainable Development: A Strategy for Ireland'. This strategy was followed by 'Making Ireland's Development Sustainable' (2002). The principles espoused in the Strategy are found in national policies and legislation today, including the Planning Development (Amendment) Act 2010.

Towards Sustainable Local Communities: Guidelines on Local Agenda 21 (2001).

It is a multifaceted blueprint for sustainable local communities that are economically strong, socially inclusive and environmentally friendly. The core of Local Agenda 21 is to encourage greater local ownership of and participation in local decision making for sustainable development. The principles of Local Agenda 21 are based on the 'Rio Declaration on Environment and Development', which formed part of the Earth Summit in Rio in 1992. This document is an agreement for meeting the challenges of the environment and development into the next century. As a result of signing the document, the government is committed to ensuring that the relationship between socio-economic growth and the environment is not negative. In effect, this implies that development should not exceed the carrying capacity of its local environment.

The Planning and Development Acts, 2000-2011 provide for an enhanced focus on sustainable development. Given the close relationship between the principles of Local Agenda 21 and development plan preparation, Plan makers have regard to Local Agenda 21 principles whilst preparing the Plans.

Some of the principles of Agenda 21 relating to Planning and Development include: -

Reducing the demand for additional transport infrastructure by reducing the need to travel.

- Resisting scattered settlement patterns which are costly to service.
- Promoting higher residential densities, particularly in redeveloping brown field sites, and in proximity to town centres, public transport nodes and access points.
- Increasing emphasis on adequate open space for out-door recreation and on planting and landscaping.
- Encouraging design flexibility so that buildings are designed or adapted in ways which allow for as many uses and as much flexibility of use as practicable.

The principles of Agenda 21 are being met through the process of Strategic Environmental Assessment and the preparation of the Kilmartin Local Area Plan.

National Climate Change Strategy, 2007-2012.

The National Climate Change Strategy 2007 – 2012 outlines how the various measures, taken across all sectors of the economy, will act to reduce Ireland's GHG emissions in the Kyoto period 2008 to 2012. It also identifies how the effect of the measures being pursued will position us for the post-Kyoto period, and which further measures are being researched and developed to enable us to meet our 2020 commitment. The strategy aims to reduce emissions through the use of economic instruments (including taxation and emissions trading), a broad range

of policies and measures tailored specifically to relevant sectors, a vigorous and appropriate pursuit of common and coordinated policies and measures implemented at EU and at a wider international forum and participation in international emissions trading. Key new measures introduced in the 2007 Strategy include: -

- Increase in electricity from renewables to 15% by 2010
- Alignment of transport investment with spatial planning
- Greener Homes
- Buildings Regulations 2008

The strategy also notes that *'The provision of infrastructure through the continued implementation of Transport 21, a €34.3 billion capital investment framework for the transport system for 2006 to 2015, will result in a switch from private to public forms of transport'*. This will help reduce annual greenhouse gas emissions for the country.

The policies of the National Climate Change Strategy, 2007-2012 are inherent in the Strategic Environmental Assessment and in the policies and objectives of the Local Area Plan.

Ireland's Pathway to Kyoto Compliance

The National Climate Change Strategy (NCCS) was published in October 2000 as a basis for Government policy and action in relation to climate change. 'Ireland's Pathway to Kyoto Compliance' takes stock of developments since then and examines options for achieving further abatement of greenhouse gas emissions in the future and sets out Ireland's overall approach to meeting its Kyoto targets.

'Delivering a Sustainable Energy Future for Ireland' – The Energy Policy Framework 2007-2020

The Government's energy policy and climate change goals are closely aligned and will be fully reflected in the Climate Change Strategy. Our plans for reducing energy demand and energy related emissions through ambitious renewable energy targets (including co-firing

biomass with peat), new state-of-the-art power generation plant and interconnection to wider markets will contribute in a major way to national climate change targets. The primary objectives of the energy policy are: Security of supply, Environmental sustainability and Economic competitiveness. The energy policy sets out clear actions, targets and timeframes to meet these interlinked objectives.

National Heritage Plan (2002)

This Plan aims to set out a clear and coherent strategy and framework for the protection and enhancement of our heritage. Every action in this Plan is founded on the principle of sustainable development, which states that the needs of the present generation must be met without compromising the ability of future generations to meet their own needs. The Plan seeks to ensure the protection of Ireland's heritage and to promote its enjoyment by all. The lands at Kilmartin have been subject to an archaeological assessment as part of this SEA process. The policies of the National Heritage Plan are inherent in the Strategic Environmental Appraisal of the Local Area Plan.

Actions for Biodiversity 2011-2016 – Ireland's National Biodiversity Plan

In 2002, Ireland published its first National Biodiversity Plan which contained 91 actions. The implementation of that Plan was reviewed as part of the process of developing this document. Actions for Biodiversity 2011-2016 builds upon the achievements since 2002. It focuses on actions that were not fully completed and addresses emerging issues. The main biodiversity actions identified are as follows:

Taking responsibility; Strengthening knowledge and raising awareness; Protecting and restoring biodiversity in Ireland; Protecting and restoring biodiversity internationally.

Amongst the most important means of providing for the conservation and sustainable use of biodiversity in the wider countryside is the planning system. A number of recent developments in planning legislation, in particular the Planning and Development (Amendment)

Act, 2010, provide significantly improved measures for the conservation of biodiversity. The Planning and Development Act 2000-2011 provides that: -

Development Plans must have mandatory objectives for the conservation of European and nationally important sites and for the conservation of biodiversity in general. The new Amendment Act 2010 has introduced for the first time, the requirement to carry out Appropriate Assessment for individual development proposals. A Stage 1 (Appropriate Assessment) Screening Report has been carried out as part of the preparation of the Local Area Plan.

Planning and Environmental Guidelines

Planning and Environmental Guidelines Strategic Environmental Assessment Guidelines - Implementation of SEA Directive (2001/42/EC) Implementation of SEA Directive (2001/42/EC) - Assessment of the Effects of Certain Plans and Programmes on the Environment. (November 2004). The SEA Guidelines set out the various SEA stages in chronological order, i.e. as they correspond to the relevant stages in the plan making process and help integrate the two processes. The guidance is based on best practice, and whilst the Directive sets some specific performance objectives that must be met, it allows individual plan making authorities a considerable degree of flexibility in how those objectives are met. The guidelines have been consulted extensively in the preparation of this environmental report.

Development Plan Guidelines (2007)

The aim of these guidelines is to

- Improve the quality and consistency of development plans, and thereby improve the quality and consistency of decisions on planning applications,

- Strengthen the strategic content of development plans, in the context of the hierarchy of plans envisaged under the 2000 Act, and
- Encourage consensus-building in the preparation, implementation and review of development plans.

A Development Plan should establish a policy framework within which more detailed plans (such as local area plans) can be drawn up for specific parts of the planning authority's area. The DOECLG has prepared guidance for planning authorities on Local Area Plans, which completes the suite of guidance for each layer in the planning framework.

The Fingal Development Plan is the 'parent' document, which sets out the strategic framework within which the zoning and other objectives of the local area plan must be formulated.

Development plans should indicate those areas for which a local area plan will be prepared, should set out a clear context for their preparation and give an indication of particular policies or objectives, which may need to be included therein such that there is a clear and unambiguous link between the county development plan and the local area plan.

The principle policies and objectives of the Fingal Development Plan relevant to the Kilmartin Local Area Plan are addressed in Section 3.0 of the Environmental Report.

Appropriate Assessment of Plans and Projects in Ireland – Guidance for Local Authorities (Dec 2009)

The Appropriate Assessment (AA) guidelines set out and explain the background to the Birds and Habitats Directives and the Natura 2000 network in Ireland. The guidelines illustrate how the Directive should be applied in the case of land use plans. The obligation to carry out AA lies with the competent Authority (Fingal County Council). The level of detail

required for Local Area Plan's is more defined and focused than at County Development Plan level and should contain appropriate policies and objectives for the conservation and protection of European sites to ensure their integrity is not adversely affected by development. An AA Screening Report has been carried out as part of the Local Area Plan making process.

The Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009)

The Guidelines, which must be implemented by planning authorities ensure that flood risk is a key consideration in preparing development and Local Area Plans and in the assessment of planning applications.

The core objectives as they apply to the Kilmartin Local Area Plan are: -

- Avoid development in areas at risk of flooding, particularly floodplains, unless there are proven wider sustainability grounds that justify appropriate development and where the flood risk can be reduced or managed to an acceptable level without increasing flood risk elsewhere;
- Adopt a sequential approach to flood risk management when assessing the location for new development based on avoidance, reduction and mitigation of flood risk; and
- Incorporate flood risk assessment into the process of making decisions on planning applications and planning appeals.

The Government places a high degree of importance on planning and development measures as a critically important element of its overall strategic approach to adaptation to climate change and flood risk management, building upon its long-standing acknowledgement of flooding in legislation as an important planning issue.

The key objective for the planning authority is to avoid the risk of flooding. A Strategic Flood Risk Assessment was carried out as part of the preparation of the LAP. There are no known flooding events associated with the Local Area Plan lands.

Draft Landscape and Landscape Assessment, 2000

The Draft Guidelines encourage a proactive approach to landscape in terms of its ability to accommodate development and to provide indicators as to which developments might be most suited, under what conditions and using particular design criteria. "Landscape Character Assessment" should be applied in all aspects of physical planning, to provide guidance to planners and others as to how landscape considerations should be dealt with and to indicate specific requirements for Plans and for development management.

The policies and objectives of the Kilmartin Local Area Plan have taken into consideration the nature and form of the landscape and of the established and proposed built form of the area.

Spatial Planning and National Roads Guidelines, January 2012

The guidelines set out planning policy considerations relating to development affecting national roads outside the 50-kph speed limit zones. The on road traffic demands generated by the development of Kilmartin has been taken into consideration in the preparation of the Local Area Plan. The plan promotes the use of sustainable forms of transport including public transport in order to reduce the demand for travel by private transport and thereby consequent demand of the local and consequently national road network.

Retail Planning Guidelines for Planning Authorities 2012

These Guidelines update and replace the Retail Planning Guidelines published in January 2001. The Guidelines provide a retail hierarchy for the State and provide a framework to guide local authorities in preparing development plans and assessing applications for permission and to guide retailers and developers in formulating development proposals. Retail provision in the Local Area Plan is consistent with these guidelines.

Sustainable Residential Development Urban Areas – Guidelines for Planning Authorities (May 2009)

The Guidelines have replaced the 1999 Residential Density Guidelines, with a view to assisting planning authorities, developers, architects and designers in delivering quality residential development into the future. The guidelines state that 'the advantage of using the LAP approach is that as a statutory plan it will have been through the planning process, will have involved local consultation and the engagement of elected members, and when approved will give a degree of certainty to those involved in the development of the area. In-depth consideration can be given to the planning issues specifically relating to the residential area within the context of the wider strategic objectives'. The first criteria to be considered for the Kilmartin Local Area Plan is the vision statement, which will outline the guiding principles for the sustainable development of the area. This overarching statement will indicate the degree to which the residential component of the development will be sustainable. The guidelines also recommend that the wider context of the LAP area in relation to access, transport provision, design context as well as physical and social infrastructure should be examined to ensure the integration of the LAP with that context. This will influence the subsequent planning within the LAP area which will relate to detailing of design such as layout, a range of appropriate densities, diversity of uses, housing mix etc.

The Guidelines recommend that if a Local Area Plan is to be developed over a long period of time it is important that a phasing programme is put in place. The purpose of phasing is to ensure that the physical and social infrastructure required is provided in tandem with the residential element of the development. The phasing programme will indicate the number of phases proposed and the enabling works that are required in each phase before being able to move onto the next phase. The programme will also specify the amount of residential development that should take place in each phase, integrated with the provision of the appropriate social facilities (such as schools, childcare and health facilities), transport access etc.

Where it is felt that the existing physical and social infrastructural services will be inadequate to serve the proposed development lands, the LAP should indicate, along with the sequencing and phasing parameters, the minimum services that are required for the development of the zoned land, and when these are likely to be provided. This highlights for service providers, developers, future residents, what services are readily available and what is required and when they are likely to be provided. On approval of the plan, the planning authority should take a proactive approach by informing the service providers of the situation, giving clarity to all involved of the role they play in the quality development of the lands. The service providers will then have the planning information required to enable them to include the necessary proposals in their work programmes. Planning authorities are urged to ensure that an adopted plan is the only effective policy framework within which to consider major development proposals.

Urban Design Manual A Best Practice Guide (2009)

This manual is intended to act as a companion document to the guidelines for planning authorities on Sustainable Residential Development in Urban Areas. Published in December 2008, it is

intended to provide best practice advice on how the policies contained in the guidelines should be implemented. It focuses not only on the key issues affecting housing schemes in the 30-50 units per hectare density range, but also on the relevant considerations relating to higher and lower density schemes in urban areas.

The Provision of Schools and the Planning System (2008)

This Code of Practice was published in 2008. It is intended to ensure that the provision of educational establishments keeps pace with the expansion of residential development. It complements and expands upon earlier guidance on the making and content of development plans.

Childcare Facilities-Guidelines for Planning Authorities (2001)

The Guidelines require that objectives be included in Local Area Plans to promote childcare facilities as a key element in the provision of sustainable communities, in locations such as: -

- Residential areas;
- Places of employment;
- City and town centres;
- Convenient to public transport nodes.

And that Plans identify locations appropriate for the provision of the full range of childcare facilities. The guidelines also guide planning authorities in assessing applications for permission and childcare providers and developers in preparing proposals for childcare facilities. The guidelines require that for every 75 dwellings proposed as part of a planning application, 1 no. childcare facility with capacity for 20 children be provided. The policies of the Childcare Guidelines are incorporated into the Local Area Plan.

Development Management Guidelines

Development Management - Guidelines for Planning Authorities was published in June 2007. These Guidelines are of relevance to all types of planning application, being intended to assist both the technical and administrative staff of planning authorities, as well as applicants and their advisers, on the operation of the planning process. They are also intended to promote best practice within planning authorities. Unlike many of the other guidelines on development control, Development Management - Guidelines for Planning Authorities focuses on the planning process rather than planning policy. The Guidelines are not directly relevant to the SEA process, however, applications submitted for permission subsequent to the adoption of the Local Area Plan will be considered in the context of the Guidelines.

Local Area Plan Guidelines Draft 2012

The Local Area Plan Draft Guidelines aim to highlight best practice and improve the quality of local area plans, especially in relation to their content and consistency with higher-level plans, thereby improving the quality and consistency of decisions on planning applications and the quality of development in general; ensure effective community and institutional involvement through consultation and/or participation in the process of preparing and reviewing local area plans; and demonstrate practical implementation approaches to assist in preparing local area plans to ensure effective co-ordination and provision of essential public infrastructure.

The Planning and Development (Amendment) Act 2010 introduced important new legal obligations on planning authorities to ensure that both existing and future local area plans comply with new core strategies which have been incorporated into city and county development plans.

Key European Legislation and Policy Documents

Environmental Assessment of Certain Plans and Programmes Amendment (S.I. No. 201 of 2011)

These amending regulations introduce changes for SEA relating to consideration of the likely significant effects on the environment of a development plan, a variation of a development plan, a local area plan (or an amendment thereto), regional planning guidelines or a planning scheme in respect of a Strategic Development Zone. The main amendments provided for in these regulations include:

- a reduction in the threshold in the case of the mandatory undertaking of an environmental assessment of a local area plan with a target population of more than 10,000 persons to 5,000 persons, or where the area covered by the plan is greater than 50 square kilometres, or where the local area plan is being prepared for a town and its environs;
- a requirement for the making of a determination as to the need for an environmental assessment of a local area plan with a target population under 5,000 persons or where the area covered by the local area plan is less than 50 square kilometres;

Birds and Natural Habitats Regulations 2011 (S.I. No. 477 of 2011)

These regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats)(Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in the CJEU judgements. The obligations of various public bodies in regard to sites designated for the protection of endangered wildlife have been clarified and strengthened. Statutory Authorities must adhere to the provisions of the new Birds and Habitats Regulations in their planning, consent and operational functions. The minister will have the power to regulate activities where they could damage breeding birds, fauna and flora or habitats.

Environmental Liabilities Directive (2004/35/CE)

The Environmental Liabilities Directive (2004/35/CE) is the first Directive to enforce the 'Polluter Pays Principle'. It has been introduced with a view to preventing and remedying environmental damage to animals, plants, natural habitats and water resources, and damage affecting land. Environmental damage is defined as: -

- direct or indirect damage to the aquatic environment covered by Community water management legislation;
- direct or indirect damage to species and natural habitats protected at Community level by the 1979 " Birds " Directive or by the 1992 "Habitats " Directive;
- direct or indirect contamination of the land which creates a significant risk to human health.

The European Communities (Environmental Liability) Regulations 2008 transposed the Directive into Irish Law. The provision of the Regulations are reflected in the policies and objectives of the Local Area Plan.

Water Framework Directive (2000/60/EC)

The WFD Directive came into effect in 2000 and requires that Member States must aim to achieve good status in all waters by 2015 and must ensure that status does not deteriorate in any waters. It applies to all inland and coastal waters within defined river basin districts. Inland water includes rivers, lakes, groundwater and estuaries. The Directive also protects the wildlife/habitats, which depend on the water sources. The other aims of the Directive are to involve the public and to streamline legislation.

The Fingal Development Plan incorporates policies to facilitate the provision of wastewater treatment systems for municipal and industrial sources in order to ensure compliance with the WFD. It also provides for the preparation of and implementation of the Eastern River Basin District Management system.

Groundwater Directive (2006/118/EC)

The Groundwater Directive is the key EU initiative aimed at improving water quality. They set underground water quality standards and introduce measures to prevent or limit inputs of pollutants into groundwater. The new Directive responds to and complements the WFD. It requires: -

- groundwater quality standards to be established by the end of 2008;
- pollution trend studies to be carried out by using existing data and data which is mandatory by the Water Framework Directive (referred to as "baseline level" data obtained in 2007-2008);
- pollution trends to be reversed so that environmental objectives are achieved by 2015 by using the measures set out in the WFD;
- measures to prevent or limit inputs of pollutants into groundwater to be operational so that WFD environmental objectives can be achieved by 2015;
- reviews of technical provisions of the directive to be carried out in 2013 and every six years thereafter;
- compliance with good chemical status criteria (based on EU standards of nitrates and pesticides and on threshold values established by Member States).

The requirements of the Directive have influenced the policies and Objectives on the Kilmartin LAP.

Environmental Objectives (Surface Waters) Regulations 2009, S.I. 272 of 2009

The Surface Water Regulations, SI 272 of (2009) institute a wide ranging set of standards for Irish surface waters and give effect to the measures needed to achieve the environmental objectives established for bodies of surface water by Water Framework Directive 2000/60/EC.

The Regulations apply to all surface waters and provide for—

- The establishment of legally binding quality objectives for all surface waters and environmental quality standards for pollutants.
- The examination and where appropriate, review of existing discharge authorisations by Public Authorities to ensure that the emission limits laid down in authorisations support compliance with the new water quality objectives/standards.
- The classification of surface water bodies by the EPA for the purposes of the Water Framework Directive.
- The establishment of inventories of priority substances by the EPA.

The drawing up of pollution reduction plans by coordinating local authorities (in consultation with the EPA) to reduce pollution by priority substances and to cease and/or phase out discharges, emissions or losses of priority hazardous substances. The regulations make reference to Best Available Technology.

European Communities (Drinking Water) (No 2) Regulations 2007 S.I. 106 of 2007

These Regulations replicate the existing Drinking Water Regulations of 2000 and provide for supervision of sanitary authority supplies by the Environmental Protection Agency. Sanitary authorities will continue to be responsible for supervising group scheme supplies, but all monitoring programmes will in future be subject to approval by the Agency. The Agency will in turn be required to supervise the performance by sanitary authorities of their monitoring functions and supervisory authorities will have powers of direct intervention if necessary to ensure compliance with their instructions.

European Communities (Energy Performance of Buildings Regulations 2006) S.I 666 of 2006

S.I. 666 requires that prior to the construction of any large new building (with a total useful floor area in excess of 1,000m²) that due consideration has been given to the technical, environmental and

economic feasibility of installing alternative energy systems in the proposed building, and that the use of such systems has been taken into account as far as is practicable in the design of the building. The alternative energy systems to be considered include decentralized energy supply systems based on renewable energy, combined heat and power systems, district or block heating or cooling and heat pumps. It is also required that a feasibility study shall be carried out by a suitably qualified person and shall include specific recommendations in relation to the utilization of alternative energy systems, including those specified in this Regulation. The Local Area Plan contains policies and objectives, which are consistent with the provisions of S.I. 666.

Regional Planning Context

Regional Planning Guidelines for the Greater Dublin Area 2010-2022

The recently adopted Regional Planning Guidelines (RPGs) for the Greater Dublin Area 2010-2022 provide a strategic planning framework for the sustainable development of the region, within the context of the National Spatial Strategy 2002-2020. They provide a long-term strategic planning framework for the Greater Dublin Area in the 12-year period up to 2022. The Regional Planning Guidelines provide the clear policy link between the NDP, NSS, other national policy documents and guidance and Local Authority planning policies and decisions.

The Guidelines further advise that the locations closest to Dublin City should continue to be developed to a relatively large scale as part of the consolidation of the Metropolitan Area.

Retail Strategy for the Greater Dublin Area 2008-2016

The Retail Strategy for the Greater Dublin Area (2008) was prepared in accordance with the Retail Planning Guidelines for Planning Authorities, for the four Dublin Local Authorities and for Counties Kildare, Meath and Wicklow. The Retail Planning Strategy is a guide to

the activities and policies for retail planning across the Greater Dublin Area, setting out a hierarchy of retail centres and floorspace need. The strategy gives guidance on where future retail should be provided and what issues need to be addressed. The retail market in the Greater Dublin Area has undergone significant change since the previous strategy. Economic growth until 2007 was buoyant, but current indicators show a slowing growth in the Irish economy with a resulting impact on the projected rates of increase in retail sales. Taking the market conditions into account the strategy is designed to ensure that there is a sufficiency of retail floorspace in the GDA and that it is provided in an efficient, equitable and sustainable manner.

Blanchardstown is designated as a Level 2 'Major Town Centre' in the Retail Strategy for the Greater Dublin Area and is the largest commercial centre within the Metropolitan Area of Fingal. Its dual centre is composed of Blanchardstown Town Centre and Blanchardstown Village, both of which serve significant catchments.

Dublin Transportation Office – Platform for Change-Strategy 2000-2010
This document provides a comprehensive framework for addressing accessibility and connectivity within the Metropolitan area and connectivity between it and the main settlements of the hinterland.

Greater Dublin Strategic Drainage Study (GDSDS)

The Greater Dublin Strategic Drainage Study (GDSDA) was commissioned in 2001 to carry out a strategic analysis of the existing foul and surface water systems and to develop environmentally sustainable drainage policies and strategies for the Greater Dublin Region for a period of 30 years up to 2031.

Fingal Planning Context

Fingal Development Plan 2011-2017

The Development Plan contains a Core Strategy, which sets out how the Settlement Strategy, the Housing Strategy and the Retail Strategy objectives within the Development Plan are consistent, in as far as practicable, with the development objectives of the National Spatial Strategy 2002-2020 (NSS) and the Regional Planning Guidelines. The LAP is consistent with the Core Strategy as set out within the Development Plan. The relationship of the LAP with the Fingal Development Plan can be considered within the wider context of the existing zonings of the subject sites and the surrounding land use zonings. The Development Strategy for Blanchardstown, as set out in the 2011-2017 Development Plan, is to promote the planned and sustainable development of Blanchardstown, positioning it as an important residential, service, employment, retail and leisure centre.

The LAP will assist in delivering the strategic long term growth of Blanchardstown. It is intended, in conjunction with existing development at Tyrrelstown, to develop a self-sustaining community. Currently it is estimated that the population of the area is 6,200 persons. As provided for in the Fingal Development Plan 2011-2017, the undeveloped lands the subject of this LAP, have the potential to provide for an additional population of circa 4,000 persons.

Under the current development plan the lands are zoned 'RA' – *'Provide for new residential communities in accordance with approved local area plans and subject to the provision of the necessary social and physical infrastructure'* and 'LC' – *'Protect, provide for and/or improve local centre facilities.'*

The R121 divides the 'RA' zoned lands into two parcels, with the lands to the east containing a specific objective to *'Provide for a density of 20 units per hectare (8 units per acre) at Hollywoodrath.'*

The LAP will help strengthen and reinforce the existing development plan and its objectives.

Cherryhound Local Area Plan 2012-2018

A separate LAP has been prepared for lands to the east of the subject LAP lands which is the Cherryhound Local Area Plan 2012-2018. The lands are zoned objective 'GE – General Enterprise and Employment'. The LAP area comprises 240 hectares (593 acres) of which 170 hectares (420 acres) are undeveloped (71%). Both the Kilmartin LAP and the Cherryhound LAP will complement each other in a sustainable way by locating employment uses and residential use in close proximity to each other

Hollywoodrath Local Area Plan 2006

The majority of the lands to the east of the R121 formed part of the Hollywoodrath Local Area Plan which was adopted on the 13th November 2006. The subject Kilmartin LAP includes the Hollywoodrath LAP lands as the density increased from 12 to 20 units per hectare in the 2011-2017 Fingal Development Plan and the amount of RA zoning increased. There is also an extant permission on the Hollywoodrath lands (F07A/0973) for 331 no. residential units.

APPENDIX 2: Scoping Report sent to Environmental Authorities

The Manager,
Development Applications Unit
Department of Arts, Heritage and the Gaeltacht
Newtown Road
Wexford
Co Wexford

22nd March 2012

**Re: Scoping for Strategic Environmental Assessment of proposed Local Area Plan at Kilmartin (lands north of Tyrrelstown), Dublin 15, as required under the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (as amended).
Appropriate Assessment Screening as required under Article 6 of the Habitats Directive.**

Dear Sir/Madam

Fingal County Council intends to prepare a Local Area Plan for lands at Kilmartin (lands north of Tyrrelstown) Dublin 15. The LAP lands comprise approx. 78.51 hectares (c.194 acres) and are located in North Blanchardstown. The lands are situated approximately 11.5km from Dublin City centre and 4km from Blanchardstown Town Centre. Please find enclosed SEA Scoping document for your comments.

Appropriate Assessment Screening has been carried out pursuant to Article 6 of the Habitats Directive for the LAP lands, with all Natura 2000 sites within a 15km radius of the site being considered. On the basis of this Screening, it was concluded that the proposed development of the LAP lands would not have a significant effect on the Natura 2000 network and a Stage 2 Appropriate Assessment is not required. Please see attached Appropriate Assessment screening report for your comments.

Please also find attached Issues Paper and copy of the pre-draft advertisement for the proposed Kilmartin Local Area Plan.

Please respond with your comments to Fingal County Council by the 20th April 2012.

Yours sincerely

Yolande Mc Mahon
Assistant Planner
Fingal County Council

**SCOPING REPORT FOR STRATEGIC ENVIRONMENTAL
ASSESSMENT OF PROPOSED LOCAL AREA PLAN AT
KILMARTIN, DUBLIN 15**

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1.0 Location and Description

The LAP lands comprise approx. 78.51 hectares (c.194 acres) and are located in North Blanchardstown (north of Tyrrelstown). The lands are situated approximately 11.5km from Dublin City centre and 4km from Blanchardstown Town Centre.

Hollystown Village a low density residential development and Hollystown Golf Course are located to the north of the LAP lands. To the south are open space lands, Tyrrelstown residential development, Tyrrelstown local centre and community facilities. To the south east and east are industrial lands zoned for high technology and general employment uses. To the west the land is in agricultural use.

A separate LAP is being prepared for lands to the east of the subject LAP lands which is the Killamonan / Cherryhound LAP. (Please refer to map). The lands are zoned objective 'GE – General Enterprise and Employment'. The LAP area comprises 240 hectares (593 acres) of which 170 hectares (420 acres) are not developed (71%).

In terms of educational facilities, Tyrrelstown is currently served by a primary school Tyrrelstown Educate Together, with permission granted for an additional primary school. This school is under construction. In addition, areas are reserved for a post-primary school and additional primary school immediately south of the LAP lands. On the LAP lands, a specific objective is included for a school.

The existing road network serving Kilmartin consists of two roads, the R121 and the Ratoath Road. These roads intersect at Hollystown. The R121 divides the LAP lands into two parcels of land, while the Ratoath Road runs along the north-eastern corner of the site. The M2-N3 link road touches the eastern boundary of the site and is currently under construction. When completed, this road will form a strategic link road in the area.

In terms of open space, there is a large area of zoned open space to the south of the LAP lands, which will be developed as a public park to serve the existing Tyrrelstown residential population and the proposed residential population at Kilmartin.

1.1 The Local Area Plan in Context

Blanchardstown is designated as a Metropolitan Consolidation Town in both the Regional Planning Guidelines for the Greater Dublin Area 2010-2022 (RPG's) and the Fingal Development Plan 2011-2017. Metropolitan Consolidation Towns present opportunities for intensive development and activity and to focus growth around dynamic urban quarters within the fabric of the Gateway and for opportunities for employment and services proximate to high population densities. Blanchardstown is the largest commercial and residential centre within the Metropolitan Area of Fingal, and will continue to be promoted as a key urban settlement within the County providing retail, social, cultural, leisure and administrative services catering for a population of c. 100,000. The Development Strategy for Blanchardstown in the 2011-2017 Fingal Development Plan is to promote the planned and sustainable development of Blanchardstown, positioning it as an important residential, service, employment, retail and leisure centre.

The LAP will assist in delivering the strategic long term growth of Blanchardstown. It is intended, in conjunction with existing development at Tyrrelstown, to develop a self-sustaining community. Currently it is estimated that the population of the area is 6,200 persons. As provided for in the Fingal Development Plan 2011-2017, the undeveloped lands the subject of this LAP, have the potential to provide for an additional population of circa 6,000 persons.

Tyrrelstown Local Centre, designated as a Level 4 Centre in Fingal's Retail Hierarchy, is located immediately adjacent to the LAP lands. This centre is an important focus for a range of commercial, service and community activities. The LAP provides for an extension of the local centre.

There are substantial employment generating lands located to the east and south of the LAP lands. It is considered that these employment lands are a key component in delivering a sustainable community at Kilmartin. The employment lands will complement the retail, residential, open space and community land uses forming part of the Kilmartin LAP and those which currently exist at Tyrrelstown.

1.2 Potential Capacity of the LAP lands

The capacity of the subject Local Area Plan lands at Kilmartin will be considered as part of the Local Area Plan process. A preliminary assessment shows that the subject LAP lands have the potential to accommodate a population of circa 6,000 persons. The LAP lands will be developed predominantly for residential use. In addition areas will be reserved as part of the LAP process to provide for schools and local services (including retail and commercial use) as well as for public open space and community facilities to serve the future residents of this area. The development of the LAP lands will result in increased infrastructural demands such as water, wastewater and transportation.

2.0 Fingal Development Plan 2011-2017

The Fingal Development Plan 2011-2017 sets out Fingal County Council's policies and objectives for the development of the County for the plan period. The Plan seeks to secure the development and improvement in a sustainable manner of the economic, environmental, cultural and social assets of the County.

2.1 LAP Zoning

The LAP lands are zoned 'RA' – *'Provide for new residential communities in accordance with approved local area plans and subject to the provision of the necessary social and physical infrastructure'* and 'LC' – *'Protect, provide for and/or improve local centre facilities.'*

The subject lands comprise c. 78.51 hectares in area (c.194 acres) as follows:

- c.40.47 hectares of land east of the R121; (RA zoned lands) (subject to 20 housing units per hectare restriction).
- c.31.97 hectares of land west of the R121; (RA zoned lands).
- c.6.07 hectares of land north of the existing Tyrrelstown Local Centre (LC zoned lands)

A map showing the lands outlined in red is enclosed for your attention.

The R121 divides the 'RA' zoned lands into two parcels, with the lands to the east containing a specific objective to *'Provide for a density of 20 units per hectare (8 units per acre) at Hollywoodrath.'* The majority of the lands to the east of the R121 formed part of the Hollywoodrath Local Area Plan which was adopted on the 13th November 2006.

The subject Kilmartin LAP includes the Hollywoodrath LAP lands as the density increased from 12 to 20 units per hectare in the 2011-2017 Fingal Development Plan and the amount of RA zoning increased. There is also an extant permission on the Hollywoodrath lands (F07A/0973) for 331 no. residential units.

The following Specific objectives on the Development Plan Maps relate specifically to the Kilmartin lands:

Objective 386: The LAP will specify a programme for the phasing of construction of residential and commercial development in tandem with the delivery of appropriate augmentation of the road network and public transport provision, preparation of a public drainage and water supply infrastructure plan, as well as provision of recreational, community, and educational infrastructure.

Objective 389: Having regard to the deficit in key community infrastructure, in particular schools and recreational amenities, preparation of the LAP shall be dependent on the advance delivery of the following: minimum 15.4 ha (38 acres) exclusive of any pylon corridor lands (to provide for the proposed public park), minimum 4.5 ha (11 acres) site for a Post Primary School, minimum 2.0 ha (5 acres) site for an additional Primary School.

Objective 397: Provide for a density of 20 units per hectare (8 units per acre) at Hollywoodrath (eastern portion of lands).

School: A school is proposed on the LAP lands to the east of the R121.

Inner Airport Noise Zone: applies to a small strip of land in the northern section of LAP lands (550m x 50m, c.2.43 hectares in area)

Outer Airport Noise Zone: applies to all the LAP lands.

Outer Public Safety Zone: applies to the majority of the LAP lands.

3.0 Policy Framework

The SEA Directive requires an analysis of the plans' "*relationship with other relevant plans and programmes*". The LAP will be considered in the context of International, National, Regional and Local Plans viz: -

- The National Spatial Strategy, 2002-2020
- National Development Plan 2007-2013
- Water Framework Directive
- Urban Waste Water Directive
- Childcare Facilities- Guidelines for Planning Authorities 2001
- National Climate Change Strategy, 2007 – 2012
- The Regional Guidelines for the Greater Dublin Area 2010-2022;
- Fingal Development Plan 2011-2017.
- Transport 21 and Platform for Change (to be superseded by the NTA Transport Strategy 2011-2030)
- Smarter Travel – A Sustainable Transport Future (2009)
- National Action Plan for Social Inclusion (2007-2016)
- Delivering Homes, Sustaining Communities, 2009
- Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas, and accompanying document Urban Design Manual – A Best Practice Guide, 2009.
- Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities, 2007.
- The Planning System and Flood Risk Management, Guidelines for Planning Authorities, 2007.
- Retail Planning Guidelines for Planning Authorities, 2005 and relevant updates.
- Cherryhound LAP
- M2-N3 Link Road

4.0 Scope of Environmental Report

In order to identify, describe and evaluate the likely significant environmental effects of implementing the LAP, relevant aspects of the current state of the environment and any existing environmental problems which are relevant to the plan area are required to be identified. This information is set out below.

4.1 Population and Human Health

The LAP lands have the potential for an additional population of circa 6,000 persons. It is envisaged that the population increase will result in enhanced physical and social infrastructure to serve both the existing and future populations, such as recreational, community and educational facilities. The industrial zoned lands to the east of the LAP lands will provide employment opportunities for the future population at Kilmartin, with both land uses complementing each other.

4.2 Cultural Heritage including Architectural and Archaeological heritage

There are no Protected Structures on the LAP lands. There are 5 Recorded Monuments listed in the Record of Monuments and Places (RMP) located to the west of the LAP lands. These are as follows:

DU013-032 – Enclosure

DU013-036 - Enclosure

DU013-037 - Enclosure

DU013-038 – Ring ditch

DU013-039 – Enclosure

Archaeological Assessment of the LAP lands will be carried out to identify any archaeological potential within the plan lands and to propose mitigation measures where necessary. The Environmental Report will assess the likely significant environmental impact of the proposed development on the archaeological heritage of the plan lands.

Relevant Development Plan Objectives/Policy

Policy HP2: 'To ensure that full consideration is given to the protection of archaeological heritage when undertaking, approving, or authorising development in order to avoid unnecessary conflict between development and the protection of archaeological heritage'.

Objective HO5: 'To ensure that all significant development proposals affecting sites specified in the Record of Monuments and Places or Zones of Archaeological Potential are referred to the Prescribed Bodies (as set out in the Planning and Development Act 2000) and to have regard to the advice and recommendations of the Prescribed Bodies in relation to undertaking, approving or authorising development'.

4.3 Water

Water Supply

Water is supplied from Leixlip. Existing developed areas in the vicinity of the LAP Area are supplied with water from the low level reservoirs at Ballycoolin, boosted via the Cruiserath pumps. There are no capacity issues with Leixlip or the network in the vicinity of the lands.

Foul Drainage

The natural drainage fall for the LAP lands is in a southerly direction towards the Tolka Valley 9C sewer. The 9C sewer has limited capacity. The 9C sewer flows to the Ringsend Wastewater Treatment Plant. There are capacity issues at Ringsend.

Surface Water

The Pinkeen river flows through the western portion of the site. The Pinkeen river is a tributary of the Tolka river, which flows directly into North Dublin Bay (Special Area of Conservation). A Sustainable Drainage System (SuDS) as outlined in the Greater Dublin Strategic Drainage Study will be implemented in the LAP area. This will minimise surface water run-off, minimise the risk of flooding in the area and surrounding areas and prevent pollution. A SuDS Strategy for the subject lands will be detailed in the LAP.

Flood Assessment

Flood Risk Assessment will be incorporated within the LAP strategy and SuDS principles incorporated in the development of the lands. Baseline information to be used includes the River Tolka Flood Study.

Aquifers

There are two aquifers listed pertaining to the LAP lands identified as PI – Poor Aquifer – Bedrock which is Generally Unproductive except for Local Zones and LI – Locally Important Aquifer – Bedrock which is Moderately Productive only in Local Zones. Groundwater vulnerability ranges from low to extreme, with extreme being one small portion in the north-west of the site and one area adjacent to the LAP lands.

4.4 Biodiversity, Flora and Fauna

The LAP lands comprise largely green field sites. A full biodiversity flora and fauna survey will be carried out at the end of March 2012, as this is the optimum time for recording the presence of any protected birds/species on the subject lands.

Appropriate Assessment Screening has been carried out pursuant to Article 6 of the Habitats Directive for the LAP lands with all Natura 2000 sites within a 15km radius of the site being considered. A summary of the findings is set out in the table below.

Table 1: Natura 2000 Sites within 15 km of Local Area Plan lands at Kilmartin

Special Protection Areas (SPA's) located within 15km of the site	Approximate distance from Natura 2000 Site	Likely Impacts
Rogerstown Estuary SPA	14.7km	No potential source-pathway-receptor links exist between the LAP lands and the SPA. The SPA will not be impacted directly or indirectly
Broadmeadow/Swords Estuary SPA	12.25km	No potential source-pathway-receptor links exist between the LAP lands and the SPA. The SPA will not be impacted directly or indirectly
North Bull Island SPA	14.85km	The Pinkeen river is a tributary of the Tolka river, which flows directly into North Dublin Bay. A Sustainable Drainage System (SuDS) as outlined in the Greater Dublin Strategic Drainage Study will be implemented in the LAP area.
South Dublin Bay and River Tolka Estuary SPA	14.78km	No potential source-pathway-receptor links exist between the LAP lands and the SPA. The SPA will not be impacted directly or indirectly

Special Areas of Conservation (SAC's) located within 15km of the site

Rogerstown Estuary SPA	14.7km	No potential source-pathway-receptor links exist between the LAP lands and the SAC. The SAC will not be impacted directly or indirectly
Malahide Estuary	12.25km	No potential source-pathway-receptor links exist between the LAP lands and the SAC. The SAC will not be impacted directly or indirectly
North Dublin Bay	12.3km	The Pinkeen river is a tributary of the Tolka river, which flows directly into North Dublin Bay. A Sustainable Drainage System (SuDS) as outlined in the Greater Dublin Strategic Drainage Study will be implemented in the LAP area.
South Dublin Bay	14.78km	No potential source-pathway-receptor links exist between the LAP lands and the SAC. The SAC will not be impacted directly or indirectly
Rye Water Valley/Carlton	9.6km	No potential source-pathway-receptor links exist between the LAP lands and the SAC. The SAC will not be impacted directly or indirectly

(Please refer to the map attached which shows the Kilmartin lands in relation to the Special Areas of Conservation and Special Protection Areas within a 15km radius.)

Relevant Development Plan Objective

Objective GI10: Require all Local Area Plans to protect, enhance, provide and manage of green infrastructure in an integrated and coherent manner addressing the five GI themes set out in the Development Plan – Biodiversity, Parks, Open Space and Recreation, Sustainable Water Management, Archaeological and Architectural Heritage, and Landscape.

4.5 Landscape

The LAP lands are primarily agricultural in nature. In terms of topography, the land is flat and largely featureless, containing a number of hedgerows with a number of individual trees, none of which are identified in the Development Plan for preservation. The Pinkeen river and a number of streams traverse the site. The land bank has a good orientation, the east-west configuration gives good exposure to southern sunlight. The site is crossed by overhead lines and pylons which have a significant negative visual impact.

The Development Plan classifies the county into 6 Landscape Character Types. Each landscape type is given a value through the consideration of such elements as aesthetics, ecology, historical, cultural, religious or mythological. The LAP lands are located within Landscape Character type 'Low Lying Character Type'. This character type has an open character combined with large field patterns, few tree belts and low roadside hedges. This low lying area is dominated by agriculture and a number of settlements. The area is characterised as having a modest value and a low sensitivity. Table LC01 from the Development Plan shows how this character type compares with the other landscape character types within Fingal in terms of character, value and sensitivity.

Table LC01: Landscape Character Assessment Summary – Character, Value and Sensitivity.

Landscape Character Types	Landscape Value	Landscape Sensitivity
Rolling Hills Type	Modest	Medium
High Lying Type	High	High
Low Lying Type	Modest	Low
Estuary Type	Exceptional	High
Coastal Type	Exceptional	High
River Valley and Canal Type	High	High

The use of existing vegetation on site has value in integrating future development into the existing landscape. Trees, hedgerows and townland boundaries will be preserved where it is desirable to do so.

Relevant Development Plan Objective

Objective OS31: *‘Ensure trees, hedgerows and other features which demarcate townland boundaries are preserved and incorporated into the design of developments.’*

4.6 Soil

The Geological Survey of Ireland (GSI) provides information available on bedrock and subsoil. The vast majority of the LAP lands have a ‘till derived chiefly from limestone’ subsoil. There is a small piece of land containing ‘bedrock outcrop and subcrop’ at the north-eastern tip of the LAP lands adjacent to the golf course.

4.7 Air & Climatic Factors

It is considered that any significant impacts on air and climatic factors would likely be in the short-term and associated with the construction phase of any future development. With regard to dust, it is envisaged that there will likely be an increase in dust activity during the construction phase of development that may impact on the sensitive receptors and the local flora and fauna. However these impacts are likely to be temporary and not likely to cause significant environmental effects. During the operational phase of the development, there will likely be a permanent increase in traffic volumes in the local area and an associated rise in vehicle emissions.

4.8 Material Assets

Transportation

Roads

The existing Road Network serving the Kilmartin area comprises:

R121 – The development lands are bisected by the R121. This road is the main road serving the Tyrrelstown residential development from Blanchardstown and it intersects the Ratoath Road at Hollystown.

Ratoath Road – This road is the main road link to Hollystown/Ratoath from Blanchardstown/city.

M2-N3 Link Road –The M2-N3 link road is currently under construction. This road will run through the middle of the Killamonan/Cherryhound LAP lands and will connect the Cherryhound intersection on the M2 (upgraded) with the North Blanchardstown area and on to the N3. This new road will form a strategic link road in the area.

Public Transport

In terms of public transport, Tyrrelstown is served by the no. 40D bus route which travels from Tyrrelstown to Parnell St in the city centre via Finglas (every 15 mins at peak time, 30 mins at

off-peak time). The no. 238 bus route travels from Tyrrelstown to Blanchardstown Town Centre via Mulhuddart (every hour). The Urbus (private) operates between Swords and Castleknock via Tyrrelstown Monday to Friday.

There will be increased traffic demands resulting from the scale of the proposed development. A Transportation Assessment will be carried out as part of the LAP process. Walking and cycling will be promoted as sustainable modes of transport within the LAP lands and between these lands and adjoining land uses.

Relevant Development Plan Objective

Objective T04

Promote walking and cycling as sustainable transport modes by securing the development of a network of safe cycle routes and footpaths, in urban and rural areas, both within new developments and on existing and new roads, on routes reserved exclusively for pedestrians and cyclists or as far as practical on routes effectively segregated from major vehicular carriageways. This network of routes shall provide connections between residential areas and recreational, educational and employment destinations. In addition, this objective will facilitate the development of a green network.

Noise

All of the LAP lands are located within the Outer Airport Noise Zone associated with Dublin Airport. A small strip of land in the northern section of the LAP lands lies within the Inner Airport Noise Zone.

Relevant Development Plan Objective

Objective EE51

Strictly control inappropriate development and require noise insulation where appropriate within the Outer Noise Zone, and actively resist new provision for residential development and other noise sensitive uses within the Inner Noise Zone, as shown on the Development Plan maps, while recognizing the housing needs of established families farming in the zone.

5.0 Next Stages of the SEA Process

5.1 Preparation of Environmental Report

As part of the preparation of the Local Area Plan for Kilmartin, Fingal County Council will prepare an Environmental Report of the likely significant effects on the environment of implementing the plan. The Environmental Report is required to include the information that may reasonably be required, taking into account -

- v) current knowledge and methods of assessment
- vi) the contents and level of detail in the Plan
- vii) the stage of the Plan in the decision making process and
- viii) the extent to which certain matters are more appropriately assessed at different levels in the decision-making process in order to avoid duplication of environmental assessment.

The Environmental Report will contain the information required by Article 5 and Annex 1 of the Directive, as follows:

- (a) an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes.
- (b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.
- (c) the environmental characteristics of areas likely to be significantly affected.

(d) any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.

(e) the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.

(f) the likely significant effects* on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.

*These effects should include secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects.

(g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.

(h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.

(i) a description of the measures envisaged concerning monitoring in accordance with Article 10.

(j) a non-technical summary of the information provided under the above headings.

5.2 Public Consultation

Consultation required under section 20 of the Planning and Development Acts 2000-2010 has commenced. A public newspaper notice dated 1st December 2011 advertised that Fingal County Council intend to prepare a Local Area Plan for the lands at Kilmartin. A Strategic Issues Paper was prepared in order to aid and inform the making of submissions. The public were invited to make submissions on the proposed Local Area Plan on or before Thurs 2nd February 2012. A copy of the advertisement and Issues Paper is included for your information. Further consultation will take place at each stage of the Local Area Plan process.

