

# PORTMARNOCK SOUTH Local Area Plan

JULY 2013





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**County Manager**

David O'Connor

**Director of Services**

Gilbert Power

**Senior Planner**

Rachel Kenny

**Senior Executive Planner**

Hazel Craigie

**Executive Planner**

Imelda Hickey



**SECTION 1: INTRODUCTION**

1.0	Introduction to the Local Area Plan	01
1.1	Why a new Local Area Plan?	01
1.2	Pre Draft Public Consultation - Portmarnock South Issues Paper	01
1.3	Assessments Associated with the LAP	02

**SECTION 2: POLICY AND STATUTORY CONTEXT**

2.0	Introduction	05
2.1	National Spatial Strategy, 2002 – 2020	05
2.2	Fingal Development Plan 2011-2017	06
2.3	Landscape Designations	09

**SECTION 3: LOCAL AREA PLAN CONTEXT**

3.1	Strategic Context of the LAP lands	11
3.2	New Developing Areas adjoining the LAP lands	12
3.3	The Plan Lands - Landscape Description	12
3.4	Landscape/Biodiversity/Ecological Value of the Plan Lands	14
3.5	Issues affecting the Local Area Plan Area	14

**SECTION 4: STRATEGIC VISION AND AIMS OF THE LAP**

4.1	Strategic Vision	17
4.2	Development Strategy Overview	17
4.3	Strategic Aims of the LAP	17
4.4	Achieving the Vision and Strategic Aims for the Portmarnock South LAP lands	18

**SECTION 5: GREEN INFRASTRUCTURE**

5.0	Green Infrastructure	19
5.1	Green Infrastructure and Landscape Strategy	19
5.2	Biodiversity Conservation and Extension of the Biodiversity Network	20
5.3	Landscape	22
5.4	Archaeology and Built Heritage	25
5.5	Open Space and Recreation	26
5.6	Sustainable Urban Drainage (SuDs)	30
5.7	Public Lighting within the Landscape	31

**SECTION 6: MOVEMENT AND TRANSPORT**

6.0	Movement and Transport Strategy	33
6.1	Public Transport - Rail	32
6.2	Traffic Impact Assessment	34
6.3	Proposed Road Improvements: Fingal Development Plan 2011-2017	35
6.4	Internal Street and Movement Network	35
6.5	Parking Provision	38
6.6	Bicycle Storage	38
6.7	Mobility Management	39

**SECTION 7: URBAN DESIGN**

7.0	Urban Design Framework	41
7.1	Urban Design Principles	41
7.2	Character Areas	43
7.3	Urban Form	43

7.4	Building Heights	44
7.5	Edges	44
7.6	Design - Architectural Expression	45
7.7	Housing Mix	45
7.8	Social & Affordable Housing	45
7.9	Urban Design Appraisal	45

**SECTION 8: COMMUNITY, SOCIAL, EMPLOYMENT AND TOURISM INFRASTRUCTURE**

8.1	Community Facilities	47
8.2	Educational/Childcare Facilities	47
8.3	Sports & Leisure/Recreation	47
8.4	New Local Centre	48
8.5	Local Employment	48
8.6	Tourism Infrastructure	48
8.7	The Fingal Coastal Way - Essential Tourism Infrastructure	48
8.8	Tourism and Leisure within the Plan Area	49

**SECTION 9: INFRASTRUCTURE AND SERVICES**

9.0	Infrastructure and Services	51
9.1	Water Supply Source and Network	51
9.2	Wastewater Network and Treatment	51
9.3	Surface Water Management	52
9.4	Flood Risk Management	53
9.5	Water Quality	53
9.6	Groundwater Vulnerability and Protection	54
9.7	Utilities - Electricity Supply	54
9.8	Waste Management	54
9.9	Construction Haul Route	55
9.10	Coordination of Infrastructure	55

**SECTION 10: SUSTAINABLE DEVELOPMENT FRAMEWORK**

10.0	Introduction	57
10.1	Climate Change	57
10.2	Sustainability and the LAP	57
10.3	Sustainability in Design	57

**SECTION 11: PHASING AND IMPLEMENTATION**

11.0	Introduction	59
11.1	Sequencing of Development	59
11.2	Timeframes for Delivery	59
11.3	Phasing and Implementation – Linking development to Infrastructure	59
11.4	Undeveloped and Interfacing Areas of the Plan Lands	60
11.5	Fundamental Requirements to Enable Development within the Plan lands	60
11.6	Social, Environmental and Physical Infrastructural requirements for each phase of the development	61

**Appendices**

Appendix 1 – SuDs Strategy
Appendix 2- Flood Risk Assessment

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Senior Parks Superintendent – Mr. Kevin Halpenny
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Front Cover Blacktailed Godwit – Courtesy of Clive Timmons



## Introduction

### 1.0 Introduction to the Local Area Plan

Fingal County Council has prepared this Local Area Plan (LAP) for lands at Portmarnock South. The new LAP sets its new residential community within a wider landscape and environmental context and provides a framework for the proper planning and sustainable development of the Portmarnock South Plan lands. This will facilitate the delivery of targets for housing in key locations, particularly those with links to public transport, set out in the core strategy of the Fingal Development Plan 2011-2017. The plan lands are c. 86 hectares in area and the local area plan has been prepared in accordance with the relevant policies and objectives of the Fingal Development Plan 2011-2017.

The local area plan will be in effect for a period of 6 years following its adoption, unless otherwise extended, as provided for under Section 12 of the Planning and Development (Amendment) Act 2010.

### 1.1 Why a new Local Area Plan?

Work done in respect of the 2006 LAP, subsequent Masterplan and previous permission is acknowledged and has informed this LAP. However, since the publication of the 2006 LAP, there is now a greater emphasis on the protection of the environment and biodiversity, green infrastructure, high quality sustainable design and services, which largely stem from recent EU directives and associated changes in Irish planning and environmental legislation. The recently published *Draft LAP Guidelines for Planning Authorities (June 2012)* acknowledge that local area plans have in the past often been dominated by engineering or architectural design solutions, which have unduly dictated the resulting urban environment. Respecting the uniqueness and sensitivity of plan areas and responding to new environmental and green infrastructure considerations, needs to be an equal consideration in LAP design philosophy. Local Area Plans present an opportunity to implement in a real and meaningful way the Council's overriding policies and objectives relating to sustainability, environmental protection, green infrastructure, climate change mitigation and adaptation, social inclusion and high quality design to ensure the proper planning and sustainable development of the area.

This LAP presents an opportunity to provide an updated strategy as to how the Portmarnock South Local Area Plan lands should be developed in line with current planning and environmental policy at national, regional and local level and best practice in sustainable development. Giving practical meaning and implementation of the Fingal Development Plan 2011-2017, its location along a public transport corridor in the form of the Dublin-Belfast rail line, and the associated railway station adjacent to the plan lands, the LAP provides for the opportunity to ensure integrated transport and land use planning in line with government policy reflected in the document Smarter Travel.

### 1.2 Pre Draft Public Consultation - Portmarnock South Issues Paper

During December 2011 and February 2012, the Planning Department invited pre-draft submissions and observations to begin the LAP process. The Portmarnock South Issues Paper was published to assist the public in making a submission.

This paper set out what the Council considered to be the main development issues facing the Portmarnock South development lands and invited the local community and various stakeholders to submit their views regarding which planning and development matters should be included in the new plan for the area. A total of 15 submissions were received. The following are the main issues raised in the submissions from the community and other stakeholders.

- Protect designated conservation sites, ecological corridors and the coastal/seascape landscape character of the area.
- Incorporate green infrastructure proposals in line with current County Development Plan policy.
- Promote sustainable forms of design incorporating green design techniques, energy efficient buildings, water conservation techniques, optimum use of public transport and universal open access to support telecommunications, broadband and digital.
- Promote a range of unit types, layouts and designs.
- Prepare a Masterplan promoting best practice in sustainability and design solutions.
- Integrate new and established communities.
- Improve connections between Portmarnock, Baldoyle-Stapolin and Clongriffin through the provision of pedestrian/cycle routes.
- Facilitate a coastal walking/cycling route.
- Encourage new commercial/business start-ups, tourism/leisure activities and local service provision.
- Promote a bus service through the plan lands.
- Adhere to airport safety and noise restrictions.
- Front load necessary infrastructure.
- Phase development with emphasis on a sequential approach to development.
- Retain the overarching structure of the previous Masterplan for the lands and consolidation into the new LAP while modifying house types/layouts including the omission of apartments.
- Conduct Appropriate Assessment (AA), Strategic Environmental Assessment (SEA), Flood Risk Assessment and Archaeological Assessment.

### 1.3 Assessments Associated with the LAP

A number of assessments were carried out and informed the preparation of the Draft LAP.

#### 1.3.1 Strategic Environmental Assessment

Strategic Environmental Assessment (SEA), as required under the Planning and Development [Strategic Environmental Assessment] Regulations 2004, was carried out as part of the preparation of this plan. SEA is an iterative process and has informed and guided the preparation of the objectives, policies and development alternatives for the Draft Portmarnock South Local Area Plan with the aim of achieving sustainable development in the area without causing harm to the environment. The resulting Environmental Report (SEA) has been published as a separate document in conjunction with this LAP.



#### 1.3.2 Appropriate Assessment

An Appropriate Assessment (AA) as required under Article 6[3] of the EU Habitats Directive 92/43/EEC was conducted as part of the preparation of the LAP and has had particular regard to the proximity of Baldoyle Bay [Natura 2000 site], the River Mayne and the Sluice River Marsh to the LAP lands. The Competent Authority (Fingal County Council in this instance) cannot adopt a plan unless it determines that the provisions of the plan are not likely to have a significant effect on any Natura 2000 site. It is a requirement of the Habitats Directive that mitigation measures or measures proposed to avoid impacts on Natura 2000 sites be incorporated into the Draft Portmarnock South Local Area Plan before finalisation. The Appropriate Assessment informs the objectives of the LAP. The drafting of the LAP is an iterative process between the Appropriate Assessment, the SEA and the plan itself. A Natura Impact Report (AA) has been published as a separate document in conjunction with this LAP.

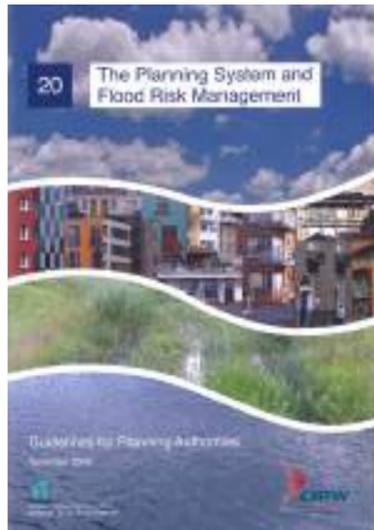
Figure 1.0 Aerial View of Plan Lands and Environs





### 1.3.3 Flood Risk Assessment

A Strategic Flood Risk Assessment was undertaken for the plan area having regard to the Department of the Environment, Community and Local Government and OPW issued guidelines to identify flood risk areas together with mitigation measures to be implemented. Mitigation measures include the SuDS strategy outlined below. Flood Risk Assessment was integrated into the SEA process [See Section 9.4 Flood Risk Management and Appendix 2.].



### 1.3.4 Sustainable Water Management – Sustainable Urban Drainage Systems [SuDS]

Surface water drainage is required to incorporate Sustainable Urban Drainage Systems [SuDS], which will restrict the surface water run-off to greenfield rates. Accompanying this LAP is a SuDS Strategy which gives advice and best practice examples of SuDS design and provides a valuable design resource for development within the plan area [See Section 9.3 Surface Water Management and Appendix 1].

### 1.3.5 Traffic Impact Assessment and Transportation Strategy

A Traffic Impact Assessment was carried out on behalf of the Council to determine the likely traffic implications of the cumulative impact of proposed developments at Portmarnock South, Baldoyle/Stapolin and the Clongriffin/Belmayne North Fringe area within the Dublin City Council administrative area. The assessment includes suggested phasing of road infrastructure proposals to serve the plan lands [See Section 6 Movement and Transport].

### 1.3.6 Green Infrastructure and Landscape Strategy

A fundamental challenge in the preparation of the Portmarnock South LAP is to achieve a balance between competing demands. On the one hand, the need to develop a new high quality urban residential environment, while on the other hand the need to protect and enhance the existing biodiversity features of the plan lands, maintaining the integrity of Baldoyle Bay, a Natura site, and compliance with the green infrastructure and open space objectives of the Fingal Development Plan.

Green Infrastructure (GI) is the network of green spaces and natural elements that intersperse and connect our cities and towns. It is the open spaces, waterways, gardens, woodlands, green corridors, wildlife habitats, natural heritage and open countryside. The emergence of green infrastructure planning is a response to the growing recognition of the many benefits which natural amenities and green spaces provide to society and the need to plan for its protection, provision and management.

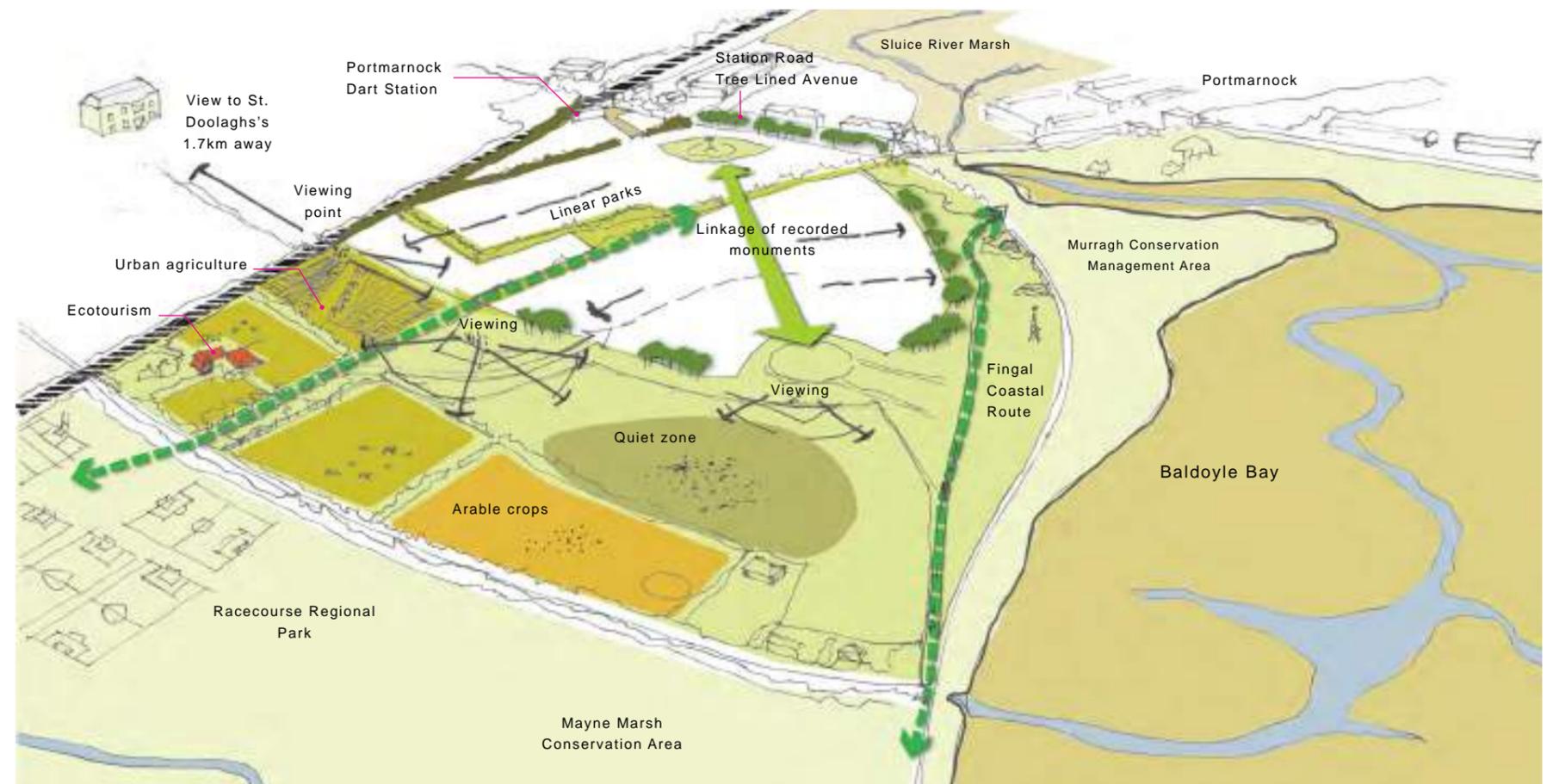
Green infrastructure planning is crucial to meet the growing demands of environmental legislation and directives that relate to water quality, flooding, habitats, birds, Strategic Environmental Assessment, Appropriate Assessment and environmental liability. Importantly, GI provides an opportunity to ensure that our natural amenities and open spaces are provided, protected and managed in tandem with plans for growth and development. The Fingal Development Plan 2011-2017 is explicit in its commitment to the advancement of green infrastructure networks throughout the county. Green Infrastructure incorporates five themes for which there are a number of specific objectives as set out in the Development Plan.

The five themes are as follows:

- Landscape
- Biodiversity
- Open Space and Recreation
- Archaeological and Built Heritage
- Sustainable Water Management

A Green Infrastructure and Landscape Strategy was prepared and has informed the making of this draft LAP. This is considered the appropriate sustainable approach to meet the challenge of competing demands. The Green Infrastructure and Landscape Strategy devised for the Portmarnock South LAP lands allows for the absorption of up to 1200 residential units on these lands whilst protecting the essence of the existing landscape and fulfilling the green infrastructure objectives of the Fingal Development Plan [See Section 5 Green Infrastructure] Consultation with the National Parks and Wildlife Service was ongoing during the preparation of this strategy.

Figure 1.1 Green Infrastructure Concepts





## Policy and Statutory Context

### 2.0 Introduction

This LAP is guided by EU Directives, the National Spatial Strategy, Regional Planning Guidelines, the National Transport Authority's [NTA] Draft Transport Strategy 2011 - 2030, the Department of Transport's Smarter Travel, and by the Fingal Development Plan 2011-2017 and various Government policy documents and guidelines.

### 2.1 National Spatial Strategy, 2002 – 2020

The National Spatial Strategy [NSS] is a 20 year planning framework designed to achieve a better balance of social, economic, and physical development and population growth between the regions in Ireland. This strategy will remain current until any superseding document is published. The NSS emphasises the importance, particularly in urban areas, of combining the location of housing with good transport facilities and the need to ensure that housing requirements are matched by zoned and serviced land. In order to promote sustainable development and allow for the public transport system to function more effectively as promoted by the NSS, it is essential to consolidate the physical growth of Fingal. Within the county, this can be achieved through the development of zoned residential and commercial lands, in particular where they are in close proximity to public transport routes. The development of lands adjoining high quality public transport links is particularly relevant in the context of the Portmarnock South LAP where the lands adjoin a suburban/inter-region rail and dart line.

#### 2.1.1 Regional Planning Guidelines for the Greater Dublin Area 2010 – 2022

The Regional Planning Guidelines for the Greater Dublin Area (GDA) provide a strategic planning framework for the development of the Dublin and mid-east regions. These guidelines distinguish the Metropolitan area from the Hinterland area with distinct development strategies for each area. The settlement strategy for the GDA is focused on achieving the key vision for the region which seeks to achieve the potential of the GDA as an international gateway, consolidated and sustainable cities and towns, supporting high quality public transport and increased opportunities for walking and cycling and green infrastructure networks.

The Portmarnock South LAP lands are within the Metropolitan area of the GDA where the key objectives are; i) consolidation of the urban centres; ii) development of brownfield sites especially along transport corridors; iii) delivery of well designed urban environments enhancing the quality of life; iv) provision and facilitation of an integrated public transport system. This is, in part, to be achieved through integrated land use and transport planning involving consolidation and increased densities along transport nodes within the existing built footprint of the city, its suburbs and towns within the Metropolitan Area.

#### 2.1.2 Greater Dublin Area Draft Transport Strategy 2011-2030

This document sets out the National Transport Authority's Strategic Transport Plan for the Greater Dublin Area for the period up to 2030. The strategy's role is to establish appropriate policies and transport measures that will support the

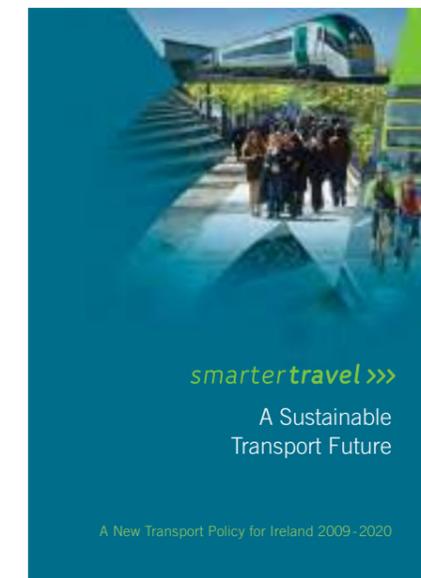
Greater Dublin Area in meeting its potential, as a competitive, sustainable city region with a good quality of life for all. The five overarching objectives for the strategy to support this vision are:

- Objective 1:** Build and strengthen communities.
- Objective 2:** Improve economic competitiveness.
- Objective 3:** Improve the built environment.
- Objective 4:** Respect and sustain the natural environment.
- Objective 5:** Reduce personal stress.

The NTA Strategy recognises the spatial hierarchy or urban centres within the region, recognising the primacy of Dublin City as the gateway core at the top followed by designated towns and designated district centres. The strategy provides a set of measures that local area plans should incorporate to meet the strategy objectives for Designated Districts. These are set out in Measure LU2 which includes provision of local services, permeable walking/cycling routes, mixed dwelling types and development close to public transport routes.

#### 2.1.3 Smarter Travel, A Sustainable Transport Future 2009-2020

This document seeks to promote sustainable development, by reducing emissions, through the promotion of cycling, walking and sharing car journeys. The LAP is consistent with the objectives of the NTA Transport Strategy and Smarter Travel in terms of promoting development adjoining a high quality public transport line, linked walking and cycling routes, green connected networks at a local and strategic level and proposals for increased public bus services.



#### 2.1.3(i) National Cycle Manual 2011

The National Transport Authority's *National Cycle Manual* embraces the principles of sustainable safety offering a safer traffic environment for cyclists. It offers guidance on integrating the bike in the design of urban areas. The Manual supports the objectives of the Department of Transport's Smarter Travel document and National Cycle Policy Framework.

### 2.1.4 Sustainable Residential Development in Urban Areas - Guidelines for Planning Authorities 2008 and Best Practice Urban Design Manual [DoECLG 2009]

The guidelines are focused on creating sustainable communities by incorporating the highest design standards and providing a coordinated approach to the delivery of essential infrastructure and services for residential development. The Urban Design Manual illustrates the 12 urban design principles that can be translated into practice by planners and developers. The design guide provides examples of good practice for varying locations, from brownfield sites to small infill sites.

### 2.1.5 Delivering Homes, Sustaining Communities and Quality Housing for Sustainable Communities [DoECLG 2007]

*Delivering Homes, Sustaining Communities* sets out a range of actions aimed primarily at building sustainable communities and responding effectively to housing need as well as more effective delivery of housing programmes. The guidelines identify the principles and criteria that are important in the design of housing.

*Quality Housing for Sustainable Communities* assists in the implementation of the policies set out in the document *Delivering Homes, Sustaining Communities* and makes practical recommendations on more specific design issues, such as layout and orientation of new homes through to more detailed design elements. This LAP reflects and responds to the design principles set in the guidance documents relating to sustainable residential development and communities.



### 2.1.6 Retail Strategy for the Greater Dublin Area 2008-2016

The Greater Dublin Area Retail Strategy sets out a co-ordinated and sustainable approach to the assessment and provision of retailing within the Greater Dublin Area. By setting out a strategic framework for retailing, the strategy seeks to give guidance on where future retail should be provided and what issues need to be addressed. To this end, the strategy proposes a retail hierarchy as a core spatial policy around which future growth, rejuvenation and expansion in the retail sector needs to be focused. The strategy also states that where large areas of

new housing are planned that new retail centres are provided to meet the regular shopping needs of new communities. The Retail Strategy for Fingal is set within the context of the Retail Strategy for the Greater Dublin Area. Portmarnock is identified as a Level 4 Centre - Neighbourhood Centres, Local Centres-Small Towns and Villages. Portmarnock South is considered a Level 5 category within the Fingal Retail Hierarchy - 'Local Shops/Small Villages'. A small centre is proposed within the plan lands to serve the new community in accordance with the requirements of the Level 5 category 'Local Shops/Small Villages' of the Fingal Retail Hierarchy.

### 2.1.7 The National Climate Change Strategy 2007-2012 and National Climate Change Adaptation Framework 2012

The National Climate Change Strategy builds on Ireland's first Climate Change Strategy and its purpose is to show clearly the measures by which Ireland will meet its 2008-2012 Kyoto Protocol commitment, to show how these measures position us for the post-2012 period, and to identify the areas in which further measures are being researched and developed to enable us to meet our 2020 commitment.

The National Climate Change Adaptation Framework provides a policy context for a strategic national adaptation response to climate change in Ireland. The framework recognises the role that spatial planning has to play in adaptation, in particular, by ensuring more compact and less energy intensive forms of urban development which embrace both mitigation and adaptation measures.

The Fingal Development Plan contains provisions dealing with climate change mitigation and adaptation in areas such as flood risk management, transportation, surface water, waste management, water services, energy, design, natural heritage and green infrastructure. The LAP includes objectives in relation to the integration of land use and transportation, the management of water supply and waste water drainage, surface water and flood risk management, energy efficiency through design and layout and a green infrastructure strategy.

### 2.1.8 National Action Plan Social Inclusion 2007-2016

The Council is committed to developing a more socially inclusive society and promoting participation and access for all. The National Development Plan 2007-2013, the National Anti-Poverty Strategy 1997, Building An Inclusive Society 2002, the National Action Plan Social Inclusion 2007-2016 and Towards 2016 are the national documents informing the development of a socially inclusive Fingal. A profile of poverty and social exclusion in Fingal has been developed by the Social Inclusion Unit (SIU). This LAP seeks to develop cohesive, integrated and socially inclusive neighbourhoods.

### 2.2 Fingal Development Plan 2011-2017

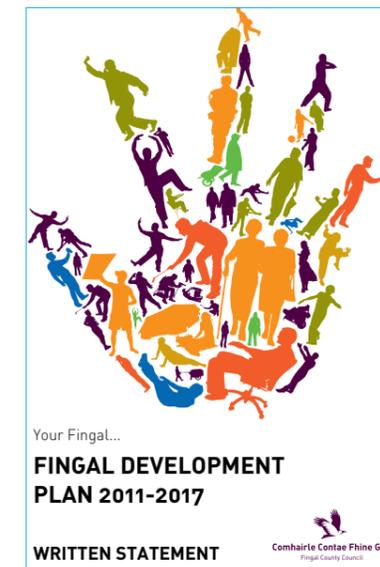
The Fingal Development Plan 2011-2017 is the statutory land-use framework for the county. For contextual purposes of the LAP, Development Plan land use zonings and objectives are outlined hereunder where directly related to the geographic area of the plan lands.

### 2.2.1 Fingal Development Plan Core Strategy

The 2000-2011 Planning and Development Act requires all County Development Plans to set out a Core Strategy indicating how the County's population allocation is consistent with the Regional Planning Guidelines [RPG's]. The core strategy within the Fingal Development Plan provides information on housing/settlement allocations based on the settlement strategy and targets set out in the Regional Planning Guidelines and the National Spatial Strategy. It also provides a policy framework for Local Area Plans. The total number of units allocated for the Portmarnock South LAP area c.1200 units is fully consistent with the Core Strategy of the Fingal Development Plan and the RPGs 2010-2022.

### 2.2.2 Development Strategy for Portmarnock

The Development Strategy for Portmarnock as set out in the Fingal Development Plan is to consolidate, define and enhance the existing urban form and retain amenities in line with the Urban Centre Strategy for Portmarnock (2009). The long-term development area for Portmarnock is based on the existing development area. It is intended to encourage more intensive commercial development, to provide good linkages to lands at Portmarnock South adjacent to the rail line, and to rejuvenate the existing village core. The Urban Centre Strategy [UCS] for Portmarnock 2009 specifically aims to provide guidance on the development of the key urban spaces in the village core of Portmarnock, to promote change and rejuvenation, and to ultimately provide a vital and viable village centre that can support and nurture the social life in Portmarnock. The design strategy for this LAP will have regard to the UCS for Portmarnock and specifically to the proposals for enhanced pedestrian/cycle connections to the Portmarnock train station via Station Road.



### 2.2.3 Fingal Development Plan Objectives for Portmarnock

The six development objectives set out for Portmarnock in the current Fingal Development Plan are as follows:

**Objective PORTMARNOCK 1**

Develop Portmarnock as a centre providing services for both the residential population and for tourists.

**Objective PORTMARNOCK 2**

Implement the Portmarnock Urban Centre Strategy including the design guidelines for Portmarnock's urban centre.

**Objective PORTMARNOCK 3**

Preserve the identity of the town by securing its physical separation from Malahide by Greenbelts.

**Objective PORTMARNOCK 4**

Improve the physical character and environment of the area so that it can act as a service, social, recreational and tourist centre.

**Objective PORTMARNOCK 5**

Carry out an environmental improvement scheme in the village.

**Objective PORTMARNOCK 6**

Protect and manage the flood plain of the Sluice River to the south of Portmarnock and ensure that its integrity as a natural habitat is maintained.

### 2.2.4 Land Use Zoning Objectives Relating to Portmarnock South

The land use zoning objectives for the plan lands are as follows:

**Objective RA** [40.36 ha]: 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 remaining lands, adjoining the 'RA' zoned area and within the LAP boundary, are governed by the following zoning objectives:

**Objective OS** [32ha]: Preserve and provide for open space and recreational amenities.

**Objective HA** [12 ha]: Protect and enhance high amenity areas.

**Objective RC** [1 ha]: Provide for small scale infill development serving local needs while maintaining the rural nature of the cluster.

**Objective RS** [0.4ha]: Provide for residential development and protect and improve residential amenity.

### 2.2.5 Local Objectives relating to the Plan Lands

The following Development Plan map based local objectives relate to the plan lands:

- 402: Promote an enhanced rail station and improved rail service, together with the provision of a local feeder bus service.
- 408: Density shall be in accordance with (draft) public safety zones recommended by the Government.
- 410: Develop an estuary walkway and cycleways from Mayne Bridge, Baldoyle Road to Strand Road, Portmarnock together with an adequate system of public lighting for the entire route from Baldoyle to Portmarnock.
- 422: Create a full pathway from Howth to Malahide through the construction of a pathway from the River Mayne Bridge to the Portmarnock Roundabout.
- 427: Place signage and information boards along this coastal pathway at pivotal locations.
- 429: Only development relating to recreational activities to be permitted in the OS zoning between Portmarnock and Baldoyle.
- 435: Facilitate extra housing on Station Road, Drumnigh Road and Old Portmarnock to link into the main drainage scheme.
- 460: In co-operation with relevant national agencies, to draw up a plan for improving the water quality of Baldoyle Estuary in conjunction with the Eastern River Basin Management System.

### 2.2.6 Strategic Objectives relating to the Plan Lands

The Fingal Development Plan includes a number of objectives of a strategic nature which are applicable to the plan lands.

#### Fingal Coastal Way

A coastal walk is a long standing objective of the Council. The Fingal Development Plan 2011-2017 fully supports the development of a Fingal Coastal Way, a strategic walking and cycling route from Howth to north of Balbriggan. This LAP will seek the provision of a section of this strategic route on the eastern edge of the plan lands [Section 5.5.4 refers in more detail].

#### Additional Rail Tracks

It is an objective of the Development Plan that lands shall be reserved to provide for additional rail tracks along public transport corridors. This LAP shall provide for a reservation along the Dublin- Belfast rail-line to accommodate future rail infrastructure where required.

### Greater Dublin Drainage Scheme and Proposed Outfall Pipeline Corridor

The Fingal Development Plan 2011-2017 is fully committed to the development of a Regional Wastewater Treatment Facility to serve the Greater Dublin Area. The report 'Alternative Sites Assessment and Route Selection Report (Phase 4): Final Preferred Site and Routes' has identified Clonshaugh as the preferred site for a Regional Wastewater Treatment Plant and includes proposals for a 26 km pipeline and a 6 km marine outfall. The outfall pipe relating to the Clonshaugh site will be undergrounded within the open space lands within the LAP area. See [www.greaterdublindrainage.ie](http://www.greaterdublindrainage.ie) for more information. This preferred "site option" however, will be subject to a full Environmental Impact Statement and Appropriate Assessment.

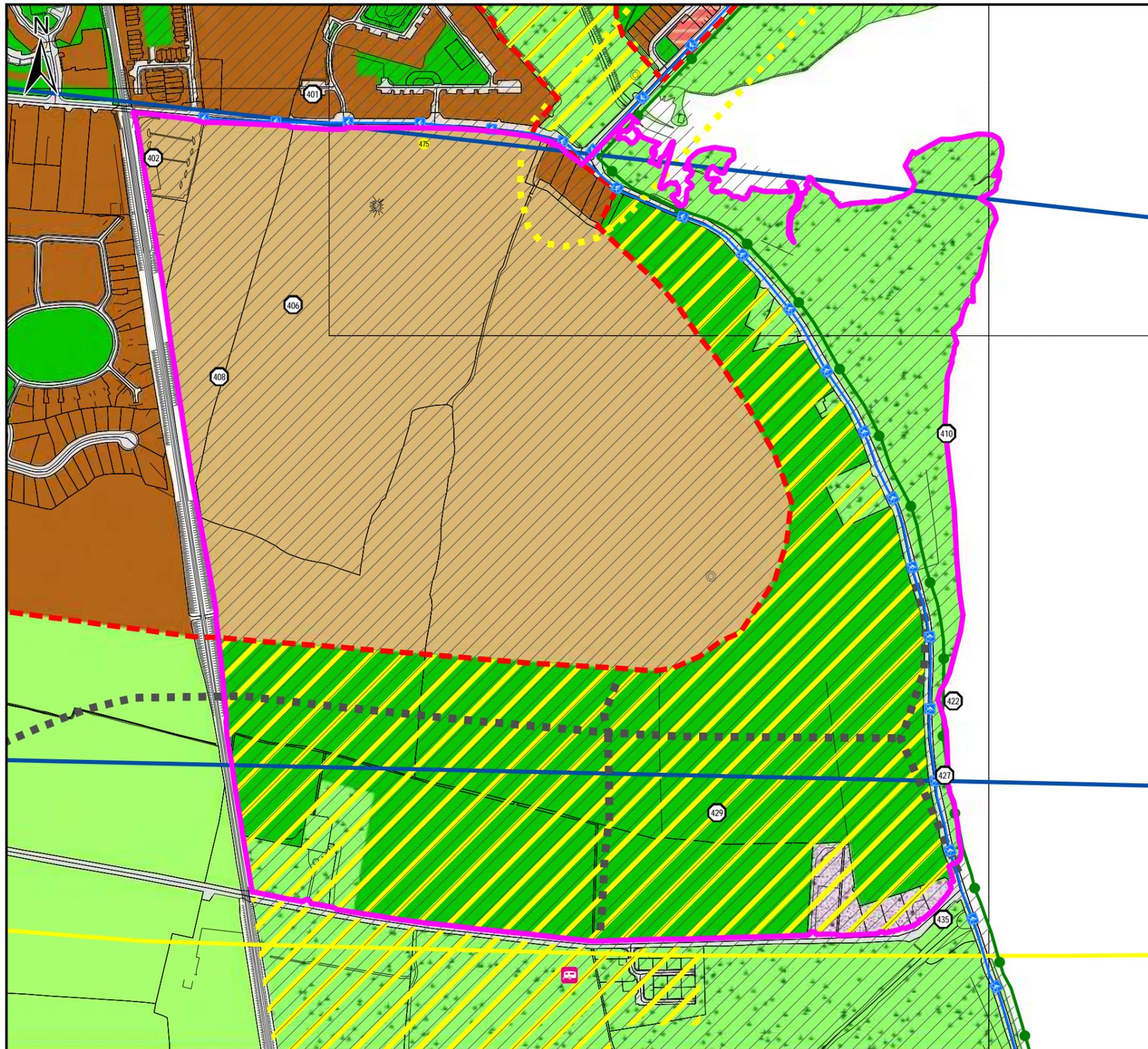
### Airport Safety and Noise Zones

The majority of the plan lands are within the outer public safety zone and the outer noise zones for Dublin Airport as detailed in the Development Plan where density, land-use and noise restrictions apply. Densities are limited by the outer public safety zone requirement that 'no single half hectare plot should accommodate more than 60 persons' [Environmental Resources Management (ERM) Report, Proposed Public Safety Zones for Dublin Airport dated February 2005 refers]. The lands are also within the Outer Airport Noise Zone where noise insulation is required. An active airport communications beacon is located within the open space lands on the south/eastern section of the plan lands adjoining the coast road.

### Portmarnock Local Area Plan 2006

The existing LAP for Portmarnock was adopted in 2006 and a subsequent Masterplan prepared in 2007, on foot of which planning permission was granted in 2007 for 684 residential units, made up of 413 houses ranging in size from 3 to 5-bedroom, 271 apartments in buildings ranging between 3 and 4 storeys in height and a 3-storey neighbourhood centre with a ground floor retail element of 455 sq.m. gross in 3 units with apartments over and associated parking [Phase 1] under Planning Reference Register F07A/0947. The 2006 LAP had a six year lifespan and has now lapsed. As a result of the downturn in the economy, the subject lands have remained undeveloped. In the intervening years since the previous LAP and associated Masterplan and subsequent planning application, a considerable volume of planning and environmental policy guidance documents at national, regional and local level [Fingal Development Plan 2011-2017] have been published. This is reflected in various new DOE guidelines and best practise manuals published since the previous LAP. This LAP provides an opportunity to update the planning authority's guidance for new proposals in the context of current planning and environmental policy.

Figure 2.0 Fingal Development Plan 2011 - 2017 Extract



### Fingal Development Plan Extract

**Legend**

- Local Area Plan Lands
- Objective GB**  
Protect and provide for a Greenbelt
- Objective HA**  
Protect and enhance high amenity areas
- Objective OS**  
Preserve and provide for open space and recreational amenities
- 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 RC**  
Provide for small scale infill development serving local needs while maintaining the rural nature of the cluster
- Objective RS**  
Provide for residential development and protect and improve residential amenity
- Objective TC**  
Protect and enhance the special physical and social character of town and district centres and provide and/or improve urban facilities
- Highly Sensitive Landscape
- Ecological Buffer Zone
- Urban Centre Strategy/Study Area
- Outer Airport Noise Zone
- Outer Public Safety Zone
- Indicative Cycle/Pedestrian Route
- Development Boundary
- Road Proposal
- Preserve Views
- Local Objective [\(See Section 2.2.5 of LAP\)](#)
- Protected Structure
- Recorded Monument
- Traveller Accommodation

**2.3 Landscape Designations**

The Fingal coastline is the county’s most important wildlife resource with most of the protected sites and protected wildlife species found along Fingal’s shores. In addition, significant portions of the coastline are visually sensitive as evidenced by many protected views and prospects, high amenity zonings and high sensitive landscape designations.

**2.3.1 Core Conservation Sites - Baldoyle Bay**

Baldoyle Bay which is among one of the most important estuaries in the county bounds the LAP lands to the east and is designated a Special Area of Conservation [SAC] and Special Protection Area [SPA] under the EU Habitats Directive and Birds Directive and forms part of the European wide Natura 2000 network. Baldoyle Bay is selected for designation because of its mudflat and saltmarsh habitats and the abundance of migratory waterfowl/wader bird species that occupy the site in wintertime. The estuary is internationally important for its Light-bellied Brent Geese and nationally important for a further 5 species. The estuary is also a designated Ramsar Conservation Wetland. A portion of the LAP lands, the ‘Murragh Spit’, zoned High Amenity and located east of Coast Road, is within Baldoyle SAC and SPA. Conservation objectives for Baldoyle Bay SAC were published by the NPWS in November 2012 and the qualifying interests for the site are set out in Table 2.0. The overarching objective for the SAC is to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected. The special conservation interests for the SPA are set out in Table 2.1.

Baldoyle Bay with view of Portmarnock South LAP lands looking westwards

**Table 2.0 Qualifying Interests for Baldoyle Bay SAC**

000199	Baldoyle Bay SAC
1140	Mudflats and sandflats not covered by seawater at low tide
1310	Salicornia and other annuals colonising mud and sand
1330	Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritima</i> )
1410	Mediterranean salt meadows ( <i>Juncetalia maritima</i> )

*Baldoyle Bay with view of plan lands to the west*



**Table 2.1 Baldoyle Bay, SPA - Special Conservation Interests**

Bird Species	
Scientific Name	Common Name
<i>Branta bernicla hrota</i>	Light-bellied Brent Goose
<i>Tadorna tadorna</i>	Shelduck
<i>Charadrius hiaticula</i>	Ringed Plover
<i>Pluvialis apricaria</i>	Golden Plover
<i>Pluvialis squatarola</i>	Grey Plover
<i>Limosa lapponica</i>	Bar-tailed Godwit

**Wetland and Waterbirds**  
In establishing their Special Protection Area network, Member States are explicitly required under Article 4 of the Directive to pay attention to the protection of wetlands. To this end the wetland habitat that is contained within this Special Protection Area and the waterbirds that utilise this resource are therefore listed as a special conservation interest for this site. This special conservation interest is listed as “Wetland and Waterbirds”.

Source: S.I.275 of 2010, European Communities (Conservation of Wild Birds (Baldoyle Bay Special Protection Area 004016)) Regulations 2010, Schedule 3

Nationally, Baldoyle Bay is a proposed Natural Heritage Area and a statutory Nature Reserve and Wildfowl Sanctuary.

In formulating objectives for the LAP, the Council must comply with the EU Habitats and Birds Directives and national environmental legislation. The LAP seeks to ensure that there will be no adverse impacts from the implementation

of the plan on the integrity of this Natura 2000 site. A Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) was carried out in tandem with the preparation of this LAP. The Environmental Report and Natura Impact Report arising from these processes accompany this document and set out more detailed information in relation to the natural heritage and biodiversity in and around the LAP lands.

**2.3.2 Adjacent Wetlands**

The Sluice River Marsh, a proposed Natural Heritage Area [pNHA] is located further to the north of the plan lands. The Mayne Marsh Nature Conservation Area based on the River Mayne located to the south of the plan lands within the planned Racecourse Park forms part of the Baldoyle Bay SAC. Both these rivers flow into Baldoyle Bay. These rivers and wetlands support a diverse range of wetland plants and animals. The Sluice River represents a regionally important salmonid system. The Fingal Development Plan and the Fingal Biodiversity Plan is fully committed to the protection of plant, birds and fauna associated with these marsh wetlands. Objectives of the Fingal Development Plan seek to ‘protect the integrity of proposed Natural Heritage Areas [pNHAs], Natural Heritage Areas [NHAs], Statutory Nature Reserves, Refuges for Fauna and Annex I Habitats’.

The Fingal Biodiversity Plan 2010-2015 seeks the preparation of a masterplan for a linear park along the Mayne River between Fingal and Dublin City Council that will combine recreational and nature conservation requirements, in such a way that allows both functions to be developed to their full potential. The creation of a linear park is an important environmental/recreational project for both Council’s to co-ordinate and deliver through the Clongriffin/Belmayne North Fringe LAP and the Baldoyle/Stapolin LAP within Fingal. The Fingal Biodiversity Plan also seeks to protect and manage the Sluice River Marsh and its surrounding lands for protected plant species and migratory birds.

*Brent Geese in Daisy*

*Courtesy of Clive Timmons*



### 2.3.3 Ecological Buffer Zone

The open space and high amenity lands within the plan area form an ecological buffer zone as designated in the Fingal Development Plan. [See Figure 2.0 Fingal Development Plan Extract] This buffer zone also extends into Racecourse Park to the south of the plan lands within the Baldoyle-Stapolin LAP area. The purpose of the buffer zone is to protect the integrity of the nationally and internationally designated sites, [Baldoyle Bay in this case] by providing suitable habitat for key species such as birds and providing for compatible land-uses around the designated sites.

Objective BD19 of the Fingal Development Plan 2011-2017 seeks to, ‘protect the functions of the ecological buffer zones and ensure proposals for development have no significant adverse impact on the habitats and species of interest located therein.’ The Fingal Biodiversity Action Plan 2010-2015 recognises the importance of the buffer zone around the estuaries. These areas will be developed as multi-functional landscapes where agricultural land-use is maintained and, where appropriate, combined with nature conservation targets and low intensity recreational use. Intensive recreational uses are not considered appropriate within the ecological buffer zones. This LAP provides the opportunity to determine the most appropriate nature conservation and recreational uses within this strategic buffer zone in the context of its relationship with Baldoyle Bay.

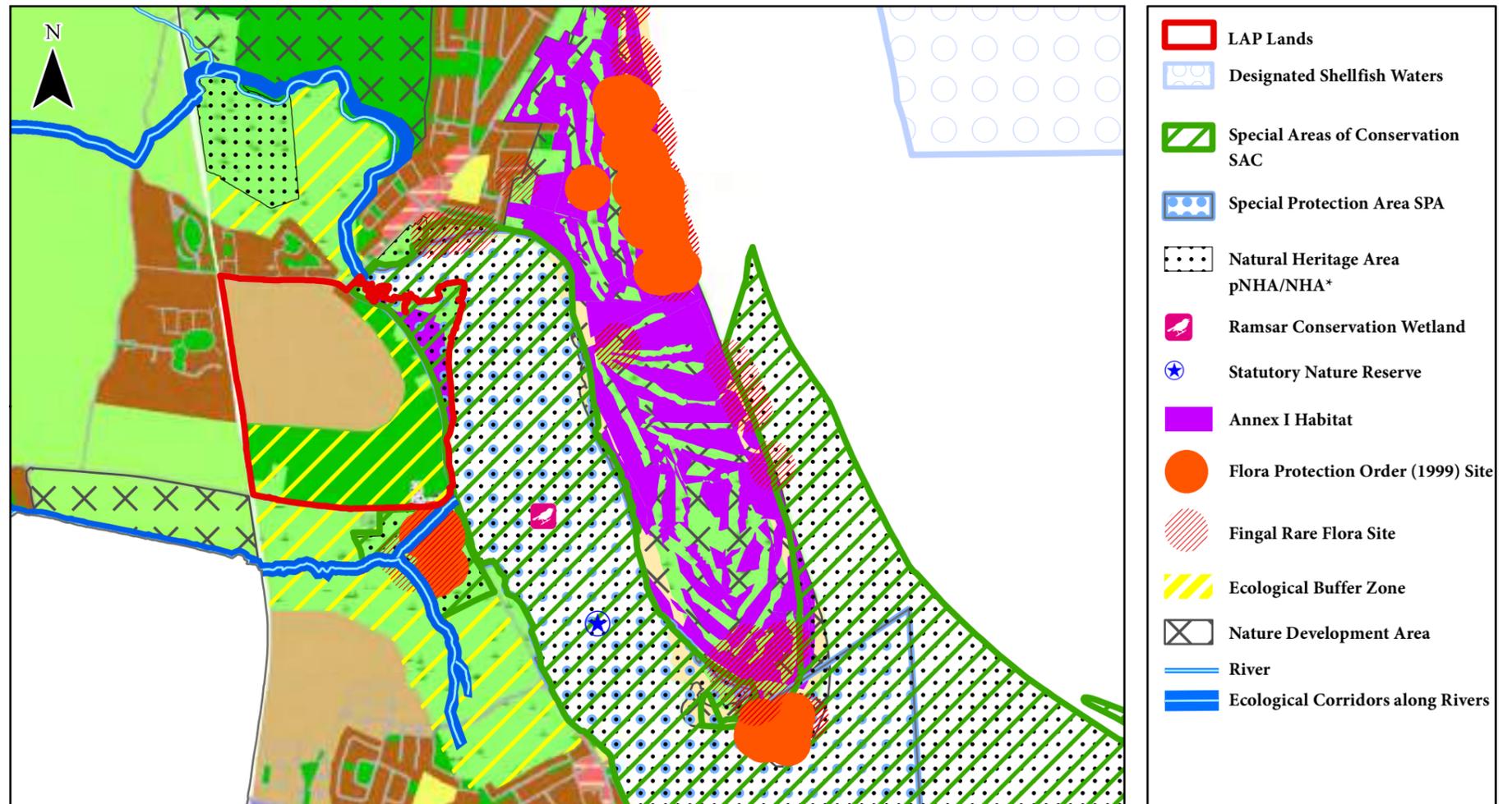
### 2.3.4 Malahide Shellfish Waters

The Malahide Shellfish Waters are located c.2km to the north-east of the plan lands and extend from Lambay Island to Portmarnock. These waters were designated under the European Communities (Quality of Shellfish Waters) Regulation 2006 (as amended) S. I. No. 268 of 2006 to protect or improve shellfish waters in order to support shellfish life and growth. It is designed to protect the aquatic habitat of bivalve and gastropod molluscs, which include oysters, mussels, cockles, scallops and clams. Any pollution or output from the LAP lands to the estuary has potential to impact on the quality of sea water and on the health of the Shellfish Area off the Irish coast. The Development Plan seeks to ensure the protection of the quality of designated shellfish waters off the coast of Fingal and to the implementation of the Pollution Reduction Programme measures for the Malahide Shellfish Area. A Pollution Reduction Programme [PRP] has been drawn up by the Department of the Environment, Community and Local Government and includes measures such as monitoring of water quality, review/monitoring of the Pollution Reduction Programme, monitoring of environmental impacts and monitoring implementation of the Pollution Reduction Programme.

### 2.3.5 Landscape Character

The Fingal Development Plan provides a Landscape Character Assessment of the county. The LAP lands are within the ‘Estuary and Coastal Character Types.’ The Estuary Character Type is categorised as having exceptional value as recognised by national, EU and international designations. The aesthetic quality of the estuaries is also regarded as outstanding. The Coastal Character Type is categorised as having exceptional landscape value. Both the Coastal and Estuary Character Types are highly sensitive to development due to the exposed nature of many of the coastal and estuarine areas making them particularly vulnerable to intrusive development. The setting and character of coastal areas could easily be damaged by inappropriate development.

Figure 2.1 Fingal Development Plan 2011 - 2017 Green Infrastructure Extract (Sheet 15)



### 2.3.6 Designated Sensitive Landscape and Preserved Views

The LAP lands are a designated ‘sensitive landscape’ as set out in the Fingal Development Plan. There are protected views along the Coast Road affording attractive views of Baldoyle Bay and Portmarnock peninsula to the east.

The objectives and designations for this area under the Fingal Development Plan will be incorporated into this LAP.

Baldoyle Bay and surrounding meadows.





# Local Area Plan Context

### 3.1 Strategic Context of the LAP lands

The Portmarnock South LAP lands (86 ha) are strategically positioned along the DART commuter service and the Dublin-Belfast railway line. Portmarnock train station immediately adjoins the plan lands to the northwest with Clongriffin train station further to the south adjoining the Balydoyle-Stapolin LAP lands. The entire RA plan lands are within 1km of Portmarnock train station and the high quality public rail service. The lands are elevated coastal lands located just south of the village of Portmarnock, approximately 15 km north of the city centre, c. 7 km from Swords between Malahide and Baldoyle in close proximity to the many coastal towns of Fingal, the M50 and Dublin Airport. Dublin City Council administrative boundary is located further to the southwest of the plan area across the Dublin Belfast railway line at Clongriffin.

The R106 Coast Road runs through Portmarnock village and along the eastern boundary of the LAP connecting the plan lands to the coastal towns and villages of Fingal. Station Road located on the northern boundary of the plan lands connecting to the Drumnigh Road (R124) to the west which connects to the Moyne Road to the south of the plan lands. The Moyne Road (R123) connects to the Malahide Road (R107), the Hole in the Wall Road and Clare Hall Avenue/R139 and onwards to the M50 and M1 to the west.

The natural amenities of the area including Baldoyle Bay, the Sluice River Marsh, Velvet Strand beach, a number of golf courses including the well known Portmarnock Golf Links, contribute to the high amenity value of this coastal area.

While recognising the strategic development value of the plan lands, rail and metropolitan/core strategy, maximising the development potential of the plan lands is constrained somewhat by reason of airport safety zones. The visual and environmental sensitivity of the lands and adjoining area will undoubtedly influence the design of future proposals.

#### 3.1.1 Current Population and Demographics

The development of Portmarnock generally occurred in the 20th century. While the train station was built in the 1850s, it had no real influence on development. Rather, the village has developed along the Strand Road, which has functioned as the principal spine of the settlement. The urban character of Portmarnock has been largely determined by significant growth in the seventies, when the majority of the housing estates were built. A number of new residential developments comprising a mix of apartments and large detached housing are located to the north of the plan lands on Station Road and to the west at Drumnigh.

Portmarnock can be characterised as a commuter village, owing to the prevailing residential land use pattern and its close proximity to Dublin City Centre. The Small Area Population Statistics [SAPS] from Census 2011 indicate that the village population of Portmarnock i.e. including the village centre and areas to the north, south and west of the centre is 8,744.

The LAP lies within Portmarnock South ED which includes Portmarnock Village as far north as Carrickhill Road. The 2006 Census indicated that the population of

Portmarnock South stood at 3,522, which was an increase of 6% from 2002. The majority of this growth can be accounted for by new residential developments along Station Road that were being occupied during this period. The population in Portmarnock North Electoral Division (ED), that is, north of Blackberry Lane, dropped by 9.5% between 2002-2006 which can be attributed to the natural lifecycle and an aging population in this established residential area. Results from the 2011 Census indicate that population in both EDs has declined in the inter-censal period. Again it is likely that this decline can be accounted for by an aging population and falling household sizes in established residential areas.

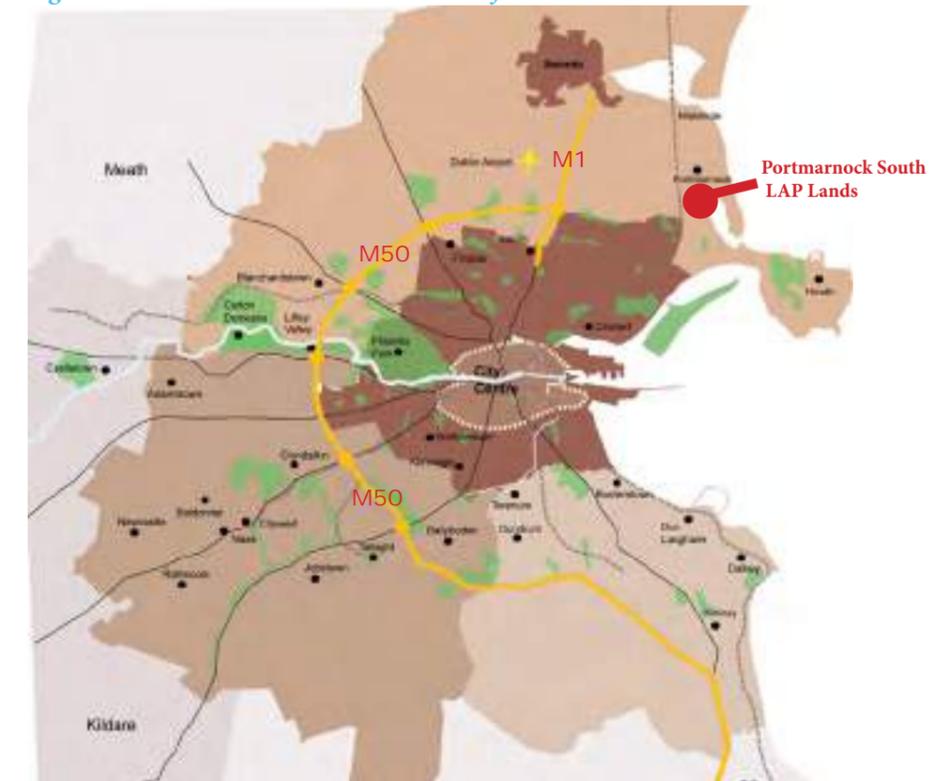
Table 3.0: Population Change 1991-2011

Portmarnock South ED	1991	1996	2002	2006	2011
Population	3,767	3,706	3,338	3,522	3,465
% Change	1.6%	-1.6%	-9.9%	6%	-1.6%

Source: CSO

To encourage a greater mix of household types, it is imperative that residential developments cater for the different demographics through mixed tenure and mixed house type. The recent census results show that the predominant mode of travel to work, school or college is by car. New developments will focus on a design and layout that encourages a modal shift away from the car to more sustainable modes of transport such as rail, bus and walking/cycling. Existing connections to bus and rail will be enhanced and new connections established where possible.

Figure 3.0 Portmarnock South in context of Greater Dublin Area



### 3.2 New Developing Areas adjoining the LAP lands

Immediately to the south of the Portmarnock South LAP lands are the Baldoyle-Stapolin LAP lands for which a concurrent LAP is being prepared. These lands adjoin the developing mixed use area of Clongriffin within Dublin City Council's wider North Fringe Area. Dublin City Council published the Clongriffin-Belmayne (North Fringe) 2012 LAP which replaced the North Fringe Action Area Plan 2000. The Clongriffin area, along with the Baldoyle-Stapolin LAP area, is one of Dublin's larger new development areas and, when completed, will have approximately 10,000 new homes as well as new retail and commercial areas. The Portmarnock South LAP will allow for the expansion of Portmarnock adjoining the railway line and will sit within the strategic context of the newly developing areas of Baldoyle-Stapolin and Clongriffin to the south and southwest.

#### 3.2.1 The Area to Date

In preparing this LAP, it is important to take account of development in the area to date including key infrastructure that has been delivered since the previous Portmarnock LAP 2006.

#### Residential Development

The original permission for Phase 1 of development was granted on the plan lands under F07A/0947 for a total of 684 dwelling units in the context of the previous Portmarnock LAP. Subsequent revisions were granted under F08A/0958 and F08A/0839 for change of house types. No development has commenced to date on the plan lands and the original planning permission on the lands is due to expire in May 2013. An application for an extension of time has been made in respect of this application under S. 42(I)(ii).

New developments in the Baldoyle-Stapolin area include Myrtle and Red Arches. Large parcels of land within this development area remain undeveloped to date. Clongriffin-Belmayne within the administrative area of Dublin City Council is a growing urban area to the north of Dublin City and mostly residential in nature. There are land banks within this area where development works have yet to commence. These lands have direct and obvious connections to the Baldoyle-Stapolin lands.

#### Key Infrastructure Delivered to Date

In addition to residential development, it is necessary to take account of key infrastructural projects delivered to date in the area and which are necessary and will serve the developing communities.

#### Water Supply and Drainage Infrastructure

The North Fringe Sewer and North Fringe Watermain infrastructural projects have been completed and will serve the plan area.

#### Transportation

Road improvements including re-alignment and carriageway widening were completed at the existing Portmarnock rail bridge on Station Road resulting in improved accessibility to Portmarnock train station.

The existing carpark at Portmarnock train station was extended on a temporary basis to cater for an additional 143 car spaces immediately adjoining the plan lands.

The new train station at Clongriffin with a park and ride facility within the administrative area of Dublin City Council serves the wider area.

#### Clongriffin Dart Station



#### Public Open Space

Racecourse Park, a planned Regional Park within the Baldoyle-Stapolin LAP lands is located immediately to the south of the plan lands and is an important amenity for the wider area and its residents. When fully complete, the park will comprise c.72 hectares of public parkland with playing pitches and ancillary facilities. The Council has taken in charge c.41 hectares of the park to date. The park will also incorporate a nature reserve area including the plan lands that lie within Baldoyle Bay SAC and a linear park based on the River Mayne. This linear park is important for recreation and amenity and protection of the river corridor and biodiversity. Permeable green routes will link the Portmarnock South LAP lands, the Baldoyle-Stapolin LAP lands and the Clongriffin-Belmayne LAP lands. The park offers the potential to create a greenway for pedestrians and cyclists connecting open space and amenity areas along the Fingal Coast and beyond the Fingal administrative area. It is an objective of this LAP that the open space lands within the Portmarnock South LAP area will form part of Racecourse Park.

#### Racecourse Park



Fr. Collins Park is the award winning open space and recreational area within the administrative area of Dublin City Council. Both Racecourse Park and Fr. Collins Park are significant public amenities for the wider area and the interconnection between these two parks is a major opportunity for the area and its residents. These parks will benefit the new residents in the Portmarnock South LAP area.

It is essential that the LAP lands integrate with the adjoining developing areas particularly with ease of movement and accessibility to open space, natural amenity areas, facilities and public transport and other essential infrastructure. A fundamental priority for this LAP is the creation of a well integrated network of open space and associated amenities for the immediate and surrounding communities. Consultations took place with Dublin City Council regarding priority issues within the plan areas and in particular integration between new and existing communities and amenities.

#### Fr. Collins Park

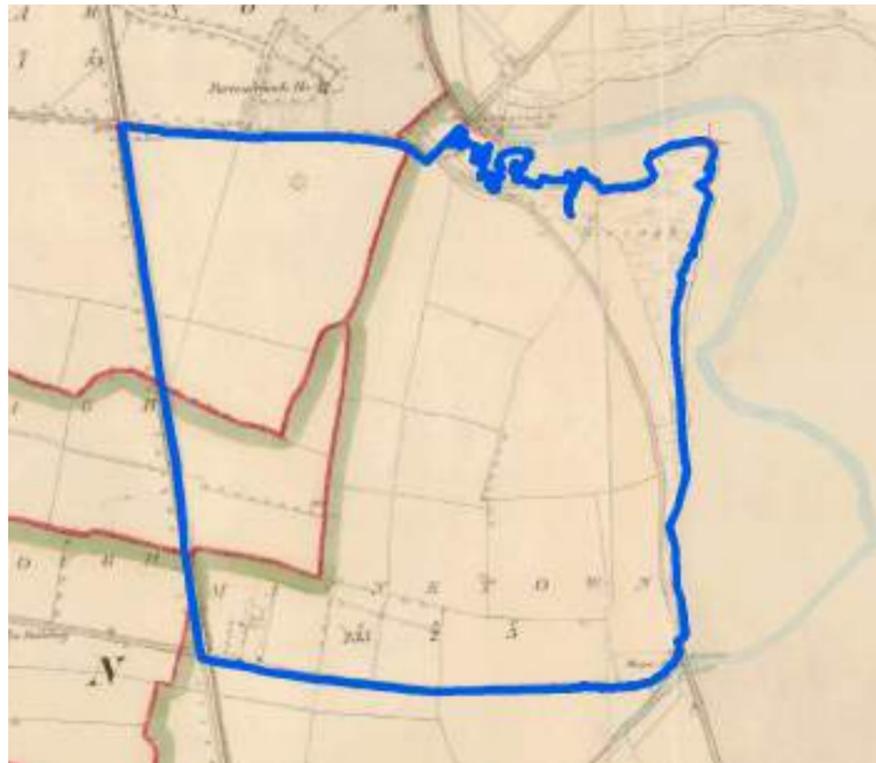


### 3.3 The Plan Lands - Landscape Description

The plan lands are an open and elevated coastal landscape forming the western backdrop to Baldoyle Bay and Portmarnock Peninsula. The eastern section of the lands rise sharply from c. 3 metres on the Coast and Moyne Roads to a central ridge that runs in a north/south direction, the highest point of which is between 12 and 14 m. The lands to the west of this central ridge continue to plateau off between 12 and 14 metres O.D. to the railway line resulting in a level topography at this location. The historic maps show that the landscape within the plan area has changed little from the early 19<sup>th</sup> century. The lands are predominately agricultural in nature consisting of arable and grassland. There are a number of established hedgerows and trees within the lands, the majority of which mark the historic townland boundaries between Portmarnock, Drumnigh and Portmarnock. The Dublin- Belfast railway line for the most part is defined by mature hedgerows and trees and there are a number of notable tree clusters and established field boundaries in the vicinity of Moyne Lodge, located in the south-western section of the lands. The c.1837 map shows this dwelling in existence

at that time. This dwelling appears to have been modified in recent years. Small clusters of detached housing have been developed in the vicinity of the Station Road junction and Mayne Bridge in recent times [See Fig. 3.1 *Historic Townland Boundaries within the plan lands*].

Figure 3.1 *Historic Townland Boundary Map c. 1837 with LAP boundary*



**3.3.1 Visual Analysis**

The eastern half of the plan area is highly visible when viewed from the shoreline of Baldoyle Bay and the Portmarnock Peninsula and enjoys panoramic views of the coast and its islands, notably Lambay Island, Howth Head and Ireland's Eye. The east-west ridge just south of the residential development area is highly visible from Clongriffin and Stapolin development areas, Clongriffin Railway Station and the mound in Father Collins Park. St. Doolagh's House is a notable built feature when looking westward from the plan lands. From the southern slopes of the plan lands, there are open panoramic views towards Baldoyle, Clongriffin and Howth to the southeast. Beyond the silhouette of Baldoyle and Clongriffin, the backdrop of the Dublin Mountains is visible. The plan lands are considered more visually sensitive than the lands further to the south and south-west where large contemporary developments at Baldoyle-Stapolin and Clongriffin have been constructed. Those lands are located further back within the coastal compartment, on lower elevations and therefore less visually sensitive than the plan lands. The landscape character of the plan lands is highly sensitive to change. This LAP will seek to ensure that all new developments contribute positively to the landscape qualities of the plan area.

**3.3.2 Hydrology**

A watercourse is located within the existing north-south townland hedgerows and serves as an open drainage channel for the plan lands. The northwestern section of the plan lands drain towards this watercourse before discharging to Baldoyle Bay via an existing culvert and a stream north of Station Road. The eastern half of the plan lands drains towards the coast road. There is no watercourse evident along the east of the plan lands that connects to the sea. The southern portion of the plan lands drains to the southeast and onwards to the River Mayne which discharges to Baldoyle Bay.

**3.3.3 Archaeological Heritage**

Located within the northern and southern extremities of the plan lands are archaeologically important National Monuments, the Portmarnock Burial Mound [DU15:014] which is also a Protected Structure Ref. No. 475 and the Maynestown Enclosure site [DU015:055]. In archaeology, an 'enclosure' is one of the most common types of archaeological site. It is any area of land separated from surrounding land by earthworks, walls or fencing. They may be a few metres across or be large enough to encompass whole settlements.

Enclosures serve numerous practical purposes such as delineating settlement areas, creating defensive positions or use as animal pens. Test-excavation of the Maynestown Enclosure identified it as early medieval in date, [Moriarty 2009, Unpublished report Margaret Gowen & Company]. A geophysical survey undertaken in 2008 revealed that that this monument is part of a much larger landscape with a further four enclosures identified subsurface in the immediate vicinity of the Maynestown monument within the open space lands to the south of the designated residential area.

The Portmarnock Mound (DU015:014) is a medieval burial mound, an artificial hill of earth and stones built over the remains of the dead. The Portmarnock Mound is an oblong shaped knoll 27m NS x 14mEW x 3m high. It is reported that the son of Queen Maedhbh of Connaught known as Maine is said to have been buried south of the village centre, possibly in this location. These archaeological sites have been the subject of a sequence of progressive desk studies, surveys and on-site investigations as part of the previous application for the lands. Agreement was reached with the National Monuments Division of the DoEHLG to preserve these monuments in situ. A 20 metre buffer area continues to be required around

Views from the Plan Lands



both these monuments. This LAP will incorporate these monuments into the design strategy for the plan lands.

*Northern section of LAP with view of Portmarnock Mound*



### 3.4 Landscape/Biodiversity/Ecological Value of the Plan Lands

The plan lands adjoin protected sites of high biodiversity importance with rare and threatened species and play a significant supporting role to these sensitive sites and their species. A bird survey was commissioned by Fingal County Council and undertaken by BirdWatch Ireland from December to February 2011-2012 covering the LAP lands and the surrounding areas. An additional bird survey was carried out in December 2012. The overall aim was to produce a baseline dataset of the bird species in the lands surrounding Baldoyle Bay and gain further insight into how important these lands are for estuarine birds.

The bird survey found that the eastern part of the plan lands including residential zoned lands and the southern sections of the open space lands serve an important ecological function in being an acknowledged feeding/roosting habitat for birds linked to Baldoyle Bay, most notably, large volumes of nationally important wader species such as Lapwing, Oystercatcher and Black-tailed Godwits. The National Parks and Wildlife Service records show that internationally important Brent Geese have previously occupied these lands. A large number of Mallards were in existence as evidenced from the additional bird survey in December 2012. The lands also support a significant number of native bird species such as winter finches, skylarks, buzzard, buntings, woodpigeon, thrushes and tree sparrow. [Winter Bird Survey for lands surrounding Baldoyle Bay- BirdWatch Ireland – Dec to Feb 2011-2012 and Baldoyle Bird Survey December 2012 refers]. The bird study and associated report indicates that the plan lands are an important habitat for estuarine birds linked to Baldoyle Bay and should be viewed as ecologically linked to this estuarine area. The plan lands are host to a rich biodiversity with many elements of natural heritage such as trees, hedgerows and a watercourse set within a highly sensitive coastal landscape setting.

The Fingal Development Plan is firmly committed to biodiversity conservation and enhancement such as the protection of trees, hedgerows, watercourses and historic townland boundaries, protection of flora and fauna, sensitive landscapes and to the promotion of a green infrastructure network.

*Blacktailed Godwit*

*Courtesy of Clive Timmons*



*Oystercatcher*

*Courtesy of Shay Connolly*



### 3.5 Issues Affecting the Local Area Plan

In order to prepare this LAP and formulate relevant objectives, it is important to take into consideration the key issues which the LAP should address. These include:

#### Environment and Conservation

- Ecological value of the adjoining Baldoyle Bay and Sluice River Marsh and associated European, international, national and local designations. Protection a fundamental priority. National Parks and Wildlife Service approval necessary given adjoining environmental designations.
- Highly sensitive receiving environment for storm water. The priority is to ensure no deterioration occurs in the receiving waters of Baldoyle Bay.
- Ecologically sensitive landscape in being an acknowledged feeding/roosting habitat for estuarine birdlife and a designated ecological buffer zone. Protection of this strategic buffer zone through appropriate habitat protection measures and management are major priorities for this LAP.

- Designated sensitive landscape, with a coastal setting, surrounded by high amenity lands. Appropriate siting and design necessary.
- The lands present the opportunity to advance a green infrastructure strategy in accordance with Fingal Development Plan objectives.
- Key views of the coast and its islands such as Ireland's Eye, Lambay, Howth Head need to be maximised in future development schemes.
- Heritage and Archaeology, two National Monuments on the plan lands, the Portmarnock Mound (RMP Ref. DU015:014, RPS Ref. No. 475) and the Maynetown Enclosure (RMP Ref. DU015:055) shall be retained in situ.
- The historic townland boundaries between the townlands of Portmarnock, Drumnigh and Maynestown remain intact on the plan lands. Incorporation of these heritage features into the layout of future schemes, together with existing trees and watercourses are a priority for this LAP, and will be considered in detail through the development management process and implementation of the Objective UD 01 of the Fingal Development Plan and Objective UD 1 of this LAP.

*Centre of LAP lands with existing historic tree and hedgerow boundaries*



#### Infrastructure

- Foul Water Drainage. The existing pumping station at Portmarnock Bridge has limited capacity and a new pumping station and overflow outfall is required, replacing the existing, which will then cater for existing and proposed development. A new sewer through the plan lands and connection to the North Fringe Sewer is also required.
- A new surface water outfall is required.

- A Foreshore License is required for any outfall/overflow to the estuary.
- An odour control buffer zone of 50m minimum from any new pumping station to existing and future development is required.
- Greater Dublin Drainage Scheme and Proposed Outfall Pipeline Corridor reservation required in the plan area for future outfall pipeline. This pipeline would be underground.
- Water Supply. Connection to the North Fringe Watermain is required.
- Sustainable Water Management. No increase in the rate of surface water discharge from the site is permissible. Application of Sustainable urban Drainage Systems [SuDS] required. The existing watercourse will form part of sustainable water management within the plan lands.
- Flood Risk Assessment of the plan lands and any mitigating measures required.
- Utilities such as electricity/gas and telecommunications infrastructure to be agreed in advance of development to ensure consistency with overall design strategy.

public realm accommodating footpaths and cyclepaths, overlooked by attractive well-designed buildings.

- Phasing required to ensure timely delivery of key infrastructure and amenities.

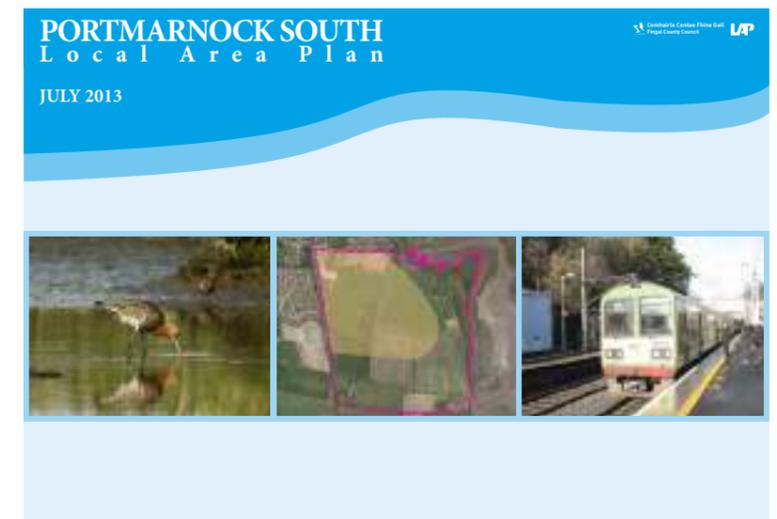
### Portmarnock Train Station Lands adjoining Station Road.



### Urban Design

- Urban Design and Layout. Important to create development that is sympathetic to the existing environment, relates to its context and creates a sense of place.
- Innovative, high quality building design and layouts, green design techniques, energy efficient life long adaptable homes and a mix of tenure a priority.
- Station Road. Opportunity to create a new street and enhance connectivity to Portmarnock village and train station.
- Small Centre. Opportunity to provide local shops and services to meet the needs of local residents with connectivity to the train station.
- Interfacing requires considerable attention for successful integration and the protection of existing residential amenity.
- Airport safety and noise zones restrict density and land-use.
- An urban design framework is necessary to co-ordinate development within different land parcels. This will be supported by an urban design appraisal as part of each planning application. [See Section 7.9 Urban Design Appraisal]

It is in the context of the above background that the LAP and accompanying SEA and AA has been prepared.



### Movement and Transport

- Connectivity and Movement. Ease of movement and access to facilities/services and amenities within and adjoining the plan area a priority. A network of local and strategic green pedestrian/cycle routes a priority focus.
- Portmarnock Train Station. Connectivity to the existing train station and ensuring adequate car parking adjacent to the train station to encourage modal split from the private car to public transport are key considerations.
- Additional Rail Tracks. Reservation required along the Dublin-Belfast railway line for possible future expansion.
- Dublin Bus. The existing route travels along the Coast Road with currently no connection to the train station. There is an opportunity to provide bus provision through the plan lands and connectivity to the train station.
- Focus shall be on the creation of safe and attractive streets within the development scheme.
- Implement a street hierarchy within the plan lands with a high quality



## Strategic Vision and Aims of the LAP

### 4.1 Strategic Vision

Develop a high quality urban environment with a unique sense of place, maximising and respecting the opportunities presented by the area's natural assets and coastal location adjoining Baldoyle Bay and recognising its high level of accessibility to Portmarnock DART station.

The LAP will facilitate residential development in this area in a coordinated and sustainable manner, focusing on the development of sustainable communities. It will also focus on a quality environment, respectful of the sensitivities of the adjoining coastal habitats and dependent species, connected to the existing urban context of Portmarnock village to the north and Baldoyle-Stapolin urban area to the south with connectivity to green infrastructure networks along the coast and to the west.

### 4.2 Development Strategy Overview

The residential [RA] zoned lands within the Local Area Plan have the potential to achieve up to approximately 1200 residential units based on a density of c.42 units per hectare which accords with airport safety zone criteria. This would equate to a potential population of c. 3360 persons but the final number of units will be dependent on meeting the standards and high quality design, environmental and movement parameters set out in the Plan and relevant guidelines. To reflect the environmental and visual sensitivities of the plan lands as well as the airport public safety zone density restrictions, flexibility regarding achievable maximum density across the plan lands is provided for in this LAP. Further to the requirements of UD1, appropriate assessment, etc, an average minimum density of 35 units per hectare with an average maximum density of 42 units per hectare shall be considered to comply with the sustainable objectives of the LAP

The population will be supported by a range of open spaces, recreational amenities and local facilities which will be developed in tandem with residential growth. As the lands are located within the Outer Public Safety Zone of Dublin Airport, schools and childcare facilities are not permitted uses within the RA (residential) zoning of the LAP lands. Childcare and education facilities are also not permitted within the open space zoned lands, therefore these community uses are not proposed as part of this LAP. Such facilities exist and are proposed within the adjoining areas, which will also need to accommodate the future educational needs of residents of the plan area. This LAP provides for pedestrian and cycle links to education and community facilities proposed in the developing area of Baldoyle-Stapolin where a school site has been reserved. [See Section 8.2 for more detail]

The LAP promotes a sustainable strategy. This will be achieved in a number of ways including; a green infrastructure network through the delivery of green routes, linear corridors and open spaces; high quality sustainable forms of design incorporating green design techniques, energy efficient buildings and life long adaptable homes; optimum use of public transport and walking and cycling and an integrated movement and transport strategy. Sustainability is an overarching theme that connects each strategy in the LAP towards the achievement of high quality sustainable neighbourhoods in the local area set within an attractive well designed living environment for the new residential community.

The following chapters set out the key strategic elements and objectives that are required to deliver the coordinated development of the plan lands, as an urban extension to the existing residential community of Portmarnock. The key strategic elements which will be addressed are:

- Green Infrastructure and Landscape
- Movement and Transportation
- Urban Design Framework
- Water Services and Utilities Infrastructure
- Sustainability
- Phasing and Sequencing

### 4.3 Strategic Aims of the LAP

#### Environment and Heritage

- Ensure that the integrity of the Natura 2000 site of Baldoyle Bay and its associated conservation objectives are appropriately protected and recognised within the plan area.
- Protect and improve where possible the water quality of the receiving waters of Baldoyle Bay and ground water quality through appropriate sustainable water management within the plan lands.
- Promote and develop opportunities for biodiversity and its supporting natural features (trees/hedgerows/watercourse), open space, green routes/corridors and key views as defining characteristics of the developing area including their priority in phasing proposals.
- Promote the conservation, enhancement, and enjoyment, including public access where appropriate, of the archaeological, natural and built heritage as important elements in the long-term sustainability of the area.

#### Movement and Transport

- Promote and encourage the use of sustainable means of travel including walking, cycling and public transport through the development of an integrated movement and transport network
- Promote connectivity and the integration of new and established communities through a hierarchy of spaces linked through a network of green permeable walking and cycling routes at a local and strategic level.

#### Urban Design and Housing

- Ensure that all new development is of a high quality and standard, promotes a local sense of place, protects existing residential, public and environmental amenities and enhances the plan area.

- Ensure that new development is physically, visually and functionally integrated with the landscape character of the plan area.
- Promote the provision of a wide choice of dwelling types and tenure with a strong emphasis on family orientated, high quality, adaptable, life long homes which are energy efficient and incorporate green design techniques.
- Ensure that housing demand is met in key locations in accordance with Fingal's Core Strategy.



*Legibility*



*Diversity*



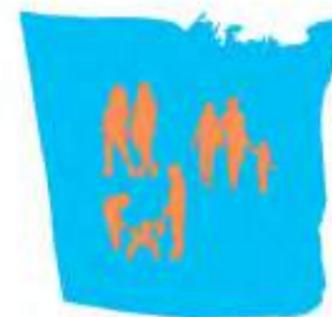
*Sustainability*

### Community, Recreational, Social and Commercial Infrastructure

- Promote and encourage a socially inclusive community that caters for all age groups, that accords with the principles of universal design and that offers equal opportunity and good services to all.
- Promote the provision of a mix of retail, service, healthcare, recreational and community facilities within the small centre and at a level commensurate with local need.
- Provide for an integrated network of open space areas to meet the recreational needs of residents while respecting the sensitivities of the Plan lands through the Green Infrastructure and Landscape Strategy.
- Promote and facilitate employment and environmentally sustainable tourism opportunities appropriate to this area.



*Flexibility*



*Lifetime Homes*



*Management & Maintenance*

### Infrastructure and Services

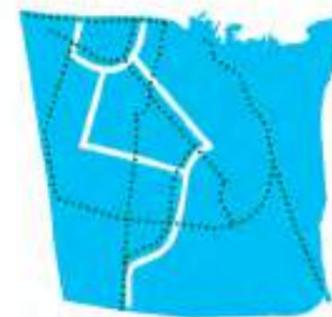
- Ensure the timely and adequate provision of infrastructure and services through phasing to serve the new development within the plan lands.

#### 4.4 Achieving the Vision and Strategic Aims for the Portmarnock South LAP lands

The various strategies, objectives and phasing schedule set out in the subsequent sections of the Plan seek to ensure that the vision for these lands becomes a reality. In particular, the strategic aims and vision will be provided for through the Green Infrastructure and Landscape Strategy, the Transport and Movement Strategy, the Urban Design Framework and through the implementation of Sustainable Urban Drainage Systems (SuDs). Appropriate phasing of development will ensure that development will only proceed in tandem with the necessary physical, social and environmental infrastructure.



*Open Space*



*Ease Of Movement*



*Inclusive Design*



## Green Infrastructure

### 5.0 Green Infrastructure

The provision of green infrastructure is seen as an essential element in delivering a high quality of life for both existing and new communities, creating a locally distinctive and quality built environment ('sense of place') and environmental improvements to the existing built environment. In developing green infrastructure strategies there is an opportunity to create places that not only function sustainably but also are very attractive places to live and work and foster a strong sense of community. In this regard, the LAP will inter alia focus on protecting, enhancing, creating and connecting green infrastructure resources and ensuring that development is planned and managed so that it does not result in undue damage to the surrounding environment and natural assets. Wildlife and natural ecological processes are more likely to be maintained in landscapes that comprise an interconnected system of habitats.

Green Infrastructure (GI) should as far as possible provide an integrated infrastructure for multi functional uses i.e. wildlife, leisure and cultural experience and deliver environmental services such as sustainable water drainage and flood protection that operates at all spatial scales from the urban neighbourhood to the open countryside. The current Fingal Development Plan is underpinned by a green infrastructure strategy which incorporates the following five themes:

- Landscape
- Biodiversity
- Open Space and Recreation
- Archaeological and Built Heritage
- Sustainable Water Management

These overarching themes have direct and meaningful relevance for the Portmarnock South LAP area. In particular in the ability of the LAP to capitalise on the natural assets of the LAP lands and the wider area, to create green corridors that will form part of a Fingal ecological network. A key objective of the Fingal Development Plan and Fingal Biodiversity Plan is to provide new and existing communities with valuable recreation areas which will help to integrate and strengthen communities. In envisioning the LAP lands as a place for new communities to live and develop, the green infrastructure within the plan area and hinterland will be key to the area's identity and character, providing strong quality of life benefits for its residents. The LAP will clearly articulate how the five green infrastructure themes are fully integrated and enhance the experience of this developing urban residential community.

Portmarnock South and the surrounding areas have a natural environment which incorporates both nationally and internationally important sites in terms of wildlife and habitats. The fundamental challenge in the preparation of this LAP is to balance the potentially competing pressures of providing for a new residential community while at the same time protecting and enhancing the sensitive environmental and biodiversity components of the plan lands and those surrounding it. [See Figure 5.0 Green Infrastructure Context]

### 5.1 Green Infrastructure and Landscape Strategy

In the context of advancing a green infrastructure strategy for the plan lands and the wider area, the Council commissioned consultants to help prepare a Green Infrastructure and Landscape Strategy. The resultant strategy is an integral component of this Local Area Plan and will inform the urban design and layout by setting out the environmental, open space and amenity parameters for the plan lands. The focus for the strategy is on integrating a network of natural habitat/biodiversity locations, parkland for recreational uses, green routes, heritage features, surface water and flood risk management successfully with development areas. [See Figure. 5.2 Green Infrastructure and Landscape Strategy]

The spatial concepts around which the Green Infrastructure and Landscape Strategy is structured are as follows:

- The open space network within the plan lands and the Baldoyle-Stapolin LAP lands has been designed as a series of interconnected zones to manage the natural character and resources of the area and to provide for the needs of biodiversity and the new community.
- A Linear park along the alignment of the townland boundary hedgerows. The linear park will incorporate pedestrian routes, SuDS features and informal play spaces.
- Pocket parks to ensure all dwellings are within a short (100m) walk of usable open space.
- Urban agriculture as a feature of the open space to the southern part of the plan area.
- A well integrated network of green routes that promotes walking and cycling for everyday needs and recreation.
- Low intervention landscape approach to the ecological buffer zone lands in order to retain the supporting ecological functions this landscape provides to the estuary habitats including a 'quiet zone' for migratory birds and arable crop areas for native bird species.
- A 3 metre wide footpath/cycle way, which forms part of the Fingal Coastal Way (walking and cycling) on the eastern edge of the plan linking to Portmarnock and Baldoyle.
- Central green route linking to Racecourse Regional Park and Station Road.
- Recorded Monuments retained in open space and linked physically by a proposed green route.
- A civic/public space within the small centre.

The Green Infrastructure and Landscape Strategy is further described below under the five Green Infrastructure themes of Biodiversity, Landscape, Archaeology and Built Heritage, Open Space and Recreation, and Sustainable Water Management. These themes should be seen as inter-related to achieve sustainable forms of development that value habitats, ecology, open space and recreational amenities as integral elements that shape future development schemes. The Green Infrastructure and Landscape Strategy within this plan is seen as key to delivering the benefits of a multifunctional green infrastructure network and to the proper planning and sustainable development of the area.

Developers/applicants will be required to implement the provisions of the Green Infrastructure and Landscape Strategy in development proposals. The phasing for this LAP will seek the early completion of the environmental, nature conservation and recreational measures outlined in this strategy.

**Objective GI 1** Advance a green infrastructure strategy through the integration of a network of natural habitat and biodiversity supporting spaces, parkland for passive and active recreational uses, heritage features, sustainable surface water and flood risk management measures.

**Objective GI 2** Promote the development of a series of green routes/green linear corridors that connect amenity and open space areas with new and established communities.

**Objective GI 3** Comply with the objectives relating to biodiversity, open space and green infrastructure set out in the current Fingal Development Plan

**Objective GI 4** Demonstrate in each planning application, how the Green Infrastructure and Landscape Strategy set out in Figure 5.1 has influenced the layout of development and in particular, how it is reflected in the design and layout of open spaces, linear parks and green routes.

**Objective GI 5** Ensure the early completion of the provisions of the Green Infrastructure and Landscape Strategy through the phasing of this LAP.

## 5.2 Biodiversity Conservation and Extension of the Biodiversity Network

Biodiversity refers to the variety of life around us everyday - trees, flowers, insects, mammals, birds and fish. It also includes the habitats or places where plants and animals live, such as hedgerows, meadows, rivers, woodlands and gardens. Natural heritage and biodiversity in the Portmarnock/Baldoyle areas includes a wide range of natural features that make an essential contribution to the environmental quality, ecological diversity, landscape character, visual amenity, recreational activities, public health and investment potential of the area. Baldoyle Bay [SAC and SPA], internationally important for its mudflats and salt marshes is rich in species and biodiversity. The adjoining wetlands of the Sluice River Marsh [NHA and a regionally important salmonid system] and the

Figure 5.0 Green Infrastructure Context



wetlands associated with the Mayne River [within Racecourse Regional Park and Baldoyle SAC] support a diverse range of wetland plants, animals and birds, as do the adjoining agricultural lands. Protection of these designated and supporting sites from direct and indirect consequences of development within the LAP is a fundamental priority and the LAP has been guided by the appropriate assessment undertaken as part of the planning process. [See *Natura Impact Report, a separate document accompanying this LAP*]

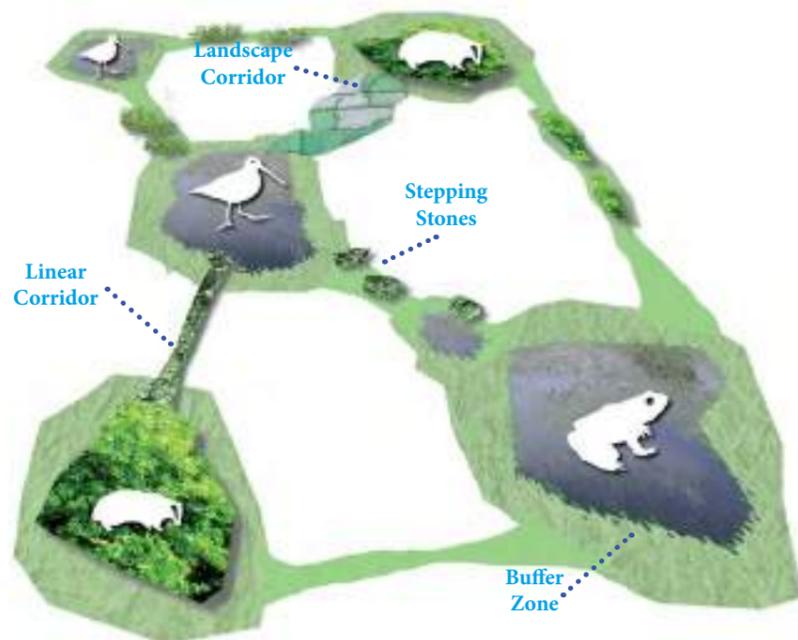
The plan lands contain an abundance of biodiversity features in the form of trees, hedgerows and a watercourse as well as estuarine and farmland bird species and fauna. Natural features provide important wildlife habitats as well as contributing significantly to the character, setting and amenity of this coastal setting. The policies and objectives of the Fingal Development Plan and Fingal Biodiversity Action Plan are committed to the protection and enhancement of the county's biodiversity.

Objectives of the Development Plan seek to ensure that all development proposals include measures to protect and enhance biodiversity and protect rivers, streams and other watercourses and maintain them in an open state capable of providing suitable habitat for fauna and flora, including fish.

The LAP will protect and enhance existing biodiversity features within the plan area through the implementation of the Green Infrastructure and Landscape Strategy. Natural biodiversity features within the plan lands are incorporated into a series of public open spaces, habitats, linear parks and a landscape corridors, linked through a series of green routes [See *Figure 5.2 Green Infrastructure and Landscape Strategy*].

*Green Network*

*Courtesy of áit urbanism + landscape*



**Objective C 1** Maintain qualifying interest habitats and species within the Baldoyle Bay SPA and SAC and other European sites where relevant at favourable conservation condition to ensure the ecological integrity of Baldoyle Bay and further ensure that the LAP lands continue to provide supporting function for the Qualifying Interest species.

**Objective C 2** Protect and conserve the natural habitats and designated status of the Sluice River Marsh and ensure that salmonid waters constraints apply to all development within the plan lands.

**5.2.1 Bird Species and Habitat Protection Measures**

The bird survey commissioned by the Council from December 2011 to February 2012 and December 2012 identifies the plan lands as important habitat for the migratory birdlife associated with Baldoyle Bay. The study also found that estuarine bird species including Brent Geese graze the Racecourse Park lands to the south, providing suitable habitat for key bird species. The fundamental challenge in the preparation of the Portmarnock South LAP is how to appropriately mitigate against the loss of the valuable feeding and roosting habitat acknowledged within the eastern section of the residentially zoned lands. In acknowledging and dealing with this issue, the LAP proposes the creation of attractive and suitable alternative habitat for migratory birds to the southeast of the residential part of the plan lands.

In the preparation of Portmarnock South and Baldoyle-Stapolin LAPs detailed plans have been drawn up for the ecological buffer zones in both areas with the intention that these will function as integrated areas, not only for open space and recreation but, critically, for the appropriate habitat protection measures for migratory waterfowl and wader bird species habitat in both LAPs. These areas are to be laid out and managed in a way that provides suitable alternative habitat for bird species likely to be displaced by residential development within the plan lands. These ecological buffer zones will offer a variety of habitats including meadow and arable crops. This will ensure adequate roosting and feeding options are available to migratory birds. Farmland bird species also benefit from these habitats. This low intervention landscape approach to the ecological buffer zone lands serves to retain the supporting ecological function this landscape provides to the estuary habitats. [ See *Table 5.0 Habitat Protection Measures* ]

The proposed habitat protection measures were devised in consultation with the NPWS, the Council's Biodiversity and Parks Officers, to ensure the protection of bird species and their habitats in a fully coordinated and managed approach. Public access within the ecological buffer zone will have to be carefully managed. This will ensure that the area can continue to play host to a wide variety of bird and wildlife species which contribute to the unique character and attractiveness of this coastal area and to the conservation objectives of the Baldoyle Bay - Natura 2000 site. Figure 5.2 clearly illustrates the proposed habitat protection measures within the plan lands and a network of green routes.

*Table 5.0 Habitat Protection Measures*

<b>Habitat Protection Measures required within the Ecological Buffer Zone</b>
Conservation Management Plan for the ecological buffer zone/open space lands and the high amenity lands of the 'Murragh Spit' prepared in consultation and agreement with Fingal County Council and the NPWS. Ensure co-ordination between the Conservation Management Plan and any relevant Environmental Management Plan associated with the coastal route. All such plans must undergo Appropriate Assessment Screening.
The Ecological Buffer Zone within the plan lands maintained as amenity grassland, semi-natural meadow, natural grassland and scrub, pasture and arable land use including wintering crops such as linnet mix.
A 'quiet zone' established to the south of the residential development area to cater for Brent Geese and wader species. The 'quiet zone' to consist of grassland pasture. This 'quiet zone' will be enclosed by a fence and hedge to prevent disturbance during the winter migratory bird season. The enclosure must be dog proof but can permit overlooking of the 'quiet zone' e.g. 1.2 metre high fence with hedge planting of native species.
Retention of field within the southern section of the plan lands under arable cultivation. This will support and encourage food production through community and contract farming initiatives.
The extensive open space within the ecological buffer zone to be managed as meadows. The meadows will support a wider diversity of native grass and wildflower species than traditional mown amenity grass and will thus support a greater number and variety of insect life, which in turn supports the bird population. The seeds produced by grass and flower species also provide a direct food source for birds.
Retain the ecological buffer zone to the estuary in a predominantly open state to support unhindered bird movement.
Retain the 'Murragh Spit', east of the Coast Road as a managed conservation area to protect estuarine birdlife.
Disposal of construction and surplus fill material to be carefully managed through the Development Management process.
Provision of SuDs Regional Wetland, unless otherwise agreed [Objective SW12 refers] and subject to Appropriate Assessment screening to ensure all downstream habitats and open habitat used by qualifying interest birds are protected.

*Existing hedgerows - a feeding source for birds*



## 5.5.2 Implementation of Habitat Protection Measures

Habitat Protection Measures agreed with both the NPWS and Fingal County Council shall be implemented prior to the commencement of development; ensuring feeding and roosting habitat is protected and disturbance to migratory birdlife for the duration of the construction phase and post construction is mitigated, to the greatest possible extent. Prior to the commencement of development, the developer shall enter into an agreement with Fingal County Council for the transfer of zoned open space lands. This early transfer of open space lands will also facilitate the planning and implementation of the Fingal Coastal Way [See Section 11.4 Phasing and Implementation].

**Objective GI 6** Require Appropriate Assessment (AA) Screening for any development, plan or project including changes to the landscape, within the Ecological Buffer Zone. This will include any changes to existing or future layout, materials or management.

**Objective GI 7** Protect and enhance the function of the ecological buffer zone through appropriate mitigation and management measures as set out in the Green Infrastructure and Landscape Strategy.

**Objective GI 8** Promote the conservation and enhancement of biodiversity having regard to the objectives of the Fingal Development Plan, the Fingal Biodiversity Action Plan and the Fingal Heritage Plan while allowing for appropriate development, access and recreational activity.

**Objective GI 9** Protect existing trees, hedgerows, townland boundaries and watercourses which are of amenity, historic or biodiversity value and ensure that proper provision is made for their protection and management in future development proposals in accordance with the Green Infrastructure and Landscape Strategy.

**Objective GI 10** Protect significant and ecologically valuable watercourses and maintain them in an open state capable of providing suitable habitat for fauna and flora.

**Objective GI 11** Require measures for the protection and management of local biodiversity features to be submitted in any development proposals. This shall include details of how and where any surplus fill from the plan lands is to be disposed.

**Objective GI 12** Implementation of agreed habitat protection measures as set out in Section 5.2.1 of the LAP and the subsequent transfer of zoned open space lands to Fingal County Council to be completed prior to the commencement of development.

**Objective GI 13** Ensure that sufficient information is provided as part of development, plan or project proposals to enable Appropriate Assessment screening to be undertaken and to enable a fully informed assessment of impacts on biodiversity to be made.

## 5.3 Landscape

The plan area is set within an elevated open coastal and estuarine landscape and is highly sensitive to development. Well-designed and managed GI assets, particularly those that relate to landscape character can significantly enhance the environmental quality of new development and create a local sense of place. In this regard, it is an objective of this LAP to minimise the visual impact of future development on the setting and visual quality of the landscape through application of the principles for development in coastal and estuarine character areas of the Landscape Character Assessment of the Development Plan. Key principles carried through in the design strategy for this LAP include field and road verge retention, use of trees and hedgerows to contain new development, sensitive design and siting, protection of major ridgelines and appropriate boundary treatments.



**Objective GI 14** Ensure that future developments within the plan area have regard to the principles for development in coastal and estuarine character areas as set out in the Landscape Character Assessment of the Fingal Development Plan.

**Objective GI 15** Incorporate principal views of the surrounding area, in particular, Baldoyle Bay, Howth Head, Ireland's Eye and Lambay Island into future development schemes.

**Objective GI 16** Protect the following views as indicated on the Local Area Plan Map:

- Views from the eastern half of the plan area towards Baldoyle Bay, Howth Head, Ireland's Eye and Lambay Island.
- Views southwards of the Dublin Mountains.
- Views into the plan lands.

**Objective GI 17** Ensure that the existing topography of the lands is incorporated into the design concept and layout with minimal variations to existing ground levels, in as far as is practicable, in development schemes.

## 5.3.1 Ridgeline and Views

Residential development should be configured to maximise on the exceptional views towards the coast and its islands such as Lambay Island, Ireland's Eye, Howth Head and Baldoyle Estuary. Indicative viewlines indicated on Fig 5.2 will be provided for within new development proposals. Viewing points are proposed along the axis of the east - west ridge south of the residential development area, utilising earthform to elevate the viewer and accentuate the view [See Figure 5.2 Green Infrastructure and Landscape Strategy]. All planning applications will need to be accompanied by a visual impact assessment, including cross sections and photomontages to assist the Planning Authority to determine the full visual impact of proposed development on the plan lands and on the high amenity lands adjoining. This will form part of the overall urban design appraisal [See Section 7.9 Urban Design Appraisal].

Figure 5.1 Visual Analysis and Compartments



## 5.3.2 Tree and Hedgerow

While it is recognised that development sometimes necessitates the loss of trees and hedgerows for sound planning reasons, this should be minimised and where removed should be compensated and replaced on site. In general, the retention of trees and hedgerows is critical in protecting the positive attributes of landscape character and heritage features of the plan lands. The hedgerow network provides a high degree of compartmentalisation and visual enclosure within the plan area. The compartments created will also be beneficial in defining urban character areas or neighbourhoods within the residential development area [See Figure 5.1 Visual Analysis and Compartments].

Figure 5.2 Green Infrastructure and Landscape Strategy



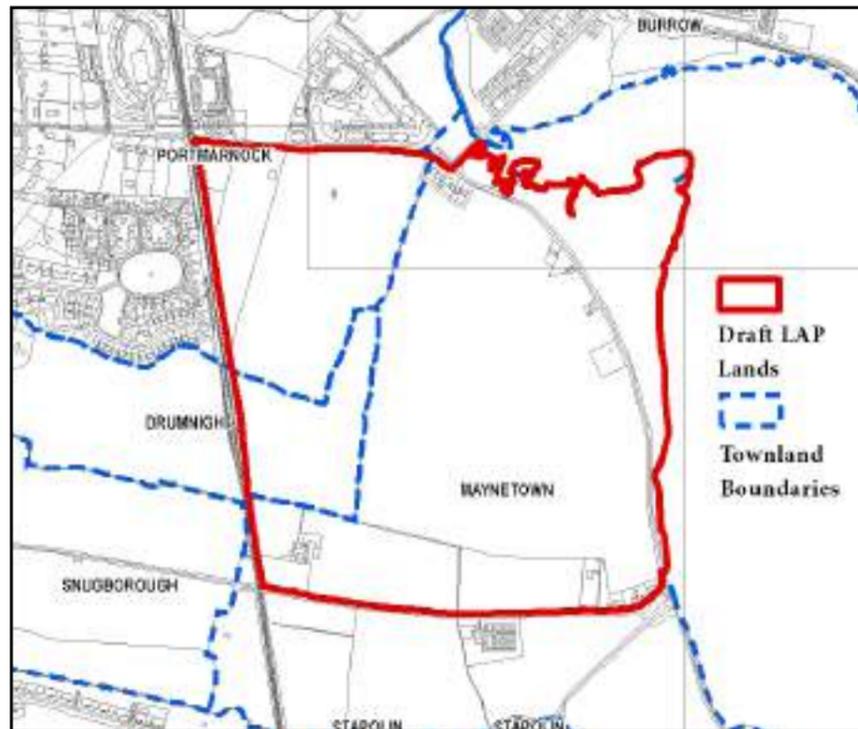
*Note:*  
The precise routes for pedestrian, cycle and vehicles, as well as the location and design of pocket parks shall be subject to detailed design and determination through the development management process.

Objective OS31 of the Development Plan 2011-2017 seeks to ‘ensure trees, hedgerows and other features which demarcate townland boundaries are preserved and incorporated into the design of developments.’

Therefore, reflecting and in compliance with the Fingal Development Plan policies and objectives, it is an objective of this LAP to ensure trees and hedgerows and in particular those hedgerows which demarcate historic townland boundaries are preserved and incorporated into the design of future development schemes [See Figure 5.2(i) *Townland boundaries*]. It is acknowledged that breaks in hedgerows will be required for pedestrian and vehicular access. Where pedestrian bridges/vehicular bridge(s) are required over the existing watercourse, they shall be aesthetically pleasing, safe and inviting, designed to a high architectural specification.

An exception to the general requirement to retain trees and hedgerow boundaries is made for the boundary to Station Road where the hedge and tree line are more intermittent and less significant, here a new tree line is proposed in order to link the new development and Station Road as a single coherent urban space [See Figure 6.5 & Section 7.2 *Station Road Edge*]. Notwithstanding the general exception being made along Station Road, new planning applications should explore the opportunities to retain some of the stronger trees/hedgerows that exist within this location.

Figure 5.2(i) *Townland boundaries*



Objective LC08 of the Development Plan, ‘prohibits proposals necessitating the removal of extensive amounts of trees, hedgerows and historic walls or other distinctive boundary treatments.’ It is an objective of this LAP that there shall be no net loss of the tree and hedgerow resource within the plan area. In limited

instances where the strict retention of trees and hedgerow boundaries may result in poorly sized or located residual spaces, it may be acceptable to replace trees and hedgerows within an adjacent area. This, however, does not apply to the historic townland boundaries within the LAP lands for which objectives GI 18 and GI 27 of this LAP apply and OS31 of the Development Plan.

**Objective GI 18** Ensure trees, hedgerows and other features which demarcate townland boundaries are preserved and incorporated into the design of developments.

**Objective GI 19** Protect, preserve and ensure the effective management of trees and groups of trees.

**Objective GI 20** Implement a scheme of tree and hedgerow protection measures, in compliance with British Standard 5837- 2005, ‘Trees in relation to Construction’ and in agreement with Fingal County Council, prior to commencement of development. The scheme of protection measures to be maintained in place until effective completion of all construction works.

**Objective GI 21** Require the use of native planting where appropriate in new developments in consultation with the Council. Indigenous, non-invasive species should be considered to provide habitat for locally occurring fauna ensuring, at a minimum, there should be no net loss of the tree and hedgerow resource.

Existing Trees and Hedgerows within the Centre of the Plan Lands



### 5.3.3 Treatment of Eastern Edge of the Plan Lands

Intermittent screening is proposed on the eastern edge of the residential development area within the ecological buffer zone to soften the impact of new development on the landscape whilst allowing views in and out of future development schemes from distant view points such as Baldoyle Bay and the Portmarnock Peninsula.

Visual and landscape character impact will be mitigated by:

- Careful and considered design and orientation of proposed dwellings along this eastern edge; avoidance of gable ends facing the shore, a defined palette of materials and simple forms.
- Copses of pines and hawthorn to soften the interface with future development. Small groups of pines and conifers are a typical feature of the existing landscape. The slow growing hawthorns will be sculpted by the onshore wind and provide refuge and food for birds.
- Impact of planting will be considered in the context of Appropriate Assessment and implications for migratory waterfowl, etc.

### 5.3.4 Proposed Pumping Station and Screening

The proposed wastewater pumping station within the northeastern section of the plan lands should be screened from the adjoining open space by a combination of low berming (1-2 metres) and dense hedgerow planting of species prevalent on site; Hawthorn, Sloe, Ash. Vehicular access to this unit will be from within the development to reduce visual impact on the estuary margins [See Figure 5.4 *Relationship of Pumping Station and Open Space, Housing and Coast Road*].

### 5.3.5 Boundary Treatments

The sensitive design, configuration and detailing of boundaries to the plan area is important to achieving the landscape and biodiversity objectives of the LAP. The southern boundary of the plan area linking the Racecourse Park lands will be formed by the retained hedgerow along Moyne Road. The existing earth-bank on the Coast Road will be retained to minimise impact on the estuary margins and the ecological buffer zone. Boundary fencing at this location will be limited to a low timber post and rail with mesh fence (1.2 metre approx) with associated planting of native hedge species; Hawthorn and Sloe on the inside of this earth-bank [See Figure 5.3 *Proposed Boundary Treatment*]. A similar boundary detail can be used to enclose the proposed ‘quiet zone’ within the plan lands with gates for closing off this zone during the winter months when the migratory birds are visiting. Existing trees and hedgerows should be retained along the boundary with the Dublin-Belfast Railway line. Section 7.5 ‘Railway Edge’ refers in more detail to the treatment of the area between the railway line and development. In general, front boundary treatments within new developments should be hedge (or reinforced hedge), rather than wall or railing.

Figure 5.3 *Proposed Boundary Treatment to Quiet Zone*



Figure 5.4 Relationship of Pumping Station and Open Space, Housing and Coast Road.



**Objective GI 22** Ensure sensitive and appropriate boundary treatments, respecting the estuarine nature of the landscape, in all development proposals.

**Objective GI 23** Require a visual impact assessment of new development on the surrounding landscape, including cross sections and photomontages at planning application stage.

### 5.3.6 The Deposit of Surplus Construction Fill Material

The deposit of fill material can have a detrimental impact on feeding and roosting habitat and landscape character. Therefore, surplus construction fill will only be permitted on the south-western section of the plan lands where bird habitat and the landscape is less sensitive to soil deposition. Such works will be restricted to appropriate times of year e.g. outside of wintering bird season. The surface of filled ground must be left in a stable condition and seeded with appropriate grass and meadow mixes. In general there will be a preference for distributing surplus fill in shallow depths (1.0 metres max) extensively except where earth forms are required for viewing points and screen berming (pumping station). Filled ground will be graded gently back to existing levels. In any event, each planning application will be subject to an appropriate assessment and screening for environmental impact assessment, where required. The outcome of these assessments will further inform the appropriateness, location and form of any fill on-site.

## 5.4 Archaeology and Built Heritage

The inclusion of the archaeological features of the Portmarnock Mound (RMP Ref. DU015:014, RPS Ref. No. 475) and the Maynetown Enclosure (RMP Ref. DU015:055) within the green infrastructure network will help to preserve these important landscape features. The Fingal Development Plan is fully committed to the incorporation of heritage features within development schemes and the

green infrastructure network. Objective GI25, seeks to provide attractive and safe routes linking key green space sites, parks and open spaces and other foci such as cultural sites and heritage assets as an integral part of new green infrastructure provision, where appropriate and feasible. Objective GI36 of the Development Plan seeks to, ensure where appropriate, that elements of the archaeological and architectural heritage are fully integrated into proposals for new developments at the project design stage.

The required archaeological buffer zones will form part of the open space network for informal play and passive recreational uses. The subsurface enclosures to the southwest of the Maynetown Enclosure within designated open space lands will be retained in situ as these open space lands remain in their natural state as part of proposed habitat protection measures outlined in this LAP. Any future interpretative boards should acknowledge these features. The LAP promotes the protection and enhancement of the archaeological and built heritage of the plan area in accordance with relevant National Monument Legislation.

### 5.4.1 Green Route Linking Existing National Monuments

Open space and scenic corridors help to define the context of historic and archaeological structures. In this regard, a core urban design concept for the LAP is to physically link the two monuments by aligning a new landscaped green axis between the two monuments. This route is a way of respecting the antiquities of past communities visible on the lands and allowing them to sit side by side with the developing community. It is considered that these national monuments are unique selling points in future residential schemes on the lands. The review of this LAP provides the opportunity to ensure these monuments are not isolated and instead become an integral part of the development.

This axis also functions as a pedestrian/cycle way linking to Station Road and the train station thereby promoting sustainable travel. It also provides the opportunity

to integrate SuDS measures [See Figure 5.5 Indicative Green Infrastructure Linkage between Monuments]. The proposed axis will be approximately 9 metres in width incorporating a landscaped area, footpaths and cycleways and overlooked by residential units. The vehicular route network will be designed to restrict the number of vehicle crossings on this axis to an absolute minimum [See Figure 6.4 Indicative Internal Street Movement Network]. The axis will be provided and developed as part of the key sustainable movement network, with pedestrian and cycle paths, within the development and dedicated as public open space. Detailed design of the proposed link between these national monuments will form part of the urban design appraisal required with all future planning applications [See Section 7.9 Urban Design Appraisal].

### 5.4.2 Archaeological Interpretation

It is an objective of the LAP to promote a greater awareness and appreciation of local archaeology. An interpretative design concept relating to the local archaeological features within the plan lands is promoted in this LAP. A practical example of such interpretation is Whitelight Garden in Park West Business Park, Dublin which responds to the history of the area with a new design concept within a public park above. The archaeology within the plan lands and particularly the Maynetown Enclosure site presents the opportunity to explore such a design concept. Interpretative information should be provided at each monument in the form of high quality 'bespoke' landscape signage and/or artwork.

#### Whitelight Garden



Examples of high quality and durable bespoke interpretative signage



Figure 5.5 Indicative Green Infrastructure Linkage between Monuments



**GI 24** Protect the archaeological heritage within the plan lands, promote best practice in its conservation and management and raise awareness and appreciation of this heritage for future generations. Ensure, where appropriate, that elements of the archaeological and architectural heritage are fully integrated into proposals for new developments at the project design stage.

**GI 25** Preserve in-situ known archaeological monuments on the plan lands through appropriate buffer zones and visual and physical linkages and incorporate into the design of development schemes.

**GI 26** Protect as yet undiscovered archaeological sites or features that survive subsurface in accordance with National Monument Legislation.

**GI 27** Ensure trees, hedgerows and other features which demarcate townland boundaries are preserved and incorporated into the design of developments.

**GI 28** Promote and facilitate appropriate interpretative concepts and signage illustrating the archaeological, built and natural heritage features within and adjoining the plan area, thus facilitating opportunities for education and understanding.

## 5.5 Open Space and Recreation

The provision of accessible open space is an integral part of the provision of high quality green infrastructure for communities and forms a core element in the emerging Green Infrastructure Strategy for the County. The Fingal Development Plan seeks to provide a hierarchy of accessible open spaces from larger regional parks to small pocket parks and strategic open spaces in the form of green/riparian corridors and greenways. These are important open space assets of green infrastructure that not only serve their passive and active recreational purposes, but also provide a link between communities and other green infrastructure elements. Public/Private open space provision as part of residential schemes must conform to the standards set out in the Fingal Development Plan 2011-2017 or any future development plans.

The required quantum of open space will include a minimum of 10% of the LAP residential lands as per Objective OS02A of the Fingal Development Plan. Objective OS04 of the Development Plan requires that 'every home within a new residential scheme be located within 100 metres walking distance of a pocket park, small park, local park, urban neighbourhood park or regional park.' Public open space shall be accessible by the general public and overlooked by high quality frontage buildings.

### 5.5.1 Open Space Hierarchy

The Green Infrastructure and Landscape Strategy provides for a hierarchy of open spaces in line with Development Plan requirements that will serve the plan area and provide links to the wider network of green spaces in the surrounding area as follows:

#### Racecourse Park – Regional Park

Racecourse Park will benefit the new and established communities within the wider area and the plan lands. This park is a unifying feature between the developing areas of Portmarnock South and Baldoyle-Stapolin, located to both the north and south of Moyne Road and is a location for existing and new communities to integrate and interact.

#### Racecourse Park North

The designated open space lands within the plan area are seen as a logical extension of Racecourse Park and have the potential to be successfully integrated with Racecourse Park South in the Baldoyle-Stapolin lands particularly through new walking and cycling routes. The completion of both these areas of parkland and associated green routes will form an integrated single entity of public open space offering a range of complementary passive and active uses for the plan lands and developing residential areas adjoining.

These open space lands will be managed as a natural landscape to ensure that the lands continue to play host to a variety of bird/wildlife species and enhanced as appropriate to create a varied open parkland offering varying degrees of controlled public access. SuDS features will be incorporated into the parkland in the form of a regional wetland to provide a suitable habitat for wildlife in the area as well as a pleasant amenity. The park will also provide connectivity to Portmarnock village to the north through a series of green routes. The habitat protection measures and amenity uses proposed within the open space lands must accord with the Green Infrastructure and Landscape Strategy of this LAP.

**Objective GI 29** Provide an integrated network of open spaces, pocket parks, linear parks and green routes through the implementation of the Green Infrastructure and Landscape Strategy.

**Objective GI 30** Integrate public open space provision and surface water management [SuDS].

**Objective GI 31** Promote and facilitate the development of carefully managed access to ecologically sensitive areas.



Table 5.1 Hierarchy, Accessibility & Function of Open Space within Portmarnock South LAP

Type of Public Open Space	Location and Function	Areas
<b>Regional Park (Class 1 Public Open Space)</b>	Racecourse Park North Provide for a large range of uses. Biodiversity/Habitat areas, passive recreation, urban agriculture, managed pedestrian and cycling routes through the parkland.	c. 32 hectares
<b>Linear Park (Class 2 Public Open Space)</b>	'Baile Fearainn Pairc' Retains historic townland hedgerows, riparian corridor along watercourse, movement corridor, biodiversity conservation and enhancement, SuDS integration. Cycling and pedestrian linkages.	c. 1.25 hectares
<b>Railway Linear Park (Class 2 Public Open Space)</b>	Railway Linear Park Retains hedgerows, movement corridor, biodiversity conservation and enhancement, SuDS integration. Cycling and pedestrian linkages.	
<b>Small Park (Class 2 Public Open Space)</b>	'Skylark Park' Provide for biodiversity conservation and enhancement, playground facilities, passive recreation and interaction space.	c. 1.23 hectares
<b>Archaeological Buffer Zones (Class 2 Public Open Space)</b>	Archaeological Buffer Zones Informal play areas and preservation of heritage features.	0.82 and 1.15 hectares.
<b>Pocket Parks (Class 2 Public Open Space)</b>	Neighbourhoods Informal play areas. Maximum passive surveillance to be achieved with housing fronting onto pocket parks.	c. 0.075 and 0.127 hectares.
<b>Small Centre Civic Space (Supporting Public Infrastructure)</b>	Civic Space Interactive public space	

Fig. 5.6 Central Linear Park (Indicative)



### Linear Park and Landscape Corridor

A linear park is proposed through the plan lands along the alignment of the historic townland boundary hedgerows and the existing watercourse where opportunities for biodiversity enhancement, walking and informal play spaces and SuDS devices are integrated. This linear park, notionally referred to as ('Baile Fearainn Pairc'), name derived from the Irish translation for townland, is a core concept in the Green Infrastructure and Landscape Strategy for the plan lands and accords with the Development Plan Objective OS23 which seeks the provision of green corridors in development schemes where the opportunity exists. This linear park is a multi-functional green corridor that serves the following functions within the proposed development:

- Conserves local flora and fauna by retaining the hedgerows.
- Maintains the townland boundaries as local heritage features.
- Provides a movement corridor for fauna between the Sluice River Marsh and Racecourse Park.
- Protects the riparian zone of the watercourse associated with the hedgerows.
- Acts as a drainage channel where the north-western section of the plan lands drain to the existing watercourse.
- Provides space for SuDS features e.g. swales.
- Provides informal play space for residents.

- Enhances visual amenity.
- Provides shelter belts, to buffer strong winds.
- Protects the central ridge/skyline from development.
- Provides a safe and attractive pedestrian route with connectivity to the various neighbourhoods within the plan lands and to Station Road and Moyne Road.
- Aids in designing in and recognising existing features to create a sense of place for the new development.

Location for Central Linear Park



Objective GI 29 of the Fingal Development Plan seeks to ensure the protection of streams, rivers, watercourses and their corridors maintaining a riparian strip of 10-15m along all watercourses. The linear park will incorporate a landscape corridor of a minimum width of 10 metres on either side of the existing townland hedgerows and watercourse [20 metres minimum, in total] to ensure biodiversity and heritage conservation, surface water management and low intensity recreational use. It is acknowledged breaks in the hedgerow will be required to facilitate vehicular and pedestrian permeability [See Figure 5.6 for Indicative treatment of the Linear Park].

### Treatment of the Existing Watercourse within the Linear Park

Any necessary and required interventions along the watercourse that are required to ensure a safe environment whilst also retaining the surface water management and amenity functions of the watercourse should be carried out and indicated at planning application stage. Recommended works may include raising the bed level of the watercourse by the use of a French drain and boulders so that the water flow above would be quite shallow. Other solutions may also be considered. All proposed design and construction techniques must undergo Appropriate Assessment screening to identify and highlight the potential for effects downstream. These works must be carried out in a manner which will retain and protect the existing trees, hedgerows and shrub layer along this watercourse. Appropriate new planting will also be considered along the watercourse. Final design detail for the treatment of the existing watercourse must form part of the Urban Design Appraisal as required under UD1 of the LAP. Prior consultation with the Parks, Biodiversity, Drainage Infrastructure and Planning Sections of the Council are necessary prior to formulating a design solution to ensure a safe environment around the existing watercourse.

Figure 5.7 Aerial view of Plan Lands showing hedgerows



Indicative character sketch - interface of housing with open space



### Railway Linear Park

A landscaped linear park is proposed along the alignment of existing hedgerows to the east of the Dublin-Belfast railway line. This park will provide an attractive landscaped buffer between the railway line and new development in the interests of residential amenity. Integrated pedestrian/cycle links are proposed within the park and will provide a direct link to the train station and other green routes. A detailed design is required at Urban Design Appraisal stage to include detailed provisions in relation to landscaping, treatments of footpaths/cycleways, street lighting, building interface and provision for the required rail reservation. Proposals must ensure that adequate provision is made for the linear park in addition to the required rail reservation See Section 6.1.1 Future Rail Infrastructure for more detail on required railway reservation and Section 7.5 Railway Edge.

### Small Park – ‘Skylark Park’

A small park of approximately 1.23 hectares is proposed within the centre of the residential lands. ‘Skylark Park’ will act as the central open space at the heart of the new community (name derived from the large numbers of skylark bird species found on these lands from the commissioned bird survey). The layout of the park reflects the landscape character that currently exists within this location with its edges formed by the existing townland hedgerow boundaries. The retention of existing hedgerows on the edge of this park will support existing native bird species providing a valuable feeding source and shelter. ‘Skylark Park’ will be central to the overall identity of the area and will be an important amenity for future residents. A number of pathways are proposed through this park linking to the adjoining linear park and future residential development. A playground is also proposed within this park. Maximum passive surveillance can be achieved from the south. This park provides the opportunity to play, rest and interact midway along the proposed linear park.

### Archaeological Buffer Zones

The archaeological buffer zones around existing national monuments are included in the open space hierarchy as they provide opportunities for informal play.

### Pocket Parks

Two pocket parks are proposed within the eastern and western sections of the plan lands. Each pocket park will be a minimum of 400 sq. metres designed as a space suitable for smaller children and with an important visual and social function. Exact location, design and dimensions for pocket parks to be determined at design stage in accordance with open space requirements as set out in the Development Plan. Design principles should provide for dwellings fronting onto pocket parks to ensure maximum passive surveillance.

### Civic/Public Space

The proposed small centre is arranged around a civic space, a small public space fronted by local shops and services. The square will incorporate flexible spaces for local events and small markets and zones for outdoor café seating. Some elements of soft landscaping should also be incorporated including, where

### Skylark Park Lands



appropriate, semi-mature tree planting. This space can also incorporate water as a design element and/or artwork and must be well lit for after dark use.

Public open space areas will be overlooked by residential units in the interests of residential amenity and maximising the level of informal supervision. These areas shall be provided and developed at the developer's expense and dedicated to Fingal County Council.

**Private Open Space**

Private and semi-private gardens will collectively represent one of the largest green infrastructure resources within the LAP lands. They are an important green infrastructure component as well as being an important contributor to local environmental quality. Private gardens can play a role in hosting wildlife and can be useful 'stepping stones' allowing wildlife to move between sites. While private gardens are not subject to external management policy and control, residents should be encouraged and helped to manage them in ways that are sympathetic to wildlife as well as other GI functions – notably sustainable urban drainage and food production. Private open space for residential schemes shall be provided in accordance with Development Plan standards.

**5.5.2 Green Routes - Maximising Access and Linkages to Green Infrastructure**

To optimise access to and use of green infrastructure, the plan area is overlaid with a network of green routes for walking and cycling. The green route network interconnects linear parks, open space, heritage features and the ecological buffer zones [See Figures 5.8 and 6.4]. The central north-south green route in the proposed linear park will link into Racecourse Park to the south and to Portmarnock to the north. Green routes can be established within the earliest phase of development particularly along the perimeter of the proposed linear park without extensive works or costs to the developer [See Figure 11.1 Early establishment of green routes as cross-county walking trails].

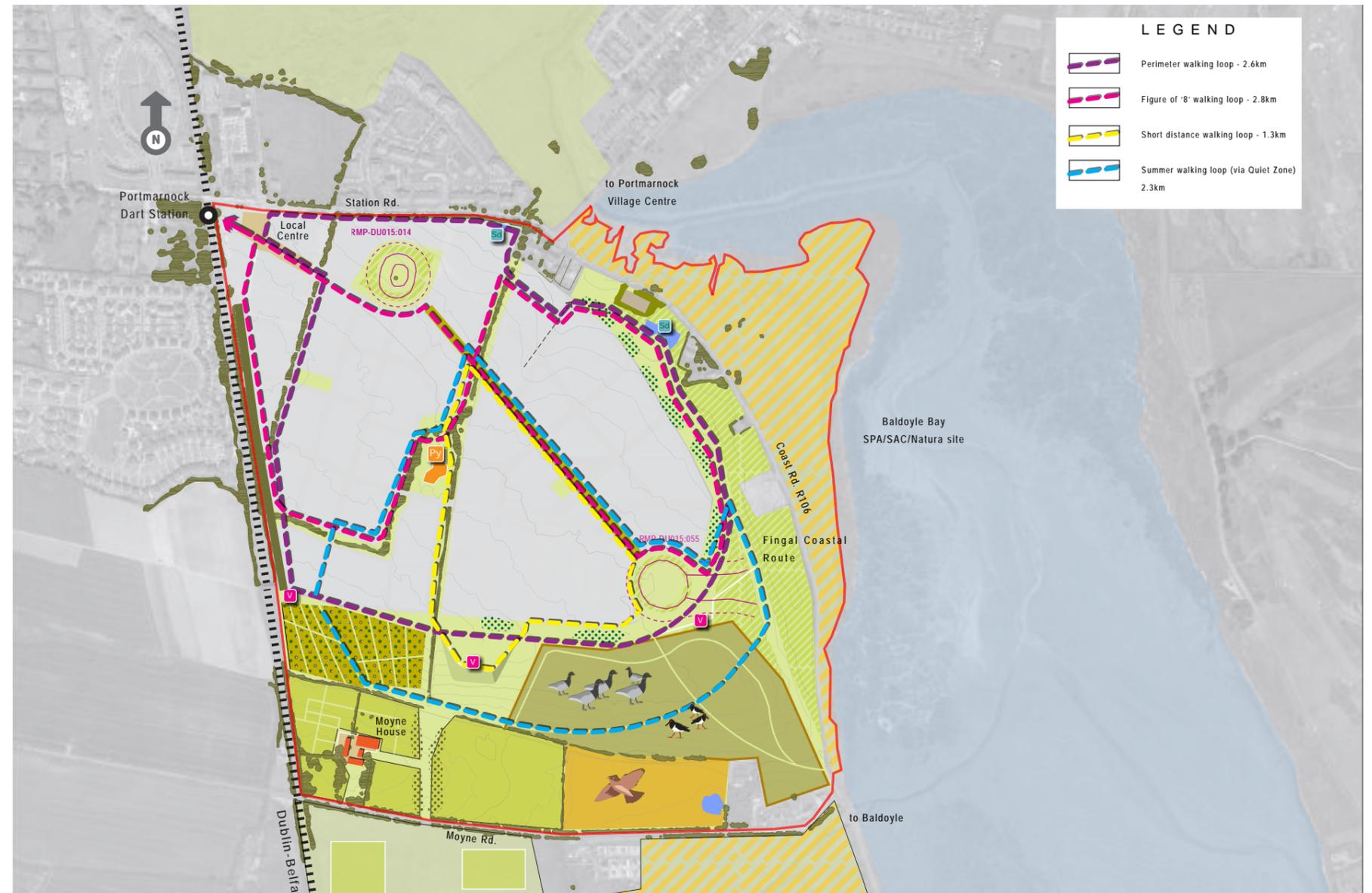
**5.5.3 Pedestrian Looped Walks**

To relieve the potential amenity pressures away from the Natura 2000 site of Baldoyle Bay, a series of looped walks are proposed within the plan area based on the proposed green routes. A summertime walking loop is proposed through the open space lands when migratory estuarine birds are not resident. These looped walks link pocket parks, playgrounds, linear and regional parkland. These routes extend beyond the confines of the LAP lands offering attractive walking routes to include Racecourse Park South and onwards to Baldoyle. Looped walking routes can be delivered as part of development schemes within the plan lands [See Figure 5.8]. Objective GI 23 of the Fingal Development Plan seeks to ensure that proposals for parks, open space and recreational facilities which may have an impact on the Natura 2000 network either directly or indirectly are subject to Appropriate Assessment and are given very careful consideration.

**5.5.4 Strategic Green Route – Fingal Coastal Way**

A maximum 3 metre wide shared greenway for walking and cycling is proposed within the eastern edge of the open space lands in agreement with the National Parks and Wildlife Service [NPWS] and the National Transport Authority

Figure 5.8 Indicative Looped Walking Routes



[NTA]. This route will form part of the proposed strategic greenway of the Fingal Coastal Way route and will integrate nature, amenities and open space along the coast. This greenway will relieve amenity pressures away from the Natura 2000 site of Baldoyle Bay and the surrounding sensitive coastal areas while ensuring good connectivity to the main residential areas and linkages through Racecourse Park to Baldoyle and Portmarnock village. The flow of visitors to the area has to be facilitated in a manner that ensures that the conservation objectives for Baldoyle Bay are not compromised. In this regard, this greenway will incorporate screening along the perimeter of the route to control and manage access along the coast and to prevent disturbance to the migratory birdlife associated with Baldoyle Bay.

**Objective GI 32** Promote connections between open spaces and amenity areas including greenways within and beyond the LAP area.

**Objective GI 33** Promote and develop a combined greenway of no more than 3 metres in width for walking and cycling along the eastern edge of the plan lands and access the potential to connect with amenity lands in the adjoining Racecourse Park to the south and further amenities along the coastal corridor, in consultation with the Council's Biodiversity Officer. The coastal walkway shall be designed and sited to reflect and where appropriate integrate with its coastal setting subject to Appropriate Assessment and detailed design assessment.

The Council is fully committed to the planning, development and implementation of the strategic greenway. The delivery of this route is dependent on a multi-agency approach between landowners, environmental bodies and funding agencies with Fingal as the lead agency. The Council is currently progressing with the planning of various sections of this greenway along the coast. Funding will be sourced from various funding bodies including the National Transport Authority. The early transfer of open space lands within the plan area will facilitate the planning and implementation of the Fingal Coastal Way [See Section 11.4 Phasing and Implementation].

This greenway will form part of the public open space network within the plan area and will be taken in charge and maintained by the Council. The location, design and materials of the proposed greenway require considerable attention given the sensitivities of the plan lands and proximity to the Natura site of Baldoyle Bay. The greenway will be subject to Appropriate Assessment screening.

Example of pedestrian and cyclepath running between hedgerows; within Fr. Collins Park



### 5.5.5 Management of Open Space

Managing such a large area of open space by traditional grass cutting practice is economically unsustainable. It is proposed to manage the lands through a low intervention landscape approach given their function as an ecological buffer zone and the requirement to provide habitat protection measures. To this end, much of the open space lands will be retained as meadow, amenity grassland and arable crops. Urban agriculture is also proposed within these lands.

Urban agriculture can be implemented by a number of models or most likely by a combination working side by side. Urban agriculture provides habitat and feeding grounds for birdlife as well as providing local residents with a valuable recreational opportunity in addition to education and community interaction. Such projects will require the co-operation of landowners, the community and the Local Authority. Effective management of such uses are required. It is an objective of this LAP to explore the feasibility of providing growing initiatives on the plan lands. Examples of such growing initiatives include:

#### Community Farming

Ground-up community initiatives can be facilitated in establishing community farms.

#### Contract Farming

Urban agriculture can also be established by contracting farmers to maintain grazing stock, cut meadows and grow crops under the auspices of the Council.

The low intervention landscape approach proposed within these open space lands is considered a sustainable approach in terms of long term management and maintenance with significantly reduced energy inputs/outputs and maintenance costs.

**Objective GI 34** Assess the feasibility of establishing growing initiatives within the LAP area.

**Objective GI 35** 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.

**Objective GI 36** Ensure that a minimum 10% of the proposed development site area shall be designated for use as public open space.

**Objective GI 37** Provide a children's playground within the proposed small park. [Skylark Park]

**Objective GI 38** Ensure the timely completion of the open space network and green routes as set out in the Green Infrastructure and Landscape Strategy through the phasing strategy in the LAP.

### 5.6 Sustainable Urban Drainage Systems (SuDS)

The Fingal Development Plan is committed to sustainable drainage systems. Objective GI30 seeks to ensure that the provision of new green infrastructure addresses the requirements of functional flood storage and links with provision for biodiversity, Sustainable Drainage Systems and provision for parks and open space wherever possible and appropriate. Objective GI 31 seeks, the creation of new wetlands and/or enhancement of existing wetlands through provision for Sustainable Drainage Systems (SuDS).

There is a positive opportunity though this LAP to promote the implementation of best practice SuDS design within the plan lands and to use natural amenity features to complement the surface water drainage and landscape proposals. The use of open space and landscape features for the purposes of water infiltration (source control), detention/attenuation (source and site control) and/or conveyance (site control) will underpin the effectiveness of the sustainable drainage system promoting a sustainable approach to the management of water resources in the development of the plan area. SuDS design can be aesthetically attractive and can provide greenery and landscaping features within developments and are generally low maintenance. Examples in practice which may be familiar to the public include wetlands or lake features as part of park design.

A SuDS Strategy was commissioned by Fingal County Council for the LAP area and provides guidance on SuDS measures which shall be taken into consideration for future development in the plan area [See Appendix 1].

#### Proposed SuDS measures within the open space network are as follows:

- A SuDS wetland within the eastern section of the ecological buffer zone.
- Filter strips in the soft landscape areas adjoining roads, carparks and residential areas.
- Swales within the proposed linear park and along the edge of the ecological buffer zone.
- Green roofs.
- Porous paving in car-parking bays, driveways.
- Stormwater tree trenches.
- Bioretention areas.

Example of boardwalk across a constructed (SuDS) wetland and example of grass swale in a linear greenspace.



#### SuDS Wetlands

The SuDS Wetlands will be a regional wetland to serve the plan lands and will be designed for biodiversity benefits incorporating native aquatic and marginal aquatic plant species such as:

- Bulrush *Typha latifolia*
- Yellow flag *Iris pseudacorus*
- Branched burr reed *Sparganium erectum*
- Water mint *Mentha aquatic*
- Fool's cress *Apium nodiflorum*.
- White water lily *Nymphaea alba*
- Yellow water lily *Nuphar lutea*

The wetland will incorporate a permanent body of water with a maximum depth of 600mm. If required the pond base below the permanent water level can be lined with a Butyl or Bentonite liner, although the preference will be for puddling the pond with clay (for further guidance refer to *Integrated Constructed Wetland*

Guidelines, DOEHLG 2010). The wetland will then attenuate an additional 600mm depth approx. of stormwater. In order to create a safe edge to the open water, the edges of the wetland shall be sloped to a maximum grade of 1:3 / 33.34% and incorporate flat benches under the permanent and maximum water level [See Figure 5.9 Typical section through SuDS wetland]. Any boardwalks or bridges over deeper sections of open water (deeper than 150mm) must incorporate balustrades at their edges.

Example of SuDS wetland within Fr Collins Park



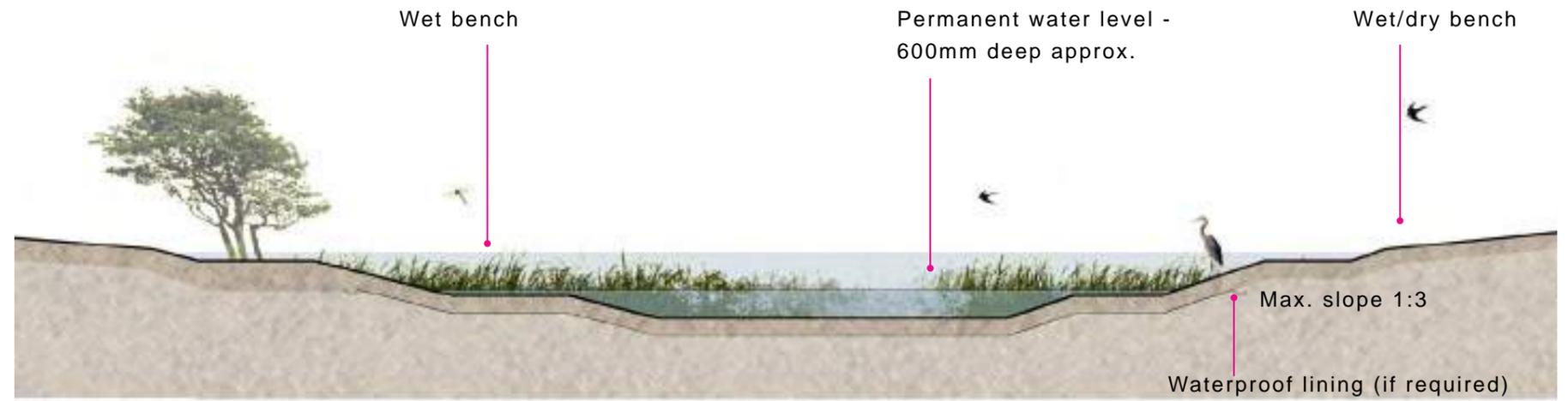
**Objective GI 39** Achieve best practice and innovation in SuDS design as part of development schemes including the successful co-ordination of surface water management with biodiversity features and amenity functions of open space and landscaped areas.

**Objective GI 40** Demonstrate compliance with the provisions of the SuDS Strategy of this LAP in the design and layout of SuDS devices in the plan area. Ensure as far as practical that the design of SuDS enhances the quality of open spaces. SuDS do not form part of the public open space provision, except where it contributes in a significant and positive way to the design and quality of open space. In instances where the Council determines that SuDS make a significant and positive contribution to open space, a maximum 10% of open space provision shall be taken up by SuDS.

**Objective GI 41** Protect the integrity of existing townland hedgerows and watercourses for their biodiversity and amenity value including surface water management. To this end, ensure that no development, including clearance and storage of materials, takes place within a minimum distance of 10-15 metres measured from each bank of any river, stream or watercourse.

**Objective GI 42** Developers shall have regard to the principles and standards for SuDS design as outlined in the following technical documents, ‘The Greater Dublin Strategic Drainage Study’ – Vol. 2 New

Figure 5.9 Indicative Section of Typical SuDS Wetland



Developments (2005); ‘The Greater Dublin Strategic Drainage Study’ – Vol. 3 Environmental Management Executive Report (2004), ‘CIRIA C697: SuDS Manual’ (2007); and ‘CIRIA C698: Site Handbook for the Construction of SuDS, or as updated.

**Objective GI 43** Ensure the early completion of the proposed regional SuDS wetland.

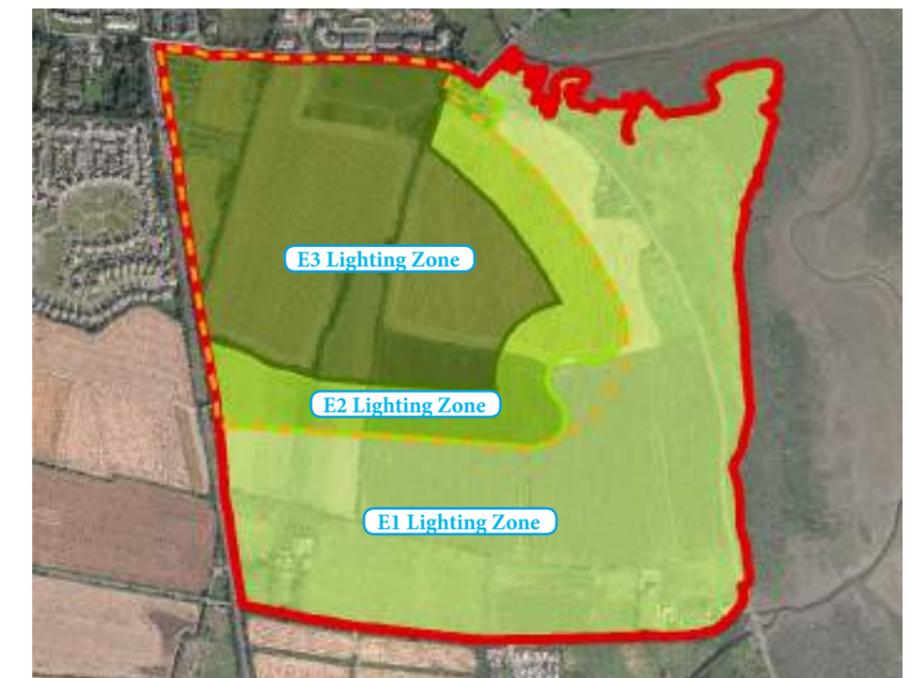
**5.7 Public Lighting within the Landscape**

To minimise the environmental impact of public lighting on this sensitive coastal landscape, appropriate light intensity zones have been devised for the plan lands. The establishment of an ‘Environmental Zone’ (as defined by the Institute of Lighting Engineers’ publication, Guidance Notes for the Reduction of Light Pollution published in the UK) has been considered in the formulation of these lighting zones. This categorisation system represents current best practice in Europe and aims to ensure that the relative brightness of a site with respect to its environmental context is appropriate. Environmental Zones have been selected from the following categories:

- E1: Intrinsically dark landscapes (national parks, areas of outstanding natural beauty, etc).
- E2: Low district brightness areas (rural, small village, or relatively dark urban locations)
- E3: Medium district brightness areas (small town centres or urban locations)
- E4: High district brightness areas (Town/city centres with high levels of night-time activity)

Portmarnock South falls under categories E1, E2 and E3 [See Figure 5.10 Lighting Intensity Zones]. Lighting along transitional areas between zones may not fall neatly into one zone and will need to be assessed in detail at pre-planning or planning application stage. Within the E3 zone and adjacent to environmentally

Figure 5.10 Lighting Intensity Zones



sensitive areas such as the central linear park, lighting must be of a sufficient level for public safety but of a reduced impact more in line with E2 zone lighting levels. Consideration may be given to limited low level lighting along the proposed coastal route given that this route will also function as a commuter route between Baldoyle and Portmarnock. This is, however, subject to Appropriate Assessment and assessment of bird movements within the plan lands and the wider area during dark hours.

**Objective PL 1** Implement the hierarchy of light intensities as set out in Figure 5.10 Light Intensity Zones for the plan lands to ensure that environmental impact is minimised as far as possible in development schemes.



# Movement and Transport

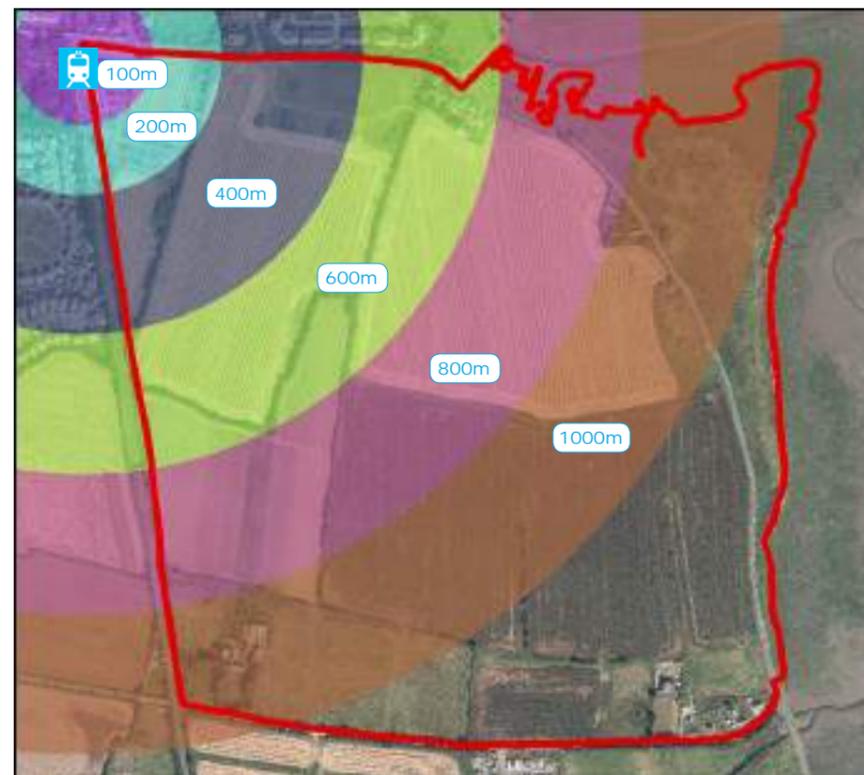
## 6.0 Movement and Transport Strategy

A key objective for this LAP is a sustainable movement and transport strategy with priority on maximising connections to amenities and services. A movement strategy has been formulated that enables residents to move in a sustainable manner without the use of the private car as the predominant choice of travel. Pedestrian and cycle movement benefits and compliments the green infrastructure strategy discussed in the previous section. The movement strategy and green infrastructure strategy set the framework for urban design and layout within this LAP [See Section 7 Urban Design].

## 6.1 Public Transport - Rail

Portmarnock train station is a crucial element in contributing to sustainable development. The entire RA plan lands are within walking distance of the train station which is located immediately to the northwest of the LAP lands and provides frequent DART services to Malahide and the City Centre, suburban train services to north county Dublin and a regional service to Belfast. [See Fig. 6.1] Direct high quality pedestrian/cycle routes and bus access to and from the station will play an important role in encouraging residents within and adjoining the plan area to use this high quality public transport service. It is an objective of this LAP to provide direct access to the train station from the plan lands in consultation with Irish Rail. It is proposed that this important connection is made via the proposed small centre adjoining the train station in the form of a new street. The early delivery of this connection is a priority.

Figure 6.1 Distances from Portmarnock Train Station



## 6.1.1 Future Rail Infrastructure

It is an objective of the Fingal Development Plan 2011-2017 that lands shall be reserved to provide for additional rail tracks along public transport corridors. Provision must be made for a reservation from the existing tracks for future widening of rail tracks within the LAP lands in agreement with Iarnród Éireann. Developers will need to consult with Iarnród Éireann regarding their requirements prior to any development adjacent to the rail line. See Figure 7.3 for the potential for treatment of the interface of future development within this infrastructural reservation.

**Objective TM 1** Ensure that future planning applications and development of the plan lands are designed to have regard to Iarnród Éireann future rail improvement proposals.

**Objective TM 2** Ensure that Iarnród Éireann's future rail improvement proposals including associated works such as access roads, maintenance yards and car-parks are designed and developed having regard to objectives of the LAP and the environmental and visual sensitivities of the plan area.

Dart at Portmarnock Station



## 6.1.2 Train Station Car Park Facility

Modal split from private to public transport will be encouraged by ensuring the provision of adequate car parking facilities adjoining Portmarnock train station. The LAP will allow for an appropriate level of car-parking provision at the optimal location adjoining the train station. The existing car-park adjoining the

train station is extensive and any further carpark expansion should incorporate decked parking to make the most efficient use of land adjoining the station. Where necessary, the Council will engage with Irish Rail to ensure the implementation of this strategic objective of the LAP.

### 6.1.3 Bus

The area is served by Dublin Bus scheduled services most of which provide links to Dublin City Centre. These include the following routes:-

- 32 Malahide - Portmarnock - City Centre
- 32X Estuary Road - Portmarnock - City Centre - UCD
- 102 - Malahide to Sutton Dart Station via Portmarnock.

Bus services are limited and there is currently no feeder bus to the train station from Portmarnock village and the surrounding area. The Council will facilitate relevant stakeholders including developers to engage with public transport operators to seek improvements to the bus transport network, particularly with regard to a bus link to Portmarnock Train Station and a bus route through the plan lands. Each planning application shall, as may be applicable, provide for bus access, stops/laybys and/or turning areas to serve future bus services to Portmarnock train station. Such proposals shall form part of and be subject to appropriate assessment screening. The LAP proposes integrated pedestrian/cycle facilities on Station Road providing a significantly enhanced and efficient link to Portmarnock train station.

**Objective TM 3** Promote the development of a pedestrian and cycle network of routes that incorporate existing natural features on the lands, connects with local amenities, parks, retail/community facilities and public transport facilities throughout the plan area and that is coherent, direct, safe and convenient.

**Objective TM 4** Ensure that all planning applications provide for a pedestrian/cycle connection to Portmarnock train station within the plan lands in consultation with Irish Rail. Interfacing with residential development, environmental features and the train station lands shall be carefully considered in future route design proposals.

**Objective TM 5** Support and facilitate the liaison between developers and Dublin Bus regarding the provision of a bus service and integrated public transport service with direct connectivity to Portmarnock train station for commuters as the area develops.

**Objective TM 6** Liaise with Irish Rail to promote greater frequency and enhanced services at Portmarnock Train Station for commuters as the area continues to grow.

**Objective TM 7** Promote modal split from private car to public transport through the provision of adequate car parking at Portmarnock train station ensuring an efficient use of land at this key location through decked car parking if necessary.

### 6.2 Traffic Impact Assessment

A key part of the preparation of the two Local Area Plans at Portmarnock-South and Baldoyle-Stapolin was the assessment of the potential increase in the population of the area and the associated impact on traffic on the surrounding road network. An assessment of this impact allows for an understanding of the required phasing of infrastructural improvements to the road network and the application of this phasing to be built in to the delivery of both Local Area Plans.

In May 2012, consultants AECOM produced a report detailing the traffic impact on the South Fingal Area. This report, entitled, *South Fingal Transport Study: Final Report, May 2012*, recommended road and public transport network improvements for the North/South fringe area including Clongriffin-Belmayne. The study used a morning peak hour transport model for a base year of 2011 and a future year of 2025.

The model in the *South Fingal Transport Study* was refined to concentrate on the transportation impacts of the development of the two Local Area Plans having

regard to the wider potential for development within Fingal but also including the administrative area of Dublin City Council's North Fringe. Traffic surveys were undertaken in May 2012. Updated traffic flow data and signal information was also obtained for the Clare Hall signalised junction from the Dublin City Council SCATS Urban Traffic Control system. This fed into the final report entitled *Transport Phasing Assessment: Portmarnock South and Baldoyle-Stapolin Local Area Plans*, which was issued in October 2012. Recommendations for phasing arising out of the final report are included in Section 11 Phasing and Implementation of this LAP.

The recommendations in the TIA report covered both Baldoyle-Stapolin and Portmarnock South and for the purposes of phasing, some adjustments were made to the assumed delivery of development set out in the AECOM report to better reflect the likely timing of development. The outcome of the NTA North East Dublin Transportation Study (see below) may also influence the delivery of transportation infrastructure.

Figure 6.2 Location of LAP Lands in the context of existing transport network.





The following issues were observed by AECOM on the local transport network in May 2012:

- There are high traffic volumes on all approaches to the Clare Hall signals in the morning peak hour. Eastbound traffic on Clare Hall Avenue/Grange Road queues back from this junction and impacts on the operation of the roundabout junction at the Hole in the Wall Road.
- Some congestion also occurs on the approaches from the Hole in the Wall Road and R124 Drumnigh Road to the R123 Moyne Road. In addition, there is poor sight visibility from the minor arm approaches (Hole in the Wall Road and Drumnigh Road) to the Moyne Road.
- Some minor congestion occurs at the Drumnigh Road/Station Road junction, in particular on the minor arm of the junction (Station Road) during the AM peak. However, the delays at the junction are infrequent, while any queues that form disperse quickly. There is poor visibility from the minor road (Station Road) to the left on the Drumnigh Road.
- The Moyne Road underpass of the Irish Rail Bridge is a shuttle system with good intervisibility between the yield lines.
- The remaining key junctions were observed to operate within capacity with no major issues in the morning peak hour.

As part of the South Fingal Transport Study, a number of road infrastructure schemes are proposed in the study area which will play a key role in facilitating the future development of the Portmarnock South and Baldoyle-Stapolin LAP lands. The proposed road schemes are outlined below and shown on Figure 6.3.

- **Hole in the Wall Road Upgrade:** A proposed realignment of the northern end of the Hole in the Wall Road to tie in at the R123 Moyne Road at a four arm crossroads junction. This will address the existing deficient visibility at the existing junctions on the Moyne Road with the Hole in the Wall Road and the Drumnigh Road.
- **Baldoyle Public Transport Bridge:** An extension of Red Arches Road and bridge over the rail line at Clongriffin DART station and connection with the east-west link of Clongriffin Main Street to accommodate buses, pedestrians and cyclists.
- **Baldoyle Link Road (within Clongriffin-Belmayne LAP):** An extension of Clongriffin Main Street to the west of Hole in the Wall Road and connecting to the R107 Malahide Road to the north of the existing Clare Hall traffic signals.
- **R107 Malahide Road Realignment:** A significant realignment of the existing Malahide Road from Belcamp Lane to north of Chapel Road. The proposed new link is a dual-carriageway with a new grade separated junction with the R139 (old N32).

- **R139 (old N32) Upgrade:** Upgrade of the R139 (old N32) to dual-carriageway from the existing Malahide Road to Clonshaugh Road.
- **East-West Distributor Road:** A new link road from the existing Malahide Road at Balgriffin Road to the R132 Swords Road at Collinstown Cross, incorporating a bridge over the M1 and facilitating access to new development lands at Belcamp and Clonshaugh.

The phasing strategy of this LAP reflects the recommended phasing of the above roads infrastructure schemes including key junction upgrades to facilitate development in the Portmarnock South LAP and wider area. Recommendations arising from the more refined level of detail in the October 2012 study will also inform phasing. In addition or as part of the already identified road schemes these include:

- Clare Hall junction upgrade (part of the R107 Malahide Road Realignment)
- Grange Road/Baldoyle Industrial Estate junction upgrade
- Willie Nolan Road/Baldoyle Main Street junction upgrade
- Drumnigh Road/Station Road junction upgrade

**North East Transportation Study**

The NTA are currently undertaking the North East Dublin Transportation Study, a strategic study to assess the various transport infrastructural proposals impacting on the North/South Fringe Area. This study will outline the required provision and build out of transportation [roads and public transport] infrastructure to serve not only Portmarnock, but the wider north east County area. Once completed, the NTA study will inform and supplement the suggested phasing strategy of this LAP.

Figure 6.3 Proposed Road Schemes



**6.3 Proposed Road Improvements: Fingal Development Plan 2011-2017**

Fingal Development Plan includes an indicative map based objective for an upgrade of the Moyne Road. This road proposal traverses the open space lands of the plan area and would link the plan lands to the Coast Road and the Hole in the Wall Road to the south-west. A fundamental finding of the October 2012 Traffic Impact Assessment is that the existing Moyne Road underpass below the railway bridge operates satisfactorily as a shuttle system with good inter-visibility between the yield lines and is capable of accommodating development within the plan lands. Having regard to the findings of the TIA, the proposed Moyne Road upgrade is not a priority roads infrastructural project for the Council and a full review will be undertaken in the context of the next County Development Plan.

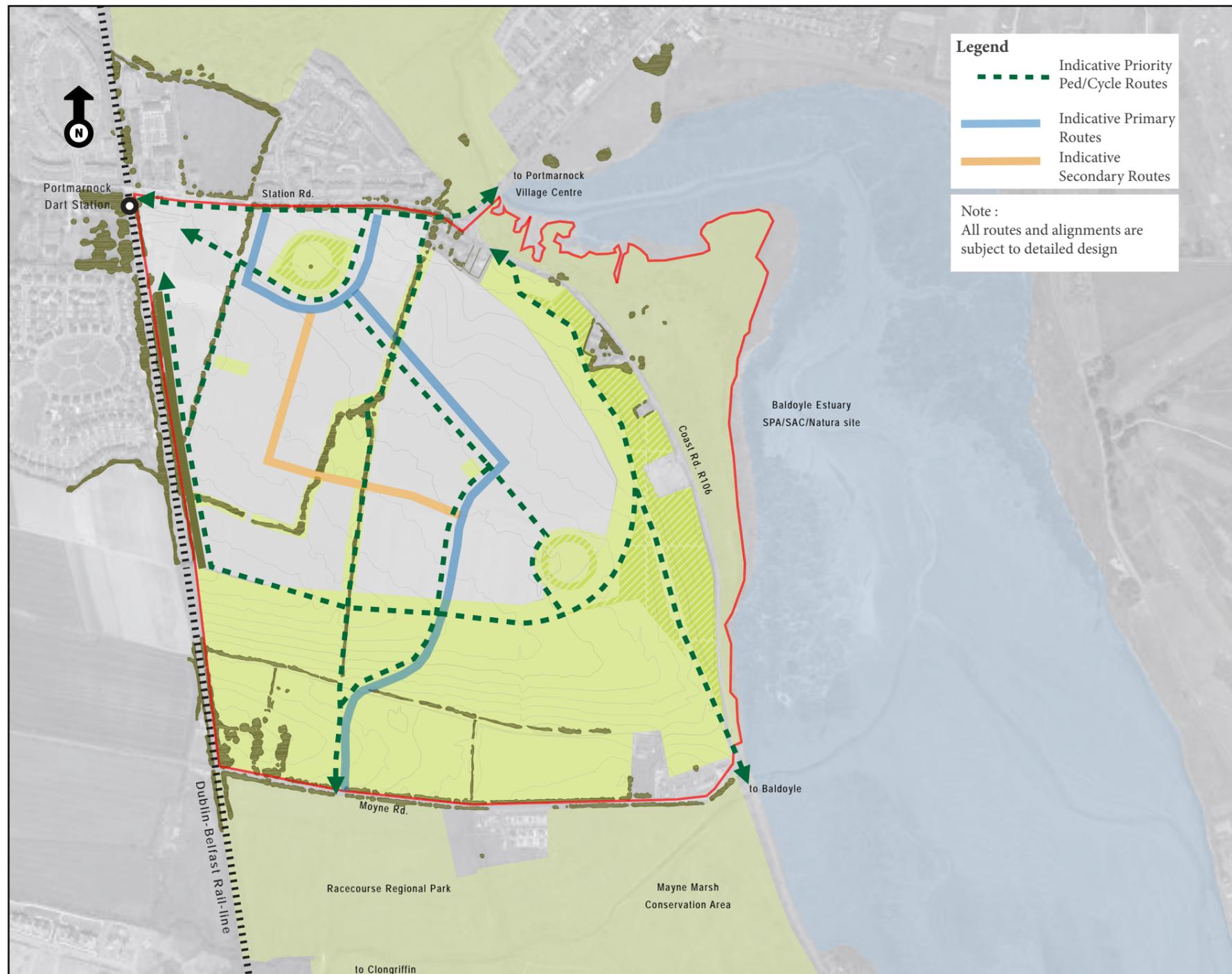
**6.4 Internal Street and Movement Network**

The street network should be designed to reflect and complement the urban character areas which underpins the urban design strategy. Street and pedestrian/cycle systems must ensure permeability and ease of movement for all modes of transport and create a legible and highly connected community. The street layout should be based on the principles set out in the *DOEHLG's Design Manual for Urban Roads and Streets 2013*. The main challenge for designers is to move away from the philosophy of the distributor road that has dominated suburban housing design up to recent times and to implement a new standard of design that creates safe, legible and attractive streets which enhance sense of place.

The street network within the plan lands shall be designed to achieve the following:

- **Safe Streets** that passively manage vehicular behaviour through a holistic design approach and 'shared space' philosophy.
- **Accessible Streets** with a focus on the free movement of vulnerable users such as cyclists and pedestrians.
- **Attractive Streets** that enhance the area's sense of place and peoples enjoyment of the urban environment.
- **Legible Streets** that direct and assist the most casual of users in finding their way around.
- **Cost Effective Streets** where materials, finishes and street furniture are rationally and strategically applied.
- **Innovative Streets** that continue to evolve through the application of best practice and contemporary design models.

Figure 6.4 Indicative Internal Street and Movement Network



### Primary and Secondary Route

The primary street runs through the plan lands generally in a north-south direction with a secondary east-west spur linking to the external road network of Station Road to the north and Moyné Road to the south. These streets will play a major role in terms of access and circulation and will link all neighbourhoods within the plan area. In general, the main vehicular carriageway for the primary route will be 6.5 metres in width, a minimum 1.5 metres each per pedestrian and cycle lane and 1.5 metres per verge [i.e. 15.5 metres total width] and designed to provide a safe and pleasant environment for cyclists and pedestrians with associated cyclepaths, footpaths and verges. In general, the vehicular carriageway for the secondary route will be 6 metres in width and designed to provide a safe and pleasant environment for cyclists and pedestrians. Exact design details to be determined at Urban Design Appraisal stage and will be subject to Appropriate Assessment Screening.

A detailed design is required at Urban Design Appraisal stage to include detailed provisions in relation to surface treatments of cycleways, footpaths, road pavement, landscaping, street lighting and building interface for the primary and secondary routes. Carriageway widths and surface treatments at junctions and pedestrian crossing points must be carefully designed to give priority to pedestrian and cyclists in the interests of pedestrian and cyclist safety. Streets must be overlooked by dwellings to achieve maximum passive surveillance. Where the primary route runs between the monuments, there will be scope for the incorporation of pedestrian and cycle routes within the green axis subject to agreement at urban design stage. The primary route within the ecological/open space lands within the south of the LAP lands shall be carefully designed and located to avoid adverse impacts on the adjoining 'quiet zone' proposed under the habitat protection measures set out in this LAP. A reduction in the overall width and land take of the primary route within the open space lands to the south of the residential area which is required as an ecological buffer zone, should be examined at detailed design stage.

### Residential Streets

These quiet residential streets will comprise the majority of the street network and their predominant function will be to allow easy and direct walking and cycling into and through the area, provide local vehicular access, and give access to buildings. The role of these streets is to protect and enhance the place and social gathering function that local residential streets provide by promoting them as places to gather and socialise, alongside their secondary function of providing safe and convenient access to individual properties. Only low levels of traffic are envisaged on these streets. In general, these streets will be 4.8 metres in width. Design must incorporate measures to ensure pedestrian priority and permeability as well as very low vehicle speeds. Shared surface design measures ensuring non surface differentiation between the roadway and the pavement would be appropriate for these streets. The LAP seeks to deliver high quality surface treatments including landscaping, street lighting and street furniture.

**Pedestrian/Cycle Green Routes within the Plan lands**

A series of pedestrian and cycle routes are proposed within the plan lands to connect residential areas with open space, recreational, community, commercial/retail facilities and transportation nodes. These green routes are an integral component in the overall movement network, providing a sustainable way of travelling through the area. Maximising connections to public transport facilities by way of a coherent and efficient movement network is central to ensuring accessibility for residents. Green routes are also important for community integration by facilitating local movement between neighbourhoods. There are opportunities for strategic integration of walking/cycling routes throughout the wider area to open space, community services, schools, public transport locations and wider cycle networks such as the S2S [Sutton to Sandycove cycling route]. All green routes within/adjacent to residential areas shall be directly overlooked to ensure a high degree of informal supervision and to encourage their use.

**Priority Green Routes**

The LAP proposes a number of priority pedestrian/cycle routes within the plan lands [See Figure 6.4 Indicative Internal Street and Movement Network]. These routes are essential connecting routes for pedestrian and cyclists to key destinations including Portmarnock train station. Within the early phases of development pedestrian/cycle connections may be temporary until such time as the permanent provision is established in line with the green infrastructure strategy. Priority green routes are proposed in the following locations:

**i) Station Road Green Route**

Station Road plays a major role in the public transport system providing pedestrian/cyclist connection to Portmarnock train station. There is an opportunity through the development of the plan lands to provide significantly enhanced pedestrian/cyclist facilities along this route. This will support the sustainable transport needs of existing and developing areas. In this regard, a tree lined boundary is proposed

along Station Road with integrated pedestrian/cycle facilities located behind the tree line providing an attractive and efficient link to Portmarnock train station. Figure 6.5 illustrates this proposed green route which is overlooked by dwellings and the adjoining residential street ensuring maximum passive surveillance. This combined walking and cycling route shall be 4 metres in width given the strategic nature of the route to the train station and to acknowledge the primary status of the route. Section 7.5 refers in more detail to the architectural treatment onto Station Road. These enhanced facilities can be complemented with a future bus service along Station Road to the train station as the community grows.

**ii) Green Route along Central Linear Park**

A green route for walking and cycling is proposed in a north-south direction along the entire length of the linear park proposed through the plan lands. Fig. 6.4 shows the location of a combined walking/cycling route adjacent to the edge of the linear park. Midway through the plan lands, the route passes through the proposed 'Skylark Park'. Dwellings and front gardens incorporating off-street car-parking should front onto the proposed linear park, ensuring maximum passive surveillance. Quiet residential streets are envisaged along the perimeter of the linear park with a street width of 4.8 metres in general. The vehicular route network should be designed to restrict the number of vehicle crossings on this linear park to an absolute minimum in order to protect the integrity of the proposed park. Crossing points along the linear park must be carefully designed in the interests of pedestrian/cyclist and vehicular safety. Where crossing points occur, regard must be had to the sensitivity of existing biodiversity features such as trees and hedgerows in any design proposals.

**iii) Green Route within Railway Linear Park**

Integrated pedestrian/cycle links within the linear park adjoining the railway line will link future residential development directly to the train station and to other green routes.



*'The Kilns' at Station Road, Portmarnock showing a landscaped linear pedestrian route between the Dublin-Belfast railway line and residential development. This type of layout is promoted within the LAP lands adjoining the railway line.*

**iv) Green Route between Existing National Monuments**

A landscaped green route is proposed between the two national monuments in a north-west, south-east direction to physically link these monuments. The mechanism and design for its delivery will be dealt with at the urban design appraisal stage, including detailed analysis of car parking requirements. Basic design principles should provide for dwellings fronting onto the proposed route to ensure maximum passive surveillance. Car-parking must be adequately catered for and will include off-street and possibly some on street. Quiet residential streets would be the optimum design approach along the perimeter of this green route with a street width of 4.8 metres. Any other route/street type will have to demonstrate how it provides for a safe and high quality pedestrian/cycle environment and associated green route with passive surveillance. This arrangement should prioritise the pedestrian and cyclist by restricting the number of vehicle crossings on this route to an absolute minimum and will significantly enhance the environmental quality of the adjoining neighbourhoods for residents. Crossing points at this location shall be carefully designed in the interests of pedestrian and cyclist safety.

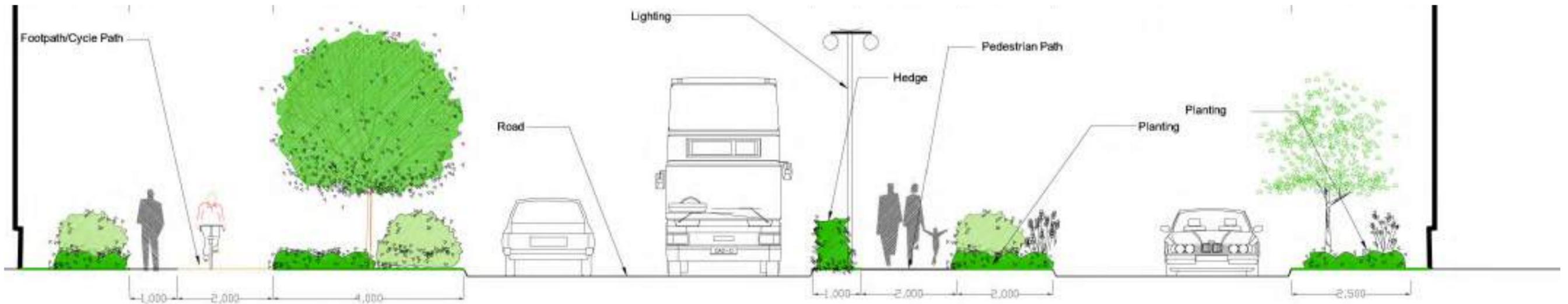
**v) Green Route East of the Dublin Belfast Railway Line**

This green route is proposed along the alignment of existing hedgerows further to the east of the train station and railway line and will link future residential development directly to the train station and other green routes. A landscape protection strip of 3 metres minimum width is proposed on either side of the existing hedgerows to protect existing trees and hedgerows. A pedestrian/cycle route is to be provided alongside at least one edge of the protection strip and must be overlooked by dwellings. In the event that not all hedgerows/trees can be protected because of the difficulty with the resulting residual spaces, alternative routes, linking the routes which can be provided along the hedgerow, will form part of any schemes in this area.

**Figure 6.5 Illustration of Station Road showing indicative intergrated pedestrian/cycle green route**



Figure 6.6 Indicative Street Section



### vi) Green Route on Eastern Boundary of the Plan Area – The Fingal Coastal Way

A maximum 3 metre wide greenway for walking and cycling is proposed along the eastern edge of the open space lands. This will link the coastal way in the Baldoyle-Stapolin LAP lands through Racecourse Park to Portmarnock Village and beyond. This route will form part of the proposed strategic greenway of the Fingal Coastal Way and will integrate amenities and open space along the coast. All green routes within and adjacent to residential areas must be overlooked by residential units to achieve maximum passive surveillance. Green routes will be provided and developed at the developer's expense and dedicated as public open space and kept free of development. The Fingal Coastal Way, however, is to be developed through a multi-agency approach and funding sourced from various funding bodies. Detailed design and finishes for green routes will be determined at the urban design appraisal stage. Regard must be had to the sensitivity of existing biodiversity features such as trees and hedgerows and fauna in any green route design proposals.

Design, route and construction methodology for a coastal walking and cycling route will be subject to Appropriate Assessment screening. Similarly, the statutory requirement for screening for Appropriate Assessment will apply to any proposed network of walking and cycling routes in order to protect European Sites.

**Objective TM 8** Ensure co-ordination between the Conservation Management Plan required as part of the Habitat Protection Measures outlined in the LAP and any relevant objectives or requirements as may be developed as part of any Environmental Management Plan associated with the coastal route.

**Objective TM 9** Provide a clear, safe and legible network of cycling and pedestrian routes within the LAP lands that will link key destinations, including local shops, services, schools, Portmarnock train station and other important local destinations and amenities and which will also provide linkages to the GDA Cycle Network.

**Objective TM 10** Provide, as part of the Fingal Coastal Way, an agreed

and appropriately designed combined pedestrian and cycle route, of no wider than 3 metres, along the eastern edge of the plan land with linkages to the GDA Cycle Network, minimising access points and signage to avoid disturbance and ensuring the integrity of the protected habitats and species within Baldoyle Bay and the ecological buffer zone within the plan lands.

### 6.4.1 Pedestrian Crossings

Pedestrian crossings at a number of locations in the vicinity of the plan area will be promoted and facilitated.

- Moyne Road - To facilitate pedestrian access to Racecourse Park to the south of the plan area, two pedestrian crossings are proposed in the vicinity of Moyne Bridge and east of Moyne Lodge.
- Station Road -To facilitate pedestrian access to Portmarnock train station and Portmarnock village, a pedestrian crossing is proposed on Station Road.

### 6.5 Parking Provision

Car parking within future development schemes shall accord with Fingal Development Plan standards for residential areas. The LAP promotes the following design guidelines for parking to serve future development schemes within the plan area:

- Design off street car parking as an integral part of the urban streetscape. Off street carparking is envisaged as the predominant form of car-parking within development schemes.
- Communal parking areas should be appropriately lit, open to natural surveillance and have obvious pedestrian routes.
- On street car parking should where possible, be provided adjacent to the residential unit that it serves and, if this is not possible, in all instances car spaces should be visible from the residential unit, thereby increasing security. On-street parking places should be located in explicit bays such that indiscriminate parking is deterred.

- An innovative solution to car-parking to serve the proposed small Centre i.e. in Character Area 1 is required in future development schemes. Car parking beneath a podium, where the space above the podium can be utilised as a shared open space should be considered in any future design schemes. Other design options which provide for well landscaped green car parking areas which enhance green infrastructure and open space provision will also be considered.
- Where possible and appropriate tree or other planting should be incorporated into car-parking areas.

### Example of Parking Solutions



### 6.6 Bicycle Storage

The Fingal Development Plan sets out standards in relation to the provision of bicycle parking for various types of development and these should be met throughout the plan lands. Cycle parking should be sheltered and secure, and should be located no less conveniently than car parking relative to the dwelling units (if not provided within the dwelling itself).

**6.7 Mobility Management**

It is an objective of this plan that future development schemes be designed and organised in such a manner as to achieve a modal split in accordance with the Government’s “Smarter Travel” transport policy. All schemes will be required to maximise pedestrian and cycle movements particularly for short journeys. The provision of rail and bus based transport will be a fundamental consideration. Portmarnock train station adjoining the plan lands presents an opportunity to divert commuters away from road travel. Development schemes within the LAP will be required to prepare Mobility Management Plans to show how such proposals comply with the Department of Transport “Smarter Travel – A Sustainable Transport Future 2009-2020”.

**Objective TM 11** Ensure that all new developments are consistent with the principles contained within the national policy documents Smarter Travel: A Sustainable Transport Future – A New Transport Policy for Ireland 2009-2020 and the Movement and Transport aims outlined in this LAP.

**Objective TM 12** Facilitate the provision of pedestrian crossings on Moyne Road and Station Road and at other appropriate locations within the plan area.

**Objective TM 13** Implement a street network with a high quality public realm and priority for the pedestrian/cyclist and mobility impaired.

**Objective TM 14** Detailed design proposals for the primary and secondary streets is required at Urban Design Appraisal stage to include detailed provisions in relation to carriageway widths, surface treatments of cycleways, footpaths, integration of green route where applicable, road pavement, landscaping, street lighting and building interface.

**Objective TM 15** Ensure that new applications are consistent with the principles for street design set out in the *Design Manual for Urban Roads and Streets 2013*.

**Objective TM 16** Seek well integrated design solutions for adequate car-parking within the design and layout of schemes with particular attention to visitor parking.

**Objective TM 17** Require the provision of cycle parking facilities in new commercial, retail, community facilities etc., in accordance with the standards set out in the Fingal Development Plan.

**Objective TM 18** Protect future rail infrastructure through a rail reservation along the Dublin Belfast Railway line within the plan lands.

**Objective TM 19** Ensure that new developments within the plan area are accompanied by a Mobility Management Plan that encourages greater use of sustainable travel options.

**Objective TM 20** Ensure that any transport and movement proposals take full account of the sensitivities of the receiving environment including biodiversity features and the conservation objectives of EU designated sites.



## Urban Design

### 7.0 Urban Design Framework

This section of the LAP sets out the optimal framework for the development of the LAP lands having regard to the sensitivity of the plan lands, the landscape designations and the requirements of the Fingal Development Plan. The urban design framework will create a new urban environment that will enhance and reflect the character of the area, create a distinctive identity and sense of place and provide a mix of dwelling types that are adaptable to changing needs. The existing natural environment, biodiversity and heritage features within the plan lands, the proximity to Baldoyle Bay and open space lands, the topography and exceptional views in and out of the plan lands are key urban design opportunities. The Green Infrastructure and Landscape Strategy set out in Section 5 ‘Green Infrastructure’ and the internal street and movement network as set out in Section 6 ‘Movement and Transport’ of the LAP influences built form and layout by setting out the environmental, landscape, amenity and movement parameters for future development schemes. A number of character areas emerge from the green infrastructure and movement strategies through which distinct residential neighbourhoods can be developed. This approach will help to minimise the impact of new development in this sensitive coastal landscape setting. This section offers urban design guidance at both a general and local character area level.

*Extract from Figure 5.2 Green Infrastructure and Landscape Strategy*



### 7.1 Urban Design Principles

The Fingal Development Plan sets out urban design principles to guide future developments. These design principles are based on the *Sustainable Residential Development in Urban Areas - Guidelines for Planning Authorities and Best Practice Urban Design Manual [DoECLG 2009]*. Table 7.0 sets out the 12 design principles that are to be applied in future development schemes in the plan area.

*Table 7.0 Design Principles, Responding Elements and Purpose*

Design Principles	Responding Elements in LAP	Purpose
<p><b>Context:</b> How does the development / LAP respond to its surroundings? The context of a site should be the starting point when designing a new scheme.</p>	<ul style="list-style-type: none"> <li>Green Infrastructure Network</li> <li>Biodiversity &amp; Heritage Integration</li> <li>Landscape/Habitat Protection Measures</li> <li>Principal View lines captured</li> <li>Hierarchy of Open Space &amp; Natural Amenities</li> <li>Sustainable Urban Drainage</li> </ul>	To promote urban environments that are respectful of natural and man-made features and environment, landscape and visual character.
<p><b>Connections:</b> How well is the new neighbourhood / site connected to facilities and services? Access to and within an urban area should preferably be focused on walking or cycling.</p>	<ul style="list-style-type: none"> <li>Integrated Movement and Transport Network</li> <li>Green Route Network</li> <li>New links to train station, local services and recreational amenities</li> </ul>	To promote development that is integrated and connected with its surrounding environment, local amenities and services.
<p><b>Inclusivity:</b> How easily can people use and access the development?</p>	<ul style="list-style-type: none"> <li>Design and layout facilitating ease of access for all</li> <li>New and enhanced pedestrian/cycle links</li> <li>Ease of access to public transport</li> <li>Walkable neighbourhoods</li> <li>Range of public, communal and/or private amenity spaces and facilities for children of different ages, adults and the elderly</li> </ul>	To promote a good range and equitable access to services, amenities, facilities.

Principles	Responding Elements in LAP	Purpose
<p><b>Efficiency:</b> How does the development maximise on energy efficiency and the use of renewable energy?</p>	<ul style="list-style-type: none"> <li>Sustainable buildings</li> <li>Integrated Movement and Transport Strategy with emphasis on walking and cycling.</li> <li>Sustainable urban drainage systems</li> <li>Buildings, gardens and public space layout to exploit best solar orientation</li> <li>Appropriate recycling facilities</li> <li>Sustainable Framework</li> </ul>	To promote developments that have a reduced energy usage and impact on the environment, in line with national policy.
<p><b>Variety:</b> How does the development promote a good mix of activities?</p>	<ul style="list-style-type: none"> <li>Mix of dwelling types and tenure</li> <li>Local service provision</li> <li>Diverse range of recreational amenities/open space</li> </ul>	To promote choice through the provision of a mix of dwelling types, mix of compatible uses, activities and spaces for interaction, passive and active uses.
<p><b>Distinctiveness:</b> How does the proposal create a sense of place? New developments should have a distinct and special character, should be a positive addition to the identity of the locality and should respond to local character including the natural and built heritage.</p>	<ul style="list-style-type: none"> <li>The layout as set out in the Green Infrastructure and Landscape Strategy incorporates and retains biodiversity, ecological and heritage features such as hedgerows, trees, watercourses and monuments.</li> <li>Successfully exploits principal views into and out of the site of Lambay Island, Ireland's Eye and Howth Head.</li> <li>There are discernable focal points for future schemes in the proposed linear park incorporating townland hedgerows, and a small central park which is home to the skylark and other native bird species. ['Skylark Park'].</li> <li>Urban design and materials should reflect the sensitive coastal location.</li> </ul>	To promote a distinct and special character with much of the area's character derived from existing elements.

Principles	Responding Elements in LAP	Purpose
<p><b>Layout:</b> How does the proposal create people-friendly streets and spaces? The layout of an area or site will be one of the key determinants of a successful place. High quality layouts will reduce traffic congestion, improve the sense of safety, and increase the vitality and vibrancy of a place.</p>	<ul style="list-style-type: none"> <li>Legible and permeable layout</li> <li>Connectivity to amenities and services</li> <li>Safe and attractive streets designed as spaces shared by pedestrians, cyclists and vehicle users.</li> <li>Hierarchy of open spaces including a civic space within a local centre, a linear park connecting to Baldoyle and Portmarnock Village.</li> <li>Fingal Coastal Way section linking amenities in the area.</li> </ul>	To promote environments that are easily understood by their users and display a strong local identity. This facilitates enhanced usage, enjoyment and pride in local places. Helps develop a sense of community.
<p><b>Public Realm:</b> How safe, secure and enjoyable are the public areas? The public realm includes streets, squares, plazas, parks and other public spaces, the design and materials of which should be of high quality. The quality of the public realm is as important as the quality of the buildings.</p>	<ul style="list-style-type: none"> <li>Appropriate street furniture, trees, open spaces, urban squares and high quality materials</li> <li>Roads and parking areas are considered as an integral landscaped element in the design of the public realm</li> </ul>	Adds interest along streets and creates a pleasant environment and interactive space for residents.
<p><b>Adaptability:</b> How will the buildings cope with change? Developments must be designed so that they can adapt to changing circumstances, changing family sizes, car ownership and energy requirements. Houses should be able to accommodate extensions without significantly impacting on the visual or residential amenity of an area. Internally, houses should be adaptable through the easy conversion of rooms, for example, from an office to a bedroom, or relocating a bedroom to the ground floor.</p>	<ul style="list-style-type: none"> <li>Flexible buildings to adapt to changing needs over a lifetime.</li> <li>Sufficient private garden area to allow for modest extensions without undue adverse impact to neighbours.</li> <li>Adequate car parking provision</li> <li>Sustainable, energy efficient homes</li> </ul>	To promote built environments that can adapt over time and respond to social, technical, environmental and economic changes.

Principles	Responding Elements in LAP	Purpose
<p><b>Privacy / Amenity:</b> How do the buildings provide a high quality amenity for residents?</p>	<ul style="list-style-type: none"> <li>Useable and sufficient private outdoor space</li> <li>Dual aspect</li> <li>Acoustic insulation and layout</li> <li>Appropriate window location for light, privacy and passive surveillance</li> <li>Adequate storage</li> </ul>	To promote good quality and sustainable living environments for residents.
<p><b>Parking:</b> How will the parking be secure and attractive? Car parking needs to be carefully designed into a residential development.</p>	<ul style="list-style-type: none"> <li>Safe, secure car-parking within close proximity to residence</li> <li>Bicycle storage provision</li> <li>Materials used for parking areas should reflect overall high quality of the development.</li> </ul>	To provide sufficient parking to cope with demand in a way that does not overwhelm the appearance and amenities of the public realm.
<p><b>Detailed Design:</b> How well thought through is the building and landscape design? The analysis of any proposal will assess the visual characteristics of the building form and how it relates to its surroundings. The architectural as well as the landscape and green infrastructure design of a scheme should, when combined, provide for a high quality design that enhances the area.</p>	<ul style="list-style-type: none"> <li>Layout and building design influenced by the Green Infrastructure and Landscape Strategy.</li> <li>Contextually relevant and high quality building design, heights and finishes.</li> <li>Building Interfacing</li> <li>Active frontage</li> <li>Public Realm</li> </ul>	To promote a high quality of architectural design that evokes a sense of place through the integration of appropriate urban form, function and relationship with the surrounding context.



**7.2 Character Areas**

The LAP lands comprise five character areas. The character of each area in terms of design, heights and finishes will vary depending upon the street hierarchy, existing topography, environmental features, open space, amenity and heritage features, and views. The overall strategy is to build upon existing environmental, open space and amenity characteristics and proposed movement network and promote a mix of unit types, designs and materials to distinguish each character area or neighbourhood. At the same time, there must be legibility between character areas to create a cohesive development. All of the neighbourhoods within these character areas will have strong connection and orientation towards amenity spaces. Character areas will be criss-crossed by a number of pedestrian/cycle green routes which are important in providing interconnections between all of the neighbourhoods and connectivity to Portmarnock station, the proposed local centre, Portmarnock village centre and Racecourse Park.

There are five residential character areas. They are defined, for the most part by topographical features, heritage features, existing townland boundaries, the train station and railway line, open space lands and the coast. These natural and man-made features (and the constraints that go with them) give character and design opportunity and will be strong constituents of a new local identity.

- 1. Station Area.** This character area is directly related to the train station and Station Road and provides for a mixed use small centre comprising commercial and residential development arranged around a new civic / public space. The neighbourhoods within this character area will have strong connection and orientation towards the small centre, Station Road, the existing national monument within the northern section of this area and to amenity spaces such as the proposed linear park, small park, pocket parks and the primary street. These features will inform this area's urban character. Residential character of a higher density (not greater than 60 persons /per half ha) would be suitable here as it is the area closest to the station.
- 2. Central Area.** This lies just south of, and is bounded by, the Station Area. To the east is Skylark Park and to the south, the historic hedgerows/linear park. A residential character comprising traditional family houses and off-street car-parking is envisaged within this character area. Particular care needs to be given to the landscaping elements facing the hedgerow/linear park edges. Materials should reflect their context and be robust.
- 3. Skylark Park Area.** Facing Moyne House and the open space/ecological buffer zone lands. This is a roughly L-shaped parcel of land bounded by hedgerows and including the park for which it is named. It is envisaged that family houses will be the predominant housing form. Particular care will need to be taken in the form and massing along this area's edges given their juxtaposition with existing hedgerows, the park and the ecological buffer zone. Care also needs to be taken to preserve the views from higher ground.

- 4. Maynetown Area.** Adjoins the bird meadow quiet zone and open space lands to the south, the Maynetown Enclosure to the south-east, the inter-monument street to the north-east and Skylark Park to the west. Family houses will be the primary housing forms, though apartments may be considered along the route proposed linking the two monuments, where three storey heights may be considered. Particular care will be required, in terms of form, massing and detail of buildings along the southern edge, facing the meadows, open space and the distant southern views. Care will also need to be taken in addressing the Maynetown enclosure. A consistency of approach to architectural and landscape treatment will be required between the frontage here and in Character Area 5.
- 5. The Coastal Area.** This character area adjoins the open space/ecological buffer zone lands to the east, the Maynetown Enclosure to the south east, the inter-monument axis to the southwest and the linear park to the northwest. This area has high sensitivity because of its visibility from Baldoyle Bay and the Portmarnock Peninsula. Family houses, individually or in small clusters, will be considered along the eastern edge, behind the maritime copses. A more formal approach could be more appropriate on the inter-monument street, to respond to development in Character Area 4. As noted above a consistency of approach is required adjacent to the Maynetown Enclosure monument site. Development along the north-eastern boundary of the plan lands must ensure the protection of existing residential amenities from overshadowing, overlooking and visual intrusion.

**7.3 Urban Form**

Each of these areas is divided into smaller sections by internal streets. These are intended to provide a step-down in traffic speed, a step down from circulatory to more domestic activity and will be streets where pedestrians will have priority. This step down will also encourage the development of strong local identity. The form of buildings in terms of height and relationship with the street should reflect this, as should detailing and materials. The break-up of the blocks should carefully maintain the views from the elevated lands to the coast and its islands, notably Baldoyle Bay, Lambay Island and Ireland's Eye and into Howth and beyond. The design, particularly in terms of height and massing, should take account of the protection and framing of views [See Sections 3.3.1 Visual Analysis and 5.3.1 Ridgelines and Views].

**Shops and Services**

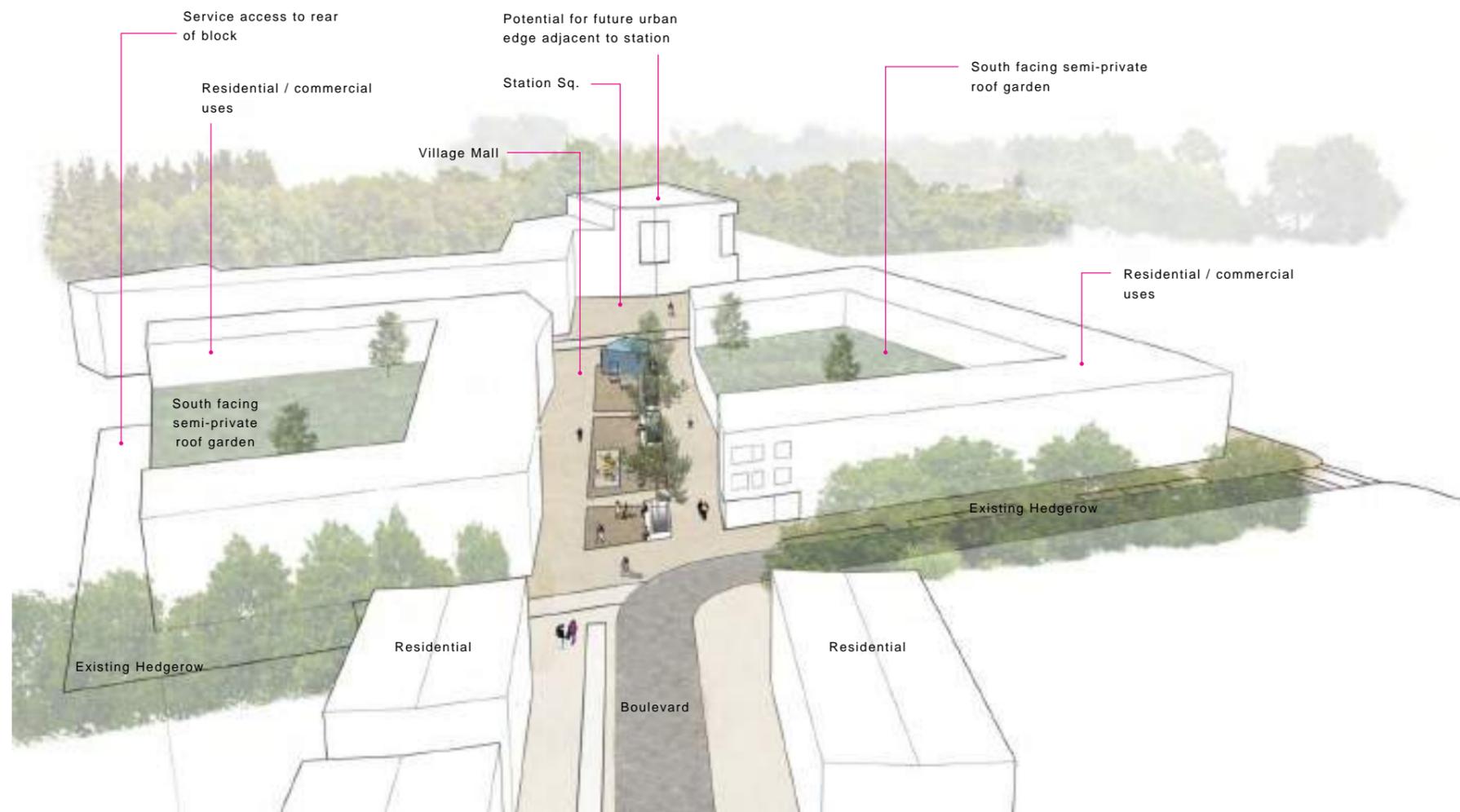
Character area 1 provides for a mixed use small centre comprising commercial and residential development arranged around a new civic/public space. Future retail/service provision within this small centre must be consistent with the requirements of the Level 5 category – ‘Local Shops/Small Villages’ as set out in the Fingal Retail Hierarchy. Elevational treatment at the interface with the train station and Station Road requires considerable design attention. Dual fronted elevational development is regarded as an essential urban design device for the centre to address Station Road and overlooking of the civic space. Retail/commercial uses need to be integrated at ground floor level onto Station Road. Parallel car parking to the front of these units should be considered subject to consultation with the Council's Transportation Department. This is considered important to create an active space and give meaning to the elevation onto Station Road. Design shall take into account innovative car parking solutions to serve the centre such as undercroft, decked or podium type parking carefully designed into the development. Other design options which provide for well landscaped green car parking areas which enhance green infrastructure and open space provision will also be considered. Design and layout of buildings within the centre shall maximise on the southern aspect of these lands at this location. Buildings heights will be generally three to three-and-a-half storeys in the centre.

The centre will serve the day to day needs of the new and adjoining residential communities. Provision shall be made for signature buildings focused on a public space creating an attractive meeting space in the heart of the new community. A pedestrian through route, connecting residential development within the plan lands to the train station is an objective of the LAP. A residential component is envisaged within the local centre and therefore the design of the local centre should have regard to impacts on residential amenity with respect to privacy, daylight/sunlight and visual outlook. The combination of mixed uses, including residential, will encourage vitality and vibrancy within this urban space. Figure 7.1 shows a suggested illustration of the proposed local centre overlooking a public space and designed to achieve southern facing semi-private open space. This figure also includes a suggested drawing illustrating for a potential future urban edge adjacent to Portmarnock train station on the existing station car park. Proposed buildings would overlook a new civic space.

*Figure 7.0 Character Areas within LAP Lands*



Figure 7.1 Indicative Small Centre & Civic Space



## 7.4 Building Heights

The plan area lands are highly visually sensitive, because of their relative elevation. The aspect of any buildings from the shoreline of Baldoyle Bay and the Portmarnock Peninsula; and the aspect from the Clongriffin / Stapolin areas require particular attention. To minimise visual impact, buildings along the southern and eastern edges of the plan lands should not be higher than one and a half storeys to eaves or parapet level.

## 7.5 Edges

There are a number of edge conditions to the character areas which need careful design consideration.

### Station Road Edge

This will in many respects be the “front gate” for the whole area. The station is here, as is the small centre, which allows for a higher local density. Three to three-and-a-half storey buildings will be considered along this edge. Architecturally significant frontage definition is required inside a tree lined Station Road to

the train station with a new pedestrian and cycle path located behind the new treeline. Figure 7.2 shows the eastern end of Station Road where it meets the northern end of the proposed linear park in the vicinity of existing dwellings. Figure 6.5 in Section 6 Movement and Transport shows the relationship of new dwellings to the curtilage of the national monument Portmarnock Mound.

### Railway Edge

This combines the western edges of Character Areas 1 (Station), 2 (Central) and 3 (Skylark Park). The areas are primarily residential, though there is some retail at the northern end beside the station. There will also be significant local parking provision at the station. The edge treatment must allow for the creation of a landscaped linear park in addition to the future widening of the rail corridor. A linear park will provide an attractive buffer between the railway line and new development in the interests of residential amenity. Provision for a reservation from the existing rail line for future widening of the rail tracks must occur in agreement with Iarnrod Eireann. Proposed buildings must be setback an adequate distance to allow for the additional tracks and temporary access during

construction as well as the incorporation of the linear park which will ensure the protection of residential amenity. It is critical that the space between the existing rail-line and any future additional tracks is overlooked and sufficiently set back from any future rail line to cater for both the rail reservation and the linear park. Figure 7.3 shows suggested illustrations for two possible approaches for the treatment of the lands on the railway edge. The treatment of the railway slope will be subject to detailed design and agreement with Iarnrod Eireann.

Considering the length of boundary to the rail-line it is recommended that a combination of both approaches is used to ensure sufficiently robust passive surveillance of the public realm. Detailed design proposals for the linear park and rail reservation must be dealt with at urban design appraisal stage.

### Southern Edge

This edge fronts onto the ecological buffer zone/open space lands and the Maynestown Enclosure. The lands at this location are elevated and buildings will lie behind intermittent copses of parkland broad leaf trees. Building heights should be no more than one and a half storeys.

### Coastal Edge

This forms the eastern edge of the coastal area. The aspect of this edge from Baldoyle Bay and Portmarnock Peninsula requires particular care. The buildings will be set back from the Coast Road by intermittent screening such as copses of maritime tree species (Scots Pine and Hawthorn), which will act as a partial screen to development. Buildings along the coastal edge should not be higher than one and a half storeys. The architectural response to the Maynestown Enclosure monument should be consistent across the Maynestown and Coastal Areas where they adjoin the monument.

### Townland Boundary Edges

Townland boundary hedgerows run alongside all of the character areas and in particular between Character Areas 1 (Station) and 5 (Coastal); around much of Character Area 3 (Skylark Park); between Character Areas 1 (Station) and 2 (Central). These hedgerows will form the centrepiece of the linear park through the plan lands, incorporating green routes [See Figure 5.6 for suggested treatment of linear park in Section 5 Green Infrastructure]. Breaches to allow traffic through these hedgerows should be kept to an absolute minimum. Where they are proposed, they should be justified in detail. (e.g. a route between the development edge and Skylark Park itself will allow for surveillance of the park by residents and passing traffic) Building heights here may be two or three storey.

### Inter-Monument route Edges

These are the facing edges, mainly between Character Areas 4 (Maynestown) and 5 (Coast), but continuing into Character Area 1 (Station). They lie on either side of the route between the Portmarnock Mound and the Maynestown Enclosure. The physical link between the two monuments with adjoining streets is a new connection, but one that will serve to increase local identity. A more formal treatment is envisaged. A suggested treatment for the inter-monument link is shown in Figure 5.5 in Section 5 Green Infrastructure. Building heights here will be two, two-and-a-half and three storeys.

Figure 7.2 Eastern end of Station Road: Indicative Boundary Treatments

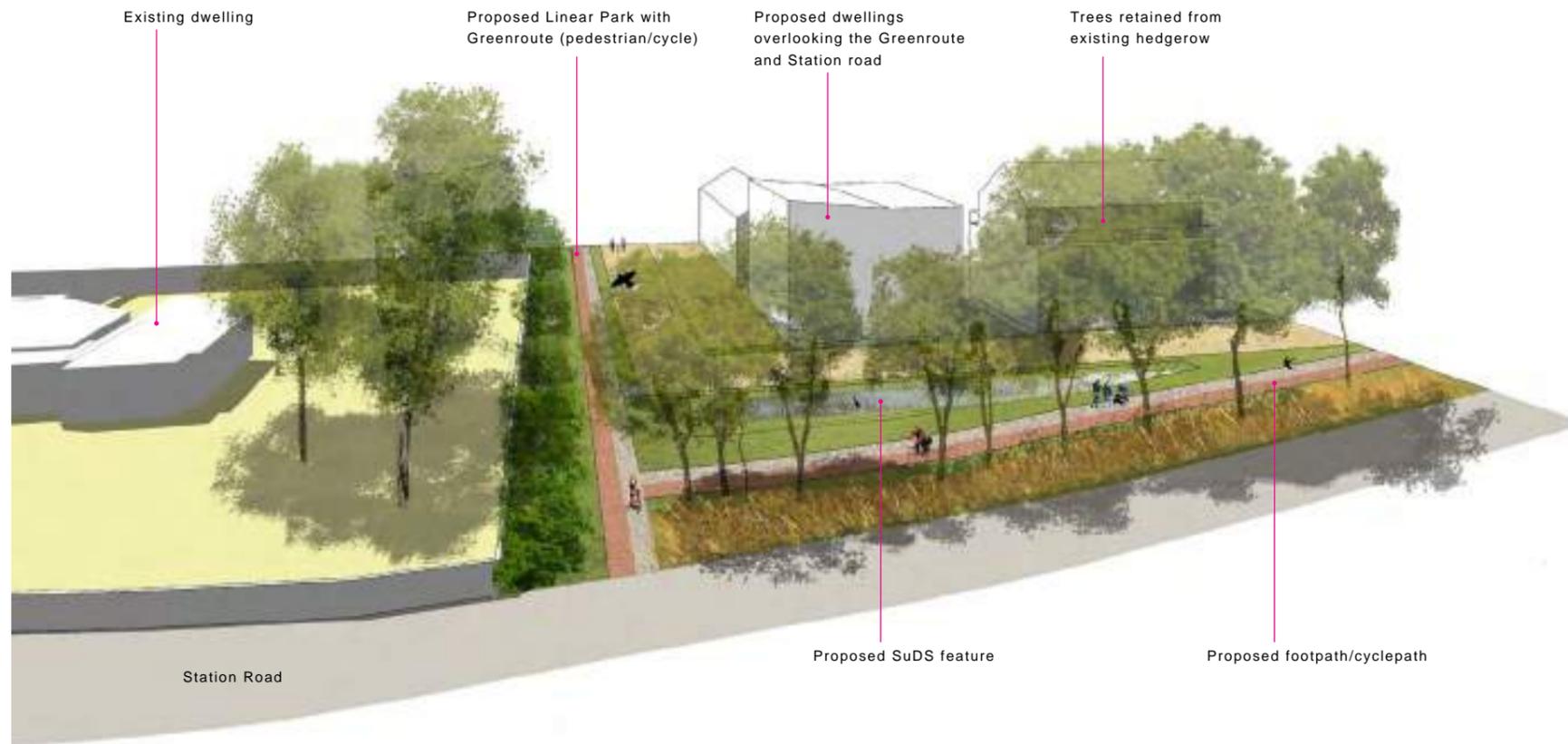
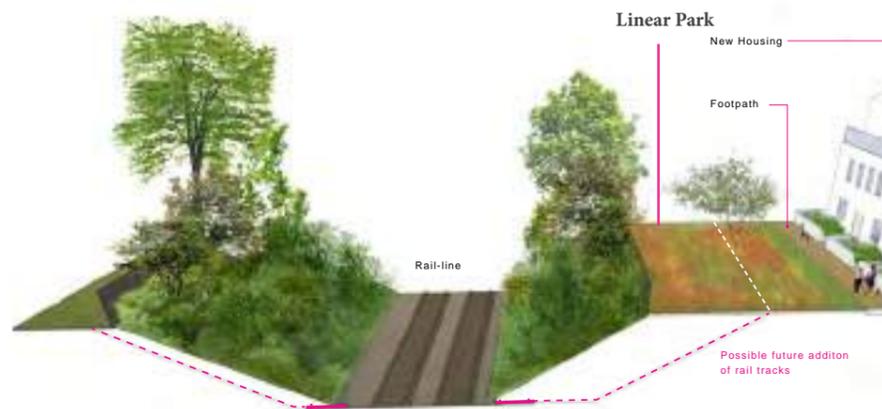


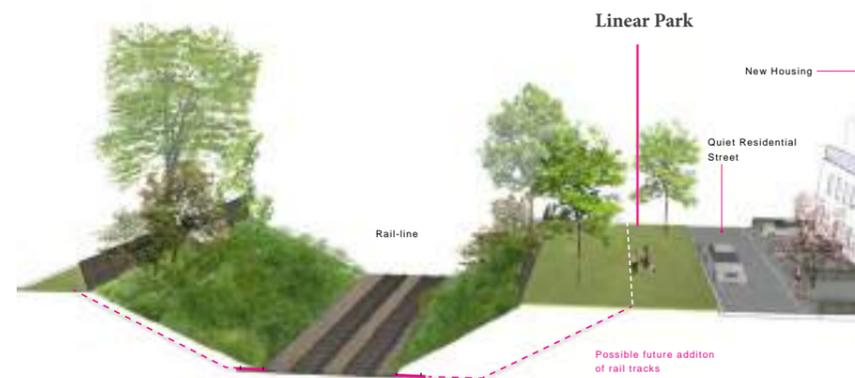
Figure 7.3 Suggested Illustrations for Two Possible Approaches for the Treatment of Lands on the Railway Edge

Interface with railway line and proposed additional tracks - Option 1



Adjoining dwellings face onto a linear open space along the rail-line, the open space is sufficiently wide to allow for the future addition of rail tracks and reinstatement of a planted embankment.

Interface with railway line and proposed additional tracks - Option 2



Adjoining dwellings face onto a quiet street running parallel with the rail-line.

### 7.6 Design - Architectural Expression

Architectural design must carefully consider the sensitive landscape setting, coastal character and topography of the plan lands. Development must be designed and oriented so as to safeguard and maximise on views to and from the plan lands and maximise daylight and solar orientation for residential enjoyment and energy sustainability. Buildings shall be designed to ensure physical breaks between buildings to allow for glimpse views to and from Baldoyle Bay and the islands. Materials should be appropriate to their setting, robust and easy to maintain. Architectural expression should be of an innovative and contemporary nature. Light contemporary structures with simple finishes such as smooth render, extensive glazing and alternative mono-pitch roof profiles are envisaged, particularly in the Coastal and Maynestown character areas.

In general, front boundary treatments should be hedge (or reinforced hedge), rather than wall or railing. Appropriate integrated design for the storage of waste and recyclable materials in bins or other waste containers, for houses, apartments and retail outlets needs to be considered at the early design stage [See Section 9.8.1 Bin Storage and Recycling].

### 7.7 Housing Mix

The LAP seeks to promote the development of new housing which delivers integrated, balanced communities and a sustainable social mix. It is envisaged that within this LAP both the traditional and more innovative models of accommodation be provided in a contemporary style. The delivery of life long family homes as part of a successful mix of residential typologies is important. Homes should be flexible enough to meet the changing needs of residents. This will ensure that spaces and features in new homes can readily meet the needs of most people, including those with reduced mobility. Innovative designs that help achieve family housing typologies are a priority for this LAP and will be dealt with at the Urban Design Appraisal stage.

### 7.8 Social & Affordable Housing

Social and Affordable housing will be delivered in accordance with the provisions of the Housing Strategy and will be delivered jointly by the Council, private developers and the voluntary housing sector. In order to promote and facilitate social integration it is an objective of the Council to ensure that social and affordable housing is spread throughout the plan lands. Planning applications should clearly outline how social/affordable provision will be met.

### 7.9 Urban Design Appraisal

In accordance with the aims and objectives of the adopted LAP, an Urban Design Appraisal must be submitted with each planning application and prepared by qualified, experienced urban designers. Prior to the preparation of the urban design appraisal and any applications for permission, pre-planning consultation should occur with Fingal County Council. The Urban Design Appraisal must have regard to the strategic aims and objectives of the LAP and specifically the Green Infrastructure and Landscape Strategy, the Movement and Transportation Strategy, Urban Design and Sustainability Strategies.



**Objective UD 1** Require the submission of detailed design appraisals with each planning application within the plan area. The design appraisal is required to:

- Outline how the development meets the Development Plan objectives, the objectives of the Local Area Plan or other statutory plan or requirements affecting the site.
- Explain the design principles and design concept of the proposed scheme in accordance with the design criteria set out in this section.
- Demonstrate how the twelve urban design principles set out in this section have been taken into account when designing the scheme. Each of the twelve principles is of equal importance and has to be considered in an integrated manner.
- Demonstrate how proposed units can adapt to changing housing needs.
- Outline how green infrastructure integrates into the scheme and how habitat protection measures relevant to the designated sites have been achieved.
- Submit boundary treatment details for development schemes in accordance with Sections 5.3.3 - 5.3.5 of the LAP.
- Demonstrate the hierarchy of light intensities as set out in the lighting zone map for the plan lands in the design of development schemes.
- Outline detailed proposals for open space and ensure compliance with Development Plan requirements.
- Demonstrate that every home within a new residential scheme is located within 100 metres walking distance of a pocket park, small park or regional park.
- Submit a Visual Impact Assessment including cross-sections to assist the Planning Authority to determine the full visual impact of development on the plan lands.
- Include photographs of the site and its surroundings.
- Include other illustrations such as photomontages, perspectives, sketches.

- Submit detailed design proposals and cross sections for primary and secondary streets and the inter-monument link to include detailed provisions in relation to carriageway widths, surface treatments of cycleways, footpaths, road pavement, landscaping, street lighting and building interface.
- Detailed proposals and cross-sections for priority green routes to include detailed provisions in relation to widths, surface and boundary treatments.
- Details for deposit of surplus construction fill material, including plans and sections through areas where it is proposed to distribute fill, as well as details relating to timing of construction filling works.
- Submit proposals and cross sections for an appropriately located construction haul route in agreement with Fingal County Council.
- Submit proposals and cross-sections for the treatment of the lands between the Dublin – Belfast railway line and new development to include the treatment of the railway edge
- Submit a clear design rationale where overlap of phasing areas and/or > 150 units are proposed in any planning application.
- Submit details of how any interfaces/undeveloped areas between sites and/or within the plan lands will be treated. This should include consideration of pedestrian safety, boundary treatment, connectivity and management of the lands. [See Section 11.3 Phasing and Implementation]
- Demonstrate how each planning application will integrate and relate to key infrastructure set out in the Green Infrastructure and Landscape Strategy, the Transport and Movement Strategy and the sub-sections set out in Section 7 Urban Design of the LAP.
- Submit design details and cross-sections for the treatment of the existing watercourse and hedgerow/townland boundary to ensure a safe environment around the existing watercourse in the context of a new Linear Park. Prior consultation with the Parks, Biodiversity, Drainage Infrastructure and Planning Sections of Fingal County Council are necessary prior to formulating a design solution to ensure a safe environment.

# Community, Social, Employment and Tourism Infrastructure

## 8.1 Community Facilities

Community facilities will be primarily located within the small centre which will help to foster social inclusion and ensure accessibility to services. In providing new community related facilities, such as a community centre or meeting rooms, the space must be flexible in nature allowing for adaptability which can be delivered through the provision of multi-functional spaces with floor space that will accommodate a variety of uses.

## 8.2 Educational/Childcare Facilities

As the lands are located within the Outer Public Safety Zone of Dublin Airport, schools and childcare facilities cannot be included within the LAP lands.

The following table gives a breakdown of schools in the area.

National School	Secondary School
St. Marnock's National School, Portmarnock	Portmarnock Community School
St. Helens Junior NS, Portmarnock	Malahide Community School
St. Helens Senior NS, Portmarnock	St Fintans High School, Sutton
St Andrews NS, Malahide	Sutton Park
St Oliver Plunkett, Malahide	Santa Sabina, Sutton
St Fintans NS, Sutton	Pobalscoil Neasain Community School, Baldoyle.
Burrow National School, Sutton	St Marys Secondary School, Baldoyle
St. Laurence's NS, Baldoyle	
St. Marys NS, Grange Road, Baldoyle	
St Peter & Pauls Boys NS, Baldoyle	

There are additional schools within the developing 'North Fringe' within the administrative area of Dublin City Council to the west of the rail line including Belmayne Educate Together and Saint Francis of Assisi National Primary Schools both of which are currently in temporary accommodation but for which permanent sites have been identified within Clongriffin-Belmayne. A site has been reserved for a 16 classroom primary school within the Baldoyle-Stapolin LAP lands as well as an additional site in Clongriffin. With respect to secondary school provision, capacity exists within existing schools to cater for existing and future needs of the LAP area. There are also a number of crèches and montessori schools at key locations within the vicinity of the plan lands. This LAP provides for a network of pedestrian and cycle routes inclusive of pedestrian crossings connecting to the Baldoyle-Stapolin LAP lands and to the Clongriffin-Belmayne lands where future schools are proposed.

## 8.3 Sports & Leisure/Recreation

Racecourse Park will provide for more intensive outdoor sporting activities to meet the needs of the current and future communities within the adjoining developing areas. Portmarnock village has a number of local sports clubs including Naomh Mearnóg GAA and Portmarnock Football Club and the Portmarnock Sports and Leisure Centre. The proposed open spaces, parks and green routes within the plan area provide further opportunities for passive and recreational activities.

### Play Facilities

This LAP includes objectives requiring developers to provide a children's playground within Skylark Park to an appropriate standard of amenity and safety, and to create safe and accessible places for informal play. Informal play opportunities will be encouraged in public open spaces.

### Racecourse Park



### Urban Agriculture

The provision of urban agriculture has previously been discussed at Section 5.5.5 'Management of Open Space'. The concept allows space for community interaction and provides the opportunity for active recreation.

**Objective CF 1** Promote well designed, accessible urban neighbourhoods throughout the LAP area that are well served by local facilities and public transport.

**Objective CF 2** Ensure access for all to community and social infrastructure within and adjoining the plan area for community integration.

**Objective CF 3** Support and encourage an appropriate mix and level of community services and facilities including health centres, and community halls/meeting rooms within the small centre.

**Objective CF 4** Seek the provision of an adaptable community facility, of a scale to be agreed with the Planning Authority within the small centre location subject to demand and resources.

**Objective CF 5** Ensure that buildings intended for community related facilities are designed as adaptable flexible spaces that are capable of accommodating a range of uses.

**Objective CF 6** Encourage community integration through such examples as creative recreational space, and markets.

**Objective CF 7** Seek to create safe and useable open spaces within residential character areas through overlooking and passive surveillance.

**Objective CF 8** Promote and encourage a socially inclusive community that caters for all age groups, that accord with the principles of universal design and that offer quality of opportunity and good services to all.

**Objective CF 9** Provide an adaptable, integrated and accessible living environment for all sectors of the population offering every resident a sense of dignity, respect and security, in the built and natural environment, irrespective of age.

#### 8.4 Shops and Services

A new small centre, adjacent to Portmarnock train station, will help form a focal point for the LAP lands and will meet local needs by providing a range of local shopping facilities and associated services. This centre designed around a new civic space will provide an opportunity for community interaction and space for local events/markets. The small centre will also add to the range of facilities available to existing communities in neighbouring areas. Clustering such facilities together help to make them more viable as well as more convenient and accessible by public transport, walking and cycling thus promoting a steady stream of patronage which will facilitate the operational viability of a centre.

Typical uses envisaged within the centre are a small supermarket, [net retail floor area to be determined in the context of the Retail Strategy for the Greater Dublin Area, Fingal's Retail Strategy and any Traffic Impact Assessment] café/delicatessen/restaurant, pharmacy, hairdressers, small businesses, offices. Future land use and density within the centre shall adhere to those permitted within the Airport Public Safety Zones as set out in the ERDM Report 2005 or as may be updated. A residential component is also promoted within this centre. Sustaining viability within this area both day and night is important to the vitality of the centre.

#### 8.5 Local Employment

It is envisaged that any future employment uses within the plan lands will be small scale in nature having regard to the residential zoning objective of the plan lands and airport safety zone restrictions. The main source of employment within the plan area will be associated with the future mixed uses within the proposed small centre. Small-scale offices would provide for local employment opportunities and

a more vibrant centre. There is potential to provide an appropriate quantum of enterprise/training floorspace and a range of small to medium sized work units. Floor-to-ceiling heights should be at least 3.5 metres on the ground floor and at least 3.3 metres on the first floor to allow flexibility for both commercial and residential use.

#### Live-Work Units

Live-work units are specifically designed for dual residential and business use. They are distinct from space for home working, which is usually informal and often temporary within the home. Living alongside purpose-designed work space reduces overall expenditure on accommodation and the need to travel, generating savings in terms of costs and time, and contributing to a more environmentally sustainable way of life. Live-work units that are part of the new development could form a cluster of micro-businesses benefiting from proximity to one another. The inclusion of small-scale purpose-designed live-work units, within and adjacent to the small centre will be encouraged to help to reinforce its function and to provide small scale employment opportunities within the LAP lands.

#### Home-Based Economic Activity

The development of small businesses can play an important role in promoting local employment opportunities. In the early stages of business start-up it is sometimes necessary or appropriate for enterprises to be run from home. The pressure to reduce car usage for environmental and social reasons is beginning to highlight the benefit of home working. These changes are supported by the rapid development of information communications technology. Potential opportunities should be explored to facilitate home-based economic activity by developers within the LAP when considering the design of new houses and the layout of housing areas. Home based economic activity will be encouraged but subject to impact on residential amenity.

**Objective CE 1** Provide a vibrant and well designed small centre, adjacent to Portmarnock train station with a pedestrian priority through route to the train station.

**Objective CE 2** Encourage retail and commercial services and facilities within the small centre at a level appropriate to meet the needs of the future local population and visitors to the area.

**Objective CE 3** Ensure that new retail/commercial developments are designed to the highest standards and located to ensure safe, sustainable and convenient access.

**Objective CE 4** Assess all retail proposals against the criteria and recommendations set down in the Retail Planning Guidelines, the Retail Strategy for the Greater Dublin Area and the Fingal Retail Strategy.

**Objective CE 5** Facilitate appropriate employment and training uses to include for microenterprise and start-up units within the small centre. Any potential uses shall not unduly impact on residential amenity.

**Objective CE 6** Facilitate the provision of flexible use units including live-work units around the small centre.

**Objective CE 7** Permit appropriate home-based economic activities that do not result in loss of amenity in terms of traffic generation, residential amenity, noise levels and visual amenity.

**Objective CE 8** Encourage developers and other providers to take account of the possibilities of home-working in the design of new houses and the layout of housing areas.

**Objective CE 9** Promote the development of niche activities in and around Portmarnock South such as those relating to eco-tourism, food, walking/cycling, and historical/archaeological heritage.

#### 8.6 Tourism Infrastructure

Fingal's coastal corridor has significant potential to develop further as a tourist destination, given the large variety of natural and recreational amenity opportunities. It boasts breathtaking natural amenities such as its beaches, estuaries, islands, many outdoor and maritime activities, exceptional links golf courses and some of Dublin's best restaurants and pubs. Fingal is renowned for its magnificent castles and stately homes many of which are set amid fine gardens in spacious demesnes such as Malahide Castle, Newbridge House and Ardgillan Castle. Visitor attractions are many and varied, and include buildings of historic, scientific and cultural importance. Sport and leisure are important elements in the fabric of Fingal and there is an abundance of top quality facilities and amenities on the coast to satisfy the passions of both competitive and casual sports people.

#### 8.7 The Fingal Coastal Way - Essential Tourism Infrastructure

While the natural amenity and recreational base is in place, it is somewhat fragmented and currently lacks integration. A more joined-up approach to developing and promoting the tourism product that is on offer along the coastal corridor is necessary to enhance Fingal's overall attractiveness to visitors. The area has excellent potential for integrated outdoor activities: sailing, kite/wind surfing, walking/cycling, bird watching, angling, golfing, eco/food trails which can be packaged collaboratively to achieve an attractive and vibrant tourism product.

The Fingal Coastal Way is envisaged as a greenway, carrying day trippers/tourists along the coastal corridor in an eco-friendly way. It is considered an essential piece of tourism infrastructure that is seen as necessary to the success of the coastal area of Fingal to bring about that much needed integration of the natural and man-made amenities that are on offer. It offers a unique opportunity to showcase the beauty and heritage of the area and has the capacity to stimulate key attractions and most importantly increase awareness and understanding of our natural assets in a controlled manner. Given the sensitivities of the coastal area, location and design will have to be carefully considered. Through careful siting, design detailing and managed access, this greenway has the potential to relieve pressures from the sensitive biodiversity/ecological sites in the area. By locating

Irelands Eye



Portmarnock Golf Course



Malahide Castle



the coastal way within the LAP lands linking Baldoyle and Portmarnock, the pressures on Baldoyle Bay of pedestrian activity and dog walking can be better managed.

Great Western Greenway, Mayo



A Fingal Coastal Way would provide many opportunities for the development of the tourism product in the county and within each of the coastal compartments that it traverses:

- There is an intrinsic recreational value in such a route for walking and cycling and its value as an amenity increases as it makes other recreational resources accessible at the same time. The Fingal Coastal Way when complete will provide a continuous link between the recreational parks of Malahide, Newbridge and Ardgillan, Turvey Nature Reserve, the proposed Balleally Regional Park and Rogerstown, Broadmeadow and Baldoyle Estuaries. The many historic and cultural sites along the route will also benefit from enhanced accessibility.
- The Fingal Coastal Way will provide a major recreational and leisure facility in its own right and has the potential to become a major day trip/tourist attraction within the Dublin region. The coastal way would link with existing pedestrian/cycle routes, Dart and suburban rail stations in the wider Fingal area as well as the Dublin City environs that borders Fingal, thereby opening up the coastal corridor not only to residents of Fingal but to residents of Dublin City. There is an abundance of recreational amenities and leisure pursuits already in place along the route that day-trippers and visitors can be directed to in a controlled manner.
- It offers the potential to develop a number of niche tourism trails based on local foods, arts/crafts, heritage, ecology and leisure pursuits found along the coast.

- It is envisaged that, with the development, sustainable management and promotion of a Fingal Coastal Way the environmental and economic benefit to Fingal would be very significant and would generate significant economic activity, create employment and produce additional income through festivals and cultural events.

Prior to the commencement of development, the developer shall enter into an agreement with Fingal County Council for the transfer of zoned open space lands. This early transfer of open space lands will facilitate the planning and implementation of the Fingal Coastal Way.

### 8.8 Tourism and Leisure within the Plan Area

At a local level, the LAP seeks to support, establish and develop appropriate sustainable tourism activities and facilities, subject to location, siting and design criteria, the protection of environmentally sensitive areas and other planning considerations. Sustainable tourism provides a high quality product based on, and in harmony with, a high quality natural environment. Intensive recreational/tourism facilities are not permitted in the designated open space lands which also functions as a designated ecological buffer zone. Such uses would be counter productive to the function of the ecological buffer zone. These uses will be accommodated within the residential development lands of the plan area.

The LAP promotes and encourages the development of cultural/recreational facilities and services to attract visitors and tourists to the area. These include.

- A 1km section of the Fingal Coastal Way is proposed along the eastern edge of the plan lands linking to Portmarnock to the north and Baldoyle to the south and onwards where connections to the S2S - Sutton to Sandycove - walking/cycling route can be made. The green route will provide a safe, enjoyable and scenic route for pedestrian and cyclists with panoramic views over Baldoyle Bay. This route has the potential to relieve pressures from the sensitive biodiversity/ecological sites in the area through managed access. This greenway is also of strategic importance for the integration of communities, recreation and amenities within and adjoining the plan area and will open significant opportunities for tourism and recreational development. The early completion of this greenway with the plan area is a priority objective of the LAP. Appropriate signage and illustrated information boards are essential parts of this trail located at appropriate points along the route to highlight the natural and built heritage of the area.
- Eco Tourism Facility. The LAP lands and the adjoining area are well placed to develop sustainable eco tourism initiatives. A good example of such an initiative is the 'Greenbox', Ireland's first integrated eco-tourism destination, where tourists can visit a defined region within the counties of Leitrim, Fermanagh and parts of Donegal, Sligo, Cavan and Monaghan containing environmentally sustainable products, accommodation and attractions in an area of clean natural resources. The Green Box project generates tourism and activities

that have a minimal impact on the ecology of the area, are of maximum benefit to the community and matches the needs of the environmentally-conscious visitor.

- The Dublin coastline and in particular Portmarnock and the adjoining coastal areas, has much to offer in terms of eco-tourism including a unique natural landscape and a wide range of facilities and amenities. An eco-friendly visitor centre within the plan lands that focuses on Fingal's coastline, the internationally acclaimed estuaries of Baldoyle, Malahide and Rogerstown and the many nature conservation sites along the coast would enhance the area as an eco-tourism destination and serve as an orientation centre for the natural heritage and walking and cycling routes of Fingal and north Dublin. The high quality public transport line adjoining these plan lands would be a major advantage to this centre. The LAP supports the development of projects, which promote sustainable tourism like the Greenbox and similar initiatives in Fingal and in particular in the plan area. In this regard, this LAP promotes the development of an interpretative/orientation centre within the southeastern section of the residential zoned lands to interpret archaeology/built heritage, wildlife and biodiversity along the coast. This centre would adjoin the proposed route of the Fingal Coastal Way. A high quality contemporary eco-friendly building architecturally designed and finished to reflect its coastal setting is envisaged for this centre.
- Consideration will be given to uses aligned with agri-tourism/eco-tourism uses within Moyne Lodge and out-buildings given the essentially rural character in which it is located and the high amenity zoning objective of the lands where such uses are permitted.
- The development of a café, restaurant(s), tourist accommodation such as a guest house/hostel subject to airport public safety zone criteria [ $\leq 100$  beds per development ERDM 2005 refers], artists' studio and gallery, exhibiting local artists and designers work, performance space, walking/bicycle hire supplies for visitors and tourists. Such uses are envisaged within the proposed small centre.

*Velvet Strand*



**Objective TI 1** Facilitate the development of appropriate new recreation, leisure, tourism and service facilities and ensure access for all groups of the community.

**Objective TI 2** Support and co-operate with the relevant bodies in the development, marketing/promotion and funding of sustainable tourism products in the area.

**Objective TI 3** Facilitate and promote the development of environmentally sustainable tourism products/activities including an eco-tourism centre, walking, cycling and associated facilities that enhance the special qualities of the surrounding natural and built environment.

**Objective TI 4** Promote and facilitate the development of the Fingal Coastal Way as a local and tourist amenity, promoting the archaeological and cultural heritage of the area and associated events in appropriate locations.

**Objective TI 5** Promote connections between existing amenity areas and greenways in the LAP and adjoining areas.

**Objective TI 6** Preserve, protect and enhance the natural, built and cultural heritage features that form the basis of local attractions for the plan area.

**Objective TI 7** Facilitate the provision of local cultural spaces, performance and entertainment spaces, while protecting the existing amenities of the area and sensitivities of Baldoyle Bay.

**Objective TI 8** Prioritise and seek the early completion of the Fingal Coastal Way within the plan area in co-operation with landowners, the local community and relevant environmental and funding bodies.

**Objective TI 9** Promote Portmarnock as an eco-tourism destination based on natural heritage and walking and cycling routes and encourage developments which will sustain eco-tourism such as sustainable tourism initiatives like the Greenbox within and adjoining the plan area.

**Objective TI 10** Increase the knowledge and awareness of natural and cultural heritage within the local area and of the value to society in its protection and enhancement through initiatives such as information signage in parkland areas.





## Infrastructure and Services

### 9.0 Infrastructure and Services

Adequate services are essential to development. This section outlines the existing public water supply, wastewater and other key infrastructure in the plan area and will set out the requirements needed in infrastructure to serve development in the area. Adequate and improved infrastructural services to the plan area will be provided in a phased approach.

#### 9.1 Water Supply Source and Network

As with all major developments in the Dublin region, the availability of a supply of water is a regional issue which may be a constraining factor on future growth. Currently across the region supply and demand for high quality drinking water is finely balanced and this will remain the case in the short to medium term pending the delivery of a number of projects to increase production, storage and delivery capacity.

The Water Supply Project – Dublin Region is currently assessing the strategic need and source options for a new water supply source for the Dublin Region Water Supply Area, which includes Fingal. The current estimate, based on a per capita consumption of 145 l/day indicates that a new source is required by 2016. Ten new water source options are currently being evaluated in the water supply study. From 2014, the provision of strategic projects will be a matter for Irish Water.

The plan area will be served by the North Fringe Water Supply Scheme which is supplied from the Leixlip Water Treatment Plant via the Ballycoolin Reservoir. The proposed LAP lands are to incorporate the extension of the existing 450mm watermain through the site to join the network at Station Road/Coast Road. The expansion of the Leixlip Plant is currently under construction and will increase production capacity to 225Ml/day. The expansion should be complete by the end of 2014. Following the expansion there will be no more capacity for additional abstractions from the River Liffey.

New development and/or works and landscaping will need to demonstrate that the existing network and associated way leaves are protected from impacts which could put the network at risk of damage. Any proposal to develop site(s) not immediately adjacent to existing water supply infrastructure will have to address the issue of providing a suitable water supply for proposed developments. The watermain layout for the proposed development 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".

The delivery of a number of measures to sustainably manage water demand is also important. In order to limit unnecessary water usage, leakage and excessive consumption, new developments should, where feasible, install suitable water conservation measures. The use of rainwater harvesting, particularly in commercial developments, is to be encouraged.

**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 strategy of the Fingal Development Plan.

**Objective WS 2** Ensure that new developments are adequately serviced with a suitable quantity and quality of drinking water supply. Where deficiencies exist, development will be limited to that which can be provided for, based on available water supply.

**Objective WS 3** 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 WS 4** Require the adoption of water saving measures throughout future development. This will increase the extent of development capable of being serviced by the existing water treatment plant. Such measures would include:

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

**Objective WS 5** Ensure that water main layout for the proposed 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'.

### 9.2 Wastewater Network and Treatment

The Portmarnock South LAP is part of the North Fringe sewer catchment. Wastewater generated from the development of the LAP lands will be directed into the North Fringe sewer, from where wastewater is transported to and treated in the Ringsend Wastewater Treatment Plant. Currently, the Ringsend Wastewater Treatment Plant is operating at capacity. Dublin City Council is currently finalising proposals to increase the capacity of the plant from 1.64million PE (population equivalent) to 2.15 million PE, with a target completion date of 2015. In the longer term, the Greater Dublin Drainage Project, 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 and 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 provision of a new main sewer from the LAP lands to the North Fringe Sewer and a new foul water pumping station is required to facilitate development within the plan area. An existing foul water pumping station is located outside of the plan

lands close to Portmarnock Bridge to the north and serves the surrounding area. Currently Portmarnock village and lands on Station Road drain to Portmarnock Bridge pumping station. The sewage is subsequently pumped to a high point on Coast Road from where it falls by gravity to the Moyne Road Pumping Station and from there on to the North Fringe Sewer and onto Ringsend via Sutton pumping station. Portmarnock Bridge pumping station had a history of overflowing but did not have any recorded overflows last year. This is mainly as a result of improved equipment and communications at Portmarnock Bridge. However, it is acknowledged that the pumping station is at near capacity.

All of the flows from Portmarnock Bridge, plus some additional flows from Moyne Road, are pumped from the Moyne Road pumping station to the North Fringe Sewer near the roundabout on Coast Road adjacent to the Baldoyle lands. The existing pumps at Moyne Road are smaller than those at Portmarnock Bridge but have capacity to deal with the flows by pumping for longer durations. There is sufficient capacity, at present, in the Moyne Road pumping station to cater for the flows from an additional 100 houses in the Portmarnock South LAP lands. This will require the existing pumps to run for longer periods. As the existing pumps are currently smaller than those at Portmarnock Bridge and in view of the proposed additional load it may be considered appropriate to upgrade the existing pump sets to those with greater capacity and efficiency and a lower energy demand. This improvement should offset any increased risk generated by the addition of 100 houses. This would be subject to detailed assessment (including Appropriate Assessment, in particular as neither Portmarnock Bridge nor Moyne Road pumping stations have an overflow storage tank).

The plan for the development of the Portmarnock South LAP lands provides for a new pumping station which will replace the existing Portmarnock Bridge pumping station and allow for the Moyne Road pumping station to be downsized. This will be required following the completion of the first 100 units. The new pumping station will have a minimum 24 hour overflow storage tank which will effectively deal with overflow situations. Although the development of the LAP lands will increase the potential impact of any overflow to the Bay, the provision of the storage will substantially reduce the likelihood of an overflow, thereby substantially reducing the risk of pollution. The provision of an overflow pipe is still required for those exceptional events where a combination of failures occur. The detailed design of a new pumping station and associated outfalls will be subject to planning approval, Appropriate Assessment and Foreshore License.

In general, while considering the sensitivity of the SAC designated area and the requirements of the Water Framework Directive, the Water Services Department in principle consider it feasible that the proposed development can be catered for without any adverse effect on the environment and it is likely there will be an overall improvement on the existing situation.

As there is very limited capacity in the existing Portmarnock Bridge pumping station, it is a pre-requisite for all development within the plan lands that drainage infrastructure which includes the pump station and outfall are operational following the completion of the first 100 dwellings and prior to the commencement of further development. The outfall will require a Foreshore License before it can proceed.

All development shall be drained on completely separate systems, i.e. foul and surface water flows shall be directed to separate pipes. This reduces the possibility of flooding of the foul pipelines during times of extreme rainfall events as the foul network should only contain foul flows and not surface water. 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 biodiversity, reduced peak flows, water quality improvements and improved ecology.

**Objective WW 1** Ensure that all required drainage infrastructure including the installation and commissioning of the pump station and network are completed and operational following the completion of the first 100 dwellings and prior to the commencement of further development.

**Objective WW 2** Ensure the separation of foul and surface water effluent through the provision of separate sewerage and surface water run-off networks.

**Objective WW 3** 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 (GSDSDS).

**Objective WW 4** Ensure compliance with the Urban Waste Water Directive.

#### 9.2.1 Odour Control Buffer Zone

Lands adjoining pumping stations may be subject to an odour nuisance. It is deemed appropriate to establish a buffer zone around these plants for odour sensitive developments such as houses, schools, nursing homes etc. Developments which have non-sensitive uses may be permitted in the buffer zone. The buffer zone should be 50m measured from the odour producing unit of the proposed pumping station given the size of the plant, adjoining residential development, the prevailing winds and the risk of odour nuisance. Access to the proposed pumping shall be from within the development to protect estuary margins.

**Objective OC 1** Protect residential amenity by ensuring an odour control buffer zone of 50m minimum from any new pumping station to existing and future development.

#### 9.2.2 Greater Dublin Drainage Scheme and Proposed Outfall Pipeline Corridor

The Greater Dublin Drainage Project aims to provide strategic drainage infrastructure required for the Greater Dublin Area (GDA) that will facilitate employment, social progress, and economic growth while also protecting the environment. The project is being led by Fingal County Council, on behalf of Dublin City Council, Dún Laoghaire-Rathdown County Council, and South Dublin County Council, in partnership with Kildare and Meath County Councils. A new wastewater treatment works, a marine outfall and a new drainage network in the northern part of the GDA is required.

The report *Alternative Sites Assessment and Route Selection Report (Phase 4): Final Preferred Site and Routes* has identified Clonsaugh as the preferred site for a Regional Wastewater Treatment Plant and includes proposals for a 26 km pipeline and a 6 km marine outfall out to sea. The outfall pipe relating to the Clonsaugh site will be undergrounded within the open space lands within the LAP area. This preferred site option however, will be subject to a full Environmental Impact Assessment and Appropriate Assessment. See [www.greaterdublindrainage.ie](http://www.greaterdublindrainage.ie).

**Objective GDDS 1** Protect existing and future infrastructure through the provision of wayleaves/corridors and the co-ordination of developments with the requirements of infrastructure service providers.

### 9.3 Surface Water Management

New development has the potential to add to flood risk in an area if it leads to an increase in surface water run-off. In keeping with the *Greater Dublin Strategic Drainage Study (2005)*, Sustainable urban 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 design a system that incorporates 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. Runoff 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 the Council's commitments under the Water Framework Directive to improve the quality of the water in the Sluice and Mayne Rivers and the international and national designations which apply to Baldoyle Bay, the criterion of Water Quality is a key factor in the design of the storm water system to serve the development. In accordance with the Greater Dublin Strategic Drainage Study, it is a requirement that surface-water discharge rates are limited to greenfield rates for the development area. Compliance with this requirement results in compliance with flood risk management guidelines for surface-water discharge for up to the 1% AEP pluvial event. This requirement is best achieved by properly incorporating SuDS techniques into the design of future development.

A SuDS Strategy for the plan lands was commissioned by the Planning Authority and identifies various SuDS measures that may be utilised in the plan area [See [Appendix 1](#)]. Surface water attenuation will be provided generally in locations identified in the SuDS Strategy. The following are some of the drainage design SuDS measures that must be incorporated into the development in line with appropriate sustainable drainage practices:

**Source Controls** - Infiltration trenches, permeable paving, rainwater harvesting systems.

**Site Controls** – Pervious Pavements, Swales, Infiltration trenches within park and open spaces, bio retention areas/tree pits.

**Regional Controls** – Ponds, Wetlands.

Having regard to the sensitivity of the receiving waters of Baldoyle Bay, the SuDS Strategy recommends a combination of source, site and regional controls to ensure high water quality of run-off from future development. The early provision of regional SuDS measures proposed in this strategy in the form of the proposed wetland/pond device shall be a priority in the first phase of development.

*Example of SuDS Feature within the Public Realm*



**9.3.1 Maintenance of SuDS Devices**

Like all drainage systems, SuDS components should be designed for inspection and future maintenance. This ensures efficient operation and prevents 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 commitment to the long term maintenance of the drainage system should be established at the early stages in the planning process. This should include routine and long-term actions that can be incorporated into a maintenance plan. Maintenance plans should be developed prior to the adoption of all systems and should be submitted with future planning applications within the LAP lands.

**Objective SW 1** 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).

**Objective SW 2** Require all planning applications to submit details of compliance with the SuDS Strategy for the LAP which include proposals for the management of surface water within sites, and runoff rates from sites, protecting the water quality of Baldoyle Bay.

**Objective SW 3** Require local/site specific SuDS measures in tandem with development.

**Objective SW 4** Require green roofs for commercial development within the LAP unless otherwise agreed and investigate the feasibility of green roofs for residential development.

**Objective SW 5** 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 used as temporary flood ponding areas.

**Objective SW 6** Ensure that all trees planted in/adjacent to hard paved areas (footpaths, parking areas, etc.) incorporate tree root structural cell systems.

**Objective SW 7** Ensure the provision of the proposed regional SuDS wetland/pond device as set out in the SuDS Strategy for the plan lands in the first phase of development.

**Objective SW 8** Require that proposals for sustainable drainage systems include provisions for future maintenance of these systems. In this regard, maintenance plans shall be submitted with each planning application.

**Objective SW 9** Ensure that existing watercourses remain open and are incorporated into amenity/SuDS proposals. Culverting of streams is generally not acceptable and should be avoided

**Objective SW 10** Ensure that no development, including clearance and storage of materials, takes place within a minimum distance of 10-15 metres measured from each bank of any river, stream or watercourse.

**Objective SW 11** Require a settlement pond to allow for treatment of all surface water discharges from the development site during the construction phase. Prior consultation with the Council’s Water Services Department and Biodiversity Officer is required regarding the most appropriate location for this pond.

**Objective SW 12** SuDS features shall be provided as part of the first phase of development and would only be considered on a phased basis where an alternative temporary solution is proposed or where phasing does not adversely impact or prejudice the delivery of the final SuDS Strategy and complies with appropriate assessment and conservation management objectives/Habitat Protection Measures of the LAP.

**9.4 Flood Risk Management**

The Department of Environment, Community and Local Government and the OPW have jointly published a comprehensive guidance document for the management of flood risk entitled “The Planning System and Flood Risk Management Guidelines” (November 2009) that are aimed at ensuring a consistent, rigorous and systematic approach to fully incorporate flood risk assessment and management into the planning system. The Guidelines require the incorporation of flood risk management in the plan-making and development management processes. The Planning Authority must have regard to the planning and development principles outlined in the national flood risk management guidelines when considering development proposals.

In accordance with the above guidelines, a Strategic Flood Risk Assessment [SFRA] was commissioned by the Planning Authority as part of this LAP to assess flood risk within and adjoining the plan area. Appendix 2 refers. The study assessed the various flood risk data available and includes the i) OPW flood database and maps; ii) the Dublin Region Coastal Protection Project 2005 [Royal Haskoning] which extended from the city boundary to North Portmarnock which identified a number of flood risk locations in Sutton, Howth, Baldoyle and Portmarnock and iii) the most recent study, the Fingal East Meath Flood Risk Assessment and Management Study (FEM FRAMS), a catchment based flood risk assessment and management study of 19 rivers and streams within the county which included the Rivers Mayne and Sluice.

The SFRA shows the majority of the RA residential zoned lands outside any flood risk areas. Only a very limited area in the northeastern corner of these residential zoned lands is identified as being at risk of flooding. The SuDS Strategy prepared for this LAP proposes a swale device to mitigate against flooding in this location. Outside of the residential zoned lands, the locations where flooding is evident include, Portmarnock Bridge, the open space lands within the eastern edge of the plan lands and the south-eastern corner of the plan lands. Flood risk mitigation measures are proposed for each of these areas at risk. A number of flood design considerations are also proposed as part of any future development schemes. The SFRA recommends a site specific flood risk assessment for areas identified at risk in the event of development.

*Example of Flooding*



**Objective FRM 1** 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.

**Objective FRM 2** Require all proposed developments within areas at risk of flooding to carry out a detailed Flood Risk Assessment in accordance with the DoECLG Guidelines on Flood Risk Management.

**Objective FRM 3** Implement the recommendations of the FEM FRAMS Study.

### 9.5 Water Quality

Recent years have seen the adoption of a number of EU Directives, transposed into Irish law which seek to protect and improve water quality. The key piece of legislation governing water quality in Ireland is the Water Framework Directive (WFD) (2000/60/EC) established by the European Community and which came into force in Ireland in December 2000. The WFD requires that all Member States implement the necessary measures to prevent deterioration of the status of all waters - surface, ground, estuarine and coastal - and protect, enhance and restore all waters with the aim of achieving “good status” by 2015. All public bodies are required to coordinate their policies and operations so as to maintain the good ecological and chemical status of water bodies which are currently unpolluted and improve polluted water bodies to good status by 2015.

For the purpose of implementing the WFD, Ireland has been divided into eight river basin districts or areas of land that are drained by a large river or number of rivers and the adjacent estuarine/coastal areas. The management of water resources will be on these river basin districts. The Portmarnock South LAP area falls within the Eastern River Basin District (ERBD). The Local Authorities located in the ERBD - including Fingal - have prepared a River Basin Management Plan and Programme of Measures. This Eastern River Basin Management Plan (ERBMP) (2009-2015) identifies the status of water bodies within the RBD and provides objectives in order to implement the requirements of the WFD.

The River Sluice and the River Mayne, located to the north and south of the plan lands are within the Santry Mayne Sluice Water Management Unit, both discharge to Baldoyle Bay, Natura 2000 site. The overall status of the Mayne River is classified by the EPA 2011 Review as being of “poor” status and the Sluice River is classified as good. Maintaining and improving water supply to a good status is a key consideration in development of the LAP lands. In the Santry Mayne Sluice WMU the main problems identified were high nutrients, oxygen demand, low ecological rating and inferior habitat. The main causes can be attributed to wastewater and industrial discharges, due to misconnected foul sewers, combined sewer overflows and urban area pollution.

Full implementation of the Programme of Measures (POM) set out for Santry-Mayne-Sluice WMU is expected to correct this. However, recovery time will mean that these rivers will not achieve Good Status before 2015. It is likely

that the rivers in this management unit will attain “Good Status” by 2027. The development of sites within the LAP provides an opportunity to improve water quality alongside continuing control measures. Investigative monitoring of the River Mayne to ascertain its water quality status was undertaken by the ERBD and drainage division for this LAP. The majority of the plan lands drain to the River Mayne. The results are referenced in the Natura Impact Report and Environmental Reports accompanying the LAP.

In the case of proposed new developments within the LAP lands, bearing in mind the statutory obligations outlined above, implementation of holistic drainage policies is required, including stormwater management and SuDS in all new developments.

The Planning Authority’s Water Pollution Control Section operate a policy of issuing Trade Effluent Discharge Licences during the construction phase under the 1977 & 1990 Water Pollution Acts to all companies involved in development. This is to ensure all discharges to surface waters do not compromise water quality in the receiving waters of Baldoyle Estuary and the Malahide Shellfish Waters. In relation to waterbodies within or adjacent to LAP lands, it is imperative that any works during construction/development phases do not impact negatively on the Rivers or any tributaries. Salmonid water constraints apply to any development in the LAP lands.

**Objective WQ 1** Ensure that the EU Water Framework Directive is implemented.

**Objective WQ 2** 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.

**Objective WQ 3** Seek the maintenance of the Sluice River and rehabilitation of the Mayne River to good water status, it’s restoration as a natural amenity and protection of the riparian corridor through the LAP area.

**Objective WQ 4** Implement the SuDS Strategy for the LAP lands.

**Objective WQ 5** Implement the measures drawn up in the Pollution Reduction Programme for the Malahide Shellfish Area.

### 9.6 Groundwater Vulnerability and Protection

The Geological Survey of Ireland (GSI) has recently completed ground water mapping for Fingal. This mapping indicates that the plan lands have a locally important aquifer with bedrock that is moderately productive only in local zones with a ‘low’ vulnerability classification. 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, lakes and therefore influences its 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, the drawing up of pollution contingency measures.

**Objective GW 1** Protect existing ground water sources from pollution during construction/development works.

### 9.7 Utilities - Electricity Supply

It is an objective of this LAP that developers shall engage with ESB Networks regarding the provision of infrastructure to service their lands and this should be agreed in advance to ensure that location, design and access are consistent with the overall design strategy for the LAP area.

#### 9.7.1 Telecommunications and Broadband

New development in the area must accommodate the provision of a universal open access ducting network to telecommunications, broadband and digital services. Such infrastructure shall be agreed in advance to ensure consistency with overall design strategy for the plan lands.

#### 9.7.2 Gas Supply

Any distribution pipework shall be routed in line with the main infrastructure in the paved footpath areas or roadways design.

**Objective U 1** Seek the provision of high quality telecommunications including fibre optic, broadband links and utilities (gas and electricity) infrastructure in the plan lands.

### 9.8 Waste Management

The Council actively promotes waste prevention and minimisation through the Development Plan having regard to ‘The Waste Management Plan for the Dublin Region 2005-2010’. The objectives of the WMP will be implemented through the development management process and accommodating recycling facilities for new developments.

#### 9.8.1 Bin-Storage and Recycling

In apartment complexes and areas of terraced / duplex housing, designated communal bin storage shall be provided and suitably screened where located outdoors, as shall all composting and recycling facilities. Refuse storage, recycling and composting areas for apartment developments shall be addressed at the design stage.

**Objective WM 1** Prevent and minimise the generation of waste in accordance with the Waste Management Plan for the Dublin Region.

**Objective WM 2** Ensure that residential developments have adequate waste storage space designated for 3 waste streams-residual waste (grey bin), dry recyclables (green bin), and organic waste (brown bin) and shall

comply with Fingal County Council's Guidelines on the Provision of Waste and Recycling Bins for Residential Developments.

**Objective WM 3** Ensure that careful consideration is given to the storage of bins and waste receptacles at the design stage and that all future residential schemes include appropriate and innovative design measures for refuse bins, within convenient distance of all units. Adequate covered bin storage areas shall be provided adjacent to dwellings/ within the curtilage rather than at the front of houses, details of which should be clearly shown at planning application stage.

**Objective WM 4** Ensure that all non-residential developments have suitable and adequate internal and external storage space for segregated waste and comply with the Waste and Recycling Storage Requirements for Residential and Non-Residential Developments in Fingal.

*Refuse collection facilities shall be designed as an integral part of the built form of proposed developments*



### 9.8.2 Construction and Demolition Waste Management

Developer(s) will be required to submit a construction programme setting out a planned programme for the management/recovery/disposal of construction/demolition waste material generated at the site during the excavation and construction phases of development, in accordance with the relevant national waste management legislation, at planning application stage. It is an objective of this LAP that developers shall ensure that all waste is removed from the plan lands by approved waste disposal contractors to approved waste disposal facilities. It is also an objective that developers take adequate measures to minimise the impacts of traffic, noise and dust during construction phases.

**Objective WM 5** Require that developers/applicants submit a construction and demolition waste management plan setting out a planned programme for the management/recovery/disposal of construction/demolition waste material generated at the site during the excavation and construction

phases of development, in accordance with the relevant national waste management legislation. Prior consultation with the Council's Biodiversity Officer is required regarding re-distribution of construction surplus fill on the plan lands.

**Objective WM 6** Require that where development does not occur within one year of granting of permission, a revised construction and demolition waste management programme shall be submitted for approval three months prior to the submission of the first commencement notice.

**Objective WM 7** Ensure that developers/applicants remove all waste by approved waste disposal contractors to approved waste disposal facilities. A methodology statement for such measures shall be submitted at planning application stage and developers shall employ best practice as applicable at the time of construction.

**Objective WM 8** Developers shall take adequate measures to minimise the impacts of traffic, noise and dust during construction phases. A methodology statement for such measures shall be submitted at planning application stage and developers shall employ best practice as applicable at the time of construction.

### 9.9 Construction Haul Route

To minimise the impacts of traffic, noise and dust during construction phases on existing residential amenity, sensitive bird habitat and landscape character and features, an appropriately located construction haul route must be determined in agreement with Fingal County Council at Urban Design Appraisal stage. The haul route must have minimal impact on existing hedgerows and trees and in particular the historic townland hedgerow boundaries and ensure that no encroachment occurs on the proposed 'quiet zone' as set out in the habitat protection measures of this LAP.

### 9.10 Coordination of Infrastructure

The LAP seeks to ensure that the LAP lands are adequately serviced with drainage and water infrastructure as well as utilities infrastructure (gas/electricity and telecommunications) and that such infrastructure is coordinated between different landowners and is delivered in a manner that protects the environment and water quality.



## Sustainable Development Framework

### 10.0 Introduction

The Council is committed to the delivery of sustainable development through; high quality sustainable forms of design incorporating green design techniques, energy efficient buildings and life long adaptable homes; the optimum use of public transport and walking and cycling, green connected routes, linear corridors; and protection of the natural environment. The main priority focus for this LAP is that development contributes to the achievement of energy efficient and high quality sustainable neighbourhoods in the plan area while recognising the highly sensitive receiving environments.

### 10.1 Climate Change

There are various predictions for the effects of climate change in the future, with moderate predictions indicating a 10% increase in rainfall intensity, a 20% increase in base river flow and a sea-level rise of 500mm by the year 2100. These scenarios have been included in the SuDS Strategy. Climate predictions are constantly under review and scientists on the International Panel on Climate Change are considering the current rate of melting of the polar icecaps. A report is due in 2013 indicating the future likely effects of climate change. This LAP promotes energy efficiency in building design, renewable energy to service urban developments, use of public transport, walking and cycling, improvements in public transport, efficient waste management and recycling, surface water management and a hierarchy of quality open spaces, green corridors, protection and integration of natural amenity features to mitigate the effects of climate change.

#### 10.1.1 Energy Conservation and Renewable Energy Technologies

The Government's white paper on energy 2007 *Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007-2020* sets out the Government's strategic approach to delivering a sustainable energy future for Ireland. At present, 90% of Irish energy requirements are imported. By 2020, the Government aims to meet 20% of energy requirements from renewable sources.

New development, and particularly larger scale development such as Portmarnock South provides significant opportunities to develop "decentralised energy systems" such as Combined Heat and Power (CHP). Decentralised energy systems are more efficient than 'centralised' or national power generation and distribution systems as they reduce energy lost through the transmission process. They also utilise energy in the form of heat that is ordinarily discharged into atmosphere, rivers or sea during the normal energy generation process. The term 'decentralised' refers to site-wide systems and smaller scale systems for groups or individual dwellings. There are a number of different types of decentralised energy systems, either fuelled by renewable energy or fossil fuels, which might be appropriate for use within the plan lands. In addition to the development of CHP/Community Heating, it is likely that the greatest potential for renewable energy in Portmarnock South is through solar collection (photovoltaic and solar thermal), ground source heat pumps and biomass.

### 10.2 Sustainability and the LAP

The LAP through its many aims and objectives incorporates the following sustainable principles;

- Maximising opportunities for open space, green connected networks and protection of the natural environment as defining characteristics of the developing area.
- Optimal use of land through the consolidation of development adjoining the train station.
- A movement and transport strategy which minimises trip generation and promotes cycling, walking, public transport, all sustainable modes of transport through the area.
- Green routes, linear parks, pedestrian and cycling routes between attractors of activity such as recreation areas and parks, community facilities/shops and train station.
- Sustainable approaches to housing developments through design, layout, specifications and a mix of house types.
- High standards of energy efficiency in housing and commercial developments and use of alternative energy techniques.
- Innovative and best practice examples of sustainable design and green technology.
- Sustainable communities through integration with the established communities such as Portmarnock and new communities at Baldoye-Stapolin and Clongriffin-Belmayne and integration of social and community facilities in both the developing and established areas to provide people with the services/facilities they need close to their homes to encourage life time residency and strengthen communities.
- Appropriate sustainable tourism activities within the plan area.
- The priority completion of movement infrastructure, water services infrastructure and open spaces/amenities within the first phases of development.

### 10.3 Sustainability in Design

Fingal is committed to developing sustainable building requirements to promote a shift to energy efficient, low environmental impact buildings. Good design is the key to achieving the optimum energy performance of buildings at no extra cost. The Planning Authority will promote a consistently high Building Energy Rating (BER) for all new developments. This will be required to be demonstrated as a preliminary rating at planning application stage calculated in accordance with the approved Dwelling Energy Assessment Procedure (DEAP).

DEAP -The Dwelling Energy Assessment Procedure (DEAP) is adopted as the Irish official method for calculating the energy performance of dwellings. The calculation is based on the energy balance taking into account a range of factors that contribute to annual energy usage and associated CO2 emissions for the provision of space heating, water heating, ventilation and lighting of a dwelling. [SEAI 2008 Version 3.1]

The energy and environmental performance required for new buildings under the Building Regulations is expected to improve rapidly over the course of the LAP with a Government policy target of carbon neutral by 2013. The Council seeks to ensure that all development in the LAP lands will contribute positively towards a reduction in energy consumption and the associated carbon footprint.

**Objective SU 1** Support the National Climate Change Strategy by facilitating measures to reduce emissions of greenhouse gases.

**Objective SU 2** Ensure that development proposals demonstrate reduced energy consumption in their design and construction. Applicant's/ Developers shall demonstrate how proposed development meets or preferably exceeds the requirements of Part L of the Building Regulations.

**Objective SU 3** Seek best practice in sustainable design and incorporation of green technology in all development proposals.

**Objective SU 4** Promote and facilitate the development of renewable sources of energy and associated infrastructure within the LAP area and encourage the integration of micro-renewable energy sources into the design and construction of new developments.

**Objective SU 5** Incorporate environmentally sustainable design principles in the design and construction of all buildings in the plan area. New buildings shall strive to reduce the energy and water demand through:

- Careful consideration of building orientation, form, massing and fenestration to make the most of passive solar gain for space heating.
- Use of insulation to reduce heat loss from draughts and uncontrolled ventilation.
- Reduced water use through rainwater harvesting and recycling of rainwater and in-building grey water treatment systems.
- Use of materials with low embodied energy and consider incorporating environmentally 'smart' materials that can minimise energy use by responding to changing external conditions.

**Objective SU 6** Seek to maximise opportunities for new development to capture energy and water. This may include:

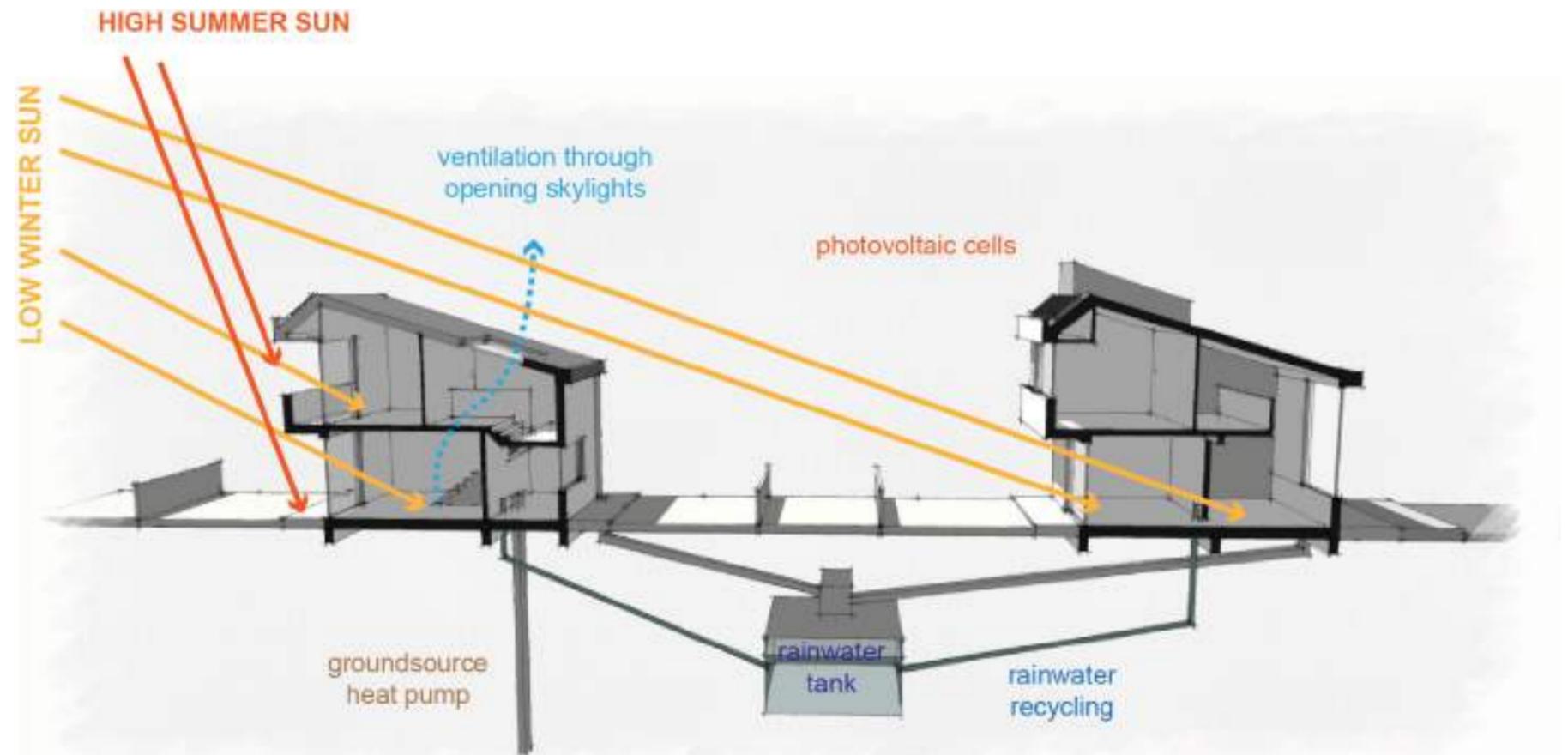
- Maximisation of natural daylight;
- Maximisation of passive solar gain for solar thermal water heating and electricity production;
- Use of building roofs as solar collectors and rainwater harvesters; (green roofs can be used as amenity spaces that also support biodiversity and rainwater attenuation.)
- Intelligent and energy efficient heating, cooling and ventilation systems.

**Objective SU 7** Seek the priority completion of movement infrastructure and open spaces.

Example of Energy Efficient Housing Design



Example of the Incorporation of Sustainable Measures within Housing Design





## Phasing and Implementation

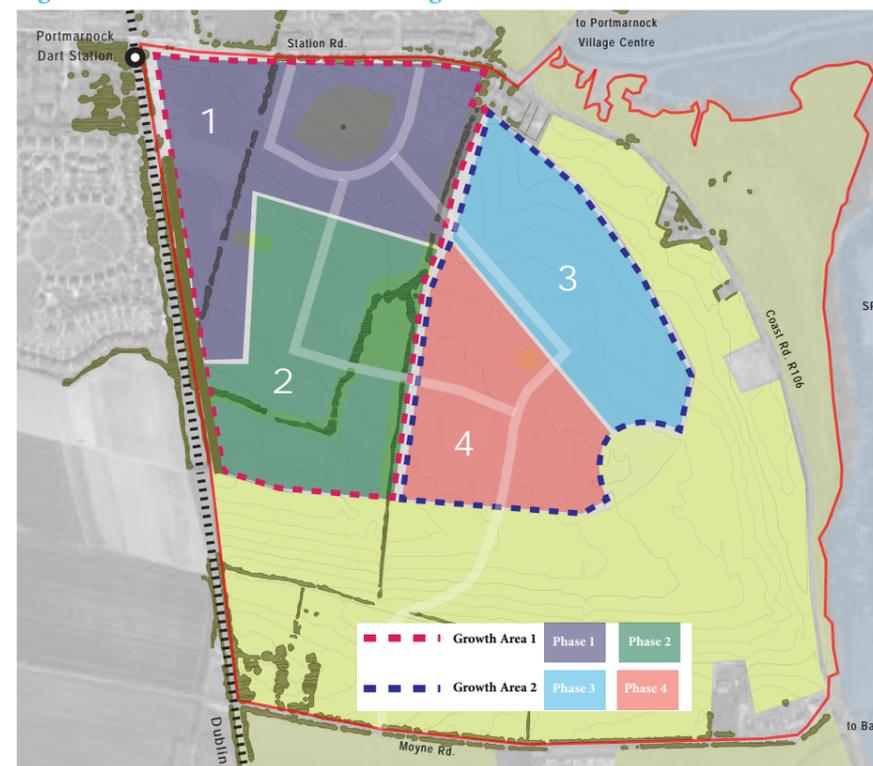
### 11.0 Introduction

Section 19(2) of the Planning and Development Act 2000 provides for the phasing of development within a local area plan. This section of the LAP will deal with the sequential development and phasing programme linked with necessary investment in drainage and roads infrastructure, open space and recreational amenities and local service provision. It sets out a phasing mechanism and the enabling works that are required in each phase before being able to move on to the next phase. Phasing will be addressed in two ways by; a) addressing the geographical progression or sequencing of development through identification of growth areas and; b) addressing the quantitative restrictions on the phasing of development until such time as enabling infrastructure has been delivered.

### 11.1 Sequencing of Development

It is critical that the LAP ensures the progression of development within the plan lands in an ordered way which avoids the undue creation of long term 'gaps' or interim sites within the built element of the development. In particular, it must avoid the situation of permitting remote development in advance of the infrastructure necessary to link such development to the train station, to local services, open space and recreational amenities. In this regard, residential development should generally occur from the train station and Station Road towards the east and south with the small service centre occurring in tandem with the earlier phases of residential development i.e. going from a west to east progression. Two growth areas have been identified to facilitate the orderly progression of the development with two phases of development within each growth area.

Figure 11.0 Growth Areas and Phasing



### Growth Area 1 [ Phases 1 & 2 ]

This growth area adjoins Portmarnock Train Station, Station Road and the Dublin-Belfast railway line and incorporates two development phases. The phases of residential development within Growth Area 1 will ensure that linkages are created to the train station, the small centre, open space and recreational amenities and the wider area in a north-south and east-west direction.

### Growth Area 2 [ Phases 3 & 4 ]

This Growth Area is located within the eastern and southern sections of the plan lands and provides for two development phases. Each phase will ensure that linkages are created to open spaces, the train station, small services and the wider area [ See Figure 11.0 Growth Areas and Phasing ].

### 11.2 Timeframes for Delivery

Given the economic uncertainties, timeframes are indicative only and provide a broad framework within which development can be delivered. However, it is important that the sequencing of development within the lands is adhered to for the facilitation of orderly development.

#### Growth Area 1- Short-Medium term

The two phases of development, within Growth Area 1, are the short-medium term phases. They will include the lands immediately east and south of the train station and along Station Road allowing for housing immediately adjoining the public transportation node of Portmarnock train station and delivering essential components in the green infrastructure network such as the linear park, 'Skylark Park', priority green routes, open space lands, habitat protection measures and archaeological buffer zone, local service provision and essential drainage and roads infrastructure. It is envisaged that this timeframe will likely cover the period 2013-2019 and will deliver approximately 600 units.

#### Growth Area 2 – Long term

These two phases of development will occur within the eastern and southern sections of the plan lands and will complete the overall number of dwellings proposed within the LAP lands, the necessary green route linkages, the green axis between national monuments and the proposed primary route ensuring connectivity and permeability throughout the two growth areas of the plan lands. The timeframe for this Growth Area may range between 2020-2023 and will deliver approximately 600 units.

### 11.3 Phasing and Implementation – Linking development to Infrastructure

Planning applications for each Growth Area shall be in accordance with the phasing set out in this section. In total the proposed phases of development have the potential to achieve up to 1200 dwelling units subject to detailed design appraisal. Planning applications for residential development shall generally not exceed 150 units to facilitate detailed assessment of each planning application; unless clear justification for exceeding this number is demonstrated by the developer on a case by case basis and avoiding piecemeal or remote parcels of development. Development should occur sequentially as described in Section 11.1.

Each growth area is subdivided into phases with requirements for open spaces and recreational amenities that form part of the overall green infrastructure network, movement and drainage infrastructure. The phasing for road infrastructure is based on the transport phasing assessment report carried out by Aecom consultants for Fingal in 2012 [See Section 6 Transport and Movement for further detail]. It is recognised that the phasing requirements derived from this report may require to be revised on foot of the outcomes of the North East Dublin Transportation Study or by any subsequent updated studies carried out by or in conjunction with the relevant prescribed bodies i.e. NTA and/or NRA.

Whilst the orderly progression of development is fundamental to the proper planning and sustainable development of these LAP lands, a degree of flexibility will be considered in recognition that a developer may be in a position to deliver a part of a site before others. However, development which does not have clear connectivity between the two growth areas or phases to adjoining development, to the train station and local services and open space, would be considered contrary to proper planning and sustainable development of the area. Each phase of development will be linked to the delivery of key pieces of social, environmental and physical infrastructure. This is set out in the next section of the plan. In any event, no development can proceed on the plan lands until the related and appropriate habitat protection measures are implemented.

### 11.4 Undeveloped and Interfacing Areas of the Plan Lands

The sequencing of development sets out an orderly manner for development to proceed within the plan lands based on the delivery of the required infrastructure and connectivity within the plan lands. At any given time, there will be areas of the residentially zoned lands which are not being developed. Where these lands are extensive, they should remain in agricultural use or be managed in such a way as to support the roosting and feeding habitats required by the qualifying interests of the EU designations of Baldoyle Bay. Where they are smaller parcels of land which interface between new development areas and/or new development and the train station/small centre they should remain open in nature with paths laid out to connect the different developments to each other and to the train station. No arisings or other material associated with site development works shall be left on these undeveloped lands except where otherwise agreed with the Planning Authority. Details of the treatment and management of all undeveloped areas within the Plan lands should be submitted with each planning application.

**Objective SP 1** Ensure that those areas of the plan lands that are not under construction are kept free from arisings or other materials associated with development unless otherwise agreed with the Planning Authority.

**Objective SP 2** Ensure that the larger undeveloped areas of the residentially zoned lands are maintained in agricultural use or are managed in such a way as to support the roosting and feeding habitat requirements of the qualifying interest species of Baldoyle Bay. Where smaller parcels of land between developments are created, they should be kept open in nature with connectivity provided between other residential areas and the railway station and small centre.

### 11.5 Fundamental Requirements to Enable Development Prior to the Commencement of Development

Habitat Protection Measures agreed between the NPWS and Planning Authority, as per Table 11.1 shall be implemented as may be appropriate prior to the commencement of development; ensuring feeding and roosting habitat is protected and disturbance to migratory birdlife for the duration of the construction phase and post construction is mitigated, to the greatest possible extent.

Prior to the commencement of development, the developer shall enter into an agreement with Fingal County Council for the transfer of zoned open space lands. This early transfer of open space lands will also facilitate the planning and implementation of the Fingal Coastal Way.

*Undeveloped areas of the residentially zoned lands should be managed in ways that support the roosting and feeding habitat of native and migratory birds.*



Table 11.1 Habitat Protection measures

#### Habitat Protection Measures required within the Ecological Buffer Zone

- Conservation Management Plan for the ecological buffer zone/open space lands and the high amenity lands of the 'Murragh Spit' prepared in consultation and agreement with Fingal County Council and the NPWS.
- The Ecological Buffer Zone within the plan lands maintained as amenity grassland, semi-natural meadow, natural grassland and scrub, pasture and arable land use including wintering crops such as linnet mix.
- A 'quiet zone' established to the south of the residential development area to cater for Brent Geese and wader species. The 'quiet zone' to consist of grassland pasture. This 'quiet zone' will be enclosed by a fence and hedge to prevent disturbance during the winter migratory bird season. The enclosure must be dog proof but can permit overlooking of the 'quiet zone' e.g. 1.2 metre high fence with hedge planting of native species.
- Retention of field within the southern section of the plan lands under arable cultivation. This will support and encourage food production through community and contract farming initiatives.
- The extensive open space within the ecological buffer zone to be managed as meadows.
- Retain the ecological buffer zone to the estuary in a predominantly open state to support unhindered bird movement.
- Retain the 'Murragh Spit', east of the Coast Road as a managed conservation area to protect estuarine birdlife.
- Disposal of construction and surplus fill material to be carefully managed through the Development Management process.
- Provision of SuDS Regional Wetland, unless otherwise agreed [Objective SW12 refers] and subject to Appropriate Assessment screening to ensure all downstream habitats and open habitat used by qualifying interest birds are protected.

**11.6 Social, Environmental and Physical Infrastructural requirements for each Phase of the Development :-**

Growth Area 1	Phase 1: 1 - 300 units
Open Space and Recreational Amenity [Green Infrastructure Elements]	Linear park from Station Road extending to north of 'Skylark Park' and associated 20 metre minimum landscape corridor completed.  Archaeological buffer zone around National Monument DU015:014 - Portmarnock Mound completed.
Local Services	Small Services Centre commenced.
Water and Drainage	Prior to the occupation of any new dwellings on site the applicant shall ensure that the existing pumping stations have been appropriately assessed (including Appropriate Assessment, as applicable) and upgraded to provide for any additional load, which shall in any event not exceed 100 residential units.  The continued use of the existing pumping stations at Portmarnock Bridge and/or Moyne Road shall be considered an interim situation to serve no more than 100 additional dwellings and the applicant/developer shall demonstrate compliance with this in the making of any planning applications for these lands.  Pumping Station and associated outfalls completed and operational following the completion of the first 100 dwellings and prior to the commencement of further development.  Internal network of foul sewer, surface water sewer and water mains completed. Pipe line corridor shall be incorporated within internal road network and vehicular crossing points where it traverses the linear park.  SuDS device on northeastern corner of plan lands completed.  Regional SuDs wetland pond completed as part of the required Habitat Protection Measures prior to the commencement of development, unless otherwise agreed and subject to Appropriate Assessment screening to ensure all downstream habitats and open habitat used by qualifying interest birds are protected.
Movement and Transport	Compliance commensurate with and as required by the scale of development permitted:-  Priority pedestrian/cyclist green route east of the railway line and link to Portmarnock train station completed.  Priority pedestrian/cyclist green route adjacent to Station Road and link to Portmarnock train station completed.  Priority pedestrian/cyclist green route adjacent to section of Linear Park between Station Road and north of 'Skylark Park'.  Temporary pedestrian link to open space lands to the east.

	Pedestrian crossing on Station Road completed.  Vehicular access points as indicated on the LAP map onto Station Road completed.  Relevant section of Primary Route connecting to Station Road and street network completed.  Hole in the Wall Rd Upgrade. Realignment of the Hole in the Wall Road with Drumnigh Rd on the R123 to create a new four arm crossroads junction commenced.  R107 Malahide Rd Realignment Phase 1 (Clare Hall Junction) Enhance capacity of Clare Hall Junction as phase 1 of the R107 Malahide Rd upgrade or provide other improvements as may be informed by the North East Dublin Transportation Study or any updated studies in consultation with the NTA and/or NRA.
Growth Area 1	Phase 2 : 301 – 600 units
Open Space and Recreational Amenity	Linear Park and associated 20 metre minimum landscape corridor linking to Station Road and Moyne Road fully completed.  'Skylark Park' completed.  Children's playground within 'Skylark Park' completed.  Eastern section of inter-monument green axis completed to its intersection with Linear Park.
Local Services	Small Services Centre completed.
Water and Drainage	Internal network of foul sewer, surface water sewer and water mains completed.  Surface Water Management systems completed.
Movement and Transport	Compliance commensurate with and as required by the scale of development permitted:-  Priority pedestrian/cycle green route alongside the Linear Park linking to Station Road and Moyne Road completed.  Pedestrian crossing on Moyne Road completed.  Internal Street network of this phase completed.

Growth Area 2	Phase 3: 601-900 units
Open Space and Recreational Amenity	Completion of inter-monument green axis to southern National Monument [RMP Ref. DU015:055] Maynestown Enclosure.
Water and Drainage	Internal network of foul sewer, surface water sewer and water mains completed.  Surface Water Management systems completed.
Movement and Transport	Completion of Primary Route connecting to Moyne Road through open space lands and associated pedestrian/cycle links.  Internal Street network of this phase completed.
Growth Area 2	Phase 4 : 901-1200 Completion of all dwellings
Open Space and Recreational Amenity	Completion of inter-monument green axis completed to southern National Monument [RMP Ref. DU015:055] Maynestown Enclosure.  Network of looped walking routes as indicated on Figure 5.8 completed.
Water and Drainage	Internal network of foul sewer, surface water sewer and water mains completed.  Surface Water Management systems completed.
Movement and Transport	Compliance commensurate with and as required by the scale of development permitted:-  Internal Street Network completed.  Drumnigh Road /Station Road Upgrade  Grange Rd/Baldoyle Industrial Estate junction. Improve carrying capacity and free flow on Grange Road and Grange Avenue into Baldoyle Industrial Estate.  Willie Nolan Road/Baldoyle Main Street junction Provide for a dedicated right turn lane on Main Street (north) and a dedicated left turn lane on Main Street (south)  Full R107 Malahide Road realignment. This road has been identified in the South Fingal Transport Study as necessary for the mitigation of increased development in the South Fringe area.  East-West Distributor Road (from Malahide Road R107 to the R132 Swords Road) This road has been identified in the South Fingal Transport Study as necessary for the mitigation of increased development in the South Fringe area, or provide other improvements as may be informed by the North East Dublin Transportation Study or any updated studies in consultation with the NTA and/or NTA.

Figure 11.1 Early establishment of Greenroutes as cross country walking trails

