

SEA STATEMENT
BARRYSPARKS LOCAL AREA PLAN 2011
July 2011

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1.0 Introduction

The Barrysparks Local Area Plan was adopted by Fingal County Council at a council meeting on 11th July 2011 and comes into effect on 8th August 2011, 4 weeks after the day it was made. In accordance with S.I. no 436 of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (as amended), the Planning Authority is required to prepare a SEA statement following the making of a Local Area Plan.

2.0 Content of the SEA Statement

The SEA Statement is required to include the following information based on Section 13I of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 and as amended by Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011:

- (a) How environmental considerations have been integrated into the plan,
- (b) How
 - (i) the environmental report prepared pursuant to Article 13C of the Regulations,
 - (ii) submissions and observations made to the planning authority in response to a notice under section 12(1) or (7) of the Planning and Development Act 2000, and
 - (iii) any consultations under Article 13F of the Regulations,have been taken into account during the preparation or amendment of the plan,
- (c) The reasons for choosing the plan or amendment, as adopted, in the light of the other reasonable alternatives dealt with, and
- (d) The measures decided upon to monitor, in accordance with Article 13J of the Regulations, the significant environmental effects of implementation of the plan or amended plan.

Each of these individual criteria will be addressed in separate sections of this SEA Statement.

3.0 Inclusion of Environmental Considerations into the Plan

The SEA process can be broken down into a number of steps where outputs from the SEA inform the Plan development. At each stage of the process, the impacts of the Plan on the environment and the public were assessed and where the Plan conflicted with the environmental objectives, mitigation measures were proposed. The mitigation measures are predominately in the form of an amendment to or the addition of an objective in the LAP.

3.1 SEA Methodology

The SEA process undertaken for the Barrysparks Local Area Plan was as follows: -

- Screening: In examining the LAP area and proposed development, it was determined by the Planning Authority that the proposed LAP, given the scale and density of development, would be likely to have a significant impact on the environment and therefore a full Environmental Report was required.
- Scoping: The Planning Authority liaised with statutory consultees to identify key issues of concern that should be addressed in the environmental assessment of the Plan. This stage included consultations with the DOEHLG,

The Department of Communications, Marine and Natural Resources, the EPA and the NRA. The results of these consultations were taken into consideration in the making of the Draft Local Area Plan.

- Draft Environmental Report: The likely significant environmental effects of implementing the Local Area Plan were identified and evaluated within the draft Environmental Report.
- Consultation: Statutory authorities and the public were consulted on the draft environmental report and draft Local Area Plan.
- Managers Report and Assessment of Amendments proposed: A Managers Report was compiled which assessed the submissions received on the draft plan and the environmental report. Amendments were proposed and these amendments were re-examined to determine if there was any impact on the SEA and Habitats Screening Statement. No impact was found.
- Draft Plan and associated SEA adopted
- SEA Statement: Following the decision to adopt the draft Local Area Plan and Environmental Report, this SEA Statement is hereby published to establish how the SEA process influenced the outcome and how environmental considerations have been integrated into the final Local Area Plan.
- A Natura Impact Screening Report was also conducted on the draft LAP. This screening report considered there to be no negative impact of the draft LAP on any natura protected habitats.

3.2 Environmental Issues raised within the Scoping Process

The broad categories of components in the environment, derived from paragraph (f) of Annex 1 of the Directive, assessed as part of the LAP/SEA process are as follows:

- Biodiversity/Flora and Fauna
- Population and Human Health
- Soil
- Water
- Air & Climatic Factors
- Material Assets/Cultural Heritage (including Architecture and Archaeological Heritage)
- Landscape
- Transport
- Identified data gaps in scoping document

The scoping process and analysis of the baseline environment highlighted a number of key issues for the Barrysparks lands:

- Biodiversity/Flora and Fauna
- Water Services
- Transport

The key issues represent: -

- Aspects of the environment that will need careful consideration; and/or
- Opportunities to optimise the contribution that the LAP makes to securing sustainable development.

Due to a lack of existing data, the following specific baseline studies were carried out on the plan lands:

- Ecological Assessment
- Archaeological Assessment
- Water Services Study
- Transportation Network Study

Submissions from the subscribed bodies were addressed in the SEA and LAP, where required.

Table 3.2 Summary of Issues raised by prescribed bodies in Scoping of SEA Environmental Report and FCC responses

Summary of Issues raised by prescribed bodies in Scoping of SEA Environmental Report and FCC responses	
Issue	FCC Response/Amendment to Plan
Fingal County Noise Action Plan	The lands at Barrysparks do not appear to experience "undesirable" levels of noise from traffic (Dublin Agglomeration Action Plan relating to the Assessment and Management of Environmental Noise). However the dominant noise levels in Fingal are due to traffic. An objective in relation to noise is included in the LAP as a mitigation measure.
Air Quality Monitoring Data	The EPA has only commenced air quality monitoring in Swords from the beginning of 2010. The SEA monitoring programme includes this data as a future indicator for ambient air quality.
Climate Change - Mitigation Measures and Adaptation	There is a requirement that new builds must show reduced energy consumption in their design and construction and where possible use alternate energy technologies. An objective in relation to energy efficiency and BER ratings will be included in the LAP as a mitigation measure.
Energy Conservation	There are three objectives included in the LAP to address mitigation measures in relation to Building Design, Energy Efficiency and Sustainability.
Water Conservation	A key Water Services objective has been included in the Plan for water conservation: <i>Ensure incorporation of water conservation measures into the design of proposed developments.</i>
Waste Management Plan	A specific objective is included in the LAP in relation to the requirement for a waste management strategy and a construction waste management strategy.
Recommendations of Shellfish Waters Pollution Reduction Programmes in the Louth-Fingal Region, (Skerries / Balbriggan and Malahide).	The LAP proposes the following objectives "Support the Water Framework Directive in implementing the Eastern River Basin District Management Plan and the program for measures for the Broadmeadow River"; "A 10 metre riparian corridor shall be maintained along both sides of the Gaybrook Stream in order to protect and manage this watercourse". These objectives ultimately relate to the protection of the Broadmeadow/Malahide Estuary as surface water quality from the site is assured.

FEM Recommendations	FRAMS	The LAP is prepared with full regard to the FEMFRAMS recommendations. A local objective is included in the LAP to ensure compliance with FEMFRAMS proposals.
Cumulative Effects / In-Combination Effects other ongoing Plans / Programmes		The Barrysparks LAP is derived from the Fingal Development Plan 2011-2017 and the transport and services proposals making up the LAP were initiated in the county plan. Since these objectives were derived from this plan, there should be no cumulative impacts.
Eastern River Basin District River Basin Management Plan		A key Water Services objective has been included in the Plan in assistance of the ERBD management plan: <i>Support the Water Framework Directive in implementing the Eastern River Basin District Management Plan and the Program of Measures for the Broadmeadow River.</i>
Biodiversity - Broadmeadow Estuary, ecological linkages such as hedgerow networks & trees (both individual / groups)		This LAP specifically proposes objectives relating to incorporation/strengthening existing trees/ hedgerows; protection of woodland/marsh area to southeast and protection of Gaybrook Stream.
Water Quality (WFD & EPA classifications)		Water quality (WFD and EPA classifications) are considered as part of the SEA baseline assessment and are highlighted as water quality SEA indicators. A SUDS strategy has been undertaken as a background study to support the LAP, which mitigates potential impacts on water quality.
Flood Risk Assessment		A Strategic Flood Risk Assessment has been prepared as part of this Environmental Report.
Appropriate Assessment		An appropriate assessment screening of this LAP is prepared and is contained in Appendix 1 of this report. The LAP contains an objective to ensure compliance with the requirement of Article 6 of the Habitats Directive.
Traffic Management		A traffic management plan "Swords Integrated Traffic Model" was prepared for the document 'Your Swords, An Emerging City, Strategic Vision 2035'. The traffic management recommendations from this model are integrated and developed as part of the transport study undertaken for the LAP.
Groundwater Protection		An objective is included in the LAP in relation to groundwater protection.
Loss of Agricultural Land / Soil Loss		The development of the LAP lands will lead to the loss of grassland (not in active use). Water quality will be protected during development on these lands through the specific Barrysparks SUDS design.
Infrastructure Requirements		A tiered and phased approach to infrastructural developments is being implemented in this LAP. The Plan requires that infrastructure and services are provided in tandem with/prior to development. Specifically, no development shall commence within the LAP lands until the Government approves the awarding of the main

	infrastructural contract by the RPA for the construction of Metro North to Swords.
Waste water treatment Capacity	The Swords WWTP is being upgraded to 90,000 p.e. and the Plan requires that utilities precede development in a phased approach.
Appropriate Assessment A determination for the requirement for an Appropriate Assessment of all Land Use Plans and related variations/amendments should be made in consultation with the Department of Environment, Heritage and Local Government - National Parks and Wildlife Service, and this should be highlighted in the Plan. The Plan, should promote the setting up of procedures to ensure compliance with the requirement of Article 6 of the Habitats Directive.	An appropriate assessment screening has being prepared concurrently with the Plan. The LAP contains a recommendation to ensure compliance with the requirement of Article 6 of the Habitats Directive.

3.3 Environmental Objectives and Evaluation of Draft LAP Objectives and Policies

Having considered the baseline environment, a number of environmental objectives were proposed.

The following table lists the environmental objectives considered in the plan. Matrices were used to assess the environmental objectives against each other to ensure compatibility and also assess the objectives against the preferred development strategy for the LAP lands. The development strategy proposed was in compliance with the environmental objectives, subject to identified mitigation and monitoring measures.

SEA Objectives
Biodiversity, Flora and Fauna
B1 Conserve and enhance the diversity of habitats and species.
Population and Human Health

P1	Improve people's quality of life based on high quality residential, working and recreational environments and on sustainable travel patterns.
Soil	
S1	Minimise the amount of waste soil sent to landfill and reuse on site if possible.
Water	
W1	Achieve and maintain good ecological and water quality status for all surface water, groundwater, existing rivers and streams, particularly those entering the estuaries.
W2	Promote sustainable use of water and water resources
W3	Ensure that new development is adequately serviced by foul drainage infrastructure
Air/Climatic Factors	
A1	Protect and enhance ambient air quality and contribute to national climate change policy.
Noise	
N1	Minimise environmental and transport related noise.
Cultural Heritage	
C1	Protect all recorded and previously unidentified archaeological sites from inappropriate development that would adversely affect the site or setting.
Landscape	
L1	Develop a new urban landscape, while respecting the existing landscape character of the area and existing development in the area.
Transport	
T1	Facilitate sustainable movement, through greater use of public transport and other sustainable modes such as walking and cycling.

The SEA Environmental Report assessed the draft policies and objectives and formulated mitigation measures for the draft LAP.

3.4 Evaluation of Proposed Amendments to the draft LAP

The draft LAP and SEA Environmental Report were put on public display in April 2011. This constituted the first public display period. 47 submissions/observations were received during the consultation period, 37 of which related to the same issue. A number of amendments were proposed on foot of the submissions received and these were assessed against the draft Environmental Report and Natura Impact Screening Report. No changes were made to the policies or objectives of the plan as a result of the amendments.

4.0 Incorporation of Submissions and Observations

4.1 SEA Scoping

As per Section 13C of the SEA Regulations (as amended), the SEA environmental report was scoped with the statutory SEA consultees. The full list of scoping consultees is as follows;

- The Environmental Protection Agency
- The Development Applications Unit, Department of the Environment, Heritage & Local Government
- The Co-ordination Unit, Department of Communications, Marine & Natural Resources/Inland Fisheries Ireland
- NRA

Submissions received by these departments were fully considered in the Environmental Report and reinforced the identification of the key environmental issues of the plan (as discussed within section 3.2 of this report).

4.2 Draft Plan Public Consultation

The Draft Local Area Plan, accompanying Environmental Report and Habitats Directive Screening Report for lands at Barrysparks, Swords was on public display for a period of 6 weeks, from 21st April 2011 until 1st June 2011, at Fingal County Council Offices, County Hall, Swords, and Grove Road Blanchardstown. It was also available at Swords library on Rathbeale Road and on the Council's website at www.fingalcoco.ie.

A total of 47 submissions were received. 37 of the submissions related to the 'Holywell Distributor Road' / Airside-Feltrim Link Road.

4.3 Managers Report

Subsequent to the display period, a Manager's Report was prepared on the submissions and submitted to the members for their consideration. The most significant amendments recommended in the Manager's Report related to the following:

- Airside-Feltrim Link Road, identified within phase 1, to be linked with planning application stage of development (this was proposed and agreed at the council meeting on 11th July 2011).
- Strengthening of provision for sequential expansion of retail core and use of retail impact assessments.
- Reduction in car parking standards, where it facilitates 'smarter travel' and is supported by the accompanying Mobility Management Plan and/or Traffic Impact Assessment.

These amendments were assessed and impacts on the environmental objectives were considered in a report titled "Strategic Environmental Assessment Report on Proposed Amendments to the Draft Barrysparks Local Area Plan" dated 27th June 2011. The proposed amendments, including the amendment agreed at the council meeting on 11th July, had no impact on the policies and objectives of the LAP and the associated environmental report.

5.0 Reasons for choosing the plan as adopted, in light of the other reasonable alternatives considered

5.1 Options

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

With regard to the development options considered, the proposed constants are: -

- Integration of Metro Stop with adjoining land uses.
- Incorporation of Metro Plaza and The Rise Street, which are key public transport routes/interchange points.
- Accommodation of Metro Plaza and Metro Box infrastructural projects.
- Alignment of internal street, referred to as Eastern Avenue, to avoid a large area of wetland/woodland on adjoining lands.
- Available capacity within Swords Waste Water Treatment Plant and sufficient water supply.
- No development shall commence within the LAP lands until the Government approves the awarding of the main infrastructural contract by the RPA for the construction of Metro North to Swords.

The proposed variables are: -

Metro

- Development is not linked to the delivery of Metro.
- Metro operational before Phase 1 is completed.
- Metro operational after Phase 1 is completed.

Landuse Mix

- Retail and Commercial core to be located adjoining R132, with residential on remaining portion of land.
- Retail, commercial and residential uses mixed throughout, with focus of residential overlooking key internal streets and R132, and adjoining existing residential development.

4 options have been developed, based upon a combination of public transport scenarios and alternative mix of uses, in accordance with the terms of Article 5 of the SEA Directive

- Option 1: Do Nothing Scenario
- Option 2: Low-Medium Density Mixed-Use development, delivered prior to delivery of Metro North, with a residential zone and commercial zone
- Option 3: Medium-Higher Density Mixed-Use development, with mix of uses throughout development area, and Metro North delivered prior to occupation of Phase 2
- Option 4: Medium-Higher Density Mixed-Use development, with operation of Metro North prior to occupation of Phase 1

5.2 Option Evaluation and Selection of Preferred Option

Each option was evaluated against a set of environmental objectives, depicted in matrix format, using a set of symbolic ratings.

Options 3 and 4 emerged as the strongest options at a strategic level, with option 3 from a planning perspective being the preferred option.

5.3 Environmental Assessment of Preferred Option

Following selection, Development Option 3 was assessed to determine compatibility of LAP objectives and environmental objectives.

Hereunder is a table setting out the compatibility of local objectives and environmental objectives (full explanation of the environmental objectives in the table below is set out in section 3.3 of this report).

√	Likely to have a Positive Impact on the Environment.	X	Likely to have Negative Impact on the Environment.	0	No impact or neutral. Impact on the environment is neither Significantly Positive nor Significantly Negative.	?	The likely impact on the environment is uncertain, due to limited or insufficient information.
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	LAND USE STRATEGY & MIX OF USES	B1	P1	S1	W 1	W 2	W 3	A1	N1	C1	L1	T1
1	Secure the phased and sequential expansion of Swords town centre at Barrysparks and position land uses so as to maximise proximity of people intensive uses to transport and services, in particular Metro North and improved bus network.	X	√	0	0	0	0	0	√	0	√	√
2	Develop a high density mixed use quarter comprising retail, office, residential, social and community uses, complying with highest standards of design and the development of a quality living and working environment, with provision of supporting community/leisure facilities for those living and working in the area.	X	√	0	0	0	0	0	0	0	√	√
3	Ensure the location and scale of retail development supports the existing core retail areas within Swords town centre. Anchor stores (no more than 2) shall be located in proximity to R132/Metro Plaza area, with direct linkages to the Pavilions development area and Swords Main Street. Retail units shall be designed to address the street and avoid creation of large blank frontages. A mid-term review of retail impact shall be undertaken prior to receipt of applications for phase 3 to ensure continued vitality and viability of town centre is being achieved.	X	√	0	0	0	0	0	0	0	√	√

4	Ensure all office development is designed in a flexible manner, to allow future subdivision of floor space in response to market changes. Offices shall address the street and avoid creation of large blank frontages. A finer grain of use shall be required where office buildings have a ground floor presence to maximise the number of entrances and maintain an active streetscape.	X	√	0	0	0	0	0	0	0	0	√	√
5	Promote the development of high density attractive residential development, comprising units of varying size, type and tenure.	X	√	0	0	0	0	0	0	0	0	√	√
6	Ensure residential uses within the LAP lands are located to address and overlook key streets and have prominent entrances from the street, thereby providing activity, surveillance and security both during the day and in the evening outside of standard retail/office hours.	0	0	0	0	0	0	0	?	0	√	0	0
7	Ensure the protection of residential amenities of existing dwellings within/bounding the development in terms of overlooking, overshadowing, and distance from boundaries.	0	√	0	0	0	0	0	√	0	√	0	0
8	Support the location of active retailing, cafes and civic use frontages around public squares and open space to support vibrancy around these spaces and ensure the provision of active frontages onto the R132/Metro Plaza.	X	√	0	0	0	0	0	0	0	0	√	√
TRANSPORT		B1	P1	S1	W1	W2	W3	A1	N1	C1	L1	T1	

1	Facilitate and ensure integration of development with Metro Stop, Metro Plaza/Public Transport Interchange and Metro Box infrastructure, as well as improved local and regional bus routes, in particular The Rise, and pedestrian/cyclist routes.	X	√	0	0	√	0	√	0	0	√	√
2	Ensure connection of LAP lands to the surrounding road network through new street and pedestrian/cyclist links, in particular from Western Avenue and Eastern Avenue to Airside-Feltrim Link Road, thereby improving the capacity of the road network, reducing overall car dependency, and increasing accessibility to support public transport routes.	X	√	0	0	0	0	√	0	0	√	√
3	Ensure all streets within the Barrysparks development area facilitate 24 hour public access, are not enclosed and are landscaped, in particular Western and Eastern Avenues, which will be tree-lined boulevards.	X	√	0	0	0	0	√	√	0	√	√
4	Ensure the provision of active frontages at ground level and residential units at upper levels onto public spaces/nodes within the development area, key pedestrian streets, and onto Metro Plaza.	X	√	0	0	0	0	0	0	0	√	0
5	Require a Mobility Management Plan/Smarter Travel Plan to be submitted with planning applications for proposed trip intensive developments, including retail and commercial proposals.	X	√	0	0	0	0	√	√	0	√	√
6	Ensure that transport infrastructure is appropriately phased and implemented in tandem with development of LAP lands, in accordance with section 9.	X	√	0	0	0	0	0	√	0	√	√

7	A mid-term review shall be undertaken prior to receipt of applications for phase 3 to ensure assumptions applied to the traffic modelling and analysis undertaken as part of the Transport Network Study by Roughan O'Donovan are valid and remain appropriate.	X	√	0	0	0	0	√	0	0	√	√
URBAN DESIGN												
1	Prior to the commencement/in support of planning applications for each phase of development (see section 9), a detailed Urban Design Masterplan for that phase (and incorporating previous phases) shall be submitted to the Planning Authority for agreement.	0	√	0	0	0	0	0	0	0	√	√
2	The design of new streets shall generally comply with the sections illustrated in figures 22-26 and accord with the criteria outlined in section 5.3.2. New streets shall remain permeable to the general public 24 hours a day and all routes will where possible have alternative access points so cul-de-sacs are avoided.	X	√	0	0	0	0	0	0	0	√	√
3	Create a network of 3 high quality public spaces as identified on the LAP map and ensure connectivity to the wider network in Swords.	X	√	0	0	0	0	0	0	0	√	√
4	Provide a number of land mark buildings to reinforce a sense of place in the LAP area.	X	√	0	0	0	0	0	0	0	√	0
5	Arrange uses to ensure activity throughout the day and into the evening in the LAP area.	X	√	0	0	0	0	0	0	0	0	√

6	Ensure a high quality and variety of architectural design and finishes for buildings, ground finishes, street furniture, landscaping and signs.	X	√	0	0	0	0	0	0	0	√	0
7	Planning applications for significant elements of development within the area shall be accompanied by a detailed design appraisal (in accordance with Fingal Development Plan), to ensure a high architectural quality in design and a coherence to the heights strategy and location of landmark structures.	X	√	0	0	0	0	0	0	0	√	0
8	Planning applications shall be accompanied by an assessment of the daylight, sunlight, overshadowing, privacy, and amenity impacts of new development upon existing as well as new development areas, in addition to details of noise mitigation measures to protect existing as well as new residences.	0	√	0	0	0	0	0	√	0	√	0
9	Applications for substantial building elements shall be accompanied by a sustainability report addressing sustainability in building design and building energy ratings, in addition to energy efficiency, water conservation and waste management measures.	X	√	0	0	0	0	0	0	0	√	0
10	Require details of the requirements for alternative renewable energy systems, for buildings greater than 1000sq m or residential schemes above 30 units, under SI 666 of 2006 European Communities (Energy performance of buildings) to be submitted at pre planning stage for consideration. These should take the form of an Energy Statement or Feasibility Study carried out by qualified and accredited experts.	X	√	0	0	√	0	0	0	0	√	0

11	A waste management strategy and a construction waste management plan shall be submitted with all applications for substantial development.	0	0	√	√	0	0	0	0	0	√	0
	GREEN INFRASTRUCTURE	B1	P1	S1	W 1	W 2	W 3	A1	N1	C1	L1	T1
1	Develop a Landscape Masterplan for each phase of development to provide a coherent 'green' structure throughout the LAP area, including hard and soft landscaping, providing a range of open space types, with their function and facilities identified. These shall be submitted to the planning authority for agreement prior to each phase of development.	√	√	0	0	0	0	0	0	0	√	0
2	All development proposals shall maximise opportunities for enhancement of existing ecology and biodiversity, through incorporation of existing trees/hedgerows (particularly along boundary with existing housing); protection of woodland and marsh southeast of plan lands; protection of Gaybrook stream, which links to the Broadmeadow/Malahide Estuary (Natura 2000 site); and bat survey in accordance with Bat Assessment Study (see SEA).	√	√	0	√	0	0	0	0	0	√	0
3	Develop a sufficient number of local playgrounds/amenity spaces to serve the area in accordance with Fingal Development Plan standards.	0	√	0	0	0	0	0	0	0	√	0
4	Develop a Landscape and Recreational Masterplan for the Local Urban Park, which shall be designed to fulfil a dual role in terms of its function as a high quality amenity space and sustainable water management resource.	√	√	0	√	0	0	0	0	0	√	0

5	Ensure that the public realm is characterised by coordinated and integrated elements of high standard design, planting, finishes and treatments. 2 high quality urban squares shall be developed and shall be designed with adjoining buildings to ensure passive supervision and active frontages.	0	√	0	0	0	0	0	0	0	√	0
6	Encourage the provision of high quality, innovative, works of art within the public realm and park areas.	0	√	0	0	0	0	0	0	0	√	0
7	Seek to preserve and/or record, as appropriate, the archaeological and cultural heritage of the area, including the ring ditch along the route of Western Avenue and inclusion of a protection buffer in vicinity of St Werburgh's Well.	0	0	0	0	0	0	0	0	√	√	0
8	Archaeological monitoring of topsoil stripping at site clearance stage of development shall be carried out by a suitably qualified archaeologist under licence to DoEHLG and the National Museum of Ireland.	0	0	0	0	0	0	0	0	√	√	0
9	Promote and implement the SuDS strategy for the LAP lands and ensure no impact on the Gaybrook Stream and consequently the Malahide/Broadmeadow Estuary (Natura 2000 site).	√	0	0	√	√	√	0	0	0	0	0
	WATER SERVICES INFRASTRUCTURE	B1	P1	S1	W 1	W 2	W 3	A1	N1	C1	L1	T1
1	Ensure the implementation of a stormwater management system in the detailed design of the plan lands, following the principles of Sustainable Urban Drainage Systems (SUDS) undertaken for the LAP.	0	√	0	√	√	√	0	0	0	√	0

2	Ensure surface water attenuation ponds and dry detention basins are well designed and incorporated as a design feature within open space areas, particularly within the local urban park.	0	√	0	√	√	√	0	0	0	√	0
3	Support the Water Framework Directive in implementing the Eastern River Basin District Management Plan 2009-2015, the Program of Measures for the Broadmeadow River, and the Fingal Ground Water Protection Scheme.	0	√	0	√	√	√	0	0	0	√	0
4	Ensure there is an adequate water supply network to cater for the proposed development within the LAP lands.	0	√	0	√	√	√	0	0	0	0	0
5	Ensure that strategic telecommunications including fibre optic broadband links and utilities (gas and electricity) infrastructure is provided for within the LAP area.	0	√	0	0	0	0	0	0	0	0	0
6	Require, prior to the commencement of all development, that a Sediment and Water Pollution Control Plan be submitted, in accordance with the Fingal Development Plan.	0	√	0	√	√	√	0	0	0	0	0
7	Require the development and submission of a water management and conservation plan, in accordance with the Fingal Development Plan.	0	√	0	√	√	√	0	0	0	0	0
8	Ensure incorporation of water conservation measures in the design of proposed developments.	0	√	0	√	√	√	0	0	0	0	0
9	The Eastern Regional Fisheries Board shall be consulted in relation to any works in relation to the diverting or crossing of a river/stream.	0	√	0	√	√	√	0	0	0	0	0

10	A Trade Effluent Discharge Licence under the 1977 & 1990 Water Pollution Acts shall be obtained by all companies involved in development from Fingal Water Services Department to ensure all discharges to surface waters do not compromise water quality in the Gaybrook Stream or any tributaries or drainage ditches discharging to the Gaybrook Stream and subsequently the Broadmeadow Estuary.	0	√	0	√	√	√	0	0	0	0	0
11	A 10 metre riparian corridor shall be maintained along both sides of the Gaybrook Stream in order to protect and manage this existing watercourse.	√	√	0	√	√	√	0	0	0	0	0

As a result of the assessment of environmental objectives against each other and against the preferred strategy objectives, a detailed set of mitigation measures are set out in Section 11 of the Environment Report.

6.0 Monitoring Measures

Under Article 10 and Section (i) of Schedule 2B of the SEA Regulations, monitoring is required in order to identify at an early stage any unforeseen adverse effects caused by the Plan. The methodology used in the development of the monitoring programme for the Barrysparks LAP is based on the use of indicators and targets.

It is recommended that Fingal County Council carry out a mid-term review of performance against SEA Objectives. This would occur in 2013 and would use the most recent information from the EPA State of the Environment Report. It is further recommended that reporting on the overall monitoring of the LAP is made to the EPA SEA Section.

SEA Objectives	Targets	Indicators
Biodiversity, Flora and Fauna		
B1 Conserve and enhance the diversity of habitats and species.	<p>No development approved that would have a significant impact on protected habitats, species, or their sustaining resources by development within or adjacent to the LAP lands.</p> <p>Incorporate biodiversity into design of buildings and overall development of LAP lands.</p> <p>Improvement or at least no deterioration in quality of Gaybrook Stream.</p>	<p>Percentage of unique habitats and species lost in designated sites.</p> <p>Landscaping and biodiversity proposals contained in Masterplans and planning applications.</p> <p>Water quality status of Gaybrook Stream.</p>
Population and Human Health		
P1 Improve people's quality of life based on high quality residential, working and recreational environments and on sustainable travel patterns.	<p>Urban Design and Landscape Masterplans to be developed, in compliance with parameters established in LAP.</p> <p>Provide a range of residential units of appropriate sizes and</p>	<p>Submission of masterplans for each phase of development, subject to written agreement of Fingal County Council, prior to/in support of submission of planning applications for that phase.</p>

	<p>types, as well as tenure.</p> <p>Provide high quality private open space for residential units.</p> <p>Provide high quality public open space/recreational facilities for residents, workers and visitors to the area, in accordance with Urban Design and Landscape Masterplans.</p> <p>Provide and distribute Social and Affordable housing in accordance with Fingal Housing Strategy.</p> <p>Provide in advance of demand high quality public transport and walking/cycling facilities.</p> <p>Provision of local employment opportunities, in proximity to high quality public transport service.</p>	<p>Individual planning applications.</p> <p>Individual planning applications.</p> <p>Provision of adequate open space/recreational facilities to cater for residential and working demand in each Phase of development.</p> <p>Individual planning applications.</p> <p>Early delivery of Metro North, Metro Plaza, and linkages to town centre and other areas, in accordance with phasing programme established in LAP.</p> <p>Provision of retail/office development adjoining Swords Metro Stop and Swords Metro Plaza.</p>
Soil	Targets	Indicators
S1 Minimise the amount of waste soil sent to landfill and reuse on site if possible.	<p>No contamination incidents.</p> <p>Reuse as much existing soil as possible for landscaping of site.</p>	<p>Recorded on site incidents of contamination. Quantity of contaminated soil removed from site.</p> <p>Quantity of soil retained on site for landscaping and other uses.</p>
Water	Targets	Indicators
W1 Achieve and	Improvement or at least no	Changes in water quality of

maintain good ecological and water quality status for all surface water, groundwater, existing rivers and streams, particularly those entering the estuaries.	deterioration in surface water quality by 2015, particularly within Gaybrook Stream. Improvement or at least no deterioration in ground water quality by 2015. SUDS to form a major part of all surface water proposals.	Gaybrook Stream as identified during water quality monitoring for the WFD. Biotic quality rating of river waters at EPA monitoring locations. Changes in groundwater quality as identified in monitoring programmes. % of planning applications that incorporate SUDS.
W2 Promote sustainable use of water and water resources	Planning applications to include minimum water use efficiency measures	% of planning applications which include minimum water use efficiency measures.
W3 Ensure that new development is adequately serviced by foul drainage infrastructure	No new development to commence within the Plan area until such time as capacity is available within Swords Wastewater Treatment Plant.	Prior to development of each phase/any application being made, written confirmation from Fingal Water Services Department shall be required to state that capacity is available and extent of that capacity.
Air/Climatic Factors	Targets	Indicators
A1 Protect and enhance ambient air quality and contribute to national climate change policy.	No limit values exceeded. Increase usage of public transport, cycling and walking. Reduce use of private transport. High energy efficiency of new buildings.	EPA air quality indicators from Swords air monitoring station. Increase in number of cycle/pedestrian routes and links in the area. Modal Split using public transport, new cycle and pedestrian paths. Car parking demand. Number of new buildings with A1-B3 BER Rating.
Noise	Targets	Indicators
N1 Minimise	Maintain daytime noise levels	Number of complaints from

environmental and transport related noise.	to less than 70 dB. Maintain night-time noise levels to 55dB.	householders. Incorporation of noise reduction measures (for buildings as well as roads) and increased levels of insulation in construction of buildings, as part of planning application process.
Cultural Heritage	Targets	Indicators
C1 Protect all recorded and previously unidentified archaeological sites from inappropriate development that would adversely affect the site or setting.	No developments permitted over the lifespan of the Plan which result in full or partial loss of: <ul style="list-style-type: none"> • archaeological sites listed on the Record of Monuments and Places; • areas identified as being of archaeological potential and significance; • the context of the above within the surrounding landscape where relevant. Refer all planning applications, which may impact on heritage to the DOEHLG. Supervision of all site clearance works, particularly addressing areas identified in the earlier geophysical surveys or in areas unable to be surveyed due to condition of terrain to ensure no loss of sites or artefacts, without proper recording.	Number of developments permitted over the lifetime of the plan which result in full or partial loss of: <ul style="list-style-type: none"> • archaeology listed on the Record of Monuments and Places; • areas identified as being of archaeological potential and significance; • the context of the above within the surrounding landscape where relevant. Number of planning applications referred to DoEHLG. Monitoring of planning conditions attached to grants of planning permission.
Landscape	Targets	Indicators
L1 Develop a new urban landscape, while respecting the existing landscape character of the area and existing	Retain as much of existing vegetation on site as possible. Particularly perimeter vegetation and woodland/marsh area on	Proportion of existing vegetation retained in new development.

development in the area.	adjoining lands to southeast. Assimilation of development of LAP lands into existing landscape and creation of new landscape.	Submission of Landscape Masterplan(s).
Transport	Targets	Indicators
T1 Facilitate sustainable movement, through greater use of public transport and other sustainable modes such as walking and cycling.	High % of persons using Metro, bus, cycling and walking as modes of transport, in accordance with projected modal split, established within LAP. Ease of movement through site for pedestrians and cyclists. Ease of access from Metro/bus to LAP lands/ expanded town centre	Modal Split using public transport, new cycle and walking paths. % of persons arriving at Barrysparks by bike/on foot. % use of bicycle shelters provided. % of persons arriving at Barrysparks by Metro/bus.