

6 REVIEW OF RELEVANT POLICIES, PLANS AND PROGRAMMES

6.1 INTRODUCTION

The objective of the SEA Directive is “to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations in the preparation and adoption of plans and programmes with a view to promoting sustainable development”. In order to meet the requirements of the Directive in this respect, the environmental assessment must,

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

The purpose of this review is to take into consideration the policy and legislative framework within which the Newbridge LAP 2013-2019 is being developed. Consideration was given to the key statutory and non-statutory plans, programmes and policies relevant to the LAP in order to inform the SEA Strategic Environmental Objectives and Targets (discussed further in **Chapter 7**).

The following section provides an overview of the key relevant planning policies that are relevant and influence the Newbridge LAP. **Appendix C** provides details on all of the key legislation, plans and programmes considered most relevant to LAP.

6.2 THE KEY RELEVANT PLANNING POLICIES

The following is a summary of the key relevant policies plans and programmes in relation to the Newbridge LAP.

6.2.1 Planning and Development Policies

National Development Plan (2007-2013)

This National Development Plan integrates strategic development frameworks for regional development, for rural communities, for all-island co-operation, and for protection of the environment with common economic and social goals. The National Development Plan together with the National Spatial Strategy and Regional Planning Guidelines must inform the development of the County of Kildare through its County Development Plan and associated core strategy. As a result this informs Newbridge Local Area Plan.

National Spatial Strategy (2002-2020)

The National Spatial Strategy (NSS) is a 20 year planning framework to guide policies, programmes and investment in the interest of delivering balanced social, economic and physical development and population growth between the regions. The National Spatial Strategy together with the Regional Planning Guidelines must inform the development of the County of Kildare through its County Development Plan and associated core strategy. As a result this informs Newbridge Local Area Plan.

The NSS is based on a hierarchy of settlements including gateways, hubs, county towns, smaller towns, rural villages and diverse rural economies. Strategic issues of importance relevant to Newbridge include effective integration in terms of land use and transportation and maintaining a high quality environment. The Spatial Strategy defines Newbridge as a Primary Development Centre.

It must be noted that in February 2013 the Government announced that the National Spatial Strategy was to be abandoned. The Minister for the Environment stated that “it is scrapping the National Spatial Strategy because the resources have never been provided to create planned “gateways” and “hubs”. It is understood that a new policy will replace this strategy some time in 2014.

Regional Planning Guidelines for the Greater Dublin Area (2010-2022)

These Guidelines combine two Regional Authority Areas, the Dublin Regional Authority and the Mid-East Regional Authority. The Regional Planning Guidelines (RPGs) work to implement the strategic planning framework set out in the National Spatial Strategy (NSS). As part of the planning framework, the Guidelines allocate housing and population targets for the individual counties based on national and regional population targets set by the NSS. The RPGs designate Newbridge as an Economic cluster. Newbridge is clustered with Naas and Kilcullen but they are outlined to develop in a mutually dependent way. The RPGs set out that growth in the hinterland area which includes Newbridge will be focused on high quality integrated growth and consolidation. They specify that key towns will be separated from each other by extensive areas of strategic green belt.

The RPGs set out that sectoral strength should be developed and identified around the growth centres. Newbridge has established itself in the pharmaceutical, distribution, manufacturing, innovation, research and development sectors and future development will seek to complement the sectoral strengths of the primary economic growth town.

Newbridge will have high levels of employment activity, higher order shopping and a full range of social services with good road and bus linkages to other towns and Dublin City and will serve the surrounding rural hinterland and rural villages.

Greater Dublin Area Draft Transport Strategy 2011-2030

This strategy outlines a strategic transport plan for the GDA for the next 20 years. The role of the strategy is to establish the essential policies and measures required to support the GDA in meeting its full potential as are outlined in the Strategy visions and objectives. Major infrastructural developments such as the Kildare Route Project were provided for under Transport 21, a government public transport initiative. The Kildare Route Project already improved transport services to Kildare and other counties such as Carlow and Laois. The new GDA draft strategy outlines additional measures which include the south-western Kildare rail corridor.

Greater Dublin Strategic Drainage Study (2005)

The Study was commissioned to carry out a strategic analysis of the existing foul and surface water systems in the following local authority areas; Dublin City, Fingal, South Dublin, Dún Laoghaire-Rathdown and the adjacent catchments in Meath, Kildare and Wicklow. The main objective of the study is to identify policies, strategies and projects for a sustainable drainage system for the Greater Dublin Region.

Kildare County Development Plan (2011-2017)

This Plan was prepared in accordance with the requirements and provisions of the Planning and Development act and sets out an overall strategy for the proper planning and sustainable development of County Kildare over the period 2011-2017. This plan is very relevant to Kildare Town LAP as it sets out an overall vision, core strategy, policies and objectives for the County.

The Kildare County Development Plan (CDP) designates Newbridge as a 'Large Growth Town II'. The CDP has set a target population increase of 36% within Newbridge between the periods of 2006 and 2017 to 23,245 people.

The aim for Newbridge is to grow in a self sufficient manner, reducing commuting levels and ensuring sustainable levels of housing growth, providing a full range of local services adequate to meet local needs at district level and for surrounding rural areas; The provision of strong social infrastructure in tandem with growth in population, particularly in relation to schools and leisure facilities is also required.

6.2.2 Environmental Plans and Policies**Habitats (92/43/EEC) and Birds (2009/147/EC) Directives**

This Directive seeks to prevent and eliminate the causes of habitat loss and maintain and enhance current levels of biodiversity. The Directive requires Ireland and other EU member states to designate key habitats as Special Areas of Conservation (SAC). In conjunction with the Special Protection Areas

(SPAs) under the EU Birds Directive, the SACs form the Natura 2000 network of sites. There are two SACs in direct proximity to the LAP and they include Pollardstown Fen and Mouds Bog which have been designated for species and habitats of nature conservation importance. The LAP should seek to protect these designated areas and species. There are no SPA sites in direct proximity to the LAP.

In addition the Nagoya Convention of the Parties (2010) agreed a 2020 biodiversity target which is to *“take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planets variety of life and contributing to human well being and poverty eradication. To ensure this, pressures on biodiversity are reduced, ecosystems are restored, biological resources are sustainably used and benefits arising out of utilization of genetic resources are shared in a fair and equitable manner; adequate financial resources are provided, capacities are enhanced, biodiversity issues and values mainstreamed, appropriate policies are effectively implemented, and decision making is based on sound science and the precautionary approach”*.

Water Framework Directive (2000/60/EC)

This Directive seeks to maintain and enhance the quality of all surface water and groundwater in the EU. The Directive is focussed at the River Basin District level to ensure that all potential pathways for pollution can be explored and measures to mitigate negative impacts can be better focussed. There are eight RBD on the island of Ireland and County Kildare falls into two of them: Eastern and South Eastern RBD. Newbridge falls within the Eastern RBD. River Basin Management Plans and associated programmes of measures have been developed for each region and must be implemented. The assessment of potential impacts on water quality is therefore considered in the context of the WFD and the River Basin Management Plan and Programme of Measures for the Eastern River Basin district which lays out the objectives for waters within Newbridge.

Surface Water Regulations (2009)

Aligned to the WFD is the Surface Water Regulations (S.I. 272 of 2009). These Regulations have significant implications across a range of existing legislation. They provide for the classification of surface water bodies by the EPA for the purposes of the Water Framework Directive which dictates that water bodies achieve at least Good Status by 2015.

Groundwater Directive (2006/118/EC)

The Directive seeks to prevent and combat groundwater pollution in the EU. It contains key criteria for the assessment of the chemical status of groundwater, for identifying significant upward trends in groundwater pollution levels and for preventing and limiting indirect discharges of pollutants to groundwater. As Newbridge have sensitive groundwater habitats in proximity to its administrative boundary, (e.g. Pollardstown Fen) the formulation of the LAP will have regard to these objectives.

Floods Directive (2007/60/EC) and Associated CFRAMS

Floods are a natural and inevitable part of life in Ireland. Floods pose a risk to human life and wellbeing, can cause extensive damage to property and have significant consequences for the environment. With the effects of climate change, it is likely that there will be more frequent and severe flooding events in the future. The EU has responded to this with the Floods Directive. This Directive sets a framework for proactive management of flooding and, like the WFD, will see measures being implemented through the development plan process. The first step in this is the development of Catchment Flood Risk Assessment and Management Studies (CFRAMS) which are ongoing through the OPW. These studies will identify areas susceptible to flooding and identify measures to reduce or eliminate flooding in key areas.

The River Liffey flows through the centre of the Newbridge LAP lands. The LAP should therefore take account of the Directive and monitor the CFRAMS for the east as it progresses to conclusion in 2015.

Urban Waste Water Directive (91/271/EEC), amended by Directive (98/15/EEC)

The primary objective is to protect the environment from the adverse effects of discharges of urban wastewater, by the provision of urban wastewater collecting systems (sewerage) and treatment plants for urban centres. The Directive also provides general rules for the sustainable disposal of sludge arising from wastewater treatment. With the proposed upgrade of the Osberstown wastewater

treatment facility for Newbridge, capacity will not be a long term issue for the future development of Newbridge, however it will restrict short term development.

Drinking Water Directive (80/778/EEC) as amended by (Directive 98/83/EC)

The primary objective is to protect the health of the consumers in the European Union and to make sure drinking water is wholesome and clean. The (Drinking Water) (No. 2) Regulations 2007 (SI No. 278 of 2007) have the following aims:

- To provide for the creation of EPA and local authorities as supervisory authorities;
- To set obligations for water suppliers to provide wholesome and clean drinking water;
- To ensure protection of public health;
- To inform the public; and
- To monitor and carry out remedial action.

The primary source of Newbridge's water is the Ballymore Eustace Treatment Plan. The LAP must have regard to ensuring adequate and clean water is available for all existing and planned developed within the town.

Water Services Act (2007) and Water Services Investment Programme DEHLG (2010-2012)

The Water Services Act provides in the interests of the common good the provision of water services and gives effect to certain Acts adopted by the institutions of the European Communities. The Act identifies and prioritises national water infrastructure. The WSIP evolves from needs assessments received from all 34 Water Services Authorities in Ireland, for which Newbridge is included. The programme presents a balanced national strategic programme of works designed to support the national socio-economic objectives established by government in the National Development Plan and related plans and policies.

National Climate Change Strategy (2007-2012)

This strategy outlines how Ireland will meet its 2008-2012 Kyoto commitments and identifies what further policy measures are needed. It shows sector by sector how the Kyoto commitments, to reduce national GHG emissions are to be met by a range of existing and additional measures including limiting emissions and investment in energy efficiency and renewable resources. This strategy is nearly out of date but there are not as yet any plans to update it.

National Sustainable Development Strategy (1997) and Making Ireland's Development Sustainable (2002)

The aim for Ireland outlined in the Sustainable Development Strategy (1997) is "to ensure that economy and society in Ireland can develop to their full potential within a well protected environment, without compromising the quality of that environment and with responsibility towards present and future generations and the wider international community". The subsequent report in 2002 "Making Ireland's Development Sustainable" was a five-year review of the original 1997 Strategy. The overall tenet of the Strategy is to balance economic growth with a continued commitment to promoting environmental quality.

National Biodiversity Plan (2011 – 2016)

In response to the requirements set out in Article 6 of the UN Convention of Biological Diversity 1992, a Biodiversity Plan was prepared by the Department of Arts, Heritage, Gaeltacht and the Islands. This is the second National Biodiversity Plan and it builds upon the achievements of the previous Plan. The Plan seeks to ensure the full and effective integration of bio-diversity concerns in the development and implementation of other policies, legislation and programmes which is of critical importance if the conservation and sustainable use of bio-diversity is to be achieved.

National Heritage Plan (2002-2006)

The core objective of this Plan is to protect and enhance Ireland's heritage. The Plan sets out archaeological policies and principles that should be applied by all bodies when undertaking a development. An aim of this National Plan is to enhance the role of Local Authorities in heritage protection and management. Kildare has developed its own Heritage Plan (2005-2011), where it aims "to identify, preserve and conserve the built, natural and cultural heritage of the county". A number of projects have been completed such as habitat mapping for Newbridge, and there are a number of projects being undertaken and proposed.

7 STRATEGIC ENVIRONMENTAL OBJECTIVES, TARGETS AND INDICATORS

7.1 INTRODUCTION

SEA is carried out at a strategic level with a focus on readily available information (primarily desk-top assessment). It is therefore not possible for the baseline environment to be presented in as much detail as could be done for a project-level environmental impact assessment as often suitable baseline information does not exist at the regional or sub-regional level. Instead, SEA uses a system of *objectives*, *targets* and *indicators* to rationalise information for the purposes of assessment. This is the approach which has been taken for the draft LAP assessment in this case, however where possible baseline led assessment has also been undertaken to provide the most robust assessment possible.

In order to streamline the assessment process, this report has used broad themes, based on the environmental topics listed in the SEA Directive, to group large environmental data sets, e.g., human health, cultural heritage and climate. Assigned to each of these themes is a high-level **Strategic Environmental Objective** that specifies a desired direction for change, e.g. reduce CO₂ emissions, against which the future impacts of the Plan can be measured. These high-level Strategic Environmental Objectives are then paired with specific **Targets**. The progress towards achieving these specific Targets is monitored using **Indicators**, which are measures of identified variables over time.

7.1.1 Appropriate Assessment

As stated previously an AA is being undertaken in conjunction with the SEA process. The AA specifically assesses the likely impacts on Natura 2000 sites within 15km of the LAP lands. The Newbridge LAP has been examined in the context of a number of factors that could potentially affect the integrity of the Natura 2000 network. The SEO for biodiversity, flora and fauna as outlined in **Table 7.1** has been developed with reference to the associated AA and in consultation with the AA ecologist.

7.2 DEVELOPMENT OF STRATEGIC ENVIRONMENTAL OBJECTIVES, TARGETS AND INDICATORS

7.2.1 Strategic Environmental Objectives

There are essentially three types of Objectives considered as part of this SEA. The first relates to the *Objectives of the Newbridge LAP 2013 - 2019* (see **Chapter 4**). The second relates to wider *Environmental Objectives*, i.e. environmental protection objectives at national and European level (see **Chapter 6**), and finally there are the *Strategic Environmental Objectives*, which were devised to test the environmental effects of the Plan.

The Strategic Environmental Objectives reflect the existing environmental issues relevant to the Plan. They are focussed on protecting and enhancing the natural and human environment and on minimising negative effects. The Strategic Environmental Objectives were developed to be consistent with environmental protection objectives established by International, European and National environmental policies, objectives and standards.

The selected Strategic Environmental Objectives for this SEA are set out in **Table 7.1**. These Strategic Environmental Objectives are based on the current understanding of the key environmental issues identified as well as the indicative list of environmental protection objectives outlined in the document *Implementation of SEA Directive 2001/42/EC* (DoEHLG, 2004). Selection was also based

on consultation with statutory consultees during the scoping stage and discussions between the SEA and Plan Teams.

Also, included in **Table 7.1** are detailed assessment criteria, which represent the issues that will be considered during the assessment of whether the Plan, including the proposed alternatives, will contribute to meeting the Strategic Environmental Objectives.

Table 7.1: Strategic Environmental Objectives

Draft Objective	Detailed Assessment Criteria* – To what extent will Newbridge LAP:	SEA Topics
<p>Objective 1 Protect and where appropriate, enhance biodiversity, particularly protected areas and protected species.</p>	<ul style="list-style-type: none"> • Provide effective protection of international, national and local “protected areas”; • Provide effective protection of biodiversity in the wider landscape including species protected by law; • Contribute to Irish Biodiversity Action Plan objectives; • Support delivery of Ireland’s Biodiversity Strategies; and • Protect habitats from invasive species. 	<p>Biodiversity, Flora and Fauna (BFF)</p>
<p>Objective 2 Improve people’s quality of life based on high-quality residential, working and recreational environments and on sustainable transport.</p>	<ul style="list-style-type: none"> • Meet the core strategy of objectives in the Regional Planning Guidelines and the Kildare County Development Plan. • Reduce population exposure to high levels of noise; • Increase modal shift to public transport; • Facilitate integration of land use and transportation; • Improve access to recreation opportunities; • Protect drinking water areas (including private abstractions); and • Contribute to the mitigation of flooding. 	<p>Population (P)</p>
<p>Objective 3 Improve water quality and the management of watercourses to comply with the standards of the Water Framework Directive and incorporate the objectives of the Floods Directive into sustainable planning and development.</p>	<ul style="list-style-type: none"> • Improve water quality in rivers where currently less than good status and maintain groundwater status; • Support the objectives of the Eastern River Basin Management Plan; • Promote sustainable drainage practices to improve water quality and flow and to enhance opportunities for biodiversity; • Reduce the impacts from point source pollution, diffuse source pollution, abstraction and flow regulation and morphological alterations; • Ensure sustainable levels of abstraction from surface and groundwater; and • Continue to promote sustainable use of water and water conservation. 	<p>Water (W)</p>
<p>Objective 4 Protect and, where appropriate, enhance the function and quality of the soil resource in the lands within Newbridge Draft LAP.</p>	<ul style="list-style-type: none"> • Re-use of underutilised lands in favour of development on Greenfield lands; and • Safeguard soil and geological quality, quantity and function. 	<p>Soil (S)</p>

Draft Objective	Detailed Assessment Criteria* – To what extent will Newbridge LAP:	SEA Topics
<p>Objective 5 Contribute to the mitigation of, and adaptation to, climate change</p>	<ul style="list-style-type: none"> • Minimise emissions of greenhouse gases; • Reduce waste of energy and maximise use of renewable energy sources; • Ensure flood protection and management; and • Reduce vulnerability to the effects of climate change; 	<p>Climate (C)</p>
<p>Objective 6 Protect and, where appropriate, enhance the character, diversity and special qualities of cultural, architectural and archaeological, heritage in Newbridge Draft LAP</p>	<ul style="list-style-type: none"> • Improve protection for protected archaeological sites and monuments and their settings; • Improve protection for protected structures and conservation areas; • Improve protection for areas of archaeological potential and for undiscovered archaeology; and • Enhance access to sites of heritage interest. 	<p>Cultural Heritage (CH)</p>
<p>Objective 7 Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in Newbridge Draft LAP</p>	<ul style="list-style-type: none"> • Protect and, where appropriate, enhance designated areas of high quality landscape; • Improve protection for landscapes of recognised quality; • Ensure that landscape character is considered in the development process; and • Maintain clear urban/rural distinctions. 	<p>Landscape (L)</p>
<p>Objective 8 Make best use of existing infrastructure and promote the sustainable development of new infrastructure.</p>	<ul style="list-style-type: none"> • Increase local employment opportunities i.e. adequate lands zoned for employment; • Improve efficiencies of transport, energy and communication infrastructure; • Ensure sufficient waste water treatment and water supply infrastructure to serve existing and new development; • Continue to provide water conservation measures; and • Reduce the generation of waste and adopt a sustainable approach to waste management. 	<p>Material Assets (MA)</p>

*Detailed criteria are cited where appropriate and these will be used to ensure consistent application of the objectives. Note air quality and human health have been screened out as part of the scoping process. See Table 3.1.

7.2.1.1 Internal Compatibility of Strategic Environmental Objectives

The internal compatibility of the Strategic Environmental Objectives has been examined to identify potential areas of conflict in relation to each objective so that subsequent decisions can be well based. As shown in **Table 7.2** the eight objectives above are generally compatible. In some cases there is no obvious relationship between the objectives.

Table 7.2: Internal Compatibility of Strategic Environmental Objectives

Objective 1 B	Y							
Objective 2 P	Y/N	Y						
Objective 3 W	Y	Y	Y					
Objective 4 S	Y	Y	Y	Y				
Objective 5 C	Y	Y	Y	0	Y			
Objective 6 CH	Y/N	Y/N	Y/N	Y/N	Y	Y		
Objective 7 L	Y/N	Y	Y	Y	0	Y	Y	
Objective 8 MA	Y	Y	Y	Y/N	Y	Y/N	Y	Y
	Obj 1 B	Obj 2 P	Obj 3 W	Obj 4 S	Obj 5 C	Obj 6 CH	Obj 7 L	Obj 8 MA

Key: Y = Yes, compatible N = No, not compatible 0 = Neutral Y/N = May be compatible depending on how it is implemented

B: Biodiversity, Flora and Fauna; P: Population; S: Soil; W: Water; C: Climate; MA: Material Assets; CH: Cultural Heritage; L: Landscape

7.2.2 Strategic Environmental Indicators and Targets

The overall purpose of Environmental Indicators in the SEA is to provide a way of measuring the environmental effect of implementing the Plan. Environmental Indicators are also used to track the progress in achieving the Targets set in the SEA as well as the Plan itself. The proposed Indicators have been selected bearing in mind the availability of data and the feasibility of making direct links between any changes in the environment and the implementation of the Plan.

Targets were considered over the duration of the baseline data collection and assessment, and throughout the consultation process, in order to meet the Strategic Environmental Objectives as well as the objectives of the Plan. In each case, any target that is set must be attributable to the implementation of the Plan. The targets and indicators associated with each SEA Objective are presented in **Table 7.4**.

Table 7.3: Strategic Environmental Objectives, Targets and Indicators

Objectives	Targets	Indicators	Source/ Responsibility
<p>Objective 1 Biodiversity, Flora & Fauna Protect and where appropriate, enhance biodiversity, particularly protected areas and protected species.</p>	<p>No net loss of designated sites, species or habitats especially in relation to Mouds Bog SAC, Pollardstown Fen SAC and the Curragh pNHA.</p>	<p>Reported/ Estimated levels of damage to designated sites/ species/ habitats as identified by GIS and AA.</p> <p>No. of Appropriate Assessments Carried out.</p> <p>Number of planning permissions with biodiversity conditions ensuring no net loss of green linkages / ecological networks.</p> <p>Loss of land actively</p>	<p>NPWS</p> <p>KCC Planning/ Environment Department</p>

Objectives	Targets	Indicators	Source/ Responsibility
		managed for conservation.	
	No net loss of green linkages / ecological networks	Loss of green linkages/ ecological networks identified through GIS and Habitat Mapping	KCC Environment Department/ GIS
	Prevent further spread of alien/ invasive species.	Number of sites reported to contain alien/ invasive species.	NPWS KCC Environment Department
<p>Objective 2 Population Improve people's quality of life based on high-quality residential, working and recreational environments and on sustainable transport</p>	No increase in population above core strategy population targets	% change in population based on core strategy targets based on RPG figures.	CSO
	Appropriate mix of tenure types (including social housing) in all new developments.	% of private and social housing in new developments % mix of tenures based on housing strategy requirements.	KCC Planning and Housing Departments
	All significant planning applications for new residential developments within areas designated for expansion to be accompanied by a design statement.	% of significant planning applications granted for new residential developments that are accompanied by a design statement.	KCC Planning Department
	Increase access to public transport from households.	Construction/ improvement of footpaths/ greenways/ cycle infrastructure	KCC Roads Department
<p>Objective 3 Water Improve water quality and the management of watercourses to comply with the standards of the Water Framework Directive and incorporate the objectives of the Floods Directive into sustainable planning and development.</p>	Implementation of the Programme of Measures identified under the ERBD River Basin Management Plan.	% increase in waters achieving 'good status' as defined in the WFD.	EPA and KCC Environment Department
	Ensure wastewater collection system capacity is provided either prior to construction of new development or is developed in parallel.	Wastewater collection system capacity compared with wastewater collection demand from development in the LAP.	EPA and KCC Environment Department
<p>Objective 4 Soil Protect and, where appropriate, enhance the function and quality of the soil resource in the lands within Newbridge Draft LAP.</p>	Increase in any derelict buildings and brownfield sites being redeveloped	Number of derelict buildings being redeveloped based on commencement notices	Commencement notices
	Increase in remediation of contaminated lands.	Number of remediation cases of contaminated land.	Environment/ Waste Department
<p>Objective 5 Climate Change Contribute to the mitigation of, and adaptation to, climate change.</p>	All new development applications within areas at risk of flooding to submit a flood impact assessment.	Number of new development applications within areas at risk of flooding without flood impact assessment.	KCC Planning Department

Objectives	Targets	Indicators	Source/ Responsibility
	Increase access by households to sustainable forms of transport, including bus and rail services.	Passenger numbers. Funding allocated to improvement of walking and cycling facilities.	KCC Planning and Roads Department
Objective 6 Cultural Heritage Protect and, where appropriate, enhance the character, diversity and special qualities of cultural, architectural and archaeological, heritage within Newbridge Draft LAP.	No impact on the fabric or setting of monuments on the Record of Monuments and Places (RMP) by development granted planning permission.	Number of monuments on the RMP, impacted by granted planning permissions.	The Archaeological Survey monitoring programme, Ireland
	No impacts on the architectural heritage value or setting of protected structures by development granted planning permission.	Number of protected structures impacted by development granted planning permission.	Buildings at Risk Register, Heritage Council Ireland. KCC Planning Department
	No protected structures to be demolished because of long term neglect and dereliction.	Number of protected structures that have been demolished because of long term neglect and dereliction.	Buildings at Risk Register, Heritage Council Ireland. KCC Planning Department
Objective 7 Landscape Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in Newbridge Draft LAP.	No negative alteration to protected views.	Number of visual impact assessments received as part of development proposals	KCC Planning Department
	No planning permission granted within special qualities of landscapes that materially contravene the policies or objectives of the LAP.	Number of planning permissions granted which materially contravene the special qualities of landscapes.	KCC Planning Department
Objective 8 Material Assets Make best use of existing infrastructure and promote the sustainable development of new infrastructure.	Maximise development potential within the urban envelope in order to reduce pressure on outlying rural areas.	Increase in population within the urban areas.	CSO Geodirectory
	Minimise the % of unaccounted for water. This refers to leakage from the system.	% unaccounted for water	EPA
	Increase in planning permissions making provision for renewable energy and water conservation measures.	No of planning permissions making provision for renewable energy and water conservation measures.	KCC Planning Department

8 LOCAL AREA PLAN ALTERNATIVES

8.1 INTRODUCTION

The preparation of Local Area Plan (LAP) policy and objectives affecting a geographical area such as Newbridge presents a significant opportunity to shape the physical development, its location and the character of the area. The SEA process seeks to document the development process where key decisions are reached, and consider the environmental impacts of the policy path chosen. The examination of alternative means of achieving the strategic objectives of a LAP, in the first place recognises the broad challenges before policy makers, as well as seeking the articulation of why the LAP prescribes one path over another.

The consideration of LAP alternatives is a real-world exercise that recognises that the plan must work within an existing context of National and Regional Strategic Plans, climate change, and an Irish and European legislative framework which has sustainable development at its core. It is not an open-book exercise, where every conceivable option is examined. Therefore, in selecting realistic alternatives that could be evaluated, 'no development' or 'unconstrained development', were considered unreasonable alternatives, as they are unlikely to be delivered and would not reflect the statutory and operational requirements of the LAP.

This section sets out:

- The legislative context for the consideration of alternatives;
- An outline of the reasons for selecting the alternatives dealt with;
- A description of the alternatives; and
- Evaluation of the alternatives and identification of preferred alternative.

8.2 LEGISLATIVE CONTEXT

The consideration of alternatives is a requirement of the SEA Directive (2001/42/EC). It states under Article 5(1) that;

Where an environmental assessment is required under Article 3(1), an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated. The information to be given for this purpose is referred to in Annex I.

Annex 1 (h) of the Directive clarifies that the information to be provided on alternatives under Article 5(1), is *inter alia* an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.

Article 9 of the Directive requires that a statement shall be prepared providing information on the reasons for choosing the plan as adopted, in the light of the other reasonable alternatives dealt with.

Annex 1 (f) details the environmental topics to be considered in the evaluation of the alternatives, which is the same as that addressed in the assessment of the plan itself:

...biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.

Therefore, the Directive emphasises that the SEA process must consider alternatives that are 'reasonable', and take into account 'the objectives' of the plan, and 'the geographical scope of the plan'.

The term 'reasonable' is not defined in the legislation. Good practice points to the analysis of 'alternatives' as being a constructive and informative exercise for the policy makers, and that only 'possible' options for policy are examined. Plan scenarios that run counter to European environmental directives, the National Spatial Strategy (NSS), Ministerial Guidelines or Regional Planning Guidelines (RPG) would not be considered reasonable.

Alternatives are required to take into account the objectives of the plan. The alternatives study therefore must operate within the strategic objectives, set out for the plan, and provide an examination of alternative means of implementing the plan.

Section 3.14 of the DEHLG Guidelines notes that the higher the level of the plan, the more strategic the options which are likely to be available. Conversely, lower tier plans, such as LAPs, will be framed in a policy context set by the level(s) above them, and strategic options may be limited. As a result, the strategic options available to the preparation of the draft Newbridge LAP 2013 – 2019 are limited in terms of growth scenarios as population and housing growth is inherited from the strategic planning framework and growth is allocated from the NSS, RPGs and Kildare County Development Plan¹. The preparation of local area plan policy and objectives affecting a geographical area such as Newbridge Town boundary presents a significant opportunity to affect the way physical change and development occurs, where it happens and the character of that process. The LAP comprises areas of contrasting character, from the urban centre of Newbridge, the lands alongside the River Liffey to the rural hinterland including the Curragh and Natura 2000 sites. The alternatives study must take account of this contrasting landscape and context, and only consider policies appropriate for the nature and extent of the LAP.

The Directive does not prescribe at what stage consideration of alternatives should be undertaken, as it requires a rationale for choosing the LAP as adopted, in the light of the other reasonable alternatives dealt with. However, to present a useful input into the plan making process, all guidance points to alternatives assessing the implementation of the plan at a strategic level, at the stage where the preferred strategy is being finalised. This is not to say that location specific policies should not be examined. But this must be placed within the context of the SEA's role to examine the strategic environmental implications of the direction of the plan at the appropriate policy level.

8.3 REASONS FOR SELECTING THE ALTERNATIVES DEALT WITH

The SEA process seeks to document the LAP process where key decisions are reached, and consider the environmental impacts of the policy path chosen. The examination of alternative means of achieving the strategic objectives of a LAP, in the first place recognises the broad challenges before policy makers, as well as seeking the articulation of why the LAP prescribes one path over another.

Every LAP is required to ensure that sufficient lands are zoned for particular purposes. This is especially relevant in relation to the quantum and location of new residentially zoned lands. In this regard it is important to highlight that it is not proposed to rezone any significant additional residential or commercial lands within the Newbridge LAP 2013 –2019.

¹ Refer to Strategic Planning Policy in Chapter 6 of this Environmental Report.

The Newbridge Town LAP team developed 4 alternative options detailing potential scenarios for the future development of Newbridge Town. Options developed are not predictions or preferences; instead they offer a range of outcomes arising from different planning and development strategies. These four scenarios form the basis for comparative evaluation of the likely environmental effects of each as part of this study.

Alternatives are required to take into account the objectives of the LAP. The alternatives study therefore must operate within core strategy and the strategic objectives, set out for the LAP, and provide an examination of alternative means of implementing the LAP. The principles of the core strategy of this LAP as identified within the Newbridge Local Area Plan Issues Paper (August 2010) and inherited from the Kildare County Development Plan are as follows:

- Newbridge is designated as a 'Large Growth Town II as set out within the Kildare CDP and reflects the RPGs and NSS;
- Newbridge is targeted for 36% increase in population from its 2006 population of 23,245 people to 2017;
- Newbridge will grow in a self sufficient manner, reducing commuting levels and ensuring sustainable levels of housing growth, providing a full range of local services adequate to meet local needs at district level and for surrounding rural areas;
- The provision of strong social infrastructure in tandem with growth in population, particularly in relation to schools and leisure facilities is also required.

8.4 ALTERNATIVES CONSIDERED FOR SEA

The following strategic alternatives for the LAP were considered for assessment as part of the SEA process for the Newbridge LAP 2013-2019, and are shown in **Figures 8.1 - 8.4**. The four alternatives specifically focus on the alternative means of achieving the aims of the new LAP. Arising from this discussion the strengths and weaknesses of the various approaches are evaluated and a preferred alternative derived. A summary of the assessment is included in **Table 8.1**.

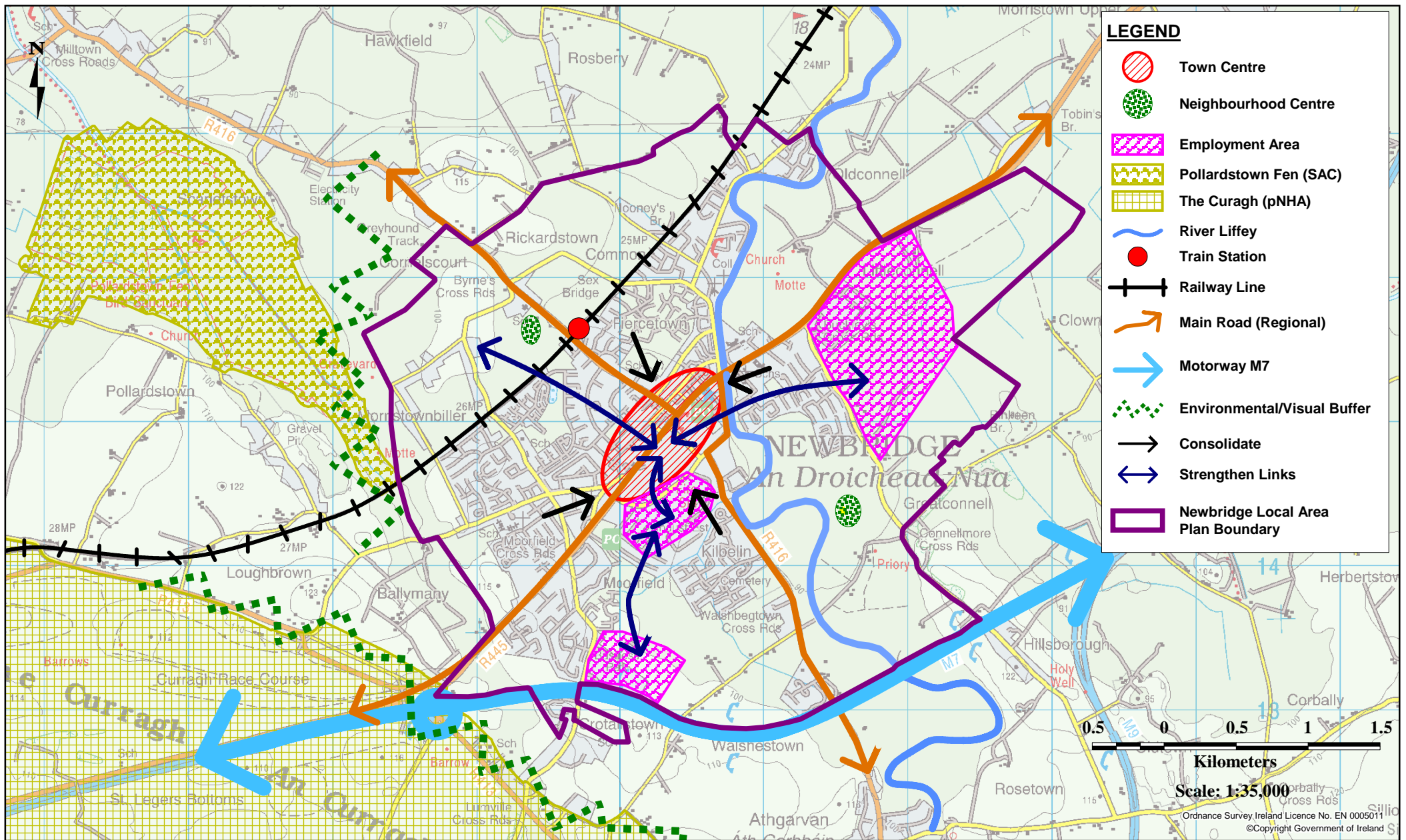


FIGURE 8.1:
NEWBRIDGE TOWN LAP ALTERNATIVES - OPTION 1: CONSOLIDATION

8.4.1 Alternative Scenario 1: Consolidation of the exiting Town Centre with re-development of Brownfield sites (Figure 8.1)

8.4.1.1 Description of Objective

- Consolidation of the existing town centre by encouraging the development of vacant and underutilised sites in the town centre in an appropriate manner;
- The re-development of the Bord na Mona and GAA sites in the town centre;
- Residential development will occur on suitable zoned sites and within the existing built area; and
- Provision of a public transport corridor linking Newbridge Town Centre, the train station and employment and mixed uses within and around the town.

8.4.1.2 Environmental Effects

The environmental effects have been assessed under each of the strategic environmental objectives (SEOs) outlined in **Chapter 7**.

SEO1 – Loss of large area of arable crops to the north east of the town centre. Further potential loss of GAA sites in the centre of the town which would be greenfield. Development to the east would be preferential in relation to the protected site Pollardstown Fen SAC which is situated to the west of the town.

SEO2 – Through expansion to the east and south along with consolidation of the town centre, potential rail noise impacts are reduced. A new employment area will lie adjacent to the M7 motorway and the likelihood is that people will use the car as a means of transport rather than using the train which lies to the north of the town centre. Parts of this expansion area extend east of the town which is peripheral to the town centre and is likely to require extension of services. This does not lend itself to the use of public transport within the town centre and train station. There will be provision of a public transport corridor to link the town centre and the new employment areas and this will allow for a modal shift to public transport subject to discouraging the use of motor vehicles.

SEO3 – The surface water quality of the River Liffey is good but the river water body status under the Water Framework Directive (WFD) is at significant risk. Aquifer vulnerability is high and the employment areas will be development over a regionally important aquifer. Consolidation of the town centre and the location of the employment centres away from the rivers floodplain will be more in line with the objectives within the Floods Directive. There is a recurring flood event at the only river crossing point within the town so future consolidation will have to take account of flooding at this location.

SEO4 – The proposed employment area to the north east has a combination of shallow well drained and poorly drained soils, which have arable crops growing on them. The employment land adjacent to the motorway will be developed on deep well drained soils that are covered with agricultural grassland. Therefore whilst consolidation within the town centre will not inhibit the loss of soils there is high loss within the areas outlined for employment use.

SEO 5 – The development of an employment area to the east will have potential for increased vehicular traffic on the existing congested network leading to potential increases in noise levels and car emissions. The provision of the public transport corridor could offset this increased vehicular traffic. However, the employment areas lie to the east and south of the town and are a good distance from

the train station. The southern employment area lies in proximity to an interchange on the M7 motorway which could result in increased car usage and more traffic using this junction.

SEO 6 – There are no significant issues, however there is one RMP within the employment land expansion to the east of the town and the town centre contains a number of buildings protected under NIAH. Consolidation and redevelopment will have to be sensitive to these buildings and their heritage. There will be policies to protect the RMP and protected buildings in the plan.

SEO 7 – There are no scenic routes within the expansion lands which lie within central undulating lands and northern lowlands. The north east expansion area will need to be sensitive to the river valley for which it lies adjacent to and the southern expansion area will need to take cognisance of the Curragh, however the motorway will act as a natural barrier.

SEO 8 – The employment area to the east may require further infrastructure to ensure proper linkages to the town centre and the train station. However this provision of public transport will encourage best use of the existing train infrastructure. The co-ordination of employment, residential and community facilities will promote sustainable development.

8.4.1.3 Critical Evaluation

- Efficient use of land and enhancement of self sufficiency by creating greater degree of coordination of employment, residential and community facilities to cater for population within the town;
- Development of sustainable mixed use developments and communities; and
- Beneficial to the protection of Pollardstown Fen SAC and Curragh NHA.

8.4.1.4 Effects on Planning

- Responds to national and regional planning strategies including the NSS and RPG's and is in accordance with the DoEHLG Guidelines "Sustainable Residential Development in Urban Areas" (2009) and accompanying "Urban Design Manual- A Best Practice Guide";
- May have beneficial impacts on the vitality and viability of the town centre;
- Sustainable re-use of brownfield sites;
- Requires the implementation of detailed design briefs and possibility of masterplan for town centre sites; and
- Requires the upgrade of infrastructural links from residential areas elsewhere in the town back to the town centre.

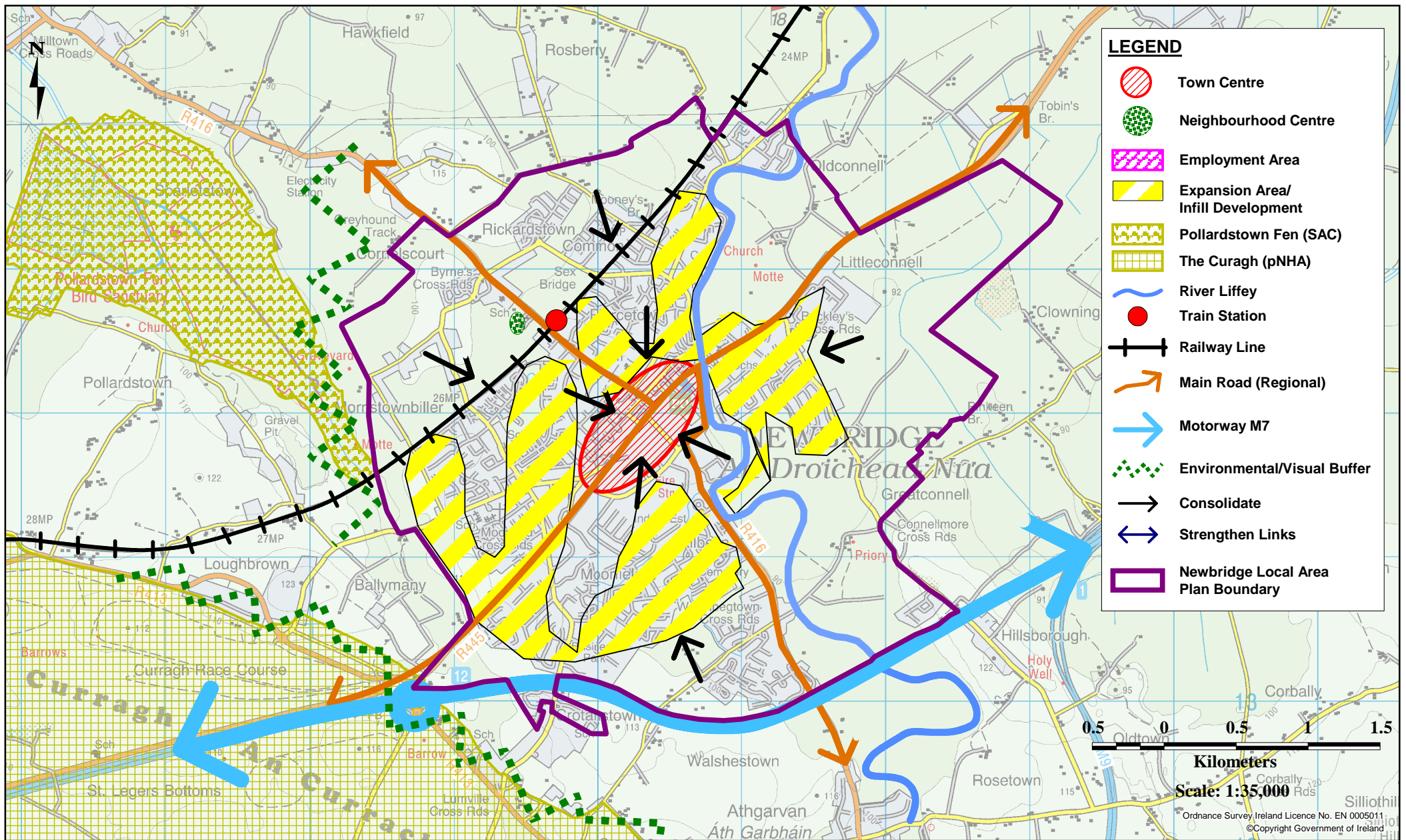


FIGURE 8.2:
NEWBRIDGE TOWN LAP ALTERNATIVES - OPTION 2: LIMITED EXPANSION

8.4.2 Alternative Scenario 2: Limited Expansion, Environment/ Preservation Approach (Figure 8.2)

8.4.2.1 Description of Objective

- Adopt a cautious and restrained approach to new development;
- A certain amount of expansion would be required to meet population targets and this will take place within the existing built envelope to the south west and north east of the town;
- Prioritise the amenity and character of existing residential areas together with the protection of Newbridge's natural environment; and
- Limited expansion would be allowed in terms of residential and commercial developments within the existing footprint of the Plan area.

8.4.2.2 Environmental Effects

SEO1 – Infill of the urban area would ensure that arable grasslands to the east of the town centre would remain. Limited expansion could see a reduction in amenity lands within the urban area and potential loss of open space for which there is abundance within the urban town footprint. Infill development the west of the town could put pressure on the protected site, Pollardstown Fen SAC which lies adjacent to the LAP boundary. Expansion of development to the south of the town centre could also increase pressure on the Curragh pNHA which like Pollardstown lies adjacent to the LAP boundary.

SEO2 – The restrained approach to new development may not improve people's quality of life as the balance between high quality residential, working and recreational environment may not be achieved. There will be little scope for employment creation and there could be negative impacts on infrastructural developments and the delivery of recreational facilities. However expansion through infill within the town centre will encourage greater use of public transport and self sufficiency within the town centre.

SEO3 – Development of infill areas within the existing urban fabric will have regard to the recurring flood events along the River Liffey. This may restrict the types of infill that will be allowed. The surface water quality of the River Liffey is good but the river water body status under the Water Framework Directive (WFD) is at significant risk. Aquifer vulnerability is high and the majority of the infill lands are located on a regionally important aquifer. However lands are already urban in nature therefore impacts are unlikely to be significant.

SEO4 – The limited expansion of development areas would safeguard and protect the greenfield lands and the soils that reside beneath them. There may be loss of gardens within the towns urban fabric through the consolidation of development.

SEO 5 – Limited expansion with infill development is likely to result in increased use of public transport due to town centre living. There may be potential for more sustainable transport uses due to the infill development.

SEO 6 – There is only 1 RMP within the town centre urban fabric, along the R416. The limited infill incorporates a small portion of town centre lands with protected structures and NIAH buildings and therefore the type of development will need to reflect the existing heritage sensitivities.

SEO 7 – There are no scenic views within the infill lands which overlie the landscape character areas of central undulating lands, the river valley and the northern lowlands. A limited expansion area will be required to the west of the town will need to be sensitive to the Curragh which has a high landscape sensitivity.

SEO 8 – With limited infill there will be limited allocation of lands for local employment opportunities. However the restrained approach to development may encourage best use of existing infrastructure.

8.4.2.3 Critical Evaluation

- Emphasis is placed on the preservation of the environment and natural features surrounding the town;
- Provision of green buffers and preservation of wildlife corridors and a strict compliance with the Flood Management Guidelines; and
- New development would be required to be higher density due to its infill nature.

8.4.2.4 Effects on Planning

- May have beneficial impact on the quality of the natural resources as any threat to the environment from development would not be acceptable;
- Economic and social implications would be negative as there would be little scope for employment lands and therefore employment creation;
- Would negatively affect infrastructural developments and delivery of services such as schools and recreational facilities due to infill of green areas within the town;
- The out migration from the plan area could in turn result in increased pressure for services and facilities in the surrounding areas of the county; and
- Failure to deliver population targets over the Plan period.

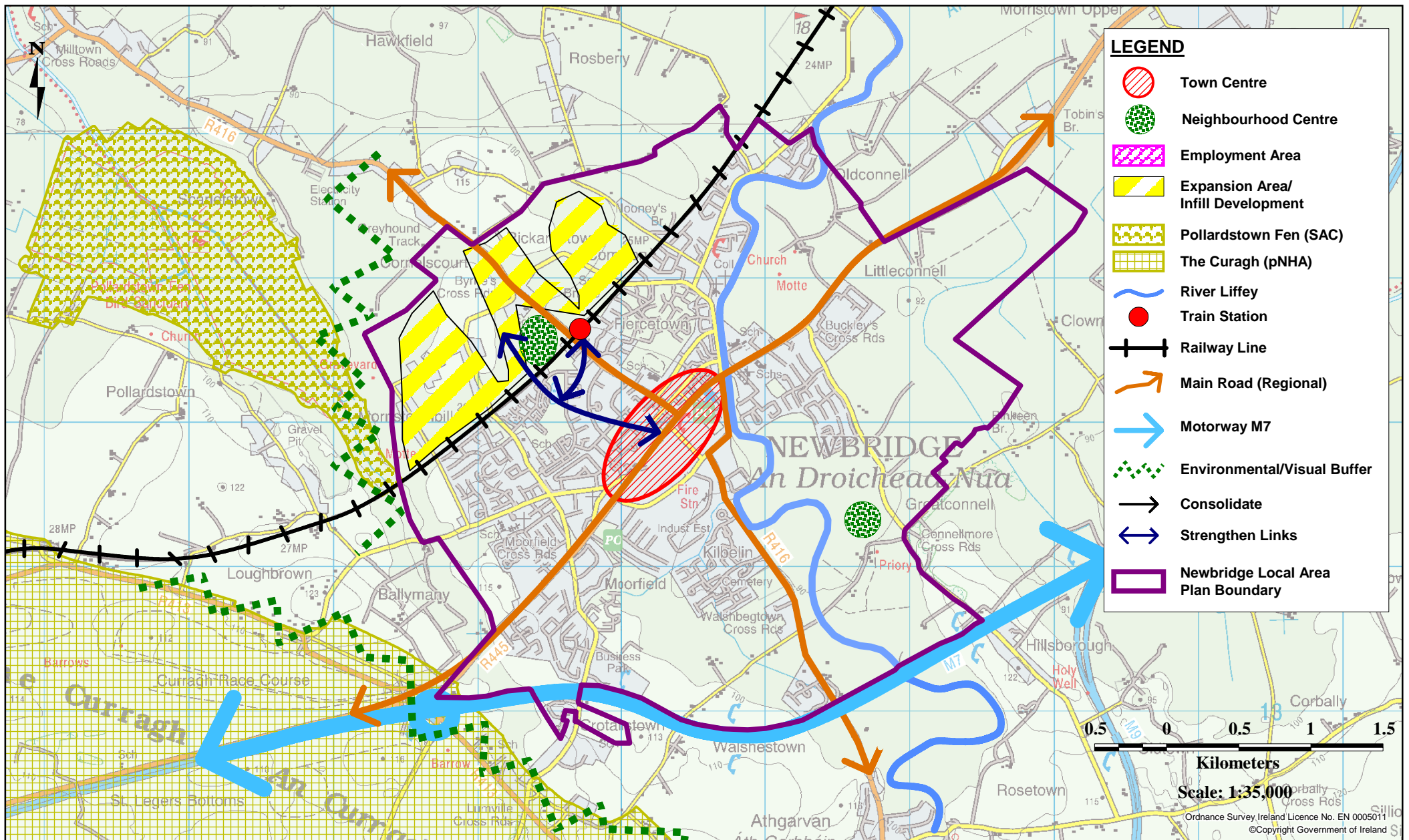


FIGURE 8.3:
NEWBRIDGE TOWN LAP ALTERNATIVES - OPTION 3: NORTHWEST EXPANSION

8.4.3 Alternative Scenario 3: Northwest Expansion, North of Railway Line (Figure 8.3)

8.4.3.1 Description of Objective

- Focus higher density development adjoining public transport corridors adjacent to the Railway Station; and
- Extension of the town towards the northwest in a phased manner.

8.4.3.2 Environmental Effects

SEO1 – Loss of improved agricultural grassland, arable crops and potential loss of tree lines. Development of new neighbourhood centre along with expansion of Newbridge to the west will mean increased human pressure on Pollardstown Fen SAC. New neighbourhood centre to the south east will mean the loss of agricultural grassland and arable crops.

SEO2 – The expansion area along with new neighbourhood is in close proximity to the railway station which would encourage some modal shift to public transport. However new residential developments could have increased noise due to their proximity to the railway line. The neighbourhood centre to the south east is quite isolated and would need better links to the town centre. At present there is only one bridge crossing to the town centre along the R445 so the neighbourhood would require local services due to the inaccessibility of the town centre.

SEO3 – The expansion area will be to the west of the town and therefore a distance from the flooding events that recur along the River Liffey. The majority of the expansion lands reside on lands that have moderate water body status under the WFD, however a small section has poor water body status. The neighbourhood centre to the south east is located on the floodplain of the River Liffey which could have the potential for conflicts with the objectives of the Floods Directive.

SEO 4 – The expansion area to the north west is on deep well drained soils the majority of which are covered by agricultural grassland along with a small portion of arable crops. Consolidation of the town centre will protect soil resources.

SEO 5 – The strengthening of links to the town centre and the railway station may encourage more sustainable transport which would have a direct reduction on noise pollution and air emissions. Flood protection may be required for the neighbourhood centre which is located on the floodplain of the River Liffey.

SEO 6 – There are no RMP sites on the north west expansion lands or the neighbourhood area to the south east. The expansion lands and new neighbourhood area in proximity to the train station will need to take cognisance of the train station which is a protected structure.

SEO 7 – There are no scenic views within the expansion lands however future development would need to ensure protection of the high landscape sensitivity of Pollardstown Fen SAC which it lies adjacent to.

SEO 8 – The development of expansion areas in proximity to the train station will encourage best use of existing infrastructure and promote sustainable development. However the neighbourhood centre located to the south west is isolated in relation to sustainable transport modes and the likelihood is that vehicular car use would increase in this area.

8.4.3.3 Critical Evaluation

- Identifies a new quadrant that would be developed to accommodate and deliver optimum efficiency of new population density and commercial floor space;
- Creates a mixed use development allowing for a greater degree of coordination of employment, public infrastructure, amenities, transport etc through a plan led approach; and
- Creates critical mass to sustain an integrated public transport network for the area.

8.4.3.4 Effects on Planning

- Responds to the relevant national/regional planning strategies and transport policies to locate new development in proximity to transport nodes;
- Contradicts the DoEHLG Guidelines “Sustainable Residential Development in Urban Areas” (2009) and accompanying “Urban Design Manual- A Best Practice Guide” (2009), in not developing large brownfield sites closer to the town centre prior to developing peripheral greenfield sites;
- Potential development scenario in the future should population targets increase for the town;
- Requires the implementation of a masterplan for the northeast area; and
- The development pattern has potential to negatively impact on Pollardstown Fen SAC.

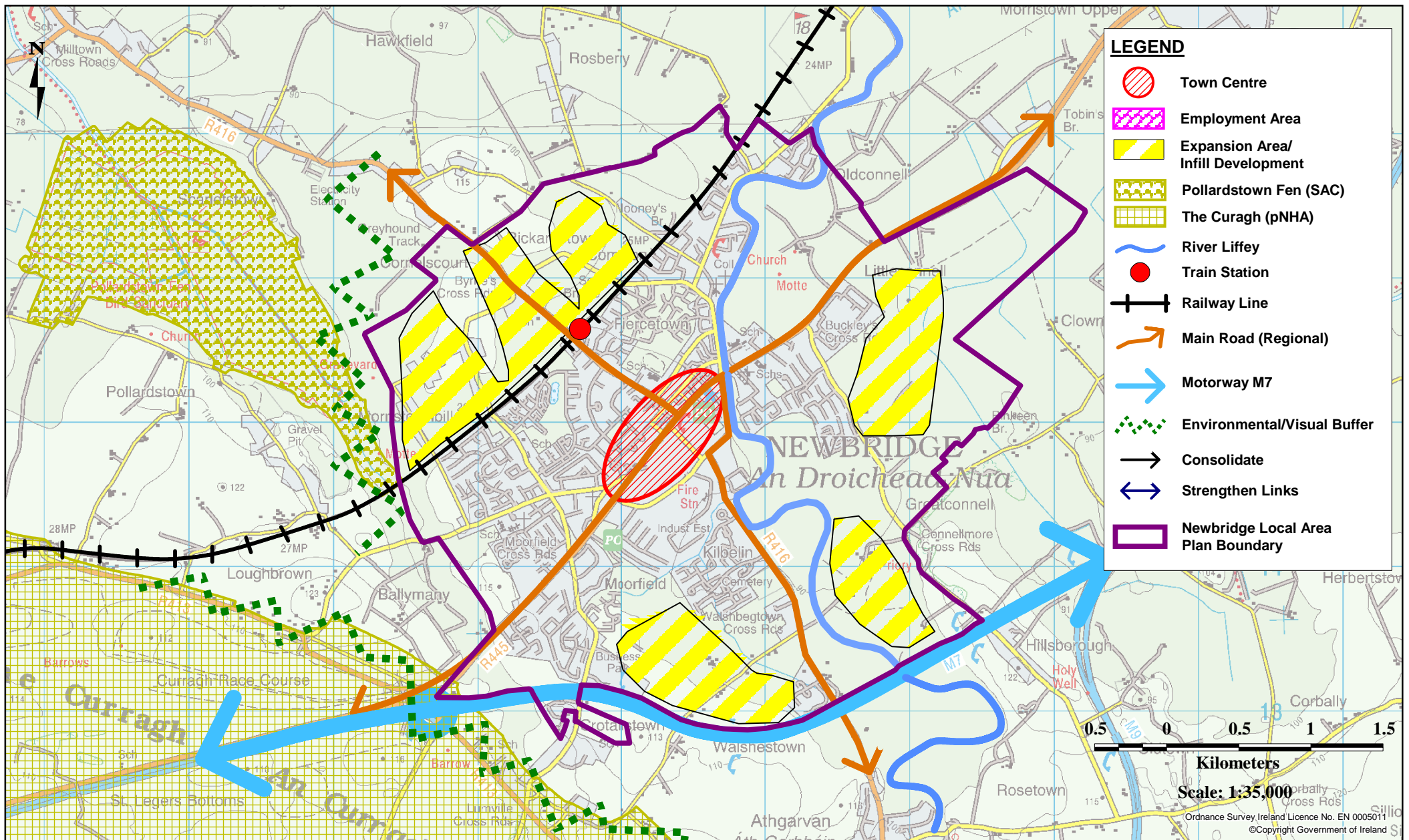


FIGURE 8.4:
NEWBRIDGE TOWN LAP ALTERNATIVES - OPTION 4: MARKET LED GROWTH



8.4.4 Alternative Scenario 4: Market-Led Growth, Development at various peripheral locations (Figure 8.4)

8.4.4.1 Description of Objective

- Allows for growth of low density employment and residential development at peripheral locations at the boundary of Newbridge;
- The growth and development of the town is completely dependent on market demand; and
- Additional zoning of lands results in the extension of the urban footprint of the town within the boundary of the town and beyond.

8.4.4.2 Environmental Effects

SEO1 – As with Alternative 1 and 3 there will be a loss of arable cropland and agricultural grassland with the potential additional loss of a number of trees. Protected areas such as Pollardstown Fen and the Curragh will be subject to increased pressure. This alternative provides minimal protection for existing biodiversity.

SEO2 – The north west expansion within this alternative is the only element that will increase modal shift towards public transport use. The three other low density expansion areas to the east and south will encourage car use and discourage sustainable transport. The alternative fails to respond to national and regional planning has focus on improving people's quality of life.

SEO3 – The expansion areas are generally not prone to flooding, however the south east expansion area is located on the floodplain of the River Liffey. The majority of the expansion lands reside on lands that have moderate water body status under the WFD, however a small section to the north west has poor water body status.

SEO4 – The low density peripheral development will not provide protection to soil resources. As with Alternatives 1 and 3 there will be a loss of deep well drained and shallow well drained soils along with the loss of alluviums alongside the River Liffey. This alternative does not protect or enhance the function and quality of soil resources.

SEO 5 – Dispersed expansion areas will lead to increases in vehicular traffic and emissions which will only compact existing climate change issues. Whilst there will be expansion close to the railway station the other three expansion areas are at great distance to the railway station which will not encourage the use of this public transport system. The south east expansion area is located on the floodplain of the River Liffey which is likely to have significant effects on the town as a result.

SEO 6 – The expansion lands to the south east has one RMP on the site while the lands to the north east lie adjacent to an RMP at Littleconnell. The expansion lands to the south and north west are free of RMP sites but the north west lands will need to take into consideration the heritage of the protected structures that reside in proximity to the railway station.

SEO 7 – There are no scenic views within the expansion lands but as with Alternative 3 protection of the high sensitivity of Pollardstown Fen will be needed.

SEO 8 – Peripheral and haphazard alternatives do not lend themselves to public transport and would result in over zoning of lands which would result in wasteful resource of services and ad hoc development.

8.4.4.3 Critical Evaluation

- All forms of development more likely to take place on edges of the town, where greenfield land is freely available;
- Impact on the interchange with the M7 with increased residential development creating traffic congestion at key junctions;
- The development pattern is likely to detract from the town centre with increased vacancies on the existing Main Street and lack of critical mass resulting in a less vibrant town centre;
- More likely to develop towards the east of the town with possibility of merging with existing industrial lands at Ladytown; and
- Impacts on the town's relationship with Pollardstown Fen SAC and the Curragh NHA and a reduction in agricultural lands on the edges of the town.

8.4.4.4 Effects on Planning

- Planning focused on the case-by-case assessment of planning applications with no clear vision set out for the strategic development of the town;
- Merging of urban edges of existing town into Pollardstown Fen SAC and Curragh NHA and surrounding agricultural lands resulting in potential environmental degradation and loss of identity; and
- Leads to an uncoordinated use of lands with disconnected neighbourhoods and isolated areas of employment.

8.5 AA SCREENING OF ALTERNATIVES

Appropriate Assessment (AA) Screening has been undertaken which specifically addressed potential impacts on the Natura 2000 sites in proximity to the LAP. Within a 15km radius of Newbridge LAP there are four Natura 2000 sites identified. These include the water dependent sites of Pollardstown Fen SAC, Mouds Bog SAC, Ballynafagh Bog and Ballynafagh Lake SAC.

In relation to potential impacts posed by expansion of the town, after a review of the four alternative options presented it was concluded that consolidation of the town centre and expansion to the east would be the preferred alternative to ensure minimal potential impacts on the Natura 2000 sites identified. Alternative 3, Northwest Expansion along with Alternative 4, Market Lead Growth would draw development towards Pollardstown Fen SAC which could have significant impacts on this Natura 2000 site. Alternative 1 which included western expansion would in relation to AA be a preferred option along with limited infill, which was presented by Alternative 2.

In relation to potential impacts on the Natura 2000 sites, consolidation of town centres should be the first options considered followed by expansion to the western side of the town. However, due to the sensitivity of the groundwater system around Newbridge, any future planning will be required to undergo project level AA to ensure minimal impacts on the sites.

8.6 EVALUATION OF SEA ALTERNATIVES

Table 8.1 summarises the scoring for each development alternative against the Strategic Environmental Objectives (SEOs). This is not a weighted assessment and only provides an indicative outline of the environmental effects in relation to the SEOs. The sensitivity mapping outlined in **Figures 8.1 to 8.4** should be referred to whilst reviewing **Table 8.1**.

Table 8.1: Alternatives Option Scores against SEOs

Alternative Scenarios	Likely to Improve status of SEOs	Neutral interaction with status of SEOs	Potential Conflict with status of SEOs would be mitigated	Probable Conflict with status of SEOs – unlikely to be mitigated
Alternative 1	SEO2, SEO7		SEO1, SEO3, SEO5, SEO6, SEO7, SEO8	SEO1, SEO4
Alternative 2	SE05, SE08	SEO4	SEO3, SEO6, SEO8	SEO1, SEO2, SEO7
Alternative 3	SEO8, SEO2, SEO5		SEO1, SEO2, SEO3, SEO6	SEO1, SEO4, SEO7, SEO5
Alternative 4			SEO1, SEO3, SEO6, SEO7	SEO1, SEO2, SEO4, SEO5, SEO7, SEO8

8.6.1 SEA Preferred Alternative

Table 8.1 highlights that Alternatives 3 is generally considered to be the most positive alternative when measured against the SEOs of the Environmental Report. Under the same exercise Alternative 4 generally comes out as being negative in relation to impacts on human beings and the natural environment.

8.7 THE PREFERRED ALTERNATIVE

The preferred Alternative as proposed under the development strategy for the Newbridge LAP is Alternative 1.

9 EVALUATION OF LOCAL AREA PLAN POLICIES AND OBJECTIVES

9.1 INTRODUCTION

The purpose of this section of the Environmental Report is to evaluate as far as possible the potential environmental effects of the draft Newbridge LAP policies and objectives and to set out measures to prevent, reduce and as far as possible offset any significant adverse effects on the environment. The compatibility of the policies and objectives of the Plan have been reviewed against the Strategic Environmental Objectives for biodiversity, flora and fauna, population, soil, water, climatic factors, material assets, cultural heritage and landscape (as set out in **Table 7.1**). The approach used for assessing the policies / objectives for the Plan was an objectives led assessment using assessment matrices in line with current best practise for SEA of land use Plans in Ireland. Where feasible, baseline led assessment has also been used, to ensure as robust an assessment as possible.

9.2 POLICIES AND OBJECTIVES SCREENED OUT OF ASSESSMENTS

In order to streamline the assessment process, all policies/ objectives within the draft LAP that have a positive effect on the environment were identified. These policies/ objectives were then 'Screened Out', of the assessment process as they clearly demonstrated that they were having a positive influence on the environment. The Assessment Matrices in **Appendix D** have included these policies/ objectives but they have been shaded in green for clarification as they are screened out of the assessment process.

Table 9.1 provides an overall summary of the policies/ objectives contained within the draft LAP and it categorises the policies/ objectives according to their impact on the environment. The policies/ objectives which have been screened out are identified within the 'Screened Out' column. There are some policies that were identified as being positive but were not screened out as it was felt that there could be uncertain elements which required further assessment therefore they were included within the full assessment process.

Table 9.1: Draft LAP Policy and Objective Impacts

Policies/ Objectives	Screened Out	Positive	Neutral	Uncertain	Negative Mitigation /
Phasing of Lands Policies and Objectives	PLD1			PLD1	
New Housing	HL1, HL4, HL5, HL 8, HL10	HL2, HL3		HL6, HL7, HL9	HL1, HL2
Housing in Agricultural Zones	HA3, HA4	HA1		HA2	
Housing Policy		HP01, HP02		HP02, HP03	HA1, HP01, HP02, HP03
Economic Development Policy		ED1, ED2, ED3, ED4, ED5	ED3	ED1, ED2, ED6	ED4, ED5
Economic Objectives	ED04	ED01, ED02, ED03,		ED01, ED02, ED04, ED05, ED06	ED01, ED02, ED03
Tourism Development Policies	TM3, TM7	TM1, TM5, TM9		TM2, TM4, TM6	TM1, TM5, TM 8, TM9
Tourism Development Objectives	TM03	TM01, TM02,		TM01	TM02
Core Retail Policy		CR1		CR1	

Policies/ Objectives	Screened Out	Positive	Neutral	Uncertain	Negative Mitigation /
Town Centre Policy	TC1 TC3			TC2	
Retail Policy	RR3 RR4	RR1 RR2 RR5 RR6 RR7 RR8 RR9 RR10 RR11	RR6 RR7	RR1 RR5 RR8	RR2 RR9 RR11
Town Centre Objectives	RO4 RO6	RO1 RO2 RO5		RO1 RO3 RO5	RO2
Urban Design and Town Centre Development	UD1 UD4 UD6 UD7	UD2 UD3 UD5		UD2 UD3 UD5	
Public Transport	PT1, PT2, PT3		PT4	PT5 PT6	
General Movement	GM01 GM04 GM06 GM08		GM03 GM05 GM07	GM02	
Street and Road Infrastructure	SR01 SR04	SR05 SR07 SR08		SRO1 SRO2 SRO3 SRO6 SR07 SR08 SR09 SCR010 SR011	SRO5 SRO6
Parking		PK01 PK02 PK04 PK05		PK03 PK04 PK05	PK02
Water Supply	WS1 WS2 WS3 WS4 WS5 WS6 WS7 WS8 WS9				
Wastewater Policy	WW1 WW2 WW3 WW4 WW5 WW6 WW7				
Wastewater Objectives	WW02	WW01		WW03 WW04 WW05 WW06 WW07 WW08 WW09 WW10 WW011	WW01
Surface Water Drainage Policy	SW1 SW2 SW3 SW4 SW5 SW6 SW7 SW8				
Surface Water Drainage Objectives	SW01, SW02				
Flood Risk Management Policy	FRA1 FRA2 FRA3 FRA4 FRA5				
Flood Risk Management Objectives	FRO1 FRO2 FRO3				
Pollution Control and Waste Services	PC1 PC2 PC3 PC4 PC5 CL1 CL2 CL3 CL4 CL5 CL6 CL7 CL8				
Dereliction	DT1				
Energy and Communications		TEC 1TEC2		TEC 1TEC2 TEC3	

Policies/ Objectives	Screened Out	Positive	Neutral	Uncertain	Negative Mitigation /
		TEC3			
Community Policy	CF1 CF4 CF5 CF6 CF10	CF2 CF3 CF8 CF9		CF2 CF3 CF7 CF8 CF9	
Community Objectives				CO2	CO1
Architectural, Archaeological and Cultural Heritage	AH1 AH2 AH3 AH4 AH5 AH6 AH7				
Nature Conservation	NH1 NH2 NH3 NH4 NH5, NH6 NH7 NH8 NH9 NH10 NH11 NH12 NH13 NH14 NH15				
Green Infrastructure Policy	G11 G12 G13 G14 G15 G16 G17 G18 G19 G110 G111 G112 G113 G114				
Green Infrastructure Objective	G101				
Recreation and Amenity Policy	R3 R4	R2 R5 R6		R1 R2 R5 R6	
Recreation and Amenity Objective				RAO1	
Open Space and the Liffey Valley Park	OS2 OS3 OS5 OS6	OS1 OS4 OS7		OS1 OS4 OS7	
Zoning Objectives		open space and amenity			town centre, existing and new residential, neighbourhood centres, community and education, industrial and warehousing, agricultural, transport and utilities, leisure and amenity, department of defence, enterprise and employment, retail and commercial and equestrian uses

9.3 IMPACT ASSESSMENT METHODOLOGY

A pro-active approach has been taken in the methodology of this draft LAP through inclusion of a number of overall protective policies within the Plan in the first instance, these policies/ objectives are outlined in **Table 11.1**, within the mitigation chapter. It is intended that these policies/ objectives will protect against potential significant impacts as a result of implementation of the draft LAP.

The following section of the report provides a discussion of the main likely significant impacts (positive and negative, direct and indirect, cumulative and synergistic), which are anticipated from implementation of the policies/ objectives contained within the draft LAP. The draft LAP contains numerous policies/ objectives which have been assessed for environmental impacts. These are provided in a series of assessment matrices as detailed in **Appendix D** of this report. Assessments are also based on relevant associated text surrounding the relevant policies and actions in their relevant sections within the draft LAP. All policies which have been screened out are shaded in green.

The assessment matrices contain a comparison of each of the draft LAP policies/ objectives against each of the Strategic Environmental Objectives with an assessment rating assigned for the purposes of comparison. In this case, plus (+) indicates a potential positive impact, minus (-) indicates a potential negative impact, plus/minus (+/-) indicates that both positive and negative impacts are likely or that in the absence of further detail the impact is unclear, and a neutral or no impact is indicated by a zero (0). Combinations of these symbols are also possible, e.g.0/-, which indicates that impact may be neutral or negative depending on how the policy or objective is delivered.

Where negative impacts have been identified mitigation measures have been devised where possible through inclusion of either new policies / objectives, or recommendations have been made to amend or include additional text within the policies / objectives. Comments with respect to the recommended mitigation measures identified as a result of this assessment are noted within the comments section of the matrices and the associated mitigation measures and / or changes are denoted in **RED** within the policy column section within **Appendix D** of this report. All mitigation measures proposed as a result of this assessment are documented in **Chapter 11** of this environmental report.

9.4 OVERVIEW OF EVALUATION OF POLICIES AND OBJECTIVES

9.4.1 Phasing of Lands and Housing

The policies for Housing are generally aimed at the provision of adequate suitable housing and at a rate and scale which is in line with the core strategy of the County Development Plan (CDP) and subsequently this draft LAP. These policies are expected to result in positive direct and indirect impacts to population through improvements to quality of life and will provide suitable accommodation for a cross-section of the population.

Impacts in relation to climate as a result of consolidating development and providing infill development are expected to be positive, as this policy will focus development within the urban area, which is well served with public transport links and would also promote walking and cycling.

9.4.2 Economic and Tourism Development

The policies and objectives regarding Economic Activity are aimed at facilitating and encouraging economic development and employment within the draft Plan area. To achieve this, policies and objectives provide for sufficient land use zoning to cater for employment uses and associated economic development of the area. These policies are largely anticipated to have positive impacts on population through improving the economic prosperity of the Newbridge area and the visitor experience and the quality of life of its population.

Any new developments, such as commercial, industrial etc. development has potential for negative effects on biodiversity, water and soils associated with greenfield development. Any new development applications in this regard will also be subject to development management requirements of this draft LAP and the Kildare CDP and potential impacts will be minimised or mitigated at this stage.

9.4.3 Retail, Urban Design, Town Centre Policies and Objectives and Town Centre Design Briefs

The provision of a balanced mix of services in the neighbourhood centres is critical to the positive development of the town centre. The consolidation of these centres is very positive and ensures that services are not spread out within the LAP.

The town centre design briefs will have positive effects particularly in respect to Cultural heritage and Landscape as proposals plan to re-invigorate the historic heart of the town. Proposals are considered to be largely positive as it is proposed to improve the working order, legibility and movement within this area and will support the creation of new and improved linkages and roadways. Detailed urban design principles and landscape protection measures are also set out in policy which will help to ensure that development is carried out in a sustainable manner.

9.4.4 Transport

Many of the policies and objectives for Transport promote the use of sustainable forms of transport, such as walking, cycling and public transport networks, and as such will have positive benefits on the wider environment. This also has positive indirect and cumulative impacts in relation to climate as a result of the decrease in emissions associated with a reduction in use of private vehicles; positive impacts on population through reduced congestion, lower transport emissions and improved economic competitiveness; and positive impacts on material assets through provision of improved infrastructure for users of sustainable transport modes, e.g. public transport, cycling and walking.

In addition, promotion of sustainable travel with integrated land use and transportation policies should encourage the redevelopment of Newbridge Town rather than development on sites that are not currently serviced by public transport or cycle/walking networks, thus resulting in a positive direct impact on material assets.

There is potential for indirect negative effects with regard to the development of new road infrastructure with respect to biodiversity, water, soils and landscape in particular. Route selection and environmental assessment of road infrastructure will be important in terms of avoidance of impacts.

9.4.5 Water, Flooding, Drainage, Utilities and Wastewater Services

The adequacy of water, drainage and environmental services in the future development of the town is necessary to facilitate sustainable development. These key issues are addressed in various policies and objectives to provide for sufficient water, waste water and water drainage infrastructure to service the predicted requirements for future development of the town over the plan period. Relevant legislative requirements in relation to environmental requirements are also set out including policies and objectives relating to flood risk requirements.

The policies for public services relate to reliable and effective water, drainage, energy, waste management and communications infrastructure to service the existing and future development needs of the town, in an environmentally sustainable manner during the plan period.

The policies in relation to waste management will generally have positive direct and indirect impacts through the provision of recycling facilities throughout the plan area which benefits biodiversity, flora and fauna, population, soils, water and climate, cultural heritage, landscape, and material assets.

The policies relating to the provision of energy and communications infrastructure will have direct and indirect positive impacts on population by improving the quality of life of Newbridge population.

9.4.6 Community Development

The policies for community are generally aimed at provision of services for the community. The requirement to provide community facilities to support the projected population levels of the draft LAP area and environs are recognised within policy provision.

Direct positive effects with respect to population are anticipated with respect to most of the community policies and objectives due to the requirement to provide adequate provision of services associated with population growth. Indirect positive impacts with respect to climate change are anticipated with respect to provision of adequate community services within the town as this is likely to result in a reduction in the number of students/people which would otherwise be required to commute (either outside of the settlement or outside of the area) for education and other community services purposes.

9.4.7 Architectural and Archaeological Heritage

The protection and enhancement of Newbridge significant and unique built heritage is one of the core objectives of the draft Newbridge LAP. The policies for Cultural, Architectural and Archaeological Heritage will generally be positive particularly for cultural heritage and landscape through the recognition, protection and preservation of the cultural heritage (including archaeology and architecture) of Newbridge.

9.4.8 Natural Heritage, Green Infrastructure and Recreation and Amenity

The importance of green infrastructure is recognised in the draft Newbridge LAP and is based on detailed habitat mapping of the area. The draft LAP maps describe the different green infrastructure identified in Newbridge including relevant policies for its protection and enhancement. While there are no designated ecological sites within the draft LAP boundary, policies and objective requiring the protection of the Pollardstown Fen and Mouds Bog SACs, designated sites located within in close proximity to the town of Newbridge, are set out.

There are three NHAs, the Curragh, the Grand Canal and the Liffey Bank Above Athgarvan which all lie in proximity to the boundary of Newbridge administrative area and are also afforded protection in policy of the plan.

The policies for natural heritage for the draft Newbridge LAP will generally be positive for biodiversity as it aims to protect and promote opportunities for enhancement of local biodiversity features throughout the draft LAP area. Specific policies to protect the status of Natura 2000 sites and their associated habitats and features are provided within the draft LAP which will have overall positive impacts with regard to biodiversity. Positive secondary impacts are also likely to occur in the areas of soil and water, as the protection, conservation and enhancement of biodiversity is expected to also result in protection of these resources due to the controls that would be placed on development during its implementation. Secondary impacts on landscape may also occur as a result of implementation of protective policies on the natural environment.

The policies for green infrastructure, recreation and amenity are aimed at protecting, improving and enhancing open spaces and a range of facilities providing for leisure and relaxation throughout the area. These policies are expected to result in largely positive direct, and indirect impacts to population through the improvements to the quality of life. Indirect positive effects are also anticipated with respect to biodiversity and landscape as a result. Policies and objectives with respect to green infrastructure and open space will primarily result in direct positive impacts to population and landscape with potential indirect and / or secondary impacts with respect to biodiversity, soils and water.

9.4.10 Overview of Evaluation of Land Use Zoning Objectives

The draft Newbridge LAP 2013-2019 provides a development framework to guide the development of the town for the next six years. As part of this development framework, one of the key principles to this approach as set out in the draft Newbridge LAP is to achieve consolidated growth rates over the short to medium term through development of residential, employment, recreational, cultural, retail and educational facilities. The framework for the town going forward is provided for in the land use zoning map of the draft Newbridge LAP and associated land use zoning objectives, which have been assessed in relation to strategic environmental objectives for the subject of this report. The purpose of land use zoning is to indicate to property owners, and to the general public, the types of development that the Council considers most appropriate in each zone.

Land use zoning objectives are provided for with respect to town centre, existing and new residential, neighbourhood centres, community and education, open space and amenity, industrial and warehousing, agricultural, transport and utilities, leisure and amenity, department of defence, enterprise and employment, retail and commercial and equestrian uses. Design briefs in respect of town centre sites have also been prepared to assist in the planning process by setting out broad design parameters for the future development of these sites.

10 CUMULATIVE EFFECTS

10.1 INTRODUCTION

This chapter of the Environmental Report provides an outline of the potential cumulative effects on the environment as a result of implementing the Kildare Town LAP (2013-2019).

Cumulative effects are referred to in a number of SEA guidance documents and are defined in the EPA SEA Process Checklist (2011) as “*effects on the environment that result from incremental changes caused by the strategic action together with other past, present, and reasonably foreseeable future actions. These effects can result from individually minor but collectively significant actions taking place over time or space*”. Therefore the combined effect of human activity can pose a serious threat on our environment. These effects can be insignificant individually but cumulatively over time and from a number of sources can result in the degradation of sensitive environmental resources.

The 2004 Guidelines produced by the DEHLG outlines that the SEA process is in a good position to address cumulative effects for which the Environmental Impact Assessment process is not equipped to deal with. Due to the strategic nature of the SEA process a forum is provided in which cumulative effects can be addressed. The EPA is presently undertaking a study in relation to cumulative effects and it is anticipated that a *draft Cumulative Effects – Best Practice Guidance Document* will be available soon to SEA practitioners.

10.2 LEGISLATION

The consideration of cumulative effects is a requirement of the SEA Directive (2001/42/EC). It states under Article 5(1) that an Environmental Report shall be prepared and relevant criteria is provided in Annex I, which states that;

“The likely significant effect (these effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects) on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors”.

Under Article 3(5) of the SEA Directive the determination of likely significant effects is addressed and within this it is stated that Member States shall take into account the relevant criteria within Annex II. Under Annex II (2) it is stated that “*characteristics of the effects and of the area likely to be affected, having regard, in particular, to the cumulative nature of the effects*”.

10.3 PLANNING

The National Spatial Strategy (NSS) sets out the national context for spatial planning with the overall aim of achieving a better balance of economic, social and physical development. This NSS together with the Regional Planning Guidelines (RPGs) must inform the development within the county of Kildare. The RPGs are a means by which to implement the NSS by providing detailed policy and guidance. These RPGs provide a long term planning framework for the development of a region, thereby providing a strategic forum in which cumulative effects can be identified. The Planning and Development Act clarifies the key obligations required of Planning Authorities whilst envisaging close alignment between the NSS, the RPGs, Development Plans and Local Area Plans.

Newbridge, which is located within County Kildare, is within the geographical area of the RPGs for the Greater Dublin Area 2010-2022. In accordance with national and European legislation SEA was undertaken to assess the potential significant environmental impacts and effects of the RPGs.

Environmental factors have been integrated into the development of the RPGs and the related decision making process through the SEA process, thereby addressing cumulative effects within the broad context of the geographical areas of Kildare, Meath, Wicklow, Dublin City, Dun Laoghaire-Rathdown, Fingal and South Dublin.

The framework for development within the county of Kildare is outlined within the Kildare County Development Plan 2011-2017 which was prepared under the provisions of the Planning and Development Act. This document which sets out the strategy for proper planning and sustainable development of the County was also the subject of SEA and cumulative impacts with respect to the entire county of Kildare were identified.

Under the Planning Act LAPs have the responsibility for presenting a strategy for the proper planning and sustainable development of a specific administrative area which for the purposes of this LAP is Newbridge. The LAP for Newbridge will set out a strategic framework for planning covering the period 2013-2019. The adjoining administrative area of Kildare Town, which is located 4km from Newbridge has also undergone an identical process with its LAP being fully reviewed to cover a similar period as to that of Newbridge. There are a number of potential pressures on the environment from these LAPs including such issues as population increases, increased housing units and associated developments within the towns. The key environmental sensitivities affected by these potential pressures are addressed in the following section.

10.4 KEY ENVIRONMENTAL RECEPTORS

There are a number of ecological resources in close proximity to both Newbridge and Kildare town including the Curragh pNHA, which comprises a large expanse of semi-natural grassland with unique ecology and is located as a buffer between the two LAPs. In addition two water dependent SACs lie in very close proximity to both LAPs. Pollardstown Fen SAC, situated on the northern margin of the Curragh and to the north west of Newbridge comprises primary and secondary fen peat fed by a continuous supply of water from about 40 springs. Mouds Bog SAC a raised bog is located directly north of Newbridge, and like Pollardstown Fen is susceptible to development pressure from associated human activity. In addition to Pollardstown Fen and Mouds Bog, there are three other Natura 2000 sites located within 15km of both LAPs. These sites include the River Barrow and Nore SAC, Ballynafagh Lake SAC and Ballynafagh Bog SAC.

The habitat mapping presented in **Figure 5.3** illustrates that the density of hedgerows increases, the further removed from the town centre. Hedgerows act as an important wildlife habitat that host a wide range of plant and shrub species along with birds, mammals and insects. They typically form the boundary to fields and properties and are susceptible to development pressure and farming expansion. The removal of hedgerows as a result of Greenfield development from both LAPs has potential cumulative impacts in relation to biodiversity.

The accessible road and rail connections within and surrounding the two LAPs ensures that Newbridge and Kildare town are popular commuter towns for people employed in Dublin City and Environs. However the combined increase in population and associated numbers of dwellings from both LAPs has the potential to raise noise levels through increased road traffic. With the introduction of sustainable transport policies and the buffering of residential dwellings to rail noise the cumulative impacts on human beings can be minimised.

Newbridge and Kildare town are not connected by surface water streams or rivers however both LAPs overlie the same regionally important aquifer. Newbridge is mainly located within the Eastern River Basin District and Kildare LAP is located within the South Eastern River Basin District. However, both districts need to comply with the same objectives outlined within the Water Framework Directive. Both the sections of the River Liffey and the River Tully in proximity to the LAPs are outlined as being 'at significant risk' of not meeting the objectives of the WFD. The wastewater from Newbridge is treated at Osberstown WWTP. The Osberstown Plant caters for the towns of Naas, Kilcullen, Sallins, Kill, Clane and Prosperous and has present capacity restrictions but an upgrade is planned. This plant discharges its effluent to the River Liffey which flows through the centre of Newbridge. There will not

be a cumulative effect on the River Liffey from the increased population of Kildare town as the wastewater is discharged to Kildare town sewage plant which discharges to the Tully River located to the south of the town. The Kildare WWTP is presently at capacity but works were completed in 2012 which would provide the WWTP with a predicted spare capacity of approximately 19,659pe.

With increased populations for both Newbridge and Kildare town there will be cumulative pressure on the water supply demands for both towns. Newbridge presently is connected to the Ballymore Eustace Reservoir as part of the Mid-Regional Water Supply Scheme and has adequate water supply to service the present needs of the town. In the years between 2003 and 2009 the water supply demands for Kildare town increased by over 50%. Both towns reside within the Greater Dublin Water Supply Area and therefore cumulative pressures will be addressed in the context of planning for this region. Strategic planning has commenced and an SEA was undertaken on the Water Supply Project – Plan which identifies the need for a new source of water to supply the Greater Dublin Water Supply Area. Therefore monitoring and review of water supply to serve the growing population of these areas will be required.

10.5 CONCLUSION

The environment surrounding Newbridge LAP contains sensitive ecological environments and surface and groundwater systems. Both Newbridge and Kildare town have inherited population targets and projections from higher level plans in the planning hierarchy including the Regional Planning Guidelines and the County Development Plan. As a result, a core strategy has been formed which makes provision for projected targets at national, regional and local levels, which are not only in line with one another but also ensure a sustainable pattern of growth within the hierarchy. As a result, both the Newbridge and Kildare LAPs have inherited population growth projections as a result from the Kildare County Development Plan 2011, which will result in increased pressure on land resources and existing services such as wastewater disposal and water supplies within these areas. Both LAPs will adhere to the Core Strategy for Kildare taking into account the environment and sustainability and making provisions for the protection of the environment through phased development and the provision of adequate services.

11 MITIGATION MEASURES

11.1 INTRODUCTION

Annex 1 (g) of the SEA Directive requires that the Environmental Report describe the measures envisaged to prevent, reduce and/or offset as fully as possible any significant adverse effects on the environment from implementation of the LAP. The key recommendations arising from the SEA and AA Screening are outlined in **Table 11.1** of this section the Environmental Report.

11.2 HOW HAS THE SEA INFLUENCED THE DRAFT LAP

Integration of the SEA and the draft LAP was achieved through involvement of the relevant team members at the key stages of the project, including SEA Scoping, review of the existing environment and generation of policies/ objectives. The SEA, AA and Plan teams participated in meetings, telephone and email discussions in relation to development of alternatives, gathering of baseline environment data and development of policy and text recommendations for inclusion in the draft LAP.

11.3 MITIGATION MEASURES

In advance of the SEA/ AA team receiving the draft policies/ objectives the Newbridge LAP team was provided with a document from the SEA/ AA team which contained a number of relevant environmental policies for reference within the development of the draft policies/ objectives. **Table 11.1** provides a list of the policies that were included in the draft LAP, or alterations to policies which are outlined in **RED**, as a result of this first phase of mitigation. These policies/ objectives mainly relate to specific general environmental concerns that should be included as policy within the draft LAP from the outset. The first column provides the recommended policies/ objectives from the SEA and AA team and the second column outlines if these policies/ objectives are included in the draft LAP.

Table 11.1: Mitigation Measures –Initial Measures Proposed

Policies/ Objectives (Recommended changes in RED)	Changes to draft LAP
HL 10: To facilitate sustainable development in Newbridge in accordance with the settlement strategy set out in Kildare CDP 2011–2017.	Added to draft Plan
EDO 2: To promote and facilitate the development of an enterprise and employment zone on the south side of Military Road on appropriately lands zoned “Q: Enterprise and Employment”. In order to redress the lack of enclosure and undefined building line, lands zoned “Q: Enterprise and Employment” shall be the subject of a detailed design brief in advance of development. The brief shall be agreed with the Planning Department and shall achieve the following: High standard of layout, landscaping and design to create an attractive streetscape. Key emphasis will be placed on creating an attractive, modern and high quality-working and built environment. Investigate the possibility of delivering rear access via the Newbridge Industrial Estate. Development of these lands will be the subject of Appropriate Assessment screening.	Added to draft Plan
PT 6: All Local Authority development will be subject to the policies, objectives and development management requirements of this Plan and the Kildare CDP where appropriate.	Added to draft Plan
WS 5: To ensure that the EU Water Framework Directive is implemented.	Added to draft Plan
WS 6: To ensure that specific relevant objectives and measures for individual water bodies set out in the Eastern River Basin Management Plan and associated Programme of Measures will be implemented, where relevant.	Added to draft Plan
WS 7: To ensure that planning applications have regard to any existing groundwater protection schemes and groundwater source protection zones and/or the likely impacts that the development may have on groundwater.	Added to draft Plan
WS 8: To ensure the implementation of the Groundwater Directive (2006/118/EC) on the	Added to

Policies/ Objectives (Recommended changes in RED)	Changes to draft LAP
protection of groundwater against pollution and deterioration.	draft Plan
WS 9: To require developers to demonstrate that their application meets the requirements of the Water Framework Directive and associated Eastern River Basin Management Plan.	Added to draft Plan
WW 3: To ensure the changeover from septic tanks to mains connections in all cases where this is feasible and that all new developments utilise and connect to the existing wastewater infrastructure. The provision of individual septic tanks and treatment plants in the Newbridge area will be strongly discouraged to minimise the risk of groundwater pollution. Where such facilities are permitted, full compliance with the prevailing regulations and standards, including the EPA's a Code of Practice: Wastewater Treatment and Disposal Systems Serving Single Houses (p.e. ≤ 10), (EPA, 2009), as may be amended , will be required.	Added to draft Plan
WW 5: To develop a wastewater leak detection programme.	Added to draft Plan
WW 6: To implement and promote the Urban Waste Water Treatment Regulations 2001 and 2004, as may be amended.	Added to draft Plan
WW 7: To ensure that the necessary drainage facilities to serve the needs of all development are provided.	Added to draft Plan
SW 4: To require developers to adopt site specific solutions to surface water drainage systems in all cases. In this regard the site specific issues set out in section 7.8.4 Surface Water Drainage and Flood Alleviation, shall be considered where relevant.	Added to draft Plan
SW 5: To require on site surface water attenuation measures if, in the opinion of the council, a development is likely to cause flooding or potentially destructive storm surges in existing water courses.	Added to draft Plan
SW 6: To require proposed surface water drainage plans to have regard to the policy and objectives of the Green Infrastructure section of this draft LAP (Section).	Added to draft Plan
SW 7: To require surface water runoff to pass through an oil/petrol/silt interceptor prior to discharging to groundwater, existing sewers or surface water.	Added to draft Plan
SW 8: To maintain, improve and enhance the environmental and ecological quality of surface waters and groundwaters by implementing the Programme of Measures contained in the Eastern River Basin District (ERBD) River Basin Management Plan 2009–2015.	Added to draft Plan
CL 4: To enforce, where applicable, the provisions of all relevant water, noise and air legislation to reduce the occurrences of water, noise and air pollution in the town.	Added to draft Plan
CL 5: To preserve and maintain air quality in accordance with good practice and relevant legislation. The Council also aims to manage and control traffic flows, to reduce congestion and queuing times at road junctions within the Plan area, thereby improving air quality.	Added to draft Plan
CL 6: To ensure that Newbridge has an adequate solid waste collection system.	Added to draft Plan
CL 7: To adequately maintain recycling facilities and to provide additional facilities if required in easily accessible locations.	Added to draft Plan
CL 8: To require that new shopping centres provide secure bring centres.	Added to draft Plan
NH 6: To protect the Curragh pNHA, including any additions or amendments to this site, from any development that would adversely affect its conservation and amenity value.	Added to draft Plan
NH 7: To ensure that any development proposal within the vicinity of or having an effect on the Curragh pNHA, will provide sufficient detail illustrating how it will limit any possible impact upon the designated site and will include proposals for appropriate amelioration.	Added to draft Plan
NH 8: To require all proposed development within and adjoining the Newbridge LAP boundary within a 15km radius of a Natura site to be screened for Appropriate Assessment of its potential impacts on the Natura 2000 network, in accordance with Article 6 of the Habitats Directive. In all such cases the developer shall consult with the National Parks and Wildlife Service of the DoAHG.	Added to draft Plan
NH 9: To ensure the favourable conservation status of Natura 2000 sites in the vicinity of Newbridge are protected.	Added to draft Plan

Policies/ Objectives (Recommended changes in RED)	Changes to draft LAP
NH 10: To promote the maintenance and, as appropriate, the achievement of favourable conservation status of Natura 2000 sites and their associated habitats and species, in association with the National Parks and Wildlife Service.	Added to draft Plan
NH 11: To promote the protection of Annex I and Annex II – Natural Habitats, Animal and Plant Species respectively of Community Interest whose conservation requires the designation of Special Areas of Conservation and Annex IV – Animal and Plant Species of Community Interest in need of Strict Protection of “Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora” which occur within Kildare and adjoining areas.	Added to draft Plan
NH 12: To ensure the protection of the groundwater resources in and around the Newbridge area and associated habitats and species.	Added to draft Plan
NH 13: To promote opportunities for enhancement of local biodiversity features, where appropriate.	Added to draft Plan
NH 14: To implement measures to control and manage alien/invasive species (e.g. Japanese Knotweed, Giant Hogweed, etc.) and noxious weeds (e.g. Ragwort, thistle, dock, etc.) within the Newbridge area.	Added to draft Plan
NH 15: To maintain a suitable buffer zone between all water bodies and any development. The extent of the riparian buffer zone should be determined in consultation with a qualified ecologist. In all instances however a minimum buffer of 15 metres of vegetation shall be retained along the riverbank to mitigate against pollution risks, reduce flooding potential and maintain habitats. In the event of lighting being proposed along river corridors an Ecological Impact Assessment (and where necessary an Appropriate Assessment) including bat and otter survey shall be conducted by specialists. The recommendations of the specialist studies shall be implemented. No lighting will be installed without prior consultation with NPWS and shall be in line with advances in knowledge into the impact of lighting on bats and other species and also to reflect advances in technology in the lighting industry.	Added to draft Plan
GI 11: To develop links between larger areas of green infrastructure such as the River Liffey, the banks and buffer zones of the railway/motorway, the National Stud, the Curragh and the surrounding countryside.	Added to draft Plan
GI 12: To manage against the spread of invasive species.	Added to draft Plan
GI 13: To ensure replacement planting of semi mature trees where mature trees are removed within developments. Semi mature trees are defined by the BSI as ‘Trees with an overall height in excess of 4 metres and or a stem girth measurement circumference of 20 centimetres or larger.	Added to draft Plan
GI 14: To avoid development within the root protection area of the trees/hedgerows to be retained in a development.	Added to draft Plan
R5: To retain, enhance and develop routes for recreation and tourism use and to increase permeability within and around the town.	Added to draft Plan
R6: To improve existing open space areas in housing developments which have been taken in-charge by the Council.	Added to draft Plan
OS 5: To protect existing open spaces and recreational uses from encroachment by other unsuitable and incompatible uses.	Added to draft Plan
OS 6: To prohibit the loss of existing public and private recreational open space unless alternative recreational facilities are provided at a suitable location.	Added to draft Plan
OS 7: To facilitate the development of community managed gardens/allotments in the town subject to implementation of sustainable environmental practices.	Added to draft Plan

A second detailed assessment of policies/ objectives was then undertaken and the proposed mitigation and any comments expressed to Kildare County Council by the SEA Team are presented in **Table 11.2**. Mitigation measures are proposed in the form of new policies/ objectives and/or amendments to the text of policies/ objectives. The mitigation included in the assessment of policies/ objectives does not refer to the general requirement for assessment of impacts on the environment but instead assumes requirements for environmental assessment in accordance with the normal development management process and EIA Directive as a given. Column one of **Table 11.2** provides information on the policy or objective which is to be mitigated and column two sets out the mitigation measures. Column one also details comments made by the SEA Team to the plan makers and Column two sets out the plan makers (Kildare County Council) response to these comments.

All proposed insertions and proposed amendments are highlighted in **RED** for ease of reference.

Table 11.2: Further Mitigation Measures

Policies/ Objectives and Comments (Recommended changes in RED)	Changes to Policies/ Objectives of draft LAP and Responses
<p>TM 5: To support the sustainable development of new walking, cycling and biodiversity routes and bridges along the River Liffey in accordance with the Newbridge Liffey Valley Park study prepared by the Parks Department, Kildare County Council in September 2011.</p>	<p>Added to draft Plan</p>
<p>TM 8: To prepare a sustainable tourism and retail development strategy for Newbridge. The study will be prepared in consultation with the area committee and will identify appropriate policies and mechanisms which optimise tourism as an important element of the retail strategy for the</p>	<p>Added to draft Plan</p>
<p>SRO 5: To examine the likely future need for a Northern Relief Road to the north of Newbridge, to examine route options for such a road, and to investigate the feasibility of providing same having regard to environmental considerations, including the likely constraints due to the proximity of the Pollardstown Fen and Mouds Bog Special Areas of Conservation.</p>	<p>Added to draft Plan</p>
<p>New Residential Zoning Objective To provide for New Residential Development Comment: Should lands in C15, C12, C13 be zoned for residential uses given that it is located in the floodplain according to the Strategic Flood Risk Assessment. In accordance with the DoE's Flooding Guidelines these should be ruled out now at development plan review stage if they are in certain Flood Zones. Recommend inclusion of mapping identifying lands susceptible to flooding within draft LAP.</p>	<p>Response: The lands are not within areas identified as flooding areas in the Strategic Flood Risk Assessment. Residential lands which were within the zone have been downzoned. The Planning Authority is satisfied that the said lands C15, C12, C13 are acceptable subject to a site specific flood risk assessment, as advised by the Council's Consulting Engineers.</p>
<p>Comment: Could it be explained why the lands to the north of the train station have not been zoned for residential uses instead of open space and amenity. Would it be possible to re-zone lands around train station to residential and rezone lands susceptible to floodplain to open space and amenity?</p>	<p>Response: Such lands are in active use and consist of high quality pitches, astro turf and synthetic areas, providing a valuable amenity resource to the surrounding communities. It is likely that such areas could be rezoned as part of future plans, subject to securing additional sports facilities.</p>
<p>Comment: Recommend inclusion of a policy to phase and monitor new residential development to ensure that development takes place in a sequential manner closest to the town centre and public transport in advance of more peripheral development.</p>	<p>Response: Given that the draft LAP is working to the unit target as set out in the County Core Strategy (not exceeding it), and having regard to policy PLD 1, the imposition of phasing is not required. Furthermore it is not considered appropriate to introduce a sequential test for residential development as:</p>

Policies/ Objectives and Comments (Recommended changes in RED)	Changes to Policies/ Objectives of draft LAP and Responses
	<p>1. It could lead to undue delays in delivering the prescribed unit target if one landowner wishes to built before another;</p> <p>2. It could unduly influence the range of house types that could be delivered which is market dependent; and</p> <p>3. It could lead to legal challenge as is it not prescribed under national guidelines (whereas sequential test for retail is set out in the retail planning guidelines).</p>
<p>Industry and Warehousing Zoning Objective</p> <p>Comment: Should lands in H1 be zoned 'Enterprise and Employment' rather than 'Industry and Warehousing' given the uses proposed under the H1 zoning objective? Otherwise it could result in a lot of industrial and warehousing buildings given the quantum of lands zoned within this area.</p>	<p>Response: The Council is seeking to secure higher order enterprise and employment at the periphery of the town centre rather than on lands to the north east (H1). The zoning matrix allows for a variety of uses under the H zoning. Furthermore the lands to the north east (H1) are subject to a masterplan (EDO 1) which is prescriptive in terms of design and layout.</p>
<p>Comment: Recommend inclusion of text in the Industry and Warehousing zoning objective for phased development of these lands.</p>	<p>Response: Policy EDO 1 prescribes a phasing plan for the said lands.</p>
<p>Comment: As mentioned in the preferred alternative Scenario (Option 1) there is a recurring flood event at the only river crossing point within the town so future consolidation will have to take account of flooding at this location. Has this been considered in the draft LAP?</p>	<p>Response: The LAP has considered this issue. There have been no recorded incident of flooding which has resulted in the closure of the bridge while the remodelling of the bridge prior to the opening of the Whitewater Shopping Centre will ensure uninterrupted flows.</p> <p>An additional crossing is proposed further south through lands zoned C15.</p>
<p>Comment: In the development of the preferred development scenario as part of the alternatives assessment (Section 8 of this report) it was identified that in the proposed southern employment area would lie in proximity to an interchange on the M7 motorway which could result in increased car usage and congestion at this junction. Has this been addressed in the draft LAP?</p>	<p>Response: The lands have been zoned at this location over a number of Plans.</p> <p>Development proposals in this employment area will be subject to a traffic assessment, depending on the use.</p> <p>There are no capacity issues at this junction presently. Therefore the Planning Authority does not envisage that congestion at Junction 12 is an issue.</p>

The Newbridge planners had originally zoned the town centre to a reduced more consolidated form which extended from the River Liffey following Edward Street and finishing at the end of Athgarvan Street. The zoning stretched a small bit north of Edward Street, encompassing Eyre Street and a small portion of Henry Street. However following full Council Meeting on the 28th May 2013 it was decided by the Councillors to retain the original zoning within the 2003 Newbridge LAP. It is considered that this zoning does not reflect the town centre strategy and undermines the LAP strategy for consolidation.

12 MONITORING MEASURES

12.1 INTRODUCTION

Article 10 of the SEA Directive (2001/42/EEC) requires Member States to monitor the significant environmental effects of the implementation of plans *“in order, inter alia, to identify at an early stage unforeseen adverse effects to be able to undertake appropriate remedial action”*. The primary purpose of monitoring is to cross-check significant environmental effects which arise during the implementation stage against those predicted during the plan preparation stage.

The Directive leaves considerable flexibility to Member States in deciding how monitoring shall be arranged; however, it is generally agreed that a mixture of “quantitative and qualitative indicators are required. The Directive recognises that the monitoring does not necessarily require new research activity and that existing sources of information can be used. In addition, monitoring can be used to identify any information gaps and deficiencies that were identified as part of the SEA process. Furthermore, Government Guidelines state that monitoring should concentrate on the likely significant effects identified in the Environmental Report (DoEHLG, 2004).

Monitoring will be based around the Strategic Environmental Objectives, Indicators and Targets. The Strategic Environmental Objectives, Indicators and Targets for the various environmental topics are set out below in **Table 12.1**. The indicators that are used will show changes that would be attributable to the implementation of the LAP. The indicators chosen are at a level, which is relevant to the LAP and are collated on and reported on by a variety of government agencies including the EPA, NPWS and OPW.

Monitoring proposals must concentrate on likely significant environmental effects, as identified in the Environmental Report, and the measures identified as necessary to prevent, reduce, or offset any significant adverse effects. The indicators/monitoring will act as an early warning sign so that appropriate remedial action is undertaken.

Responsibilities and Frequency of Reporting

The statutory Manager’s Report on progress in achieving objectives of the LAP, takes place two years after the adoption of the LAP and “shall include information in relation to the progress on, and the results of monitoring the significant environmental effects of implementation of the Plan”. If an objective or policy is resulting in a significant adverse effect then a variation may be considered during the lifetime of the LAP. It is largely the responsibility of Kildare County Council to undertake the monitoring and to interpret the monitoring data relevant to Newbridge and to deal with unforeseen effect as a result of implementing the Newbridge Local Area Plan.

Table 12.1: Monitoring and Reporting Programme

Objectives	Targets	Indicators	Source/ Responsibility
<p>Objective 1</p> <p>Biodiversity, Flora & Fauna</p> <p>Protect and where appropriate, enhance biodiversity, particularly protected areas and protected species.</p>	No net loss of designated sites, species or habitats especially in relation to Mouds Bog SAC, Pollardstown Fen SAC and the Curragh pNHA.	Reported/ Estimated levels of damage to designated sites/ species/ habitats as identified by GIS and AA. No. of Appropriate Assessments Carried out. Number of planning permissions with biodiversity conditions ensuring no net loss of green linkages / ecological networks. Loss of land actively managed for conservation.	NPWS KCC Planning/ Environment Department
	No net loss of green linkages / ecological networks	Loss of green linkages/ ecological networks identified through GIS and Habitat Mapping	KCC Environment Department/ GIS
	Prevent further spread of alien/ invasive species.	Number of sites reported to contain alien/ invasive species.	NPWS KCC Environment Department
<p>Objective 2</p> <p>Population</p> <p>Improve people's quality of life based on high-quality residential, working and recreational environments and on sustainable transport</p>	No increase in population above core strategy population targets	% change in population based on core strategy targets based on RPG figures.	CSO
	Appropriate mix of tenure types (including social housing) in all new developments.	% of private and social housing in new developments % mix of tenures based on housing strategy requirements.	KCC Planning and Housing Departments
	All significant planning applications for new residential developments within areas designated for expansion to be accompanied by a design statement.	% of significant planning applications granted for new residential developments that are accompanied by a design statement.	KCC Planning Department
	Increase access to public transport from households.	Construction/ improvement of footpaths/ greenways/ cycle infrastructure	KCC Department Roads
<p>Objective 3</p> <p>Water</p> <p>Improve water quality and the management of watercourses to comply with the standards of the Water Framework Directive and incorporate the objectives of the Floods Directive into sustainable planning</p>	Implementation of the Programme of Measures identified under the ERBD River Basin Management Plan.	% increase in waters achieving 'good status' as defined in the WFD.	EPA and KCC Environment Department
	Ensure wastewater collection system capacity is provided either prior to construction of new development or is developed in parallel.	Wastewater collection system capacity compared with wastewater collection demand from development in the LAP.	EPA and KCC Environment Department

Objectives	Targets	Indicators	Source/ Responsibility
and development.			
Objective 4 Soil Protect and, where appropriate, enhance the function and quality of the soil resource in the lands within Newbridge Draft LAP.	Increase in any derelict buildings and brownfield sites being redeveloped	Number of derelict buildings being redeveloped based on commencement notices	Commencement notices
	Increase in remediation of contaminated lands.	Number of remediation cases of contaminated land.	Environment/ Waste Department
Objective 5 Climate Change Contribute to the mitigation of, and adaptation to, climate change.	All new development applications within areas at risk of flooding to submit a flood impact assessment.	Number of new development applications within areas at risk of flooding without flood impact assessment.	KCC Planning Department
	Increase access by households to sustainable forms of transport, including bus and rail services.	Passenger numbers. Funding allocated to improvement of walking and cycling facilities.	KCC Planning and Roads Department
Objective 6 Cultural Heritage Protect and, where appropriate, enhance the character, diversity and special qualities of cultural, architectural and archaeological heritage within Newbridge Draft LAP.	No impact on the fabric or setting of monuments on the Record of Monuments and Places (RMP) by development granted planning permission.	Number of monuments on the RMP, impacted by granted planning permissions.	The Archaeological Survey monitoring programme, Ireland
	No impacts on the architectural heritage value or setting of protected structures by development granted planning permission.	Number of protected structures impacted by development granted planning permission.	Buildings at Risk Register, Heritage Council Ireland. KCC Planning Department
	No protected structures to be demolished because of long term neglect and dereliction.	Number of protected structures that have been demolished because of long term neglect and dereliction.	Buildings at Risk Register, Heritage Council Ireland. KCC Planning Department
Objective 7 Landscape Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in Newbridge Draft LAP.	No negative alteration to protected views.	Number of visual impact assessments received as part of development proposals	KCC Planning Department
	No planning permission granted within special qualities of landscapes that materially contravene the policies or objectives of the LAP.	Number of planning permissions granted which materially contravene the special qualities of landscapes.	KCC Planning Department
Objective 8 Material Assets Make best use of existing infrastructure and promote the sustainable development of new infrastructure.	Maximise development potential within the urban envelope in order to reduce pressure on outlying rural areas.	Increase in population within the urban areas.	CSO Geodirectory
	Minimise the % of unaccounted for water. This refers to leakage from the	% unaccounted for water	EPA

Objectives	Targets	Indicators	Source/ Responsibility
	system.		
	Increase in planning permissions making provision for renewable energy and water conservation measures.	No of planning permissions making provision for renewable energy and water conservation measures.	KCC Planning Department

Appendix A

AA Screening Statement