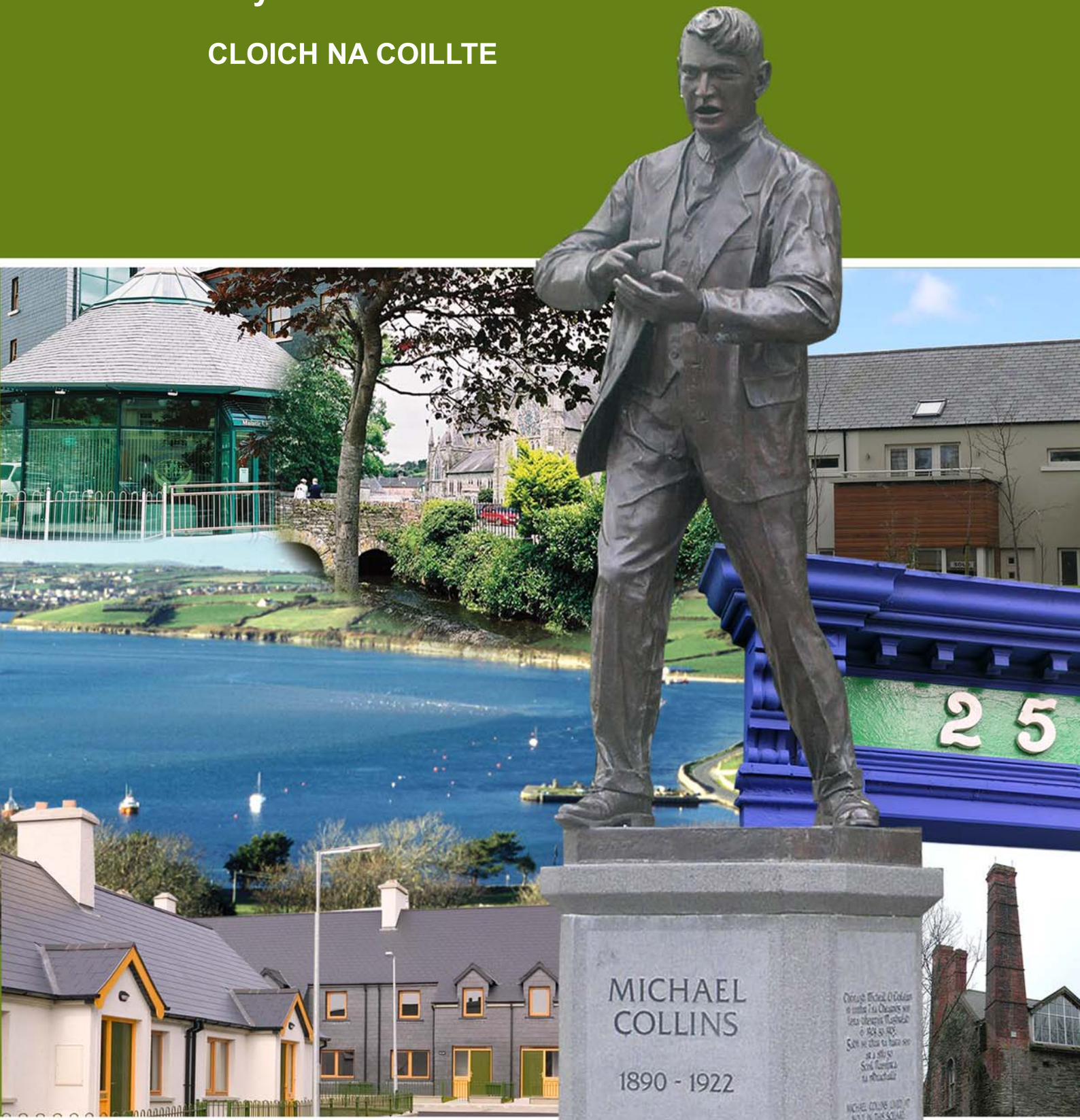




Clonakilty Town Council

Clonakilty Development Plan 2009 - 2015 July 2009

CLOICH NA COILLTE



Volume III - Strategic & Environmental Assessment
& Appropriate Assessment

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1 INTRODUCTION

1.1 BACKGROUND

The Clonakilty Development Plan sets out the overall strategy for the sustainable development of Clonakilty town. The Clonakilty Town Development Plan was adopted on Thursday 25th June 2009.

Clonakilty Town Council prepared its Town Plan under The Planning and Development Act (2000), which requires the Planning Authority to prepare a “Development Plan” every six years for its jurisdiction.

As part of the development plan process, RPS undertook a Strategic Environmental Assessment (SEA), which is intended to identify and assess the issues facing the Clonakilty Town Council area going forward. This Environmental Report forms part of the Strategic Environmental Assessment (SEA) on the draft Clonakilty Town Development Plan. The purpose of this Environmental Report is to identify, describe and evaluate the likely significant effects on the environment of implementing the proposed draft Clonakilty Town Development Plan and should be read in conjunction with the draft Plan.

The SEA process was undertaken in parallel with each stage of the draft Plan making process and involved close consultation and meetings with the SEA Consultation Authorities, members of Cork County and Clonakilty Town Council that were involved in the drafting of the Clonakilty Town Development Plan 2009 - 2015, the SEA team and a number of specialists who focused on the significant environmental issues of the plan as identified during the screening and scoping phases and assessment of baseline information for the area. The Environmental Report has guided the preparation of objectives, policies and development scenarios for the Development Plan with an ultimate goal of achieving sustainable development within the Clonakilty Town Council area.

1.2 STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA)

Strategic Environmental Assessment (SEA) is a process for evaluating, at the earliest appropriate stage, the environmental quality and consequences of Policy, Plan or Programme initiatives by statutory bodies. The purpose is to ensure that the environmental consequences of plans and programmes are assessed both during their preparation and prior to adoption. The SEA process also gives interested parties an opportunity to comment on the environmental impacts of the proposed plan or programme and to be kept informed during the decision making process.

The European Directive (2001/42/EC) on the Assessment of the Effects of Certain Plans and Programmes on the Environment (the SEA Directive), was transposed into national legislation in Ireland by the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435/2004) and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. 436/2004).

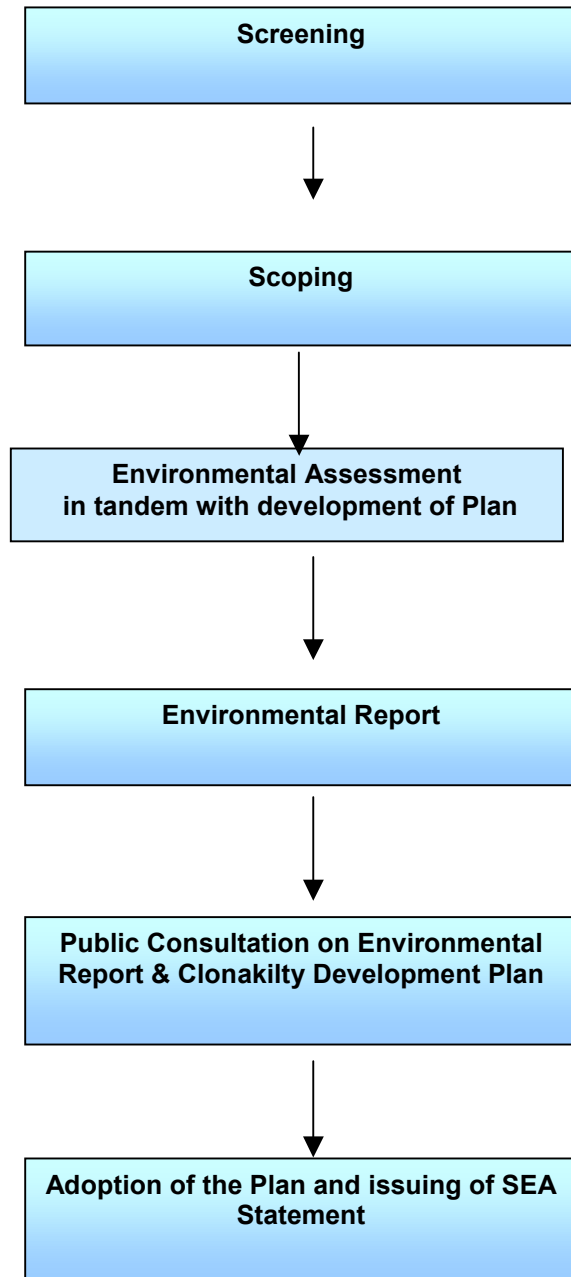
The stages of the SEA can be seen in Figure 1.1 and comprise the following:

- Screening of Plans and Programmes to establish whether the relevant plan or programmes must **Screening of Plans and Programmes** to establish whether the relevant plan or programmes must undergo an SEA;
- **Scoping Report:** This Scoping Report forms part of the statutory scoping process as required by Article 11(1) of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004, S.I. 435 of 2004. The purpose of this report is to present the current understanding of the key environmental issues relating to the Clonakilty Town Development Plan Study Area and to inform the identification and assessment of possible options

at a strategic level. It also aims to generate comments from stakeholders on the scope and the SEA approach adopted for the Clonakilty Town Development Plan

- **An Environmental Report**:- containing the findings of the Assessment on the likely significant effects on the environment of the Plan;
- **Consultation** on the Draft Plan and associated Environmental Report; and
- **An SEA Statement** identifying how environmental considerations and consultations have been integrated into the Final Plan.

Figure 1.1: Stages of the SEA Process



1.3 PREPARATION OF THE ENVIRONMENTAL REPORT AND THE CLONAKILTY DEVELOPMENT PLAN

In accordance with the provisions of Article 13A of The Planning and Development (Strategic Environmental Assessment) Regulations 2004, it was determined that the Clonakilty Development Plan would be required to be Strategic Environmentally Assessed in tandem with the preparation of the Clonakilty Development Plan 2009 - 2015. The proposed plan was screened in terms of the provisions of Article 13A of The Planning and Development (Strategic Environmental Assessment) Regulations 2004. Taking account of the relevant criteria set out in schedule 2A of the Regulations it was considered that Clonakilty Town Council is required to prepare an Environmental Report in respect of the preparation of the Clonakilty Development Plan for the following reasons.

- The plan would set a framework for projects and other activities, with regard to the location, nature, size and operating conditions or by allocating resources to the projects or activities.
- The plan influences non - statutory plans, guidelines and strategies within Clonakilty Town Council area. It also influences the Cork County Development Plan in terms of provision of development within the Clonakilty environs. The Draft Cork County Development Plan 2007 also sets out that consideration will be given to the need for a special Local Area Plan for Clonakilty in the future.
- The plan would be relevant in terms of the integration of environmental considerations in particular with a view to promoting sustainable development,
- It is likely that proposals could create environmental problems to the plan area,
- It was considered that due to the sensitive nature of the area which includes European, national and local sites of environmental and landscape importance it is likely that there could be potential environmental problems relevant to the Clonakilty Development Plan area.
- The Clonakilty Bay to the south east of the town is a candidate Special Area of Conservation (DoEHLG site code 0091) and a Special Protection Area (DoEHLG site code 4081) and therefore European Communities (Natural Habitats) Regulations 1997 which is European Union legislation on the environment would need to be implemented within the plan area.

The Environmental Report provides a Strategic Environmental Assessment (SEA) of the new Draft Town Plan, including its main objectives and policies.

The Planning and Development Act (2000) as amended requires the Planning Authority to prepare a "Development Plan" every six years for its jurisdiction. The previous Clonakilty Development Plan was adopted in 2003. The Statutory preparation of the Plan began in 27th September 2007 (4 years later), whereby a notice of intention to prepare the Clonakilty Town Development Plan 2009 – 2015 was issued. Table 1.3.1 below summarizes the timetable for release of documents.

Table 1.3.1 Timetable of Draft Plan and Strategic Environment Assessment

Date	Development Plan	Strategic Environmental Assessment
27 th September 2007 27 th November 2007	Strategic Issues Paper for Public Consultation	Scoping Report (Statutory consultation)
25 th March 2008	s. 11 Manager's Report on submissions to the Issues Paper	
April/May 2008	Preparation of Draft Clonakilty Development Plan	Preparation of Draft Environmental Report
17 th June 2008	Presentation of Draft Town Development Plan to Members	Presentation of Draft Environmental Report to Members
19 th August 2008 28 th October 2008	Public consultation of Draft Clonakilty Development Plan	Public Consultation of Environmental Report
January 2009	Presentation of Draft s. 12 Mangers Report Members	
April/May 2009	Public consultation of Draft s. 12 Mangers Report	Public Consultation of Amendment Stage Environmental Report
June 2009	Presentation of Draft s. 12(8)a Mangers Report on submissions to Members	
July 2009	Final Adopted Clonakilty Development Plan	SEA Statement

2 SEA METHODOLOGY

The SEA methodology used to carry out the SEA of the proposed Clonakilty Development Plan reflects the requirements of the SEA Directive (2001/42/EC) as transposed into Irish law (S.I. No. 436 2004) and also experience drawn from other SEA's carried out in Ireland and the UK. The following documents, in particular, have also been used as guidance:-

- Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland, Synthesis Report, EPA (2003);
- Draft Scoping Checklist as issued by the EPA in Jan 2008;
- Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment. Guidelines for Regional Authorities and Planning Authorities (DoEHLG, 2004);
- *Draft Strategic Environmental Assessment (SEA) Checklist*. Expected publication date(s) Jan - Mar 2008. Environmental Protection Agency;
- Guidelines on SEA. Department of Communications, Energy and Natural Resources. Available at: <http://www.dcmnr.gov.ie/Marine/Environmental+Assessment/Environmental+Assessment.htm>;
- *A Practical Guide to the Strategic Environmental Assessment Directive*. September 2005. Office of the Deputy Prime Minister;
- *Strategic Environmental Assessment. Services and Standards for Responsible Authorities*. Environment and Heritage Service;
- *Strategic Environmental Assessment Toolkit (Version 1)*. September 2006. Scottish Executive; and
- *Strategic Environmental Assessment and Biodiversity: Guidance for Practitioners*. June 2004. Countryside Council for Wales, English Nature, the Environment Agency and the RSPB.

Under consideration is a proposed preparation of the Clonakilty Development Plan which, if implemented has the potential to impact on the receiving environment. The main steps taken in this SEA process involved screening, scoping, baseline study, consideration of alternatives, environmental assessment of the objectives and policies of the proposed variation and the formulation of mitigation and monitoring measures.

2.1 SCREENING

In accordance with the provisions of Article 13A of The Planning and Development (Strategic Environmental Assessment) Regulations 2004, it was determined that the Clonakilty Development Plan would be required to be Strategically Environmentally Assessed in tandem with the preparation of the Clonakilty Development Plan 2009 - 2015. The proposed plan was screened in terms of the provisions of Article 13A of The Planning and Development (Strategic Environmental Assessment) Regulations 2004. Taking account of the relevant criteria set out in schedule 2A of the Regulations it was considered that Clonakilty Town Council is required to prepare an Environmental Report in respect of the preparation of the Clonakilty Development Plan for the following reasons.

- The plan would set a framework for projects and other activities, with regard to the location, nature, size and operating conditions or by allocating resources to the projects or activities.
- The plan influences non - statutory plans, guidelines and strategies within Clonakilty Town Council area. It also influences the Cork County Development Plan in terms of provision of development within the Clonakilty environs. The Draft Cork County Development Plan 2007 also sets out that consideration will be given to the need for a special Local Area Plan for Clonakilty in the future.
- The plan would be relevant in terms of the integration of environmental considerations in particular with a view to promoting sustainable development,
- It is likely that proposals could create environmental problems to the plan,
- It was considered that due to the sensitive nature of the area which includes European, national and local sites of environmental and landscape importance it is likely that there could be potential environmental problems relevant to the Clonakilty Development Plan.
- The Clonakilty Bay to the south east of the town is a candidate Special Area of Conservation (DoEHLG site code 0091) and a Special Protection Area (DoEHLG site code 4081) and therefore European Communities (Natural Habitats) Regulations 1997 which is European Union legislation on the environment would need to be implemented within the plan area.

Therefore, following a screening exercise, Clonakilty Town Council determined that a strategic environmental assessment would be warranted in this case. This decision is available in the public file in Clonakilty Town Council.

2.2 SCOPING

Once determined that an SEA is required for a given plan or programme, in this case the proposed preparation of the Clonakilty Development Plan, an environmental report must be prepared. The content and scope of this environmental report is determined with input from statutory Consultees. In Ireland, three statutory Consultees have been nominated:-

- The Environmental Protection Agency (EPA);
- The Department of the Environment, Heritage and Local Government (DoEHLG); and
- The Department of Communications, Marine and Natural Resources (DCMNR).

RPS on behalf of Clonakilty Town Council undertook formal scoping of the SEA Environmental Report with the three statutory Consultees between April and May 2008. Responses from all parties consulted were received by RPS in May 2008.

The scoping exercise for this SEA determined some of the potential key environmental impacts and outlined how they should be addressed as part of the Environmental Report (Table 2.1). Each of the relevant issues as set out in table 2.1 have been referred to and where relevant have been identified as significant impacts in section 9 of this report and linked with the relevant mitigation and monitoring measures.

During the Scoping Stage Clonakilty Town Council also issued an Issues Paper in order to stimulate public consultation/opinion on the planning issues that the 2009-2015 Development Plan should address. Public interest at the start of the plan process is important so that the Development Plan reflects public aspirations and concerns as well as government policy, strategies and guidelines.

Table 2.1: Key Environmental Impacts Determined from Screening and Scoping Phases

Environmental Topic	Issues	Mitigation/Recommendations
Biodiversity	Impact on biodiversity.	<p>Appropriate Assessment in parallel with the SEA.</p> <p>A specific objective for a phased and co-ordinated programme of Habitat Mapping of Clonakilty and adjoining area should be included in the Plan in accordance with the habitat mapping currently being pursued by Cork County Council on an electoral area basis.</p> <p>Buffer zones so as to protect features of European, national, regional county and local importance including rivers and streams from development proposals both in terms of visual and ecological impacts.</p> <p>The Town Plan, should include an objectives to ensure development in the Clonakilty area and the provision of services (e.g., roads, wastewater and waste related services etc.) in the Clonakilty area take into account the Management Plan, where, available, for Clonakilty Bay cSAC/SPA.</p> <p>Objective in the Plan to protect wetlands, and associated surface and groundwater systems within the Town Plan area.</p> <p>The plan should have regard to the EU Protected Habitats and Species in Ireland</p>

Environmental Topic	Issues	Mitigation/Recommendations
		<i>and Alien species and Noxious Weeds</i>
Flooding	The town centre is liable to both tidal and surface water flooding.	<p>OPW flood maps should be referenced as part of the SEA baseline.</p> <p>Flood maps should be referred to in planning applications</p> <p>A specific objective should be included to provide for appropriate flood risk assessments to be undertaken, where proposed development(s) and proposed zoning in areas within the floodplain of rivers or adjoining coastal areas is being considered.</p>
Water	<p>Transitional water, rivers and tributaries within Clonakilty Town Council is classified as 'possibly at risk of not achieving good status', in accordance with the Water Framework Directive Characterisation- Risk Categorisation.</p> <p>Areas within the Development Plan with Extreme groundwater vulnerability ratings and areas with Rock near Surface or Karst.</p> <p>Due to excessive levels of Aluminium in treated water, there is a need for the provision of a safe and secure water supply in Clonakilty</p> <p>If additional lands for residential development is being proposed in the Plan for the above listed areas, consideration should be given, to the adequacy of the existing water supply in terms of both quality and quantity and the potential risk to human health.</p>	<p>Policies and Objectives and conditions attached to planning authorisations should ensure that the ongoing development of the Town is undertaken in such a way so as not to compromise the quality of surface water (and associated habitats and species) groundwater within the zone of influence of the Development Plan area.</p> <p>New objective for a Groundwater Protection Plan for groundwater resources in the Clonakilty area in accordance with the Groundwater Protection Scheme for Cork County.</p> <p>The Plan should implement and include, as appropriate, the relevant recommendations set out in <i>The Provision and Quality of Drinking Water in Ireland –A Report for the Years 2006-2007, (Office of Environment Enforcement- EPA, 2007)</i> as included below in Section 4 of the SEA Pack. You are referred to this Report at: http://www.epa.ie/downloads/pubs/water/drinking/</p> <p>Plan should include specific objectives for the Clonakilty Drinking Water Supply See http://www.epa.ie/downloads/data/water/name_24319,en.html.</p> <p>Include specific objective for the preparation of a Water Conservation Strategy for Clonakilty town and surrounding area as</p>

Environmental Topic	Issues	Mitigation/Recommendations
	Waste Water Treatment plant is at capacity.	<p>appropriate.</p> <p>Develop an appropriate solution that will involve abandoning or replacing the source, upgrading the treatment facilities or improving management and operational practices.</p> <p>The plan should include the specific provisions of the Urban Waste Water Discharges in Ireland, A report for the Years 2004 and 2005 http://www.epa.ie/downloads/pubs/water/wastewater/name_13978.en.html</p> <p>Policies/objectives to ensure bathing waters in Clonakilty and adjoining areas, as appropriate, achieve “sufficient or better status by 2015”</p> <p>Include relevant policies and objectives for the provision and promotion of adequate and appropriate Sustainable Urban Drainage Systems (SUDS).</p>
Waste Water Treatment Plant Water Quality	Potential for a decrease in water quality of the Clonakilty Bay from WWTP if capacity is over used.	<p>SEA to address capacity and operating standards of the WWTP.</p> <p>The Plan should include a policy to ensure that all developments currently served by septic tanks should be connected to the WWTP where possible.</p> <p>The Plan should include a policy that all new developments use separate systems for foul and storm water sewage.</p> <p>To ensure separation of foul and surface water effluents through the provision of separate collecting networks and to ensure that all new developments provide separate collecting systems</p>
Population and Health	<p>Population Statistics</p> <p>Employment/unemployment</p> <p>Human Health - The following should be assessed in the town plan; Provision of adequate and appropriate amenity to serve</p>	<p>Review population figures giving new percentages from NSS, CASP and CDP 2003 and Draft CDP2007.</p> <p>Objective to create a new town park,</p> <p>Appropriate policies and objectives with</p>

Environmental Topic	Issues	Mitigation/Recommendations
	<p>both existing community and likely future increases in population; Provision of education and health services; Provision of adequate and appropriate cycleway and footpath networks along with adequate relevant signage; Promotion of the protection of existing natural and cultural heritage resources in the area as a local amenity and an educational resource; Protection of the air quality in the Clonakilty area; Provision of broadband (for work at home); Provision of childcare facilities near work places; Localised campaigns to encourage exercise and healthy living for all ages.</p> <p>Impacts to bathing water</p>	<p>associated commitment and timescales, where necessary, are included in relation to the provision of adequate and appropriate wastewater treatment in for Clonakilty.</p> <p>Include obj/pol in plan to outline that where any bathing water fails the mandatory bathing standards that the public are made ware of this fact by means of information notices posted at the bathing area.</p>
Material Assets	New buildings should consider use of renewable material	<p>Sustainable building practice policy</p> <p>Consideration should be given to the implementation of an integrated approach to waste management for any proposed development(s) within the Town.</p>
Landscape	<p>Protection of scenic amenity of the hills to the north and south of the town</p> <p>Key views, vistas, prospects, sensitive landscapes, river corridors etc all need to be addressed.</p>	Recommend detailed landscape assessments where appropriate.
Cultural Heritage	<p>Zone of Archaeological Importance in Clonakilty town. In addition, there may be undiscovered sub-surface archaeological sites/monuments within the town. It is recommended that these issues be investigated within the Environmental Report.</p> <p>Ensure to distinguish between National Monuments, Recorded Monuments and Places (RMPs) in Clonakilty and Record of Protected Structures (RPS). Refer to www.archaeology.ie</p> <p>The archaeological potential of the coastal and inter-tidal zone, where relevant, should be carefully considered.</p>	<p>Insert Tree Preservation Order Objective in plan</p> <p>Include protective objectives on heritage</p>

Environmental Topic	Issues	Mitigation/Recommendations
	<p>Any potential impacts on archaeological heritage should be subject to full archaeological assessment.</p> <p>Industrial Heritage should be addressed.</p> <p>Promotion of linkages between significant features of archaeological/architectural significance.</p> <p>Protection of important trees in the town.</p>	
Soil	<p>Soil and groundwater contamination and the risks associated with site development work, where Brownfield development is proposed in Clonakilty.</p>	<p>A policy/objective should be included in the Plan to ensure adequate and appropriate investigation of the nature and extent of any soil and groundwater contamination and the risks associated with site development work, where Brownfield development is proposed in Clonakilty.</p>
Transport	<p>Pedestrian facilities, public transport and cycle lanes will need to be addressed in the plan in a balanced and sustainable manner.</p> <p>Traffic, parking and mobility issues will require particular attention, as will consideration of a northern bypass.</p> <p>Considerations should be given in including specific objectives in the Plan in relation to the protection and improvement, as appropriate, of air quality in Clonakilty, particularly in areas zoned for increased urban development and transport related development.</p> <p>Consideration should also be given to the inclusion of specific policies and objectives with respect to climate change.</p>	<p>Consideration should be given to the inclusion of a Target relating to the improvement of the current transport network in the Clonakilty area.</p> <p>Development of traffic management measures to reduce the potential for traffic congestion and associated vehicular emissions should be considered for Clonakilty Town.</p> <p>Improved pedestrian and cycle facilities</p> <p>Good quality public transport</p>
Other	<p>Objectives, Indicators and Targets</p> <p>The Plan should include relevant policies and objectives for the Promotion of energy conservation measures in buildings and Promotion, where appropriate, of the use of renewable energy systems (e.g. solar, wind, geothermal etc.) within the community.</p>	<p>Use similar indicators, and targets as used within the Draft CDP 2007. Provide for consistency in monitoring across the county.</p>

2.3 ENVIRONMENTAL REPORT

The Environmental Report contains an assessment of the likely significant effects (on 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) of implementing the proposed plan.

The content of the Environmental Report is broadly defined in Article 12 (1) of the Regulations.

Chapter Title	Reference to Table 4A of the PG (Planning Guidelines)
Non-Tech summary	Ref. J
Introduction	
SEA Background and Methodology	
Key Objectives of the Plan	Ref. A
Planning and Policy Context	Ref. A and Ref. E
Baseline Environment	Ref. B, C and D
Objectives Targets and Indicators	Ref. C and Red. D
Assessment of Alternatives	Ref. J and H
Assessment of Policies/Objectives	Ref. B
Significant Effects and Mitigation Measures	Ref. D, F, I and G
Monitoring	Ref. I

2.4 CONSULTATION

The draft Clonakilty Town Development Plan and Environmental Report went on public display between 19th August to 28th October 2008 and submissions were invited from the public, from the relevant statutory bodies and the Environmental Authorities.

In order to document the SEA process, since the initial Consultation draft of the Environmental Report, this environmental report has been updated to include the following changes:

- Suggestions and comments received from the environmental authorities.
- Assessment of significant amendments to the draft Development Plan arising from consultation of the draft Clonakilty Town Development Plan.

2.4.1 Consultation Response from Environmental Authorities

Clonakilty Town Council received consultation responses from the Department of the Environment, Heritage and Local Government (DoEHLG) and the Environmental Protection Agency (EPA) in October 2008.

A submission from the DoEHLG's, Development Applications and National Monuments Units was received on the 28th October 2008 suggesting a number of changes to the Draft Plan in relation to architectural heritage and archaeology. No comments were received in relation to the Environmental Report.

A submission from the EPA was received on the 28th October 2008 relating to the possible impacts of the Draft Development Plan on various aspects of the environment and also included comments relating to the Environmental Report which went on public display with the draft Clonakilty town Development Plan. Submission no. 26 of the s.12 Manager's Report for the draft Plan deals with the response to this submission relating to the draft Plan.

In response the EPA submission additional references to the integration of the SEA and the draft Plan were made within this environmental report and further references have been made to how the preferred alternative of the SEA has influenced the development of the plan.

Suggestions were also made in terms of the assessment of environmental effects, mitigation measures and monitoring and as a result a new Table (Table 9.1) linking trends and potential environmental impacts, significant effects, mitigation measures and proposed monitoring is included within section 9 of this environmental report which refers to likely significant effects and the proposed mitigation measures. This table also references how the relevant mitigation measures of significant effects have been incorporated into the plan. Furthermore a new section referring to potential cumulative environmental effects has been included in section 9.2 of this report.

The EPA also suggested inclusion of new environmental objectives, targets and indicators within the environmental report relating to sustainable use of natural resources, water conservation and climate change. However it was considered that adequate consideration and reference had already been made to these environmental objectives within the environmental report.

2.5 AMENDMENT STAGE

In total 30 no. submissions were made to the draft Clonakilty Town Development Plan. Each of the proposed amendments were screened in terms of SEA and it is considered that thirteen of the proposed amendments as set out in the s.12 Manager's Report of the draft Clonakilty Town Development Plan should be assessed in terms of likely impacts on the environment of the area and were deemed to be material amendments in terms of SEA.

Each of the above mentioned proposed material amendments were assessed in the assessment matrix as set out in table 8.2 of this report. As synopsis of this assessment and likely significant effects and proposed mitigation measures resulting from these amendments are set out in table 2.5 below.

Table 2.5 Amendments to draft Clonakilty Town Development Plan		
Submission no.	Proposed Amendment	Environmental Consequences identified from assessment matrix 8.2
Submission 6: Harte Holdings Ltd	New zoning R-16: Primarily residential development of low to medium density, subject site specifics.	Not likely to have significant effects
Submission 7: James O' Hea Land Lamb Street Lower, Youghals (Deasy's Car Park)	'R-07: Medium to High-density residential development' changed to R-07: Town centre uses incorporating social housing, with the option of social housing only on the site.	Not likely to have significant effects
Submission 8: OPW	<p>Para 5.5: Applicants may be required to submit a hydrological survey and assessment information in support of their proposals where they are within a known flood risk area and may be required to make a contribution to flood defences. It shall be an objective to have regard to: "<i>The Planning System and Flood Risk Management: Consultation Draft Guidelines for Planning Authorities, Sept 2008</i>" by the OPW</p> <p>Zoning objective C-04 has been amended from 'Uses related to the government decentralisation process' to 'Offices and employment generating uses, such as government offices.'</p>	Not likely to have significant effects
Submission 11: Reverend Irvin Wilson	It is proposed to amend the zoning objective in respect of C-01 from: " <i>Tourist related uses subject to their being retained under the ownership and control of the hotel</i> " to " <i>Tourist related uses subject to their being retained under the ownership and control of the hotel and that respect the residential and amenity character of the adjoining properties.</i> "	Not likely to have significant effects
Submission 9: Kilty Furniture, Youghals Townland	Northern part of R-06 zoning to be changed from 'Medium residential development taking account of proposed relief road' to I-01: Industry/enterprise subject to such development not having an adverse impact on the amenities of the adjoining residential properties and taking account of proposed relief road.	Not likely to have significant effects

<p>Submission 12: Johnathan Jennings, Scartagh</p>	<p>Lands to the north of Mount Caramel Hospital were zoned R-09 for Medium density single storey residential development or alternatively allow for the expansion and development of community or health related facilities subject to reservation for the proposed Northern Relief road.</p> <p>This amendment proposes to move lands zoned R-09 south of Mount Caramel Hospital were zoned and change the zoning objective as follows – R-09: Medium residential development subject to site specifics</p>	<p>Not likely to have significant effects</p>
<p>Submission 13: Eircom Depot, McCurtain Hill, Clonakilty</p>	<ul style="list-style-type: none"> The subject site was zoned partly for commercial/tourist related development and partly for utilities/infrastructure. Proposed to rezone entire lands to C-09 for Commercial/tourist use subject to site specifics 	<p>Not likely to have significant effects</p>
<p>Submission 14: Adrian Kingstown, Desert Clonakilty</p>	<p>New zoning - R-17: Low density clustered development taking into consideration contour constraints and subject to a satisfactory proposal for the extension of the public sewerage network to facilitate this development.</p>	<p>Not likely to have significant effects</p>
<p>Submission 16: DoEHLG</p>	<p>That all references to “Development Control” be amended to “Development Management.”</p> <p>That the following section of Paragraph 4.6.2 be omitted: <i>“Proposals for development will not be permitted that compromise the setting of protected structure(s) or result in the material alteration or demolition of the structure(s) except where: a. The structure is not capable of repair b. There is no compatible or viable alternative use for the structure.”</i></p>	<p>Non material therefore this change would not change the assessment provided in this Environmental Report.</p>
<p>Submission 24: Flemming Construction, Cloheen</p>	<p>New zoning R-15: Primarily residential development of low to medium density subject to site specifics</p>	<p>Not likely to have significant effects</p>
<p>Submission 28: Department of Education</p>	<p>Have submitted details to be included within the draft Plan referring to schools within the area and have also requested amendments in terms of parking spaces within places of education.</p>	<p>Non material therefore this change would not change the assessment provided in the Environmental Report.</p>
<p>Submission 29: Appropriate Assessment</p>	<p>Will be dealt with in section 2.6 of this plan</p>	<p>Awaiting Consultation Response from NPWS at</p>

Assessment		Amendment Consultation stage.
Submission 30: John and Barbara Nugent, Dunmore Road, Youghals	New development zonings R- 18 and R 19. R-18: Limited Residential Development of a low density nature or individual sites subject to site specifics R-19: Limited Residential Development of a low density nature or individual sites subject to site specifics	Not likely to have significant effects

It should be highlighted that the proposed amendments primarily related to rezoning of lands within the town boundary to cater for the future residential needs of the town. Given the vast projected population growth for the Town to 2020 as set out in the Cork County Development Plan 2009, it is considered that the provision of an additional 17 hectares of residentially zoned lands as proposed as part of the amendments to the draft Plan would be a welcome more sustainable option for the consolidated growth of Clonakilty within the Town boundary. It is therefore considered that the majority of the proposed amendments of the draft Plan would not have a significant environmental impact on the plan area, however further consideration must be given to amendments relating to the appropriate assessment of the draft Plan as set out in section 2.6 below.

In order to document the SEA process, since the initial Consultation draft of the Environmental Report, the environmental report was updated at amendment stage to incorporate suggestions and comments received from the environmental authorities and was also updated to include the assessment of the proposed material amendments of the draft Development Plan arising from the initial consultation process. This went on public display at on Thursday 30th April for a four-week period.

2.6 ADOPTION OF THE PLAN

The Plan was formally 'made' at a meeting on Thursday 25th June 2009. At this meeting the Council accepted all recommendations contained in the s.12 (8) report and agreed to adopt the draft development plan as amended, including the recommended changes as set out in the Appropriate Assessment of the draft Plan. No material changes were made to the Plan at this stage and therefore no additional amendments were assessed in terms of SEA at this stage.

3 THE CLONAKILTY DEVELOPMENT PLAN 2009-2015 OVERALL OBJECTIVES

The Clonakilty Development Plan 2009 outlines the Councils policies for the development of Clonakilty Town to 2015.

The plan has been prepared and developed against a backdrop of consultations by means of public meeting, individual meetings, and written submissions. The plan, as the main public statement of the town council, provides a vision for the town to evolve, giving statutory context for guiding development in the interests of the proper planning and sustainable development of the town.

The strategy underlying the Plan specifically aims to address the following matters:

1. The objective of encouraging the rejuvenation of the towns economy with particular emphasis on the attraction of sunrise type industries to the town.
2. The objective of rejuvenating and extending the retail and service function of the town.
3. The objective of conserving and developing the unique and extraordinary potential of the towns bay area and extensive shoreline
4. The objective of developing the town's tourist potential.
5. The importance of pedestrian facilities, public transport and cycle lanes will need to be addressed in the plan in a balanced and sustainable manner.
6. Traffic, parking and mobility issues will require particular attention.
7. The unique heritage of the town needs to be protected and leveraged in a balanced manner for the benefit of all stakeholders in the town.
8. Clonakilty's unique architectural heritage is noted and a detailed inventory in respect of same is included. These heritage items are an asset to the town and it is an objective to continue to develop a heritage strategy that will enable the preservation of these structures for their intrinsic conservation value, their potential for enhancing the towns urban quality and their economic value enhancing role with respect to the tourist industry.
9. The objective of providing sufficient zoned and serviced lands for residential, recreational and amenity purposes along with a mix of residential densities, including low densities, will require attention.
10. Objective of liaising with the County Council with a view to encouraging balanced and sustainable development between the Town Council area and the Town environs in the county area.

4 RELATED PLANS

The SEA Directive requires that the SEA process should include the review of other Plans/Programmes, which are related to the Plan/Programme being assessed i.e. the Clonakilty Development Plan. Any identified actions from this study will need to comply with relevant international and national legislation such as the Water Framework Directive (WFD) and the Habitats and Bird's Directives that stringently protect Special Areas of Conservation (SACs) and Special Protected Areas (SPAs) within the catchment. The requirements will be expressed in the environmental objectives.

Tables 4.1 to 4.3 below provide an overview of the relevant legislation, plans, policies that apply to the various environmental topics to be addressed in this Environmental Report.

Table 4.1: Overview of International Legislation, Plans, Policies and Programmes

Topic	Title	Summary of Objectives
Biodiversity	UN Convention on Biological Diversity (1992)	Objectives include the maintenance and enhancement of Biodiversity.
	The Ramsar Convention on Wetlands of International Importance (1971 and amendments)	Objectives include protection and conservation of wetlands, particularly those of importance to waterfowl as Waterfowl Habitat.
Climate	UN Kyoto Protocol The United Nations Framework Convention on Climate Change (UNFCCC) Kyoto Protocol 1997	Objectives seek to alleviate the impacts of climate change and reduce global emissions of GHGs.
Environment	Agenda 21	Local Agenda 21 is a process, which facilitates sustainable development at community level. It is an approach based on participation, which respects social, cultural, economic and environmental needs of the present and future citizens of a community in all its diversity and how the community relates to the future of the regional, national and international community of which it is part.
	The 6 th EU Environmental Action Programme 1998.	The Environment Action Programme takes a broad look at the challenges of environmental policy and provides a strategic framework for the Commission's environmental policy up to 2012. It identified four environmental areas for priority actions: <ul style="list-style-type: none"> • Climate Change • Nature and Biodiversity • Environment and Health and Quality of Life • Natural Resources and Waste
	The MARPOL Convention International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78).	Objectives include for the protection of the marine environment.

Topic	Title	Summary of Objectives
	The OSPAR Convention The Convention for the Protection of the Marine Environment of the North-East Atlantic (22 September 1992).	Objectives include the protection of the marine environment.
	COMAH (Seveso II) Directive- European Communities (Control of Major Accident Hazards involving dangerous Substances) Regulations 2000	Requirements for the storage of relatively large quantities of substances classified as dangerous.
Human Health / Air	World Health Organisation (WHO) Air Quality Guidelines (1999) and Guidelines for Europe (1987)	Objectives seek the elimination or minimisation of certain airborne pollutants for the protection of human health.

Table 4.2 Overview of EU Legislation, Plans, Policies and Programmes

Topic	Title	Summary of Objectives
Air	The Air Framework Directive Directive on Air Quality Assessment and Management (Framework Directive) (1996/62/EC)	Objectives include the prevention and/or reduction of airborne pollutants for the protection of human health and environment.
	Directive on National Emission Ceilings for Certain Atmospheric Pollutants (2001/81/EC)	Objectives seek to limit the national emissions of certain airborne pollutants for the protection of human health and the environment.
Biodiversity	The EU Biodiversity Strategy Communication on a European Community Biodiversity Strategy	Objectives seek to prevent and eliminate the causes of biodiversity loss and maintain and enhance current levels of biodiversity.
	The EU Habitats Directive (92/43/EEC)	Objectives seek to prevent and eliminate the causes of habitat loss and maintain and enhance current levels of biodiversity.
	The EU Birds Directive (as modified) (EC/79/409)	Objectives seek to prevent and eliminate the causes of bird species loss and maintain and enhance current levels of biodiversity.
	The EU Shellfish Directive (79/923/EEC)	Objectives seek to maintain those coastal and brackish waters, which need protection or improvement, in order to allow shellfish to develop and to contribute to the high quality of shellfish products intended for human consumption.
	The EU Freshwater Fish Directive (78/659/EEC)	Objectives seek to protect those fresh water bodies identified by Member States as waters suitable for sustaining fish populations. For those waters it sets physical and chemical water quality objectives for salmonid waters and cyprinid waters
Climate	Second European Climate Change Programme (ECCP II) 2005.	Objectives seek to develop the necessary elements of a strategy to implement the Kyoto protocol.

Topic	Title	Summary of Objectives
Human Health	The EU Environment and Health Strategy 2004-2010 (first period)	Objectives seek to prevent and reduce the impacts of pollution on human health.
	The EU REACH Initiative Registration, Evaluation and Authorisation of Chemicals (REACH)	Objectives seek to limit the harmful effects to the environment and human health from certain chemicals through improved analysis and data collection.
	Laying down the Health Conditions for the production and placement on the market of live bivalve molluscs (91/492/EEC)	Objectives seek to ensure a suitable environment for shellfish growth and protect consumers of shellfish. It classifies shellfish harvesting areas according to the quality of shellfish populations. The classification determines the conditions under which shellfish harvested from those waters can be offered for sale.
Sustainable Development	The Gothenburg Strategy (2001) Communication from the Commission on “a Sustainable Europe for a Better World”	Objectives seek to make the future development of the EU more sustainable.
	The Sixth Environmental Action Programme (EAP) of the European Community 2002- 2012	Objectives seek to make the future development of the EU more sustainable.
	The SEA Directive (2001/42/EC)	Under the SEA Directive, the RBDMP requires an SEA.
Water	The Water Framework Directive EU Water Framework Directive (2000/60/EC)	Objectives seek to maintain and enhance the quality of all surface waters in the EU. The RBMPs are a requirement of this directive.
	The Groundwater Directive (1980/68/EC)	Objectives seek to maintain and enhance the quality of all groundwater in the EU.
	EU Floods Directive (2007/60/EC)	The Floods Directive applies to river basins and coastal areas at risk of flooding. With trends such as climate change and increased domestic and economic development in flood risk zones, this poses a threat of flooding in coastal and river basin areas.
	Bathing Water Directive 2006/7/EC	The overall objective of the revised Directive remains the protection of public health whilst bathing, but it also offers an opportunity to improve management practices at bathing waters and to standardise the information provided to bathers across Europe.
	Nitrates Directive 91/676/EEC	This Directive has the objective of reducing water pollution caused or induced by nitrates from agricultural sources and preventing further such pollution.
	Urban Wastewater Treatment Directive 91/271/EEC. Amended under Directive 98/15/EEC	The primary aim 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.
	Natura 2000 sites designated under Directive 92/43/EC and 79/409/EEC	The purpose is to enable Habitats Directive Annex I habitats or Annex II species to be maintained, or restored to a favourable conservation status over their natural range. Also, to conserve habitats for bird species under the Birds Directive Annex I.
	Groundwater Directive (2006/118/EC)	This new directive establishes a regime which sets underground water quality standards and introduces measures to prevent or limit inputs of pollutants into groundwater.

Topic	Title	Summary of Objectives
	Drinking Water Directive (DWD) Council Directive 98/83/EC	The primary objective is to protect the health of the consumers in the European Union and to make sure the water is wholesome and clean.
Cultural Heritage	The European Convention on Protection of the Archaeological Heritage (The Valletta Convention of 1992)	Requires that appropriate consideration is given to archaeological issues at all stages of the planning and development process.
Landscape	European Landscape Convention 2000	Requires a commitment from Ireland to introduce policies to effect landscape protection and management.

Table 4.3: Overview of Irish Legislation, Plans, Policies and Programmes

Topic	Title	Summary of Objectives
Air	Air Quality Standards Regulations 2002 (S.I. No. 271 of 2002)	Objectives include the reduction of certain airborne pollutants for the protection of human health and the environment.
	Ozone in Ambient Air Regulations 2004 (S.I. No. 53 of 2004).	Objectives include the reduction of certain airborne pollutants for the protection of human health and the environment.
	The Environmental Protection Agency Act 1992 (Ambient Air Quality Assessment and Management) Regulations 1999	Objectives include the reduction of certain airborne pollutants for the protection of human health and the environment.
Biodiversity	The National Biodiversity Plan (2002)	Objectives include the enhancement and conservation of biodiversity.
	The Wildlife Act 1976. The Wildlife (Amendment) act 2000	The Wildlife Act, 1976 and the Wildlife Amendment Act, 2000 are the principal statutory provisions providing for the protection of Wildlife (both Flora and Fauna) and the control of activities which may impact adversely on the conservation of Wildlife.
	National Heritage Plan 2002-2007	The purpose of the National Heritage Plan is to set out a clear and coherent strategy and framework for the protection and enhancement of Irish heritage over the five year period.
	European Communities (Natural Habitats) Regulations, SI 94/1997, as amended SI 233/1998 and SI 378/2005	These Regulations give effect to Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) and the Minister to designate special areas of conservation (endangered species and habitats of endangered species) as a contribution to an EU Community network to be known as NATURA 2000.
	Flora Protection Order 1999	Objectives include it being illegal to alter, damage or interfere in any way with their habitats. This protection applies wherever the plants are found and is not confined to sites designated for nature conservation.
	Quality of Shellfish Waters Regulations 1994 (SI 200/1994) and amendments	Give effect to Council Directive 79/923/EEC of 30 October 1979 on the quality required of shellfish waters and prescribe quality standards for shellfish waters and designate the waters to which they apply, together with sampling and analysis procedures to be used to determine compliance with the standards.

Topic	Title	Summary of Objectives
	Quality of Salmonid Waters Regulations 1988 (SI 293 of 1988)	Prescribe quality standards for salmonid waters and designate the waters to which they apply, together with the sampling programmes and the methods of analysis and inspection to be used by local authorities to determine compliance with the standards. Also, give effect to Council Directive No. 78/659/EEC on the quality of fresh waters needing protection or improvement in order to support fish life
Climate	National Climate Change Strategy (2000) and National Climate Change Strategy 2007-2012	Objectives include the reduction of national GHG emissions (including those from the water sector)
Human Health	Quality of Bathing Waters Regulations 1988 (SI 84 of 1988) and amendments	Prescribe bathing water quality standards and the bathing areas to which they apply, together with the sampling programmes and the methods of analysis and inspection to be used by local authorities to determine compliance with the standards. Give effect to Council Directive No. 76/160/EEC concerning the quality of bathing water.
Energy	Green Paper on Sustainable Energy (1999) Wind Energy Development Guidelines 2006	Objectives include the increased utilisation and development of renewable energies to meet EU targets
	Delivering a Sustainable Energy Future for Ireland The Energy Policy Framework 2007-2020 (White Paper)	This White Paper sets out the Government's Energy Policy Framework 2007-2020 to deliver a sustainable energy future for Ireland. It is set firmly in the global and European context which has put energy security and climate change among the most urgent international challenges. The White Paper sets out the actions to be taken in response to the energy challenges facing Ireland. The objective is to deliver a sustainable energy future, starting now, with a time horizon of 2020 but also looking beyond that.
Planning	National Spatial Strategy 2002-2020 (2002)	Objectives of the NSS are to achieve a better balance of social, economic and physical development across Ireland, supported by more effective planning.
	National Development Plan from 2007 to 2013	Objectives of the NDP are to promote more balanced spatial and economic development.
	Planning and Development Act 2000	Revised and consolidated the law relating to planning and development by repealing and re-enacting with amendments the Local Government (Planning and Development) Acts, 1963 to 1999; to provide, in the interests of the common good, for proper planning and sustainable development including the provision of housing; to provide for the licensing of events and control of funfairs; to amend the Environmental Protection Agency Act 1992, the Roads Act 1993, the Waste Management Act 1996, and certain other enactments.

Topic	Title	Summary of Objectives
	National Anti Poverty Strategy (NAPS)	The National Anti-Poverty Strategy (NAPS) is the government strategic initiative to place the needs of the poor and the socially excluded at the top of the national policy agenda. The NAPS recognises the unacceptable scale of poverty and its impact on those directly affected and on the wider society and it particularly notes the distinct spatial aspects of poverty in urban and rural areas. The strategy emphasis the importance of a cross-departmental policy response in dealing with the problem.
	Retail Planning Guidelines 2005	The Retail Planning Guidelines provide a comprehensive framework to guide local authorities in preparing development plans, assessing applications for planning permission, and guiding retailers and developers in formulating development proposals. Retail functions reflect four broad tiers of urban development. Cavan Town is defined in the third tier of towns. Third tier centres are described as providing urban anchors for a rural economy which is undergoing rapid change
	Residential Density Guidelines for Planning Authorities	These Guidelines are aimed at addressing the high levels of suburban housing development at low densities on Green field sites over the last few decades. This has led to an increase in the demand for travel, greater traffic congestion and high infrastructure costs. The Guidelines recognise that higher densities should not be achieved at an unacceptable amenity cost to the surrounding dwellings and the residents of the proposed development. A high quality of design and layout and a good quality living environment, including the availability of adequate shopping, social, transport and leisure infrastructure, are essential if increased residential densities are to be acceptable.
Sustainable Development	Sustainable Development: A Strategy for Ireland (1997) (DoEHLG)	Objectives are to ensure that future development in Ireland occurs in a sustainable manner.
	European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004)	The EU SEA Directive was transposed into Irish Law under S.I. 435 in 2004.

Topic	Title	Summary of Objectives
	Sustainable Rural Housing Guidelines 2005	<p>These guidelines set out in detail how the Government's policies on rural housing are to be implemented by Planning Authorities in making their development plans and in the operation of the development control system to ensure a vibrant future for all rural areas. In supporting housing development patterns in rural areas that are sustainable, policies and practices of planning authorities should seek to:</p> <ul style="list-style-type: none"> • Ensure that the needs of rural communities are identified in the development plan process and that policies are put in place to ensure that the type and scale of residential and other development in rural areas, at appropriate locations, necessary to sustain rural communities is accommodated. • Manage pressure for overspill development from urban areas in the rural areas closest to the main cities and towns such as the gateways, hubs, and other large towns. <p>A strong theme in the Sustainable Rural Housing Guidelines is the need to strengthen villages and towns. Planning authorities need to ensure that cities, towns and villages offer attractive and affordable housing options to meet the housing needs of urban communities and persons wishing to live in urban areas.</p>
	Making Ireland's Development Sustainable	<p>This document focuses on the link between economic activity and pressures on the environment. Sustainable development emerged as an idea in the late 1980s and led to the Earth Summit in Rio de Janeiro in 1992. At the Summit, world leaders agreed to implement an action programme for sustainable development called, Agenda 21. The Irish Government published <i>Sustainable Development: A Strategy for Ireland</i> in 1997, which applies Agenda 21 in Irish circumstances. <i>Making Ireland's Development Sustainable</i> reviews the progress made in terms of sustainable development in Ireland since Rio, assesses the challenge we now face and sets out policies and actions to meet that challenge.</p>
Transport	Transport 21	<p>Transport 21 is a strategy that will see €34.4 billion invested over the next 10 years in Irish transport. Connecting communities and promoting prosperity is the core aim of this strategy. The programme seeks to meet the transport needs of the country's citizens and also underpin our competitiveness into the future. A comprehensive and efficient transport network is essential if we are to continue to improve our living standards while remaining competitive in the global market place. Transport 21 recognises that quality integrated transport is critical for competitiveness, return on investment and regional development.</p>
Environment	The Environmental Protection Agency Act 1992	<p>Objectives include the better protection of the environment and the control of pollution through improved licensing and monitoring.</p>
	The Protection of the Environment Act 2003	<p>Objectives include for better protection of the environment and the control of pollution through improved licensing and monitoring.</p>

Topic	Title	Summary of Objectives
Water	Drinking Water Regulations SI 439 of 2000	Prescribe quality standards to be applied in relation to certain supplies of drinking water, including requirements as to sampling frequency, methods of analysis, the provision of information to consumers and related matters. Give effect to provisions of EU Council Directive 98/83/EC on the quality of water intended for human consumption.
	Local Government (Water Pollution) Act, 1977 (Water Quality Standards for Phosphorus) Regulations 1998 (SI 258 of 1998)	Provide for specified improvements in water quality conditions in rivers and lakes based on phosphorus concentrations or related water quality classifications and give effect to certain requirements arising under Council Directive 76/46/EC on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community.
	Water Quality in Ireland 2001-2003	This document assesses the quality of Ireland's aquatic ecosystems concentrating on ambient water quality indicators.
	Water Quality in Ireland 2005: Key indicators of the Aquatic Environment	The quality of rivers, lakes, estuaries, coastal waters, ground waters and canals is discussed in this report.
	Towards setting guideline values for the protection of groundwater in Ireland (2003)	Proposals for setting environmental quality objectives and standards for groundwater through use of guideline values.
	Groundwater Monitoring Programme	The information on which a national groundwater quality programme is based.
	European Communities (Water Policy) Regulations (SI 722 of 2003)	Provide for the transposition into Irish national law of the provisions of the EU Water Framework Directive.
	European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2005 (S.I. No. 378 of 2006)	Provide statutory support for good agricultural practice to protect waters against pollution from agricultural sources. Give further effect to several EU Directives including Directives in relation to protection of waters against pollution from agricultural sources ("the Nitrates Directive"), dangerous substances in water, waste management, protection of groundwater, public participation in policy development and water policy (the Water Framework Directive).
	Arterial Drainage Act, 1945	Makes provision for the drainage and improvement of land by the execution of works of arterial drainage, to provide for the maintenance of those works and make further and better provision for the maintenance of existing drainage works, and to provide for matters incidental to or connected with the matters aforesaid or relating generally to the drainage of land.
	OPW Guidelines on Flood Risk 2005	The OPW provide guidance on Planning Policy in relation to flooding. The policy which the Planning Authority should adopt is "Development should not itself be subject to an appropriate risk of flooding nor should it cause or exacerbate such a risk at other locations". This provides for run-off areas and the provision of appropriate drains. There should be set-back zones from the edge of watercourses. Minimum design standards should be applied, flood impact assessments to be required in certain developments and certification from a competent person that a development will not contribute to flooding within the relevant catchment.

Topic	Title	Summary of Objectives
Material Assets	Dumping at Sea Act, 1996	Make provision to control dumping at sea, to give effect to the convention for the protection of the marine environment of the north-east Atlantic at Paris on the 22nd day of September, 1992.
	Quarries and Ancillary Activities Guidelines 2004	Aggregates are a significant natural resource. The extractive industries make an important contribution to economic development in Ireland. However, the operation of quarries can give rise to land use and environmental issues which should be mitigated and controlled through the planning system. These Guidelines seek to identify those issues and to suggest best practice in dealing with them. It is important that Planning Authorities recognise that quarries (including sand-and-gravel pits) vary greatly in size, with varying environmental impacts, and that the planning response to proposed developments should be tailored accordingly.
	EPA Wastewater Treatment Manual 2000	The Waste Water Treatment Manual for single houses details the basic mechanism of the waste water treatment system, various types of systems, suitable site characteristics and treatment options. This document will be referred to by the Planning Authority, though may be replaced by updated versions.
	Irish National Forest Standard 2000	In 1996, the Irish Government published Growing for the Future: A Strategic Plan for the Development of the Forestry Sector in Ireland. The aim of this strategy is to develop forestry to a scale and in a manner which maximises its contribution to national economic and social well-being on a sustainable basis and which is compatible with the protection of the environment. In Growing for the Future, a commitment was made to promote quality in all aspects of Irish forestry and to provide the instruments to achieve this. The Irish National Forest Standard is the result of a consultative process initiated in 1999. Working parties were set up to consider environmental, economic, social and legal aspects of forestry and sustainable forest management. The groups were charged with developing indicators for Sustainable Forest Management.
Waste	The Waste Management Act 1996 and amendments	Objectives include (amongst others) the more effective and environmentally sensitive management of wastes in Ireland.
	European Communities (Port Reception Facilities for Ship Generated Waste and Cargo Residues) Regulations 2003 (SI 117 of 2003)	Objective is to reduce the discharges of ship-generated waste and cargo residues into the sea, especially illegal discharges, from ships using ports in the Community, by improving the availability and use of port reception facilities for ship-generated waste and cargo residues, thereby enhancing the protection of the marine environment.
Cultural Heritage	National Heritage Plan 2002	Core objective is to protect our heritage. In this regard the "polluter pays" principle and the precautionary principles are operable.
	Framework and Principles for the protection of the archaeological heritage	Sets out archaeological policies and principles that should be applied by all bodies when undertaking or authorising development.
	Architectural Heritage Protection, Guidelines for Planning Authorities, 2004	Outlines policies for protection of Architectural Conservation Areas.

Topic	Title	Summary of Objectives
	National Inventory of Architectural Heritage (NIAH)	

4.1.1 EU Environmental Plans and Other Guidance

EU Habitats Directive (92/43/EEC): The provisions of the Directive requires Member States to introduce a range of measures including the protection of species listed in the Annexes; and to undertake surveillance of habitats and species and produce a report every six years on the implementation of the Directive. The habitats listed in Annex 1 of the Directive and the species listed in Annex II, are to be protected by means of a network of sites and are afforded protection as Special Areas of Conservation (SACs). Special Areas of Conservation and Special Protection Areas (SPAs) classified under the EC Birds Directive, form a network of protected areas known as Natura 2000.

The EU Water Framework Directive (2000/60/EC) came into force in December 2000 and was written into Irish Law in 2003. The Directive clarifies, collects and updates previous pieces of water legislation and provides for water management on the basis of River Basin Districts. The Water Framework Directive (WFD) sets a framework for comprehensive management of water resources in the European Community, within a common approach and with common objectives, principles and basic measures. The WFD addresses inland surface waters, estuarine and coastal waters and groundwater. The fundamental objective of the WFD aims at maintaining “high status” of waters where it exists, preventing any deterioration in the existing status of waters and achieving at least “good status” in relation to all waters by 2015.

The main objectives of the WFD are to protect and enhance the status of all our waters, encourage sustainable water use, provide for sufficient supply of good quality surface water and groundwater, reduce or phase out discharges of dangerous substances to water, protect territorial and marine waters and to establish and maintain a register of “protected areas”.

EU Birds Directive (79/409/EEC) 1979 seeks to protect, manage and regulate all bird species naturally living in the wild within the European territory of the Member States, including the eggs of these birds, their nests and their habitats and to regulate the exploitation of these species. Special Protection Areas (SPAs) for the protection of birds were established following the Birds Directive.

EU Urban Waste-Water Treatment Directive (91/271/EEC) 1991 seeks to protect the environment from the adverse effects of urban waste water discharges and discharges from certain industrial sectors and concerns the collection, treatment and discharge of domestic waste-water, the mixture of waste-water, the mixture of waste-water and waste-water from certain industrial sectors.

EU Floods Directive was adopted on the 18th January 2006 when the European Commission proposed a directive on the assessment and management of floods. Its aim is to reduce and manage the risks that floods pose to human health, the environment, infrastructure and property.

The **Groundwater Directive 80/68/EEC** requires Member States to apply a system of investigation and authorisation to waste disposal and other activities in order to ensure that groundwater is not polluted by dangerous substances.

The **Surface Water Directive 75/440/EEC** aims to protect public health by ensuring that surface water abstracted for use as drinking water reaches certain standards before it is supplied to the public. The directive lays down nonbinding “guide” values and binding “imperative” values and requires Member States to monitor the quality of surface waters from which drinking water is abstracted and to take measures to ensure that it complies with the minimum quality standards. The Directive has been integrated into the proposed Water Framework Directive.

The **Environmental Impact Assessment Directive 85/337/EEC** (amended as Directive 97/11/EC), requires Member States to carry out environmental impact assessments (EIA) on certain public or private projects, before they are authorised, where it is believed that the projects are likely to have a significant impact on the environment. The EIA procedure is an integral part of the planning process and the public can provide input and express environmental concerns with regard to the project. The results of this consultation must be taken into account during the authorisation process.

The aim of the **European Convention on Protection of the Archaeological Heritage 1992** is to “protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study”. The Convention provides the basic framework for policy on the protection of the archaeological heritage in Ireland. The obligations on the State under the Convention have been summarised by the Department of Arts, Heritage, Gaeltacht and the Islands and included the following:

- Providing for statutory protection measures, including the maintenance of an inventory of the archaeological heritage and the designation of protected monuments and areas;
- The authorisation and supervision of excavations and other archaeological activities;
- Providing measures for the physical protection of the archaeological heritage including acquisition or protection by other means;
- Providing for consultation between archaeologists and planners in relation to the drawing up of development plans and development schemes so as to ensure that full consideration is given to archaeological requirements.
- Facilitating the study of archaeological discoveries by making and bringing up to date surveys, inventories and maps of archaeological sites and taking practical measures to ensure the drafting, following archaeological operations, of a publishable scientific record before the publication of comprehensive studies;
- Educating the public in relation to the value of the archaeological heritage and the threats to it, promoting public access to important elements of this heritage, and encouraging public display of selected archaeological objects.

In particular the Clonakilty Development Plan is informed by the following plans at National and Regional Level.

4.1.2 National Plans

National Development Plan 2007-2013

The 2000 National Development Plan was prepared to underpin the development of a dynamic competitive economy to 2006. The subsequent NDP published this year will guide the development of the country in the period 2007-2013. The Plan sets out a strong framework for the promotion of regional development with a particular focus on investment in the National Spatial Strategy (NSS) Gateway centres. Strong urban centres are directly related to regional growth and development, affecting employment, incomes and quality of life throughout the regions.

The Plan has four basic objectives: to continue sustainable national economic and employment growth, to strengthen and improve Ireland's international competitiveness, to foster balanced regional development and to promote social inclusion. It is identified that the challenge for Cork is to accelerate growth and development.

The NDP is the largest and most ambitious investment plan ever drawn up for Ireland, where over €52 billion was invested between 2002-2006 and a predicted € 184 billion of Public, Private and EU funds will be invested between 2007 and 2013 in economic and social infrastructure, enterprise, science, agriculture sectors, education, training and environmental services.

The 2007 National Development Plan includes a number of strategic investment objectives for the southwest region including major road improvement schemes, waste management, enterprise, social infrastructure programmes etc.

The National Spatial Strategy, 2002-2020

The National Spatial Strategy (NSS) is a twenty year planning framework which sets out a national context for spatial planning which informs regional planning guidelines, as well as county and city development plans and strategies. It aims to achieve more balanced regional development.

It is a planning framework designed to deliver a more balanced social, economic and physical development between the regions. The successful aspects of the growth of the Greater Dublin Area over recent years need to be emulated in other areas to deliver a more even distribution of successful economic development. The growing strengths of Cork, Limerick/Shannon, Galway, and Waterford suggest that a coordinated development of these cities has the potential to offer a counterweight to the pull of the Dublin Region.

According to the *NSS*, the best prospects for establishing critical mass of the type and scale capable of competing with that of the Greater Dublin Area are dependent on point to developing Cork, Galway, Limerick/Shannon and Waterford as an increasingly inter-connected and developed network of co-operating and complementary cities. Models for activating such polycentric development approaches are evolving in other European countries.

The strategic roles which cities, towns, villages, communities and rural areas will have in delivering a more spatially balanced Ireland can be summarised as follows:

- Consolidation- the Greater Dublin Area;
- Strengthening the South, South East, West and North West to complement Dublin;
- Revitalisation the West and South West;
- Reinforcing central parts of Ireland and the South East; and

- Co-operating in an all-island context.

The strategy notes that the process of revitalisation in parts of the South and West coastal areas is supported by the successful development of a number of relatively small towns such as Clonakilty. Associated with these towns is a growing tourism sector, a lively and attractive small town environment and spin-off employment creation in other enterprises and local services. It outlines that, to protect the economic vitality of such towns into the future, to their own benefit and that of the wider areas around them, it will be essential to sensitively balance future development options against the need to maintain those attributes that made these towns attractive in the first place. Achieving this balance will be particularly important in the case of residential development, including second homes, retail development and the treatment of their environs, setting and approaches.

National Climate Change Strategy 2007-2012

The National Climate Change Strategy 2007-2012 follows on from the first national strategy, published in 2000 and reviewed in 2002, and takes account of the public consultation process which followed the further review in Ireland's Pathway to Kyoto Compliance (2006). The purpose of this Strategy is to show clearly the measures by which Ireland will meet its 2008-2012 commitments; and to show how these measures position us for the post-2012 period, and to identify the areas in which further measures are being researched and developed to enable us meet our eventual 2020 commitment. Through innovation, energy efficiency and more sustainability in our personal choices, we can achieve the necessary lowering of the carbon intensity of our economy without sacrificing competitiveness, economic performance or quality of life

National Biodiversity Plan 2002

The National Biodiversity Plan 2002 comprises a set of 91 Actions to halt the current and continuing loss of plant species, as well as the vegetation and habitats they compose by the year 2010. The Plan pays special attention to the need for the integration of the conservation and sustainable use of biological diversity into all relevant sectors. The full and effective integration of biodiversity concerns into the development and implementation of other policies, legislation, and programmes is of crucial importance. The overall objective of the Plan is to secure the conservation, including where possible the enhancement, and sustainable use of biological diversity in Ireland and to contribute to conservation and sustainable use of biodiversity globally. The objectives of the National Biodiversity Plan include to;

- Conserve habitat diversity, including all sites of special biodiversity importance;
- Conserve species diversity;
- Conserve genetic diversity, both wild and domesticated;
- Contribute to the conservation and sustainable use of biodiversity; and
- Advancing other obligations of the European Community Biodiversity Strategy in the EU, regionally and internationally.

Sustainable Development – A Strategy for Ireland 1997

Sustainable Development – A Strategy for Ireland, published in 1997, stresses the Government's commitment to sustainable forms of transport and the need to strengthen and improve such forms in the interests of the promotion of sustainable development. An emphasis is given to the need to produce an efficient, cost effective and customer focused development of the rail network. The Strategy reflects Ireland's commitment to the principles and agenda for sustainable development

agreed at the Earth Summit in Rio de Janeiro in 1992 and also responds to the EU Fifth Action Programme for the Environment.

The general aim of the Strategy 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”*.

To achieve the aims of the Strategy, the Government has adopted the following principles, the implementation of these being specific objectives of this Plan:

- The Precautionary Principle which aims to deal with causes rather than results of environmental pollution; and
- Integration: illustrates the importance of integration at all levels of society – government, sectoral and policy levels, to enable environmental concerns to be addressed in an effective and comprehensive manner.
- The Polluter Pays Principle, which allocates the costs of pollution to producers and consumers rather than to society at large.

The Strategy recognises that the primary responsibility for the proper management of hazardous waste lies with the holder or generator of the waste. Other international policies/legislation that should be adhered to include:

- European Union (EU) Habitats Directive (92/43/EEC) 1992;
- EU Water Framework Directive (2000/60/EC);
- European Landscape;
- Birds Directive;
- Air Framework Directive;
- Waste Framework Directive; and
- Phosphorous Regulations.

National Heritage Plan 2002

The National Heritage Plan 2002 sets out a clear and coherent strategy and framework for the protection and enhancement of our heritage over the next five years. The concept of “placing heritage at the heart of public life” is intended to be all-embracing and to encompass the actions of individuals, communities, the private sector, non-governmental organisations, and regional and local bodies – all or which have a critical role to play in the protection and promotion of our heritage. The priorities for the National Heritage Plan include the following key actions:

- Local Heritage Plans, supported by enhanced levels of heritage expertise within Local Authorities;
- Increased levels of assistance for the protection of the archaeological and architectural heritage;
- Implementation of the National Biodiversity Plan and addressing the conservation of habitats, species, genetic diversity and the natural heritage;
- Initiation of a heritage inventory programme and establishment of a central heritage archive and library;
- Establishment of new structures in Dúchas, the Heritage Service of the Department of Arts, Heritage, Gaeltacht and the Islands, to provide a more efficient, integrated and regionalised service;
- Provision of total additional financial allocations of €123.16 m (£97 m) on a phased basis over the life of the Plan; and
- The deployment of a total of 102 additional staff to enhance existing heritage programmes and to operate the new structures proposed in the Plan.

The Energy White Paper – Delivering a Sustainable Future for Ireland

The White Paper entitled “Delivering a Sustainable Future for Ireland” is an action based strategy for achieving specific energy targets for Ireland in a timeframe between 2007 and 2020. The White Paper sets out strategic goals for the security of energy supply, sustainability and competitiveness. The main provisions of the White Paper are:

- Sustainable transport action plan due late 2007 will consider 100% plant oil in captive fleets in Local Authorities;
- Public sector will lead the way in bio-energy heating, electricity, CHP and biofuels;
- Electricity demand site management will be addressed this year and there are plans to install smart metering for all new and existing housing stock.
- Review part L (Conservation of fuel and energy) of building regulations in 2008 to reduce energy demand by 40% relative to current standards, look for funding mechanisms for smart metering, set target of 33% energy saving across public sector, introduce energy efficiency programmes (targets and standards) for LA's, publish green public procurement action plan, update existing social housing design guidelines; and
- Allocate significant amounts of resources towards remedial works Scheme and LA major refurbishment works.

Transport 21

In 2005 the Government launched Transport 21, a capital investment framework through which the transport system in Ireland will be developed, over the period 2006 to 2015. This framework includes for the development of the N15/N17/N18/N20/N25 Atlantic Corridor from Letterkenny to Waterford via Sligo, Tuam, Ennis, Limerick, Mallow and Cork. The road for the Atlantic Corridor is to be dual carriageway or 2+1. The current NRA policy is that 2+1 should only be used in retrofit situations therefore the cross section for new build sections of the Atlantic Corridor will be dual carriageway.

The scheme objectives are set out in Transport 21 as part of the strategy for National Roads as follows:

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

- *increase accessibility;*
- *ensure sustainability;*
- *expand capacity;*
- *increase use; and*
- *enhance quality.*

Towards Sustainable Local Communities: Guidelines on Local Agenda 21, 2001

Local Agenda 21 was the result of the first UN Conference on the Environment and Development (Earth Summit) in Rio de Janeiro in 1992, where Ireland was amongst 150 nations, which endorsed Agenda 21, a major blueprint for how the world's nations can work individually and collectively towards sustainable development by the 21st century. Local Agenda 21 and the EU's Fifth

Environment Action Programme underlined the fact that traditional policies must be replaced by an integrated approach to environment and development issues, if growth is to be achieved in parallel with, rather than at the expense of, environmental quality.

Local Agenda 21 is intended to translate sustainable development principles and objectives into practical action at the local level. Some of the major aims of Agenda 21 include:

- Reducing the amount of energy and raw materials society consumes, as well as the pollution and waste it produces;
- Protecting fragile ecosystems and environments; and
- Bringing about a fairer distribution of wealth, both between countries and between different social groups within countries.

Local Agenda 21 also encourages consultative processes which involve the whole community, its elected members and other community and representative groups through means of information awareness, public consultation and feedback, partnerships between authorities, businesses and communities, and a continuing monitoring of progress towards sustainability. The principles of Agenda 21 are being met through the process of SEA.

EU Sixth Environment Action Programme, 2002-2012

The EU Sixth Environment Action Programme sets out objectives in the shape of Europe's future environment at the start of the 21st century. It provides a framework for adopting and implementing sustainable development policies in Europe. This vision "Environment 2010: Our Future, Our Choice" seeks the following aims:

- To decouple the generation of waste from economic growth by establishing more sustainable consumption patterns;
- For waste generated, these should represent very low risks to the environment and our health;
- We should maximise recycling and bring "final disposal to an absolute minimum"; and
- Waste should be treated as close as possible to where it is generated ("proximity principle").

Seven 'Thematic Strategies' were introduced as a way to tackle seven key environmental issues, which require a holistic approach because of: their complexity, the diversity of actors concerned and the need to find multiple and innovative solutions. The Seven Thematic Strategies are:

- Clean Air For Europe (CAFE);
- Soil protection;
- Sustainable use of pesticides;

- Protect and conserve the marine environment;
- Waste prevention and recycling;
- Sustainable use of natural resources; and
- Urban environment.

Retail Planning Guidelines for Planning Authorities, 2005

Published in January 2005 the *Retail Planning Guidelines for Planning Authorities* provide a comprehensive framework to guide local authorities in preparing development plans and assessing applications for planning permission as well as retailers and developers in formulating development proposals.

These guidelines are a revision of the 2001 guidelines insofar as with relation to retail warehousing. It was recognised that there is evidence of consumer demand in Ireland for large-scale retail warehousing units which are capable of displaying a very wide range of goods within one store. Accordingly, the Minister has determined that the 6,000sqm floorspace cap on individual retail warehouses will not apply in those areas which are subject to Integrated Area Plans under the Urban Renewal Act, 1998 in National Spatial Strategy, Gateways of Athlone/Tullamore/Mullingar, Cork, Dublin, Dundalk, Galway, Letterkenny, Limerick/Shannon, Sligo and Waterford and within the functional areas of the four Dublin local authorities.

Residential Density Guidelines for Planning Authorities, 1999

These Guidelines promote increased residential densities in order to ensure the most efficient use of zoned and serviced housing land, provide a more varied range of dwelling types and sizes, optimise the use of existing services, facilities and infrastructure, encourage more sustainable commuting patterns and facilitate improved public transport. It is considered that the settlement strategy proposed in the variation reflects those in the Guidelines.

Guidelines for Planning Authorities: Architectural Heritage Protection, 2004

The Planning and Development Act 2000, required additional development objectives relating to the protection of structures which are deemed to be of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest and to preserve the character of architectural conservation areas.

In this context, these Guidelines aim to assist local authorities/town councils in the adoption of suitable policies for protecting architectural heritage in their development plans and to ensure they have practical effect through development control measures. The guidelines aim to assist planning authorities in their role to protect the architectural heritage of their area. The Clonakilty Development Plan is considered to be consistent with these Guidelines.

4.1.3 Regional Plans

Regional Planning Guidelines for the Southwest Region, 2004

The Regional Planning Guidelines for the Southwest provide a broad canvas, which aims to steer the growth and prosperity of the region and its people, up to 2020. The Guidelines contain statements and analysis of key economic objectives, together with a set of planning guidelines to be incorporated in the statutory development plans of the local authorities in the region and are seen as an important link between NSS and the draft of local county and city development plans.

Clonakilty is designated as a key service town within the *Regional Planning Guidelines*. Key service towns are outlined as towns with a population, generally between 1,500 and 5,000 that can perform an important role in driving the development of a particular spatial component of the overall region and that are being targeted for growth. This can be achieved individually or in conjunction with linked towns.

South Western River Basin District (SWRBD)

The South Western River Basin District (SWRBD) “A Future for Our Waters” and “Water Matters” outlines the requirements of the EU Water Framework Directive, and detail the main issues of investigation to date. These include wastewater and industrial discharges, landfills, quarries, mines and contaminated lands, agriculture, wastewater from unsewered properties, forestry, usage and discharge of dangerous substances, physical modifications, abstractions and local issues. The booklet “Water Matters” also outlines the next steps in the process of preparing a River Basin Management Plan, which is due to be adopted in 2009. The document “A Future for Our Waters” indicates the findings of Risk Assessments that have been carried out on water bodies within the SWRBD.

4.1.4 Local Plans

Cork County Waste Management Plan 2004-2009

The Waste Management Plan was formulated by Cork County Council to address the on-going challenge of waste management in County Cork. The Plan addresses all areas of waste management – from waste prevention and minimisation, to its collection, treatment, recovery and final disposal. The Plan is guided by international, EU and Irish legislation and policy on waste management.

The Waste Management Plan for County Cork envisages a single, central regional landfill to accept residual waste. National recycling targets for household wastes will be met by provision of a high number of civic amenity and bring sites, combined with a central integrated materials recovery and composting facility to segregate and recover recyclable and biodegradable household wastes. Thermal treatment will be retained as an option, should waste growth necessitate its introduction at a later date.

The previous Waste Management Plan (1999 to 2004) confirmed the decision to proceed on the basis of Scenario 2 of the Waste Management Strategy, which resulted in a number of actions being taken by the Council including:

- Bottlehill identified as the most suitable site for a landfill.

- Application to the Environmental Protection Agency for a waste management licence and to An Bord Pleanála for approval. The EPA issued a proposed decision to grant a licence and a decision is currently awaited. An Bord Pleanála granted approval in February 2004.
- Progress on the acquisition of sites for the provision of materials recovery and residual landfill facilities.
- Entering into tender negotiations for the provision of a materials recovery facility by public private partnership.
- Progress in the provision of civic amenity sites and transfer stations.

Having regard to the above, the Council proposes to continue to implement scenario 2 for the management of municipal waste in the county until 2009.

Cork Strategy Retail Study 2002

The Cork Strategic Retail Study superseded the Cork County Retail Strategy (1997). A joint retail strategy was derived from the CSRS and incorporated into the City and County Development Plans. The CSRS 2002 recommends that in terms of the Rural West Cork Area, Clonakilty has the main role in this area and has potential as a tourist town. Also outlining that there is potential for additional comparison and service floorspace in the town centre.

Draft Cork Strategic Retail Study 2008

The draft Cork Strategic Retail Study (CSRS) outlines that Clonakilty is the largest town in rural West Cork. The town centre supports 4,440m² of comparison goods floorspace and 3,695m² of convenience goods floorspace. The Supervalu has been extended and Dunnes stores have opened a store out-of-centre. There is planning permission for some 2,100 sqm (net) of small unit development. The town has a high quality public realm and town centre improvements – including paving and underground cabling – are ongoing. There is also funding for a relief road. In addition to providing for the needs of the local population the retailing in Clonakilty also performs a significant tourism function resulting in a relatively high number of service outlets in the town centre. There is potential to increase tourism in the town.

According to Table 6.3 Retail Hierarchy, Clonakilty is to expand to become the main retail centre in West Cork (p.45). In terms of the retail hierarchy, County Towns Section 6.53 of the strategy outlines that 'Clonakilty and Skibereen are towns that need expanded retail capacity to overcome potential isolation from higher order markets and a tendency to leakage to competitive centres outside the County. Bantry and Kanturk are small urban centres serving a large rural hinterland that require the provision of adequate retail facilities. There is potential for expansion of retail facilities in both towns. Bantry specialises in marine related industry and services and tourism functions, with an attractive setting and town centre. There is potential for small scale redevelopment opportunities in the attractive town centre, subject to land assembly.' (p.48)

Cork County Heritage Plan 2005 - 2010

The Cork County Heritage Plan aims to secure benefits for local heritage and to increase awareness, appreciation and enjoyment of this heritage for all of the people in County Cork. It aims to develop and encourage best practice in relation to the management and care of heritage in County Cork and to deliver practical actions to achieve this, as well as to gather and disseminate information about heritage in the County.

Joint Housing Strategy

Cork County Council, in conjunction with Cork Corporation and the nine Urban District Councils in the county produced a Joint Housing Strategy to address the housing needs of the existing and future population of Cork to 2011. The policies and objectives of the strategy are enshrined in the Cork County Development Plan 2003 (as amended).

Cork County Development Plan 2003

The Cork County Development Plan 2003 (as varied) took its guidance from the 20-year strategy provided in CASP and the N&WCSP (for the remainder of the County outside the CASP area). Clonakilty Town boundary is located entirely within the administrative boundary of Clonakilty Town Council and is governed by the policies and objectives of the Clonakilty Development Plan. However the lands surrounding Clonakilty Town Council are governed by the Cork County Development Plan 2003 (as varied), this plan was adopted in January 2003 and provides the framework for development and planning in the County for the next six years. The Plan has a vision for the County that is based on four strategic goals, as follows:

- Enhanced quality of life for all - based on high-quality residential, working and recreational environments, and sustainable transportation patterns;
- Sustainable patterns of growth in urban and rural areas that are well balanced throughout the County, together with efficient provision of social and physical infrastructure;
- Sustainable and balanced economic investment, together with wise management of the County's environmental and cultural assets;
- Responsible guardianship of the County, so that it can be handed on to future generations in a healthy state.

Clonakilty is recognised as a County Town within the Cork County Development Plan 2003 with a strategic aim of 'promotion as a key technology based employment location; consolidation of its important tourism and leisure functions and maintenance of its high quality residential amenities and facilities'. The town is also recognised by the LAP for its important employment, service and social function and growth/development centre for an extensive rural hinterland. According to the CDP 2003 the sewerage system plant, which was constructed in 1988, is presently overloaded and requires upgrading.

Draft Cork County Development Plan 2007

The draft Cork County Development was published in December 2007 by the Planning Policy Unit of Cork County Council and was on consultation until February 2008. Amendments to the Draft plan are due to be published in August 2008 and the draft plan is due to be adopted in January 2009.

Planning policy in the draft County Development Plan 2007 advocates the concentration of development in locations where it is possible to integrate employment, community services, retailing and public transport in conjunction with population growth. One of the Key Planning and Sustainable Development Goals of the plan is for 'Clonakilty to act as a focal point for new growth in West Cork with investment in the transport corridor linking the town to the Cork 'Gateway';(p.19)

Section 2.3.36. of the Plan outlines that in relation to the west strategic planning area, Clonakilty will be designated as an Integrated Employment Centre as follows;

'To support the area's economic and population growth, and to establish a balance within the County, Clonakilty is designated in this plan as an Integrated Employment Centre to act as a focus for economic and population growth. In addition, and in support of this measure, priority will be

given to the provision of enhanced transportation infrastructure in the N71 corridor to improve the quality of this critical economic link to the Cork area.’ (p.31)

The draft Cork County Development Plan 2007 proposes to almost double the population in the town from 4,154 people in 2006 to 8,718 people by 2020 (p.32). Further to this the policy and objectives of the plan for the West Strategic Planning Area are based on the following planning and sustainable development goals:

- a) *To recognise the importance of the role to be played by Clonakilty as a ‘West Cork Strategic Employment Centre’; to promote its development as a major centre of employment and population where there is a high standard access to educational and cultural facilities;*
- b) *To recognise the importance of the Strategic Transport Improvement Corridor to the development of Clonakilty, the overall economic potential of the West Strategic Planning Area and the facilitation of a balanced economic strategy for the County as a whole;*

The plan also notes that a major upgrade of the wastewater treatment for the area is needed in the area.

North and West Cork Strategic Plan 2002 to 2020

The North and West Cork Strategic Plan outlines that in terms of expanding the Productive Potential of the Economy of North and West Cork it is proposed that Clonakilty should be designated as a centre for technology industries. The plan notes that a nucleus has been formed there already. The objective should be to capitalise on the initiatives that have been taken there and reinforce them by ensuring that there is adequate broadband telecommunications infrastructure and that other improvements to physical infrastructure, such as improved access are commenced.

In terms of achieving sustainable settlement patterns the towns of Bandon, Bantry, Castletownbere, Clonakilty, Dunmanway, and Skibbereen are characterised as an urban development node of the South and South-west. The plan notes that this group of towns could be, capable of (or with the potential in the future of) carrying an important range of services and employment so as to sustain their immediate population and the rural-based population in their hinterlands. A focused and co-ordinated approach to the development and enhancement of these towns will be required. It is recommended that a target to double the household numbers of each of the above towns by 2020, on average, in a planned, incremental fashion, should be considered.

Skibbereen Electoral Area Local Area Plan 2005

The Skibbereen Electoral Area Local Area Plan governs the environs of Clonakilty. In this Local Area Plan, Clonakilty is identified as a Main Settlement within the Skibbereen Electoral Area, while retaining its status as a county town in the overall strategy of the Cork County Development Plan 2003 (as varied), as detailed in Chapter 2, Volume 1 of that Plan. It outlines that the strategic aims for Clonakilty are to encourage its promotion as a key technology based employment location, consolidate its important tourism and leisure functions and maintain its high quality residential amenities and facilities.

Within this plan lands outside the town boundary to the southwest and northeast of the town are zoned for residential development, while 3.2 acres of land is zoned for light industry to the south west of the town. The plan also includes policy objective U – 01 for the realignment of the current

relief Road to the west of the town, to run from the southern Mills junction westwards to meet the N71.

5 EXISTING ENVIRONMENT

5.1 INTRODUCTION

This section of the report describes the current state of the environment in the Clonakilty Development Plan area as an entire site. Sections 5.2 to 5.10 below describe the baseline conditions for each topic. As set out in the SEA guidelines (e.g. Population, Material Assets etc) are fully addressed in accordance with the SEA Guidelines. Figure 5.1a presents the boundary of the study area subject to this SEA.

In accordance with the SEA guidelines no primary research was carried out in the collection of data. Existing and available information sources were used. These include the following:-

- Central Statistics Office;
- National Parks and Wildlife Service data base;
- Planning and Policy documents;
- Geological Survey of Ireland;
- South Western Regional Fisheries Board
- The Environmental Protection Agency; and
- Ordnance Survey of Ireland.

Baseline data was collected relating to the indicators described in the SEA directive: biodiversity, fauna, flora, population, human health, soil, water, air, climatic factors, material assets, cultural heritage, landscape and the interrelationship between these factors.

5.2 BIODIVERSITY, FLORA AND FAUNA

5.2.1 Existing Policies

It is considered that the objectives of the Draft Clonakilty Development Plan 2009-2015 are poor with regard to the protection of the natural environment (biodiversity, flora and fauna). The current objectives concentrate on the protection of views, architectural and built heritage than on the protection of habitats, flora and fauna. Therefore it is recommended that a number of additional policies should be included in the draft plan in the interest of sustainability of Clonakilty Town.

5.2.2 Baseline

“Biological diversity” refers to the variety of living things. In the same way as a rich diversity of cultures enhances the quality of our lives, so does a rich diversity of plants and animals. Biological diversity is known to be important to the proper functioning of the planet’s life support system. Conservation of biological diversity has, therefore, become one of the key aims of governments throughout the world.

The study area is made up of Buildings and Artificial Surfaces, Amenity Grassland, Improved Agricultural Grassland and Cultivated Land. Hedgerows and tree lines offer potential biological corridor between habitats. The Fealge River which flows through Clonakilty town and the riparian woodland strip running along the banks of the river are habitats of ecological importance within the study area.

Clonakilty Bay proposed Natural Heritage Area (pNHA), candidate Special Area of Conservation (cSAC) and Special Protection Area (SPA) lies partially within the boundary of Clonakilty town. This designated area consists of an expanse of intertidal mud, silt and sand that stretches from Clonakilty to the open sea, and comprises two small estuaries separated by Inchdoney Island. The site is of conservation importance because it contains a diversity of coastal habitats. These habitats show a succession from salt to freshwater influences and include six habitats, which are listed on Annex I of the EU Habitats Directive, under which cSACs are designated. It is also of importance for the bird life it supports, particularly non-breeding waders and wildfowl during the autumn and winter. SPAs are designated under the EU Birds Directive (NPWS, 2008).

5.2.2.1 Flora of Clonakilty

Clonakilty town lies within Ordnance survey National Grid 10km square W34. Both the NPWS Rare Plants Database and Preston *et. al.* (2002) have recorded protected flora species from this 10km square.

The NPWS Rare Plants Database includes one record of one plant species protected under the Flora (Protection) Order (1999). Penny Royal (*Mentha pulgium*) was recorded at Clonakilty Harbour on the 23rd of October 2002. Pennyroyal, a perennial mint of damp sandy places, has been recorded from over 50 sites in the island of Ireland. The majority of these sites are concentrated in the south west of Ireland, mainly in Cos, Kerry and Cork (*Curtis and McGough, 1988*).

A plant species list for 10km square W34 was generated from the CD-Rom version of the *New Atlas of British and Irish Flora* (Preston *et. al.*, 2002). This list was then compared to the lists of species protected under the Flora (Protection) Order of 1999; and those included in the Irish Red

Data Book (Curtis and McGough, 1988). Table 5.2.A shows rare and protected plant species found within 10km squares W34.

Table 5.2.1: Rare or Protected Plant Species recorded by Preston *et. al.* (2002)from 10km squares W34.

Species	Status within 10km square W34	Notes
Ivy Broomrape	Pre 1970	IUCN = not threatened. IRDB TN = 5 (Rare).
Pennyroyal	1987-1999	IUCN = Vulnerable IRDB TN = 9 (Vulnerable) RI Protected Species Flora Protection Order Species

Ivy Broomrape, which grows parasitically, was recorded in the 10km square W34 pre-1970. Curtis and McCough (1988) describe Ivy Broomrape as occurring occasionally in the southern half of Ireland, becoming scarcer northwards. It is a legally protected Scheduled Species in Northern Ireland.

5.2.2.2 Fauna of Clonakilty

Most of Ireland's native terrestrial mammal species have been recorded within the study area. Amongst them are the otter, Irish hare, Irish stoat, red squirrel, pygmy shrew, hedgehog, badger and a number of bat species including the lesser horseshoe bat, which is listed on Annex II of the EU Habitats Directive, and whiskered bat. A full list of protected fauna species recorded by the NPWS and Hayden and Harrington (2000) is included in Appendix 5.2.1.

Clonakilty Bay supports nationally important populations of eight bird species: Shelduck, Grey Plover, Lapwing, Dunlin, Curlew, Black-tailed Godwit, Redshank and Greenshank. The site is most noted for its population of Black-tailed Godwit, which is of international importance and comprises over 10% of the national total. Amongst the other species which occur, there are notable populations of Golden Plover and Bar-tailed Godwit, both of which are listed on Annex I of the EU Birds Directive (NPWS, 2008).

Table 5.2.1 shows bird species of conservation concern recorded by Gibbons *et. al.* (1993) as breeding within OS 10km grid square W34, within which the site is located. Species considered here to be of high conservation concern are those listed either on the 'Red List' by Lynas *et. al.* (2007), as being of high conservation concern in Ireland; those listed in the Irish Red Data Book (RDB) (Whilde, 1993) or those listed under Appendix 1 of the EU 'Birds Directive'.

Table 5.2.2 Selected bird species (those of high conservation concern) recorded from 10km National Grid Squares W34 during the ‘New Atlas Survey’ 1988-91 (Gibbons *et. al.*, 1993).

Species	Breeding status within 10km square W34	Notes
Kingfisher	Confirmed breeding	Annex I Birds Directive Amber List Birdwatch Ireland
Yellowhammer	Confirmed breeding	Birdwatch Ireland (1999) ‘red list’.

Kingfisher requires relatively shallow and slow moving freshwater, with thriving populations of small fish on which to feed, and vertical banks of fairly soft material where they can excavate their nesting burrows (Gibbons *et. al.*, 1993). There is potential for Kingfisher to occur on the river Fealge.

Yellowhammer is a “red list” species (Lynas *et. al.*, 2007). The Yellowhammer is heavily dependant for food on cereals and other large grass seeds (Gibbons *et. al.*, 1993). Agricultural land use within the study area is predominantly Arable Crops (BC1), and hence it is likely that this species breeds within the town plan boundary.

It is possible that common frog and / or smooth newt may utilise wet areas such as drains, ponds, etc within the study area. There is no record of Viviparous Lizard from 10km square W34 (Marnell, 2002).

Sites of International Importance

Candidate Special Areas of Conservation (cSACs): are protected under the European Union (EU) ‘Habitats Directive’ (92/43/EEC), as implemented in Ireland by the European Communities (Natural Habitats) Regulations, 1997. There are three cSACs situated within 10km of the study area, namely *Clonakilty Bay* (Site Code: 000091); *Courtmacsherry Estuary* (Site Code: 001230); and *Kilkeran Lake and Castlerefke Dunes* (Site Code: 001061). *Clonakilty Bay* cSAC (Site Code 000091) is located partially within Clonakilty town boundary. See Table 5.2.C for the key features of these designated sites.

Special Protection Areas (SPAs): were initially designated under Directive 79/409/EEC, The Directive on the Conservation of Wild Birds (‘The Birds Directive’), and are now protected as Natura 2000 Sites under the EU ‘Habitats Directive’. There are three SPAs within 10km of the study area, namely *Seven Heads* (Site Code: 004191); *Clonakilty Bay* (Site Code: 004081); and *Gilley Head to Duneen Point* (Site Code: 004190). *Clonakilty Bay* SPA (Site Code 004081) is located partly Clonakilty town boundary. See Table 5.2.3 for the key features of these designated sites.

Sites of National Importance

Sites of national importance in the Republic of Ireland are termed, proposed Natural Heritage Areas (pNHAs). While the Wildlife (Amendment) Act (2000) has been passed into law, pNHAs will not have legal backing until consultative process with landowners has been completed; this process is currently underway. There are eight pNHAs within 10km of the study area *Clonakilty Bay* pNHA (Site Code: 000091), *Kilkeran Lake and Castlerefke Dunes* pNHA (Site Code: 001061), *Courtmacsherry Estuary* pNHA (Site Code: 001230), *Bateman’s Lough* pNHA (Site Code: 001037), *Seven Heads and Dunworly Bay* pNHA (Site Code: 001077), *Dirk Bay* pNHA (Site Code: 001498), *Roscarbery Estuary* pNHA (Site Code: 001075) and *Gallanes Lough* pNHA (Site Code: 001052). The *Clonakilty Bay* pNHA (Site Code: 000091) is situated partially within Clonakilty town boundary.

Table 5.2.3 gives details of the key ecological features of these sites, and also gives their distances and directions from the site of the proposed development.

Table 5.2.3: Designated sites within 10km of Clonakilty and the key ecological features of the sites

Name	Site Code	Key Features	Distance (and direction) from the Clonakilty
Clonakilty Bay SPA	004081	Clonakilty Bay, is a wetland complex that stretches from the town of Clonakilty to the open sea. The site includes a well-developed sand dune system, with embryonic dunes, marram dunes, fixed dunes and decalcified dune heath all represented. The dune types, as well as the intertidal sand and mud flats, are habitats that are listed on Annex I of the E.U. Habitats Directive. Clonakilty Bay SPA is of high ornithological importance, particularly for its internationally important population of Black-tailed Godwit. In addition, there are four species with populations of national importance namely Shelduck, Dunlin, Black-tailed Godwit and Curlew. The occurrence of the E.U. Birds Directive Annex I species, Golden Plover, Bar-tailed Godwit, Little Egret and Short-eared Owl is also importance.	Partially within the town
Clonakilty Bay pNHA and cSAC	000091	Clonakilty Bay is an inter-tidal expanse that stretches from Clonakilty to the open sea, and comprises two small estuaries separated by Inchydoney Island. The site is considered of conservation importance because it contains a good diversity of coastal habitats. These habitats show a succession from salt to freshwater influences and include six habitats, which are listed on Annex I of the EU Habitats Directive. Its value is also enhanced considerably by the bird life it supports (see Clonakilty SPA above).	Partially within the town
Galley Head to Duneen Point SPA	004190	Galley Head to Duneen Point SPA is situated to the southwest of the town of Clonakilty, Co. Cork. It encompasses the sea cliffs south of Castlefreke dunes to Galley Head, north eastwards along the coast to Dunowen Head and Ringlea Point as far as the north side of Duneen Point. Sea cliffs are the predominant habitat of the site; these occur along its length and are generally well vegetated by a suite of typical sea cliff species. Above the cliffs areas of heath, improved grassland, unimproved wet and dry grassland, and arable land occur. The Galley Head to Duneen Point SPA is of particular importance for Chough; it also supports a population of Peregrine and a suite of breeding seabird species. The presence of Chough and Peregrine, both species that are	5km to the south

		listed on Annex I of the E.U. Birds Directive, is of particular significance.	
Seven Heads SPA	004191	The Seven Heads SPA is situated to the southwest of the town of Courtmacsherry, Co. Cork. It encompasses the sea cliffs of the Seven Heads peninsula northeast to Barry's Point and also the cliffs of Dunworly Bay and Barry's Cove. Sea cliffs are the predominant habitat of the site; these occur along its length and are generally well vegetated by a suite of typical sea cliff species. Above the cliffs areas of heath, improved grassland, unimproved wet and dry grassland, freshwater marsh and arable land occur. The Seven Heads SPA is of particular importance for Chough; it also supports a population of Peregrine and a suite of breeding seabird species. The presence of Chough and Peregrine, both species that are listed on Annex I of the E.U. Birds Directive, is of particular significance.	7km to the southwest
Kilkeran Lake and Castlefreke Dunes pNHA and cSAC	001061	This is coastal site in which well-developed sand dunes have impounded two streams to create wetland areas of open water, freshwater marsh and swamp. The site also contains an area of mixed woodland. This site contains two priority habitats listed on Annex I of the EU Habitats Directive. The presence of a lagoon on the site is of particular significance as these are becoming increasingly rare in Ireland and Europe and Kilkeran Lake is the best example of a sedimentary lagoon in southwest Ireland. The Castlefreke system contains three dune habitats listed on Annex I of the EU Habitats Directive including fixed dunes. Sharp-leaved Fluellen (<i>Kickxia elatine</i>), a rare Red Data Book species, has been recorded from arable fields at the site. The uncommon sedge hybrid, <i>Carex paniculata</i> x <i>C. remota</i> (<i>C. x boeninghausiana</i>) has also been recorded from the site. The wide range of habitat types and high diversity of plant and animal species found adds considerably to the importance of the site. Part of the site is state-owned and managed for conservation purposes.	6km to the southwest
Courtmacsherry Estuary pNHA and cSAC	001230	The estuary consists of the drowned valley of the Argideen River, which is now filled with sediments, resulting in an extensive mudflat. The site contains a complex of coastal habitats including ten habitats listed on Annex I of the EU Habitats Directive. The site contains the rare Red Data Book plant species, Sea Kale (<i>Crambe maritima</i>) on shingle, as well as the scarce grass, Tor-grass (<i>Brachypodium pinnatum</i>), on cliffs between Broadstrand and Wood Point. The occurrence of the EU priority habitat fixed dune is also of significance. The site is of ornithological importance for the many waders and wildfowl that	8km to the east

		feed on the mud and sandflats. The winter flocks of Golden Plover and Black-Tailed Godwit constitute nationally important numbers and at least nine other species occur in significant levels for the region, Wigeon, Mallard, Red-breasted Merganser, Oystercatcher, Lapwing, Dunlin, Bar-tailed Godwit, Curlew and Redshank.	
Roscarberry Estuary pNHA	001075	<p>Roscarberry Estuary is a sea inlet fed by small rivers from the north and northwest. The northern part of the estuary is maintained as a lake by a weir but the southern part empties and fills normally on the tide. The mouth of the inlet is nearly closed by a broad spit of sand behind Creggan Strand but above this there are extensive sand flats.</p> <p>Much of the boundary of the site follows the roads but there are three places where the vegetation of adjacent ground is interesting. One is the Creggan spit itself where a new dune ridge extends westwards into the channel. Northwards this community runs into a sheltered saltmarsh where rushes (<i>Juncus gerardii</i>) and (<i>J.acutus</i>), or saltmarsh Grass (<i>Puccinellia maritima</i>) dominate.</p> <p>The estuary supports a variety of shorebirds in winter. Only Ringed Plover (average peak 226, 1984/85 - 86/87) reach numbers of national importance but there are notable flocks of eleven other species.</p>	9km to the southwest
Bateman's Lough pNHA	001037	This pNHA consists of two small lakes close to Ballinascarty. No details on this site have been found and no NPWS Site Synopsis appears to be available.	4km to the northeast
Dirk Bay pNHA	001498	<p>Sand dunes and freshwater marsh comprise most of the site, and a number of local or rare plant species were recorded in the dunes. The presence of Wild Clary (<i>Salvia verbanaca</i>) is of particular interest, since it is a rare species listed in the Irish Red Data book.</p> <p>This site is of interest because sand dunes are an unusual habitat in west Cork and this system, although small and somewhat damaged, is of great botanical value.</p>	6km to the south
Gallanes Lough pNHA	001052	<p>Gallanes Lough is situated approximately 1km. north-west of Clonakilty. It is a small waterbody occurring in a flat part of a stream valley. Much of this vegetation is in the form of a floating mat which forms a transition zone between open water and wet grassland.</p> <p>Waterfowl find this lake attractive, with up to 500 wildfowl having been recorded at times including</p>	1km to the northeast

		<p>mallard, wigeon and sometimes whooper swans.</p> <p>An invertebrate of interest, a small water boatman (<i>Microretia pygmaea</i>) has been recorded from the site.</p>	
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Shadow Sites

Within 10km of Clonakilty there are three sites within 10km of the study area that are included in the *NGO Special Areas of Conservation Shadow List* (Dwyer, 2000). The Shadow List has been compiled by a grouping of Irish conservation Non-Government Organisations (NGOs), and includes sites, which, according to the NGOs, fulfil the ecological requirements for SAC designation. The two shadow sites found within 10km of the study area are described below in Table 5.2.4. None are located within Clonakilty town boundary.

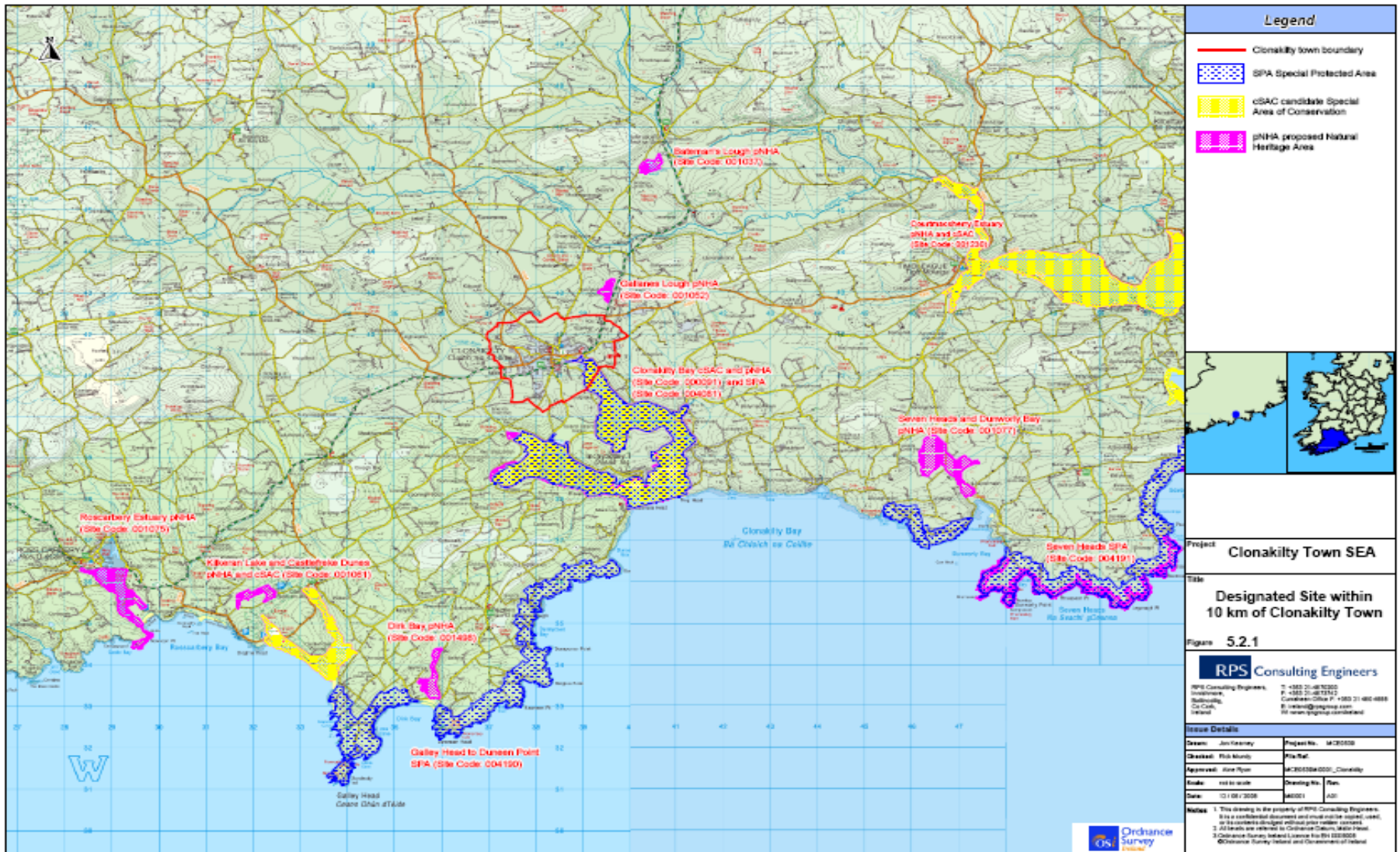
Table 5.2.4: Sites within 10km of the study area that are included in the NGO Special Areas of Conservation Shadow List (Dwyer, 2000).

Site Name	Habitats Directive habitat that is present	Distance (and direction) from Clonakilty
Ownahincha	(1220) Perennial vegetation of stony banks	8.5km southwest of Clonakilty
Seven Head and Dunworly Bay pNHA (Site Code: 001077)	(1230) Vegetated sea cliffs to the Atlantic and Baltic coasts	6.9km southeast of Clonakilty
Seven Head and Dunworly Bay pNHA (Site Code: 001077)	(4030) Dry Heath	6.9km southeast of Clonakilty

Other sites

There are no Ramsar sites or nature reserves within 10km of the study area.

Figure 5.2.1 Designated Sites within 10km of Clonakilty Town



5.2.2.3 Aquatic biodiversity

Freshwater Ecology

The River Fealge drains the agricultural catchment to the west of Clonakilty town and then flows through the town centre and into Clonakilty Bay, and therefore directly into *Clonakilty Bay* cSAC, SPA and pNHA. The EU Habitats Directive Annex II and IV listed species otter *Lutra lutra* has been recorded utilising the River Fealge (RPS, 2007), however there are no records of the Annex II species freshwater pearl-mussel (*Margaritifera margaritifera*) (Moorkens, 1999) or white-clawed crayfish (*Austropotamobius pallipes*), (Reynolds, 1998) from the River Fealge.

The South Western Regional Fisheries Board do not have specific information on fish stocks within the river, but have confirmed that it supports stocks of brown trout, sea trout, Atlantic salmon and eel. The water quality of the Fealge River has 'Q value' of 4 (meaning that it is of 'Good' status) and is continually monitored by the EPA.

The nearest 'Salmonid Water', designated under the EU 'Freshwater Fish' Directive (1978), is the Argideen River, which is situated some 2km north of Clonakilty town.

Marine Ecology

Clonakilty Bay is an inter-tidal expanse that stretches from Clonakilty to the open sea, and comprises two small estuaries separated by Inchydoney Island. The site also includes adjacent sand dunes and inland marshes, and therefore is a coastal complex with a good diversity of habitats including several habitats listed on Annex I of the EU Habitats Directive (NPWS, 2008).

Algal mats are a characteristic part of the flora in parts of Clonakilty bay and appear to be increasing in extent (MCOS, 2001). They consist of green algae, mainly *Enteromorpha* and *Ulva spp*, which grow on shells and stones. (MCOS, 2001).

Clonakilty Bay offers important habitats for several marine and seashore invertebrates including Common Cockle *Cerastoderma edule* lugworm *Arenicola marina*, ragworm *Hediste diversicolor*, the bivalve *Scrobicularia plana* and the snail *Hydro ulvae*. (MCOS, 2001). A small mussel bed of *Mytilus edulis* is also situated on the western side of the estuary. (MCOS, 2001).

Ecological Networks

An ecological network is a network that consists of core areas of high biodiversity value and corridors or stepping stones which are linkages between them. Ecological networks are important in connecting areas of local biodiversity with each other and with nearby designated sites so as to prevent islands of habitat from being isolated. They also provide important linkages for wildlife, flora and fauna and are important for mammals, particularly for bats, and for small birds. The rivers, riverbanks, treelines and hedgerows are important components of Clonakilty's ecological networks, allowing for linkages between and within designated ecological sites and the non-designated surrounding countryside. The ecological network approach supports management of linkages between areas of biodiversity value, between areas used by species for different functions and between local populations of different species.

The importance of ecological networks is recognised in Article 10 of the Habitats Directive, which recognises that ecological networks are corridors and stepping stones for wildlife, flora and fauna allowing for migration, dispersal and genetic exchange. The Habitats Directive requires that ecological connectivity and areas of ecological value outside the network of designated ecological sites are maintained and it recognises the need for the management of these through land-use planning and development policies.

Invasive Species

Invasive species is the term used to describe a non-native species which becomes established in natural, or semi natural ecosystems or habitats, is an agent of change, and threatens native biological diversity (or has potential to do so).

As yet, there is no record of any invasive species getting a foothold within *Clonakilty Bay* pNHA, cSAC and SPA (per SWRFB, 2008). However there is a potential threat from a number of sources.

Zebra Mussel (*Dreissena polymorpha*), a highly invasive bivalve mollusc, could enter Clonakilty Bay on boats and ships especially should the bay see an increase in maritime traffic in the future. Other potential sources for invasive species include surface water runoff from garden centres, which may bring seeds or fragments of living plants into natural systems; and exotic species planted in parks and residential gardens, which may 'escape' and spread into natural habitats.

Other invasive species threatening natural systems in Ireland include Japanese Knotweed (*Fallopia japonica*), Giant Hogweed (*Heracleum mantegazzianum*) and Grey Squirrel (*Sciurus carolinensis*), and any of these could potentially become a problem for biodiversity in Clonakilty.

5.2.3 Impact Assessment –existing environmental problems and constraints/Threats

The following environmental problems and constraints / threats to biodiversity in Clonakilty have been identified:

- Clonakilty Bay cSAC, pNHA and SPA is under pressure from a number of sources, notably discharges from the Waste Water Treatment Plant, which is currently at capacity. It currently caters for combined surface and foul water treatment with secondary treatment, and discharges to the estuary. Other potential sources of pollution include increased recreation and tourism developments, and additional infrastructural development including the new bypass and proposed tidal barrage.
- The drainage of wetlands, building on floodplains or land used by migratory birds, runoff from developments into watercourses, removal of hedgerows, culverting of streams, increased recreational use of natural assets due to increased population are all impacting on biodiversity within Clonakilty town.
- Greenfield Development – All developments which take place on Greenfield sites are likely cause some degree of negative impact on biodiversity. Where developments i.e. roads, housing and other infrastructural developments have occurred on Greenfield sites they have replaced some semi natural and natural areas with artificial surfacing causing a gradual loss of biodiversity.
- Invasive species –There is potential for invasive species to enter surface waters from a number of sources including runoff from garden centres, from boats and by dumping of waste from fish tanks and garden ponds. There is therefore a need to include a policy in the new plan to prevent the introduction of those alien species which threaten ecosystems, habitats or species. The use of native species in amenity planting and stocking and related community actions to reduce the introduction and spread of non-native species should be encouraged.

- Removal of Ecological Corridors. The removal of ecological networks / corridors is a significant issue. It is recognised that there has been a significant increase in hedgerow removal throughout Ireland in recent years.
- Climate Change. Until recently biodiversity losses have been attributed to the spread and increased environmental impact of people, however, it seems likely that future losses will increasingly result from human induced global climate change. Climate change considerations must therefore be seen as central to the protection of the natural environment.
- There is potential for impacts to the aquatic environment in the form of industrial and agricultural run-off, municipal sources of pollution, fragmentation of river corridors and soil erosion. These risks apply in particular to the River Feagle. Under the Water Framework Directive, water quality must achieve “good status” by 2015.

5.2.4 Evolution without implementation of the plan

In Clonakilty, biodiversity, flora and fauna is offered protection through the County Development Plan and the Town Plan. Without implementation of the Plan it is expected that there would be a continual loss of Greenfield sites and semi-natural habitats. There would be no long-term guidance and each planning application would be dealt with on an individual basis, resulting in potential for long terms impacts on habitats (including fragmentation), water and other natural resources, potentially including Designated Sites.

5.3 POPULATION AND HUMAN HEALTH

This section looks at the well-being of the population of the town, the settlement strategy and economic development. The main threats include infrastructure constraints based on population growth, air pollution from vehicles, provision of useable amenity space, road safety, waste generation and development on greenfield lands.

The 2006 Census of population identified a population of 3,745 within the Clonakilty Town Council boundary area reflecting a rate of population growth in line with the national average. This section of the report outlines the policies relevant to population in the Clonakilty Town Council area and population, employment and household data primarily retrieved from the Census of Population 2006 and assesses progress made in these areas compared with the original Clonakilty Town Development Plan.

5.3.1 Policy

Baseline National plans outlined in Chapter 4 including the National Spatial Strategy, the National Development Plan, the Retail Planning Guidelines, the Residential Planning Guidelines and the Planning and Development Act are all considered key plans/acts to reference in relation to population and human health. At a regional level the Regional Planning Guidelines for the Southwest Region will inform the policies and objectives for population and human health. While at a local level the Cork Strategic Retail Study (CSRS) 2002, draft Cork Strategic Retail Study (CSRS) 2008, Cork County Development Plan 2003, draft Cork County Development Plan 2007, North and West Cork Strategic Plan 2002 to 2020 and the Skibbereen Electoral Local Area Plan 2005 will inform mitigation, policies and objectives in relation to the human environment (refer to Chapter 4 Related Plans).

5.3.2 Baseline

This section describes the evaluation as set out in the SEA regulations of the environmental topic of population. For the purposes of evaluation, the impacts on population are divided into two, population impacts in terms of job creation and impacts on population in terms of residential population. The initial section presents a synopsis of the baseline conditions followed by a background to the Plans and policies, which influence the population of Clonakilty.

Table 5.3.1 below shows during the intercensal period between 1996-2002, Cork County recorded an increase (10.7%) in population, Clonakilty Urban saw an increase of 26% and Clonakilty Environs also increased by 18%. Therefore during this period it was evident that Clonakilty Urban had increased significantly in comparison to County Cork and the Clonakilty Environs.

During the most recent intercensal period of 2002-2006, Cork County recorded another increase in its population (11.4%). Clonakilty Urban had a population increase of 9%, while Clonakilty Environs had an increase of 54%. It is evident that the most significant increase in population between 2002 – 2006 was in the Clonakilty Environs. It is considered that this significant increase in population is a result of the rezoning of lands by Cork County Council within the Clonakilty Environs and the proliferation of one-off dwellings in this area.

Table 5.3.1: Trends in Population between the Censal Periods of 1996-2002 and 2002-2006 for County Cork, Clonakilty Urban and Clonakilty Environs

Area	1996	2002	% Change 96-02	2006 ¹	% Change 02-06
Clonakilty Urban	2,724	3,423	26%	3,745	9%
Clonakilty Environs	226	266	18%	409	54%
Co. Cork	293,323	324,767	10.7%	361,877	11.4%

Source: Census of Population 1996, 2002 and 2006.

The age structure of the population of Clonakilty is important to examine, as this will have implications for future housing demand, schools and health care services. It must be noted that the figures in Table 5.3.2 below are based on the Clonakilty town Council area, which comprises of Clonakilty Urban; the total population figure for this area is 3,745. Three categories of the population structure are examined:

- the young age dependant population (i.e. those persons within the 0-14 age cohort);
- the old age dependent population (i.e. those persons in the 65+ age cohort); and
- the working/independent age population (i.e. those persons within the 15-64 age cohort).

Table 5.3.2 Clonakilty Urban Age Cohort of the population 2002 - 2006

Area	0-14	15-64	65+	Total
Clonakilty Urban 2006	652 (17%)	2,427(65%)	666(18%)	3,745
County Cork	78,863 (22%)	245,103 (68%)	37,911 (10%)	361,877

In 2006, Clonakilty Urban had 17% of its population within the young age dependant population. This is slightly below that for the County, which has a young age dependant population of approximately 22%. This has negative implications for the future working/independent age cohort as there is likely to be a natural decline in the future housing and employment demand in the area, as there is likely to be less young adults moving into the labour market and setting up independent households in the future.

In 2006 18% of the population in Clonakilty Urban were within the old age dependent population of people with approximately 666 people. Clonakilty had a much greater number of persons aged 65 and over than in the County which only recorded 10% of its population within the 65+ age cohort in 2006. The Clonakilty Urban area had a significantly higher number of people within the 65+ age cohort than the County figure, including 509 retired people which is indicative of an ageing population in Clonakilty Urban. This increase in the percentage of an elderly population has long-term implications relating to health and social service needs.

Reflecting the national economic growth of recent years and increased participation in employment, a total of 45% of the population of Clonakilty over the age of 15 are engaged in employment, this corresponds to the County average of 46%. According to the 2006 Census figures approximately 152 people or 4% of the population in Clonakilty Urban are unemployed or looking for their first job, this is higher than the county average of 3%. In terms of socio economic groupings, the largest percentage of persons at work in Clonakilty are within non manual labour at 20% (668 people), while the second largest percentage of persons at work are in employer and managerial positions at 15% (488 persons).

The largest percentage of persons at work in Clonakilty Urban work in commerce and trade representing 28% of the total workforce, while professional services is the second largest industry with 17% at work and manufacturing is the third largest section of the workforce at 14%. While the least amount of people work in the agricultural industry in Clonakilty Urban.

Clonakilty is designated as a key service town within the *Regional Planning Guidelines*. Key service towns are outlined in the RPG's as having the ability to perform an important role in driving the development of a particular spatial component of the overall region and that are being targeted for growth. In addition section 2.3.36. of the Cork County Development Plan 2003 outlines that Clonakilty will be designated as an Integrated Employment Centre as follows;

'To support the area's economic and population growth, and to establish a balance within the County, Clonakilty is designated in this plan as an Integrated Employment Centre to act as a focus for economic and population growth. In addition, and in support of this measure, priority will be given to the provision of enhanced transportation infrastructure in the N71 corridor to improve the quality of this critical economic link to the Cork area.' (p.31)

It is considered that there is sufficient lands zoned within the town and a substantial landbank available for new enterprises in the Technology Park and the Lisavaired Estate to support Clonakilty and its environs as an Integrated Employment Centre.

While a key goal of the draft Cork County Development is for 'Clonakilty to act as a focal point for new growth in West Cork with investment in the transport corridor linking the town to the Cork 'Gateway';(p.19) The draft Cork County Development Plan 2007 proposes to almost double the population in the town and environs from 4,154 people in 2006 to 8,718 people by 2020. A land use capacity study for Clonakilty Town and its environs was undertaken by Cork County Council in drafting the Clonakilty Plan. The outcome of this land use study indicated that sufficient lands have been zoned as part of the Skibbereen ELAP 2005 and within the draft Clonakilty Town Development Plan to accommodate future growth within the Clonakilty environs and the Clonakilty Town Council area.

5.3.3 Impact assessment – existing environmental problems and constraints

No environmental problems or constraints were identified. Sufficient lands will be rezoned for residential, employment and community uses within the town boundary in line with national, regional and local population projections, which will contribute to the generation of critical mass within the town of Clonakilty. The proposed plan should help to facilitate the growing population of Clonakilty in a sustainable manner and in accordance with various policies and objectives of both national and local plans.

5.3.4 Evolution without implementation of the plan

The provision of planned residential, employment, improved infrastructure and community uses within the Clonakilty Town Council area will result in a better quality of life than would arise from an unstructured/unplanned approach. If the plan was not implemented, the redevelopment and renewal of the area would take place in a haphazard approach, possibly allowing growth in the form of pockets of populations developing in an ad hoc fashion throughout the Clonakilty Town Council area. Moreover the positive regulatory policies and objectives being introduced by the Clonakilty Development Plan and aimed at improving the town's vitality, character and overall environment would not be implemented through the planning and development process.

5.4 SOIL

5.4.1 Policy

Soils are offered protection through the proposed EC Directive 2004/35/EC of the European Parliament and of the Council for establishing a framework for the protection of soil and amending Directive 2004/35/EC. This Directive provides a common strategy for the protection and sustainable use of soil based on the principles of integration of soil concerns into other policies, preservation of soil functions within the context of sustainable use, prevention of threats to soil and migration of their effects, as well as restoration of degraded soils to a level of functionality consistent with the current and approved future use.

5.4.2 Baseline

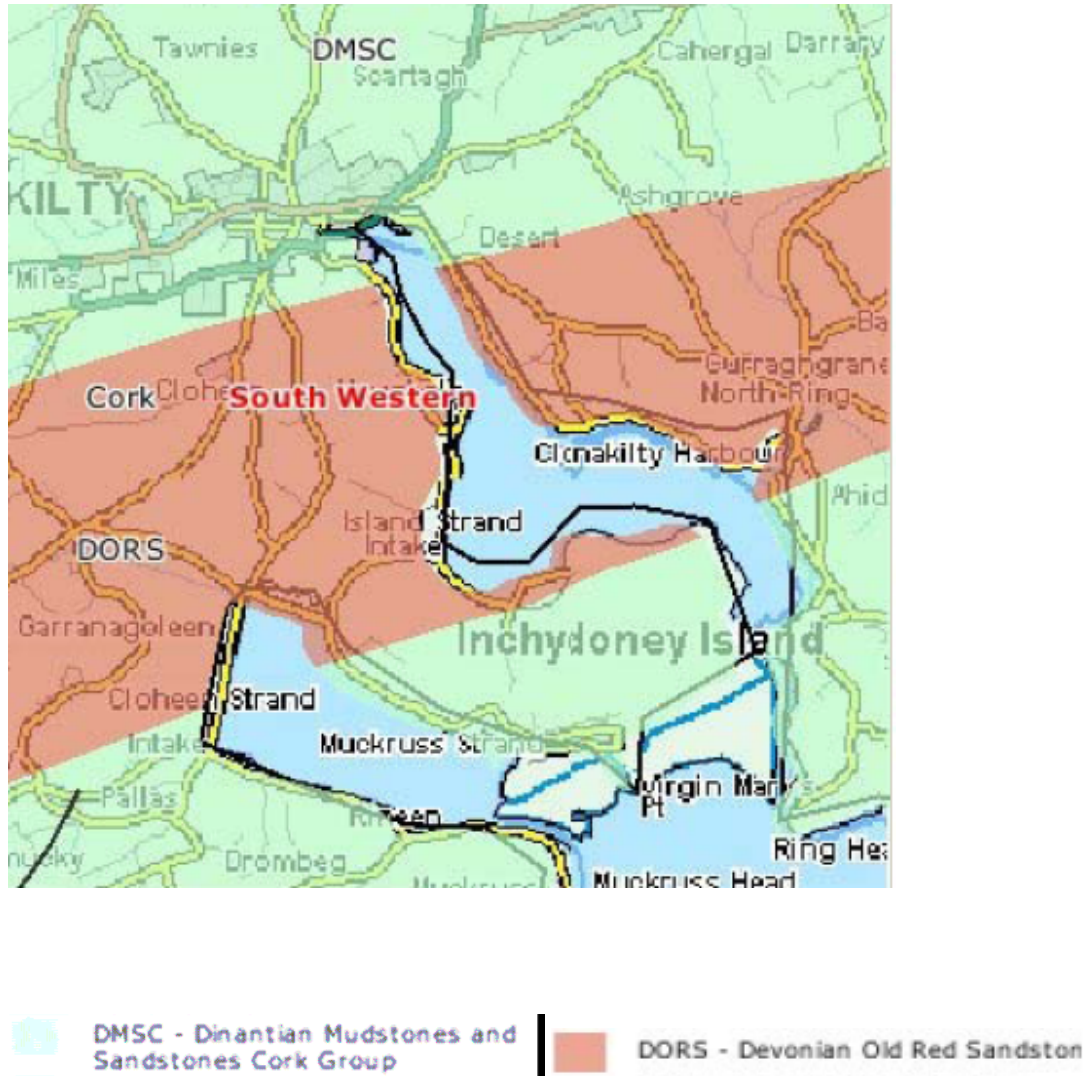
Bedrock Geology

The town of Clonakilty is situated within a sedimentary geological setting. The underlying rock comprises bedded sandstone from the Kinsale and Old Head of Kinsale Formations. The Old Head of Kinsale Formation is made up of mudstone and sandstone and was deposited by fluvial deposition during the Upper Devonian Period 350 million years ago. The overlying Kinsale Formation comprises a diverse series of mudstones and sandstones (355 million years old).

To the south of the town Upper Devonian rock continues in the form of the Toe Head crossed bedded sandstones and the Castlehaven purple mud and siltstones.

The rock is well bedded into southwest – northeast striking layers. The beds can also be found folded into a syncline (U-shaped fold) to the north of the town and an associated anticline (A-shaped fold) to the south of Clonakilty. No major faulting can be found in the immediate town area.

Figure 5.4.1 – Group Bedrock Geology



Source: Geological Survey of Ireland

Table 5.4.1 – Formation Bedrock Geology

Colour Key	Formation	Bedrock Description
KN	Kinsale Formation	Grey Mudstones and Sandstone
OH	Old Head of Kinsale Formation	Bedded Sandstones and minor Mudstone
TH	Toe Head Formation	Cross Bedded Sandstones and Minor Mudstones
CE	Castlehaven Formation	Purple Mudstones/Siltstones

Source: Geological Survey of Ireland

Hydrogeology

Within the study area there are two underlying aquifers. One locally important aquifer – moderately productive in local zones can be found in the Kinsale and Old Head of Kinsale Formation (See Table 5.4.1). The younger Castlehaven Formation (purple mudstone and siltstone) comprises a poor aquifer, generally unproductive within an exception of local zones (See Figure 5.4.2).

Figure 5.4.2 – Local Aquifers



Source: Geological Survey of Ireland

Sites of Geological Heritage/Interest

Within the Clonakilty area the following sites of geological interest occur:

Table 5.4.2 – Areas of Geological interest within the Study Area

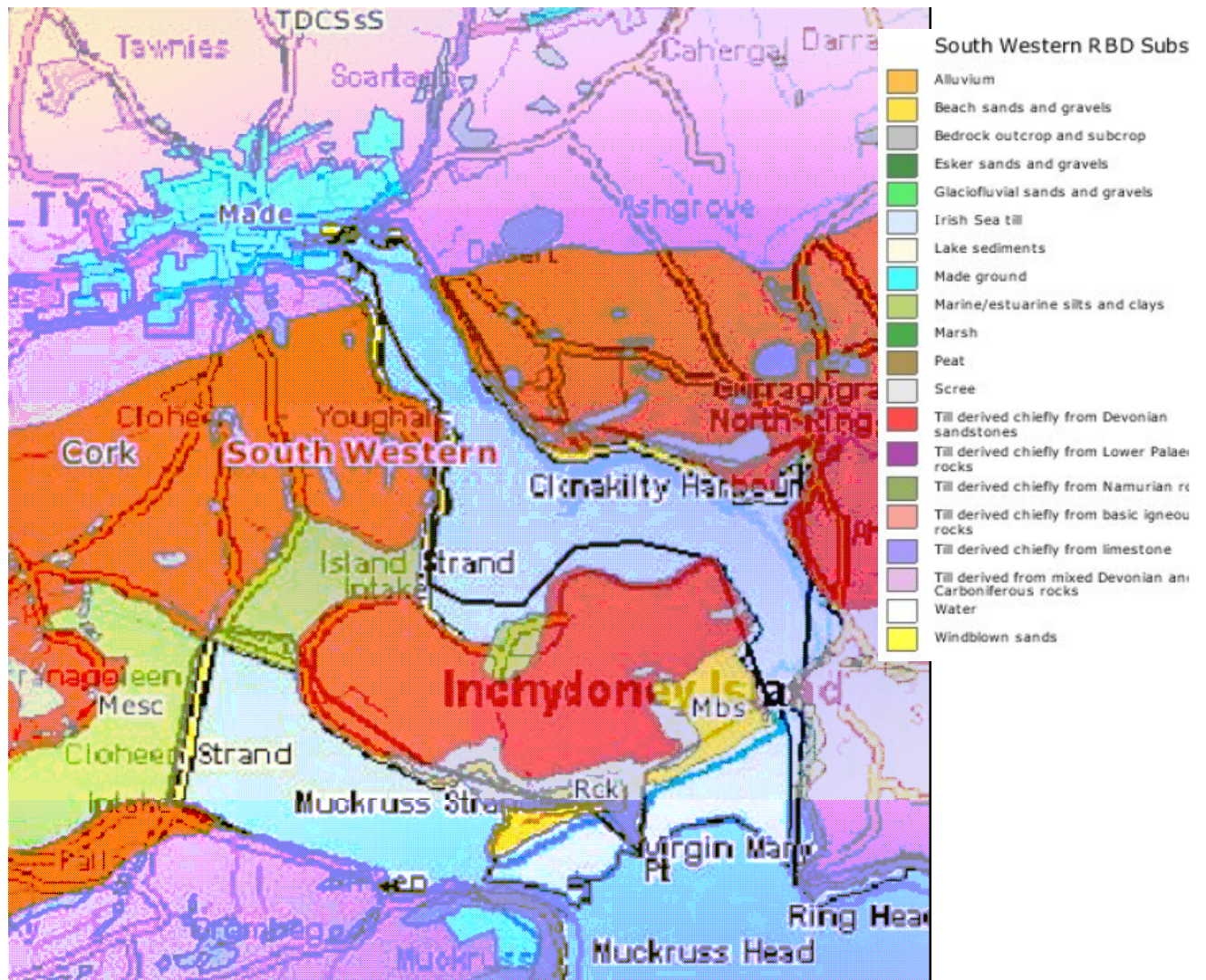
Site Name	Principal characteristics	Description	Grid Reference
Ladyswell/Duneen/ Clonakilty [Ba]	Steeply-dipping barite vein.	Steeply-dipping barite vein. Old mine workings and buildings; surface (and even road) subject to subsidence. Old dumps have barite material. Good coastal exposure still of mineralisation. Extensive section with 1 to 2 inch quartz-siderite veins containing galena, chalcopyrite and pyrite exposed on foreshore.	139750 036430
Modrana	Slate mines	Extensive slate mine caverns and quarries. Used widely in SW Ireland	

Soils and Subsoil's

The Clonakilty area generally consists of glacial gravel and tills laid down during the last glaciation period over 10,000 years ago. The Clonakilty area was dominated by an ice dome which formed a number of coalescing ice domes which flowed radially outward during the melting periods.

While the town area is generally made up of man made hard standing surfaces and landscaping in the surrounding area is overlain by Devonian and carboniferous sandstone till, to the south of the town the subsoil consists chiefly of Devonian red sandstone till. In and around the river estuary (river Fealge) some beach deposits can be found (which become more extensive at Inchydoney Island).

Figure 5.4.3 – Soils and deposits within the Clonakilty Area



Source: Geological Survey of Ireland Quarrying and Mining

At present there are no mining activities being carried out in the Clonakilty area. However quarrying is ongoing at a single operation at Shannonvale, Clonakilty (proprietors – Keohane Ready-mix Ltd). On average 250 - 500,000 tonnes are quarrying per annum.

5.4.3 Impact assessment –existing environmental problems and constraints

Greenfield sites - any proposed developments on greenfield sites involves changing the character of the ground and soil. New developments have the potential to contaminate the soil and underlying groundwater, particularly in the case of septic tanks and poor wastewater treatment facilities. Existing activities such as agriculture and manufacturing may also pose a risk to soil and groundwater.

Soil erosion – construction, agriculture and forestry can lead to soil erosion can have a negative affect on water quality and aquatic biodiversity. Soil erosion can result in a loss of nutrients in the upper layers of soil, also leading to a reduced water-holding capacity. Soil erosion can also lead to sediment movement and agricultural pollution into watercourses. This can lead to increased solids in watercourses, disruption of ecosystems and contamination of drinking water.

5.4.4 Evolution without implementation of the Plan

The proposed Soil Directive suggests the encouragement of development on brownfield sites through sustainable redevelopment of existing sites. The reuse of urban brownfield sites in particular will reduce urban sprawl and the need to develop greenfield sites.

The new Plan will provide policies and guidance for development of brownfield sites over Greenfield sites. In the absence of the Plan there is the potential for further development of Greenfield sites resulting in a loss of soil resource to development and soil erosion due to removal of materials due to construction works.

5.5 WATER

5.5.1 Policy

In the interest of maintaining good water quality in the Clonakilty area, the County Council set about fulfilling its obligation under the European Communities (Water Policy) Regulations, 2003 (SI No.722 of 2003) transposed by the Water Framework Directive (2000/60/EC) into Irish Law offers protection for water in Ireland. The Water Framework Directive (WFD) sets an objective of achieving at least good status for all water bodies and aims to ensure that no further deterioration in status of any waters will occur by 2015.

Good status for surface water is a combination of the chemical quality, biological quality and microbiological quality that must be achieved. For Groundwater Good Status refers to groundwater chemical water quality and quantity.

In addition to the Water Framework Directive, water in Ireland is also offered protection under European Community (Groundwater Directive, 80/68/EEC) and National Legislation (Local Government (Water Pollution) Act; The Waste Management Acts and the Planning and Development Act).

Drinking Water Regulations (S.I No 439 of 2000) ensure that the presence of a single faecal coliform in a water supply is unacceptable.

5.5.2 Baseline

Surface Water

Clonakilty town lies east of the River Fealge, which flows into the sea at Clonakilty Bay. The bay area also consists of protect marshes and habitats. Additional rivers in the greater Clonakilty area include the River Argideen located 5-6km north of Clonakilty (however does not flow through the study area). Other watercourses in the greater Clonakilty region include a number of streams that enter Clonakilty Bay at Ring Bar Quay (south east of the town). There are no lakes in the study area.

In order to manage and assess water quality, a River Basin Management plan was put in place in the south west of Ireland. Clonakilty lies within the South Western River Basin District (SWRBD) the plan for which is due to be adopted in 2009. Baseline data including the various risk assessments for surface water, ground, estuarine and coastal waters in the Clonakilty are outlined below.

Figure 5.5.1 – Streams and Rivers within the Clonakilty Area [Source – EPA ENvision Mapper]



Source: EPA

Risk assessments have been carried out on all water bodies within the SWRBD and four risk categories were created.

1. Not at Risk;
2. Probably not at Risk;
3. Probably at Risk; and
4. At Risk.

Figure 5.5.1 shows a map of risk assessments undertaken by the SWRBD for Rivers and Lakes within Clonakilty and Figure 5.5.2 shows a map of risk assessment for Groundwater throughout the Clonakilty area.

All rivers/streams within Clonakilty (namely River Fealge) have received an EPA Q Value rating of 4, indicating "good status". However the Water Framework Directive (WFD) has categorised the River Fealge as "At Risk of Not Achieving Good Status". Likewise streams entering the bay at Ring Bar Quay are also considered "At Risk of Not Achieving Good Status"

Bathing water in the Clonakilty area report an EPA Q Value of 4, therefore of “good status” stating the coastal water is compliant with EU standards and of Good Status. However the Clonakilty Bay / River Fealge Estuary area is determined as being “Possibly at Risk of Not Achieving Good Status” under the WFD, hence prone to pollution. On the other hand the greater Clonakilty bay is “Strongly Expected to Achieve Good Status” under the WFD

Also a single Regional Protected Area can be found in the greater study area at Inchydoney Island Beach.

Table 5.5.1 - Water Framework Directive and EPA ratings of Rivers, Streams and Bathing Waters within the Study Area

River/Streams	EPA Q Rating	Status	Water Framework Directive Rating
River Fealge	Q4	Good	Possibly at Risk of Not Achieving Good Status
Ring Bar Quay (streams)	Q4	Good	
Clonakilty Bay/River Feale Estuary	Q4	Good	
Greater Clonakilty Bay	Not Available		Strongly Expected to Achieved Good Status

Source – EPA Envision Mapper

Figure 5.5.2 shows the Water Framework Directives risk classification of rivers within the study area.

Groundwater

Groundwater forms an integral part of all ecosystems and within the Clonakilty area is a significant resource. A number of private drinking water supplies are taken from groundwater reserves.

Groundwater is subject to contamination from agriculture, poorly designed/constructed and maintained domestic wastewater treatment infrastructure, industrial sources etc. Groundwater also contributes to surface water quality providing residual flows from rivers and streams. It is also integral to the support of wetlands.

Table 5.5.2 summarizes the groundwater throughout the Study Area. This information is presented in Figure 5.5.2

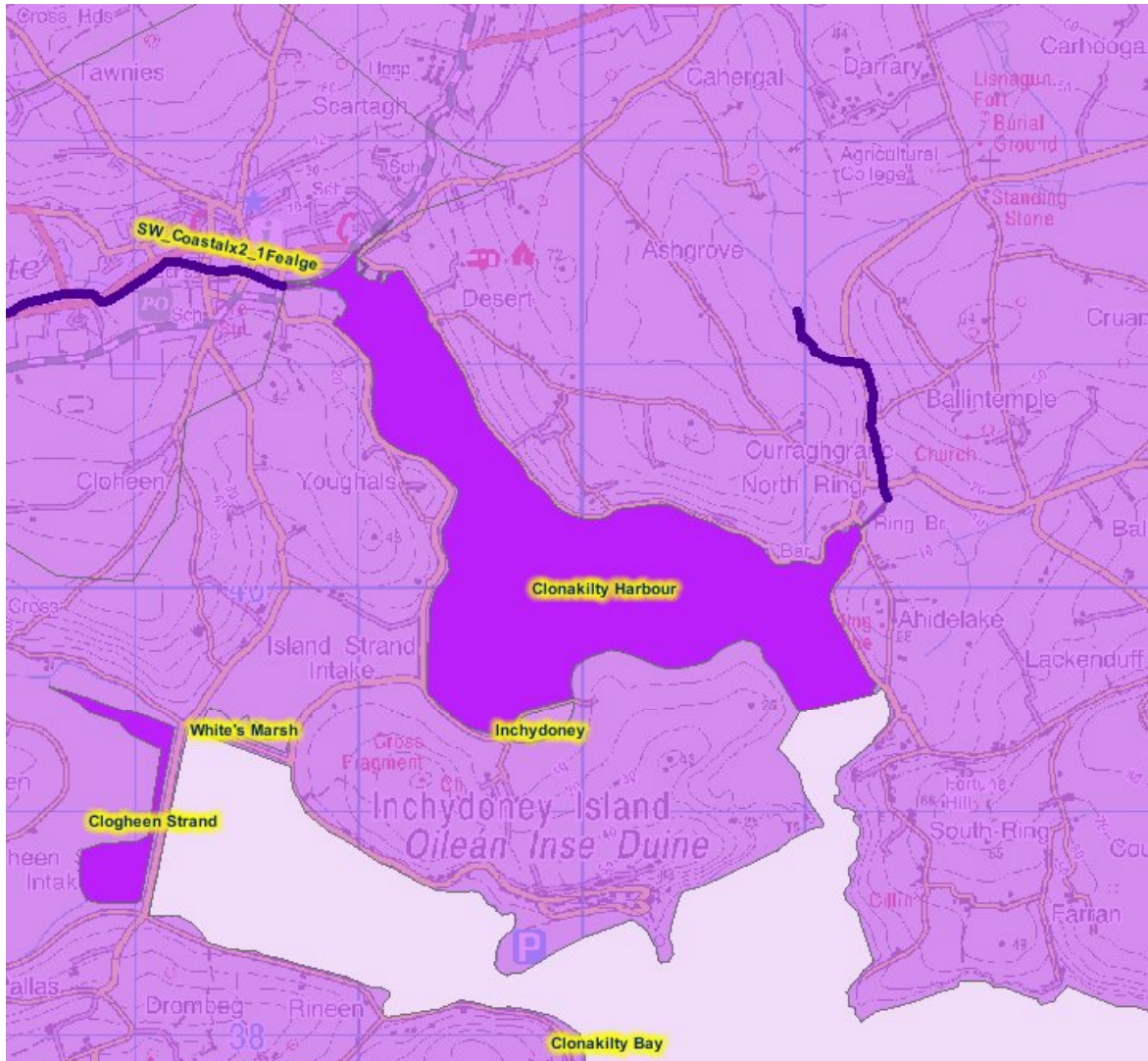
Table 5.5.2 - Summary of GW Ratings Throughout Clonakilty

Location	Water Framework Directive Rating	Aquifer Classification	Aquifer Vulnerability
Town Area and Northwards	Possibly at Risk of Not Achieving Good Status	Locally Important Aquifer – Moderately Productive in Local Zones	High – Low (interim study only) Some Extreme to High Areas N/E of Town
South East of the Town and Estuary Area		Poor Aquifer – only Moderately Productive in Local Zones	High - Low Some Extreme to High Areas along estuary

Source – WFD - EPA ENvision Mapper, Aquifer Vulnerability - GSI

The Water Framework Directive classifies a large proportion of the Clonakilty urban area groundwater as “Possibly at Risk of Not Achieving Good Status”. Also aquifer vulnerability can be considered high with some rock found near surface, therefore verifying a possible risk. See Figure 5.5.1 – Aquifer Vulnerability.

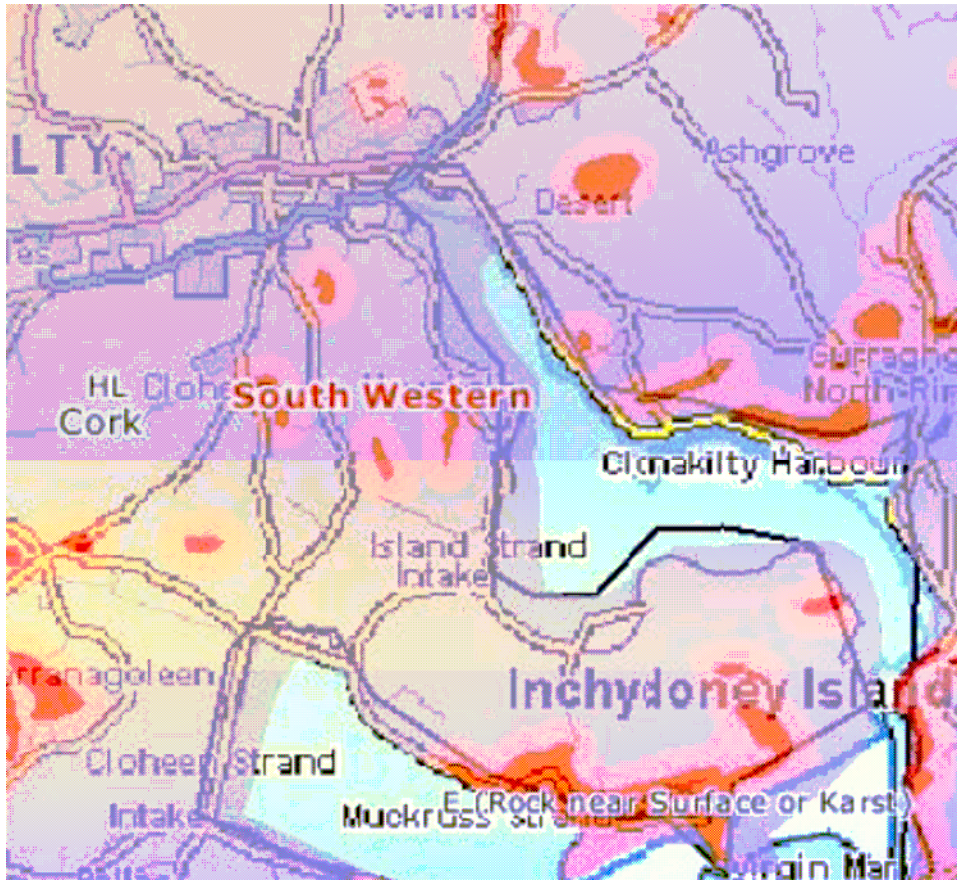
Figure 5.5.2 - WFD Risk Assessment Rating for GW [Source – EPA ENvision Mapper]



Water Framework Directive Colour Key	At Risk of Not Achieving Good Status	Possible at Risk of Not Achieving Good Status	Expected to Achieve Good Status	Strongly Expected to Achieve Good Status

Source: EPA

Figure 5.5.3 - Groundwater Vulnerability Within the Study Area (Source – GSI GW Mapper)



- E (Rock near Surface or Karst)
- E - Extreme
- H - High
- M - Moderate
- L - Low
- HL - High to Low. Only an interim s took place.
- Water

Source: Geological Survey of Ireland

Flooding

Clonakilty has suffered from flooding problems as a result of elevated sea levels due to storm surges and high flows in the River Fealge, sometimes in combination. Extreme events have caused significant damage to property in the town.

In 1992 a preliminary study was completed for a tidal barrage across Clonakilty Harbour. The proposed barrage was designed to protect the town from coastal flooding by excluding extreme high water levels during storm surge events.

In 2003 further flood assessment was conducted on the River Fealge to determine the peak flows and estimate future flood damage in terms of the effects of climate change/sea level rise. The results of the assessment have allowed for the preparation of an advanced flood management plan with the inclusive of SUDS (Sustainable Urban Drainage Systems).

Figure 5.5.4: Flooding in Clonakilty Town



Source: OPW Mapping

5.5.3 Impact Assessment –existing environmental problems and constraints

There are a variety of activities both within and outside the study area, which have the potential to impact on water quality. These include sewerage treatment works, domestic water treatment systems, housing, construction work, industry, landfill, spillages, increased road runoff and agriculture.

Existing problems within the Clonakilty area include:

- Surface Water Pollution -Under the WFD The River Fealge is classified as "Possibly at Risk of Not Achieving Good Status"

- Groundwater Pollution - The majority of study area is considered “probably at risk of not achieving good status” for groundwater
- Impacts to Fisheries - Direct impacts to water will have indirect effects on fisheries.
- Flooding- Flooding has been identified as important particularly in relation to areas where land zoned for development is proposed near or adjacent to rivers or their floodplains. Strict control of planning will be required in these areas i.e. along the Fealge River Valley and the OPW’s Guidelines on Flood Risk should be adhered to.
- Municipal Wastewater Treatment and Domestic Wastewater Treatment – There is a possibility of unchecked increase in demand for wastewater treatment with potential for increased pollution to surface waters. Therefore correct treatment of wastewater is an important factor to consider in the quality of surface water. It is essential that the WWTP operates to highest standards and that monitoring of the performance of wastewater treatment plant and sewerage network is undertaken to capture leakages to ground water and surface water.

5.5.4 Evolution without implementation of the plan

A review of the existing baseline information shows that a number of water bodies in the study area are under pressure from various sources of pollution, which has resulted in reduced biodiversity, poor water quality and algal blooms. In the event that the Plan is not updated there is potential for increased pressure on these water bodies and most water bodies would be unlikely to reach the objectives of the WFD. If water quality were to deteriorate further or experience a reduction in its quality status, there would also be increased adverse impacts on biodiversity, flora and fauna, fisheries, drinking water, human health and soils. The new 2009 to 2015 plan will steer development away from watercourses rather than along or within their floodplains. In addition the aesthetics of the Clonakilty Bay in particular but also rivers would suffer which would have an indirect effect on tourism.

Also, in the absence of the Plan there is a possibility of unchecked increase in demand for wastewater treatment with potential for increased pollution of surface water.

5.6 AIR AND CLIMATE (ENERGY)

5.6.1 Policy

At international level the Air Quality Framework Directive 96/62/EC sets out standards for air quality. The Directive was transposed into Irish law by the Environmental Protection Agency Act 1992 (Ambient Air Quality Assessment and Management) Regulations 1999 (S.I No. 33 of 1999).

In March 2007 the Government launched its Energy White Paper entitled '*Delivering a Sustainable Energy Future for Ireland*'. The paper was devised to be a practical action-based strategy for achieving a new energy future for Ireland and spans the timeframe 2007-2020. Key to the strategy are the three pillars of energy supply - security, sustainability, and economic competitiveness.

At a national level the National Climate Change Strategy 2007-2011 provides for the protection of air quality. The strategy for reducing emissions will be shared across all sectors but the main focus will be on transport, residential, industry, electricity production, the public sector and waste. The new Programme for Government outlines a 3% reduction in greenhouse gas emissions per annum. The programme will also require Ireland to join the top 5 countries in the world, as measured by the Environmental Performance Index (EPI). The National Climate Change Strategy will also be supported by other relevant government policy such as the National Development Plan, Transport 21, National Energy policy 2007 and the at a local level there are currently two objectives in relation to energy and climate change in the County Development Plan.

Climate Change

INF 4-2: It is an objective to support the national Climate Change Strategy and in general to facilitate measures which seek to reduce emissions of greenhouse gases.

Renewable Energy Production

INF 4-3: It is an objective generally to encourage the production of energy from renewable sources, including in particular that from biomass, waste material, solar wave and wind energy, subject to normal proper planning considerations, including in particular impact on areas of environmental or landscape amenity.

While there are no objectives directly relating to air quality the plan states that the long term economic, social and environmental well-being of Cork requires water and air quality to be of the highest possible standard.

5.6.2 Baseline

Air Quality

In general the air quality in Ireland is considered to be good and this is primarily as a result of the prevailing Atlantic southwesterly winds crossing the country. The EPA monitors the air quality across the country, dividing the country into regions or zones. For Ireland, four zones, A, B, C and D are defined in the Air Quality Regulations (2002). The main areas defined in each zone are: Zone A (Dublin Conurbation), Zone B (Cork Conurbation), Zone C (other named cities and large towns) and Zone D (Rural Ireland, i.e. the remainder of the State excluding Zones A, B and C).

Air quality monitoring and assessments are undertaken at 5 locations in Cork, of which 3 are located within Cork City Council area and 2 locations are within the administrative area of Cork

County Council. Air quality is monitored and assessed in Cork County at Glashaboy and Cork Harbour at Passage West.

There appears to be a small decreasing trend in concentrations in recent years.

- Suspended particulates reached about 90% of the EU limits in the past and have now reduced to about 10% of the limit due to the ban on the sale of coal. These particles arise from the inefficient combustion of solid fuels and diesel.
- New monitoring parameters called PM₁₀ and PM_{2.5} are now being used to monitor for particulates. These measure particulates less than 10 and 2.5 microns in diameter. Results from the gravimetric method indicate compliance at about 30 % of the EU annual mean limit.
- Sulphur dioxide levels were always quite low in Cork. The first smokeless fuels increased levels but levels have now fallen again to previous values. The old method for monitoring is compliant at about 7% of the standard. The new method is at about the same level of compliance with the new standard. Sulphur is a contaminant in most types of fuel.
- Nitrogen dioxide average values are about 40% of the mean limit. It arises from air being used as an oxidant in the high temperature combustion of fuel in space heating and traffic.
- Ozone levels were in compliance. There were 9 exceedances of the 8 hour running average while 25 are allowed. Ozone levels can be strongly influenced by imported pollution and/or natural sunshine events. Rural stations in Ireland have far higher levels than our urban station because nitric oxide reduces levels in cities. It is only in urban areas with extreme traffic densities and very high sunshine levels that a different series of reactions dominate to produce very high ozone levels. Ozone has always been present in ambient air but levels have increased due to pollution. It also arises due to diffusion downwards from the stratosphere
- Carbon monoxide levels are about 36% of the standard operative in 2005. It arises from poor oxidation of fuel.
- Lead levels are about 4 % of the standard. This is a major decrease from the 1980's. Unleaded petrol is now the only type available. It is a petrol additive to prevent "knock" and improve acceleration.
- The new continuous monitor, in operation since March 2000, indicates benzene levels to be about 10% of the standard. Benzene derives mainly from traffic fuels.

Source - Air Pollution in Cork City 2007 Report

Climate

The dominant influence on Ireland's climate is the Atlantic Ocean. Consequently, Ireland does not suffer from the extremes of temperature experienced by many other countries at similar latitudes. Met Eireann provides information on the various climatic conditions experienced across the country. The climate of the area is best described by meteorological measurements collected by the National Meteorological Service from the synoptic stations at Cork Airport. To characterise the prevailing conditions at the site, historical meteorological data compiled by Met Eireann (www.meteireann.ie) is presented for Cork Airport and is available at www.met.ie.

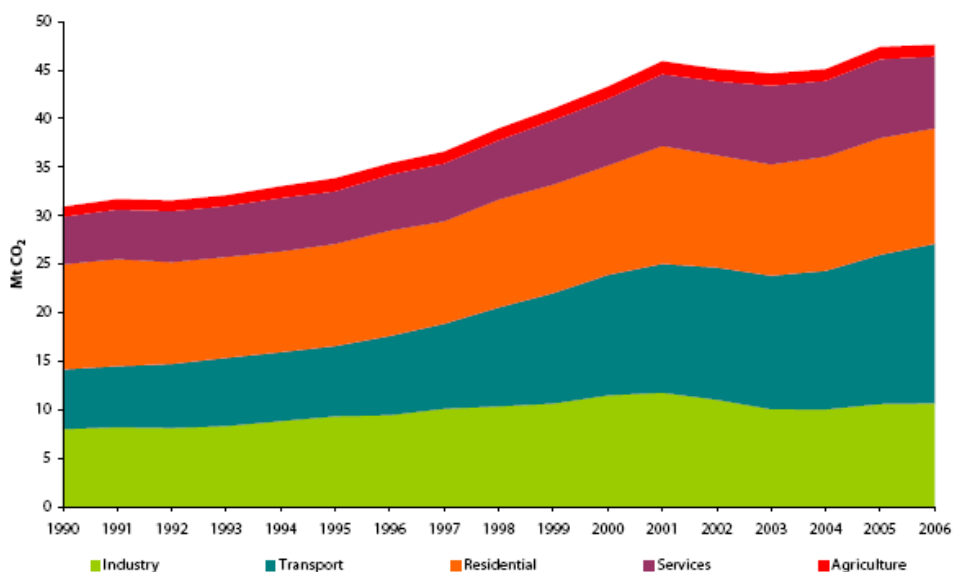
The climate is becoming ever more variable and we can no longer safely refer to past climate when planning for the future.

Greenhouse Gas Emissions (GHG)

Ireland currently emits 1.7% of total GHG emissions in the EU-15. This equates to 69.9 Mt of CO₂ equivalents. According to the most recent data (2005), Ireland currently emits 25.4% more GHG's than were emitted in 1990. This is 12% above the target set for Ireland under the EU burden-sharing agreement.

The contribution of various sectors to total energy related CO₂ emissions over the period 1990-2006 is shown in Figure 5a. While not the greatest contributor, the sector of most concern is transport as it has shown the greatest growth in the corresponding period. Coupled with a lack of public transport infrastructure, transport is likely to continue to increase its contribution to global warming and poor air quality in the immediate future.

Figure 5.6.1: Energy related CO₂ emissions by Sector



Source: Energy in Ireland 1990 – 2005-Trends, Issues, Forecasts and Indicators (SEI, 2006)

Green House Gas Permitted Installations within the study area

The National Allocation Plan 2008 to 2011(extracted from Articles 9 and 10 and Annex III of the EU Emissions Trading Directive (as transposed into Irish law by the European Communities (Greenhouse Gas Emissions Trading) Regulations 2004 (S.I. 437 of 2004) and amendments) contains a list of all installations with GHG permits in Ireland. A GHG permit is issued in attempt to control the emissions of gases, which have the potential to change global climatic conditions. There have been no GHG permits issued to installations in the study area.

Energy Overview

Energy is used in Ireland primarily for transportation, electricity generation and heat generation purposes. The contribution of each source to national energy demand has changed somewhat in the last number of decades, for example

- In 1990, thermal uses accounted for 44% of all primary energy used, electricity accounted for 34% and transport 22%; and
- In 2005 thermal uses accounted for 34% of all primary energy used, electricity accounted for 33% and transport 33%.

It is predicted that by 2020 the transport sector will increase its share in national energy demand to a value of 43%. Thermal and electricity uses, it is predicted, will together account for the remaining 57% of national energy demand.

Current Situation

Total Primary Energy Requirements (TPER) have increased substantially in Ireland since the early 1990s. Under a 'business as usual approach' this trend would continue, however, significant national efforts are currently being made to curb energy requirements. These efforts are outlined in national energy policy documents.

Currently, national TPER is met largely by the combustion of fossil fuels and in particular oil, with natural gas, coal and peat supplying lesser amounts of energy. There has been a change in fuel mix used for energy generation in Ireland from 1990 to 2005. In general

- the use of gas and oil has increased substantially;
- the use of coal and peat has declined; and
- the use of renewables has also increased substantially, albeit from a very low base.

TPER are projected to increase up to 2010. After this time the effect of the implementation of current energy policy is expected to result in a stabilization of TPER.

The demand for electricity is predicted to grow in the future. Predictions are that electricity demand will increase by 4.5% per annum between 2005 and 2010. In the following decade, the rate of growth is expected to slow down considerably to 1.2% per annum.

Fossil Fuels

In 2005, fossil fuels supplied 98% of TPER requirements. By 2010 this value is expected to decrease to 94% and to 86% by 2020. The shortfall in supplying TPER is expected to be met through the use of renewables.

Oil and Coal

Ireland imports all coal and oil requirements.

Natural Gas

There is existing indigenous production at the Kinsale fields and satellite fields off the south coast of Ireland but this is expected to decline over the next few years. New indigenous production from the Seven Heads facility also came on shore in the last quarter of 2003, through the nearby Kinsale Head facility. Further indigenous gas supplies were discovered at the Corrib field, located off the West Coast of Ireland. Reserves are believed to be of the order of 20-30bcm. The development of the field was substantially delayed by planning permission difficulties. Despite the more recent finds of indigenous gas fields at Seven Heads and Corrib, the Irish gas market is expected to continue to be heavily reliant on Interconnection with the UK market.

Renewable

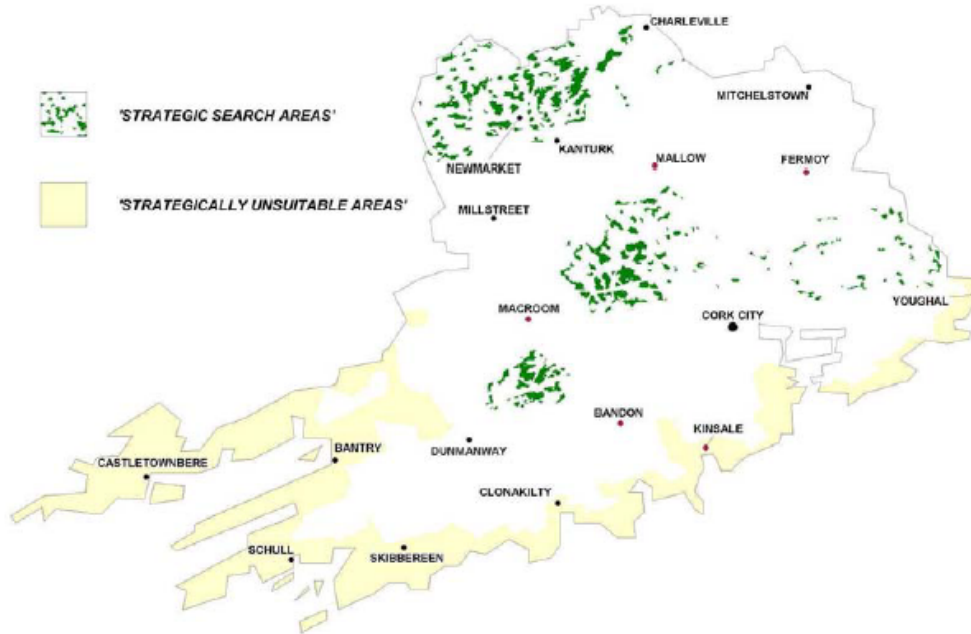
Following the publication in January 2008 of the All Ireland Grid Study, the ESB have announced a massive new investment plan, which will see €22 billion invested in the country's electricity infrastructure in the next 12 years. The scale of the new capital-spending programme is unprecedented and half of all the money is to be invested in renewable energy projects including wind, tidal, wave, and biomass energy generation.

The increased use of renewables in supplying TPER will result in a decrease in energy related carbon dioxide (CO₂) emissions. The government policy document '*Delivering a Sustainable Energy Future for Ireland*' predicts that national CO₂ emissions will decrease by 6% as a result of the increased use of renewables in supplying future TPER.

Windfarms

Cork County Council has received in excess of 70 applications for wind farms in the County. However, while there have been a number of wind farms permitted in County Cork to date only approximately 6 wind farms have been or are in the process of being constructed. A number of existing permissions will have to be renewed over the lifetime of the CDP 2009-2015.

Cork County Council has identified Strategically Unsuitable Areas, which because of high landscape sensitivity, are generally considered to be unsuitable for wind energy projects. Except on a small scale and at particularly suitable locations, wind projects would normally be discouraged in these areas. However, the identification of strategically suitable areas and strategically unsuitable areas does not give any certainty about the outcome of any particular wind energy proposal and even in strategic search areas there will be particular constraints at particular sites. Clonakilty has been identified as a strategically unsuitable area

Figure 5.6.2: Windfarms in Cork Strategic Wind Energy Areas in County Cork.

Source: Cork County Development Plan 2003

Solar

Solar energy can be used cost-effectively to meet Irish buildings' heating requirement. Contrary to the old belief that our climate is not suitable for solar, we enjoy as much solar radiation here as most northern European countries. Ireland's annual solar irradiation varies between 950 kWh/m² per year and 1,100 kWh/m² per year. Valentia experiences the greatest solar irradiation in the country. Each square meter horizontal area therefore receives the equivalent of 100 litres of oil in free energy from the sun.

Hydro

At present there is single hydropower plant in operation at Inniscara on the River Lee (12km from the city centre). The hydroelectric plant has a capacity of 27 MW of electricity. One other pilot scheme is in place, at Carrigrohane a micro-renewable turbine house has been supplying green electricity to 132 of Cork City Council's electricity accounts since 2004 and delivers a maximum of 1,130 MWh/yr electricity. There is no hydro electricity generating plants near Clonakilty. It is generally accepted that all the significant hydro power potential in the country has been exploited.

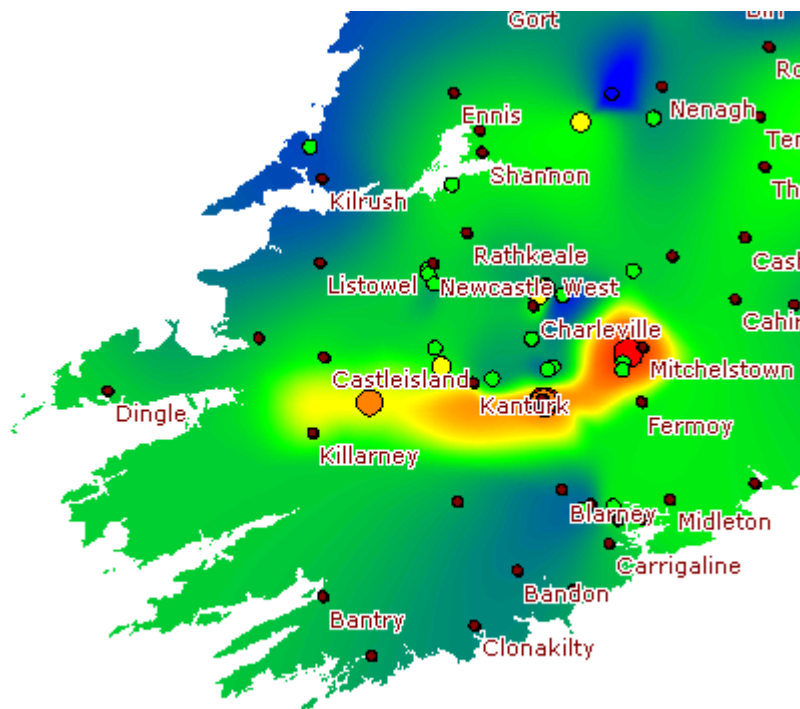
Tidal/Wave Energy

Ireland has become one of the world leaders in wave energy technology with the development of the Wavebob. The Wavebob was developed by an Irish company and can successfully convert wave energy to electrical energy. In general the waters off South Cork have poor potential for wave energy generation. The potential wave resources for the country and county can be seen on www.marinemaps.ie.

Geothermal

In 2004, CSA Group, a natural resource consultancy, completed a study commissioned by SEI, which aimed at identifying the potential resources of geothermal energy in Ireland. The results of this review indicate that Ireland is particularly well suited for the utilization of ground source heat pumps, due to its temperate climate and rainfall levels that ensure good conductivity and year round rain-fall recharge. The current installation rate is increasing rapidly and requires immediate attention to set and maintain high standards of equipment installation and operation. One of the outcomes of the project was to create a series of geothermal maps for Ireland, an example of which is illustrated below.

Figure 5.6.3: Geothermal Resources in the South West



This Map is for illustrative purposes only. All data copyright OSI + SEI

Source www.sei.ie

The map above illustrates clearly the Killarney-Mallow thrust fault and elevated ground temperatures. The warm springs in the Mallow area and in the more recently identified eastward extension to Glanworth, lie along an east-northeast trending Killarney-Mallow thrust fault. Temperatures in this area vary between 13°C at Marybrook spring, Newmarket, Co. Cork (typical of groundwater temperatures in the area) to 23.5 °C at the County Council borehole north of Glanworth, Co. Cork. It is also worth noting that in broad terms silica rich rocks, of which the Devonian in the Cork and Kerry area are mostly comprised, have higher heat conductivity than limestone.

However close inspection of the maps indicate that the geothermal resource of the Clonakilty Area is poor in comparison to the rest of the county

Power Generation in Cork

There are 3 power stations operating in County Cork and permission has also been granted for a further power station at Aghada, which is yet to commence construction. The €400m plant at Aghada will generate 400 megawatts of electricity for the national grid every year. The plant will sit alongside an existing power station and is due to be completed in 2009. (Natural gas powered).

Table5.6.1: Existing Power Plants in Cork

Location	Capacity (megawatts)	Energy Source
Innishcara	27	Hydro
Aghada	525	Gas
Marina	115	Gas

Energy Efficiency in Buildings, Sustainable Building Design

The EU Directive on the Energy Performance of Buildings (EPBD) contains a range of provisions aimed at improving energy performance of residential and non-residential buildings, both new-build and existing. This Directive was adopted into Irish law as Regulation in 2006.

The EPBD obliges specific forms of information and advice on energy performance to be provided to building purchasers, tenants and users. This information and advice provides consumers with information regarding the energy performance of a building and enables them to take this into consideration in any decisions on property transactions.

As part of the Directive, a Building Energy Rating (BER) certificate, which is effectively an energy label, will be required at the point of sale or rental of a building, or on completion of a new building.

The Action Plan for Implementation of the EPBD in Ireland published in July 2006 proposes phased implementation of BER in Ireland as follows:

- 1 January 2007: BER of new dwellings;
- 1 July 2008: BER of new buildings, other than dwellings; and
- 1 January 2009: BER of existing dwellings and other existing buildings, when offered for sale or rental.

5.6.3 Impact assessment – existing environmental problems and constraints

Sustainability is a key constraint for future development. Emissions to the atmosphere, energy consumption and climate change are all interlinked. Future developments should give consideration to passive design and clean and energy efficient technologies such as renewables, district heating and co-generation.

In Ireland the transport sector is the fastest growing contributor of GHG emissions. A reliable efficient public transport system within the Clonakilty area would reduce car dependence and combat rising CO₂ emissions from vehicle exhausts.

Clonakilty is an area of high visual amenity. It will be important to ensure that for future energy developments and the associated infrastructure does not impact adversely on the landscape. Clonakilty has been identified as a strategically unsuitable zone for wind development in the Cork County Development Plan. Space may also be a constraint in particular when locating vertical ground source heat pumps and district heating plant.

5.6.4 Evolution without implementation of the plan

Evolution without the plan would see a continued upward trend in the inefficient use of energy in the region and deterioration in air quality as a result of ever increasing combustion emissions. Evolution without the plan would also see a slower uptake of renewable energy technologies sustainable building design.

5.7 MATERIAL ASSETS

Within the Clonakilty area there are a variety of material assets. In general material assets are associated with the;

- Built Environment – (protected structures and archaeological monuments); (discussed under cultural heritage)
- Natural Assets – (quarries and mines, agriculture and forestry, conservation areas; and
- Infrastructure – (roads, telecommunications, wastewater, roads, energy).

It is how these assets are utilised that has the potential to impact on the Environment.

5.7.1 Policy

The Clonakilty Plan has a number of policies that have regard to material assets. The Plan takes into account policies at a national level, regional and local level. Particular reference is made to the National Spatial Strategy (for transport), the Urban Wastewater Treatment Regulations 2001, the Cork Waste Management Plan, the Cork County Development Plan and the Skibbereen Electoral Local Area Plan.

5.7.2 Baseline

Water Supply

The Water Services Needs Assessment 2003 for West Cork was prepared by the local authority for funding through the Department of the Environment, Heritage and Local Government. The principal objectives of the sanitary programmes are:

- to provide an adequate supply of water, complying with the Irish Drinking Water Regulations, for domestic, industrial, agricultural and other uses; and
- to provide for the safe disposal of sewage and other waterborne wastes.

Drinking water is abstracted from the Arigideen River. There is adequate capacity for planned development subject to upgrading of pumping stations, treatment works and storage capacity. It is proposed that the Dunmanway Regional Water Supply Scheme, phase 1, will supplement the north-western part of the Clonakilty scheme in times of peak demand.

Municipal Waste

Municipal Solid Waste (MSW - household and similar waste) accounted for 11% of total waste generated nationally. In 2006 MSW increased by 11% on 2005 figures and a 22% increase on 2002 figures. In 2006 the amount of MSW recovered increased by 18% but landfilling also increased by 8% in the same period. This means that recovery rate for MSW only increased marginally from 34% in 2005 to 36% in 2006

Household Waste

The amount of household waste managed by local authorities and the waste industry increased by 33% since 2001 and the amount of household waste recovered has increased four-fold since that time, reflecting changes in legislation, policy and improvement in infrastructure.

Waste Disposal/Landfill

In relation to waste disposal, it is noted that the Cork MRF, which is the cornerstone of Waste Management Strategy, is yet to be built; the Bottlehill landfill is non-operational and the Hazardous Waste Incinerator is still not constructed. Landfill capacity in the Cork region, prior to the opening of Bottlehill, is limited to that at Youghal (300,000), which is running below licensed capacity. Rossmore is currently at capacity. Kinsale Road landfill only accepts waste from Cork City Council. Once Bottlehill opens it will have a capacity of 5 Million tonnes with an approximate life of 20 years.

Waste-to-Energy

In January 2004 Indaver received planning permission for the construction of Phase 1 of a 100,000tpa €75M incinerator for hazardous waste, including a Waste Transfer Station for hazardous waste, to be located at Ringaskiddy. The development was appealed to An Bord Pleanála who subsequently granted permission subject to 27 conditions in January 2004. In addition, a Waste Licence was granted by the EPA for the facility in November 2005. Judicial reviews were sought by objectors to both EPA and APB decisions.

Gas Infrastructure

Gas infrastructure is divided between transmission and distribution infrastructure. Transmission infrastructure forms the backbone of the Irish natural gas system and delivers large volumes of gas at high pressures to the main consumption centres, and in special cases, high consumption customers (generally power stations). The distribution network operate at lower pressure and delivers gas to low consumption customers, typically including small businesses and residential customers, in mostly urban areas.

Transmission Infrastructure

Currently Bord Gais Éireann (BGE) is the only entity that owns and operates transmission infrastructure in Ireland. However the possibility exists for other entities to build and operate a transmission network, subject to licence by the CER under the Gas (Interim) (Regulation) Act 2002.

Electricity

The Electricity Regulation Act 1999 liberalised the electricity sector in Ireland. As a result, the electricity market in Ireland is now fully open to competition, in accordance with the requirements of the EU Directives 96/92/EC and 98/30/EC, as of February 19th 2005. Nationally, the electricity network is currently undergoing a major refurbishment program, to continue to 2010. One of the major projects within this programme is the completion of the Medium Voltage Network Renewal Project. This project will see all of Ireland's Medium Voltage overhead electricity network converted to 20kV or refurbished, to ensure a secure, high quality supply with adequate capacity for existing and future loads.

Agriculture

The following data has been sourced from the Agricultural Census 2000. Agricultural input for Clonakilty Urban was not available from the CSO, however information on Clonakilty Rural, which surrounds the town was obtained. The census recorded 72 farms in Clonakilty Rural area, it was estimated that the total farming area at this time was 2,564 ha. The main use of these lands is pasture farming at 41% and the second most popular use is silage at 28.9%.

The average farm size in Ireland is 31.4 Ha. The average farm size in Cork is 37.5 Ha. 27% of farms in Cork are between 30-50 Ha, 20% are between 50-100 Ha and 4% are over 100 Ha.

Transport

Clonakilty Town Council had a population of 10,194 in the 2006 Census; it also has a considerable tourist population in the summer months of the year. Significant economic growth and a consequent increase in car ownership throughout Ireland in recent years have added to the pressures on existing infrastructure. In recent years Clonakilty has experienced congestion on its road network, therefore a new relief road has been proposed for the town.

Three options for a relief road were explored in the Clonakilty Development Plan 2003 (p.8). These included a northern relief road, which would completely bypass the town extending from the N71 eastwards from Templebryan South and would meet the N71 as far down as Ballyduvane. The second option was for a northern relief road that would extend just north of the town and the third option was for a northern relief road that would extend from the N71 to the east of the town, southwards across Clonakilty Bay (SAC and SPA) to meet with the current relief road running along the south of the town centre. The Cork County Development Plan 2003 also outlines that consideration should be given to the development of a southern or northern relief road in Clonakilty.

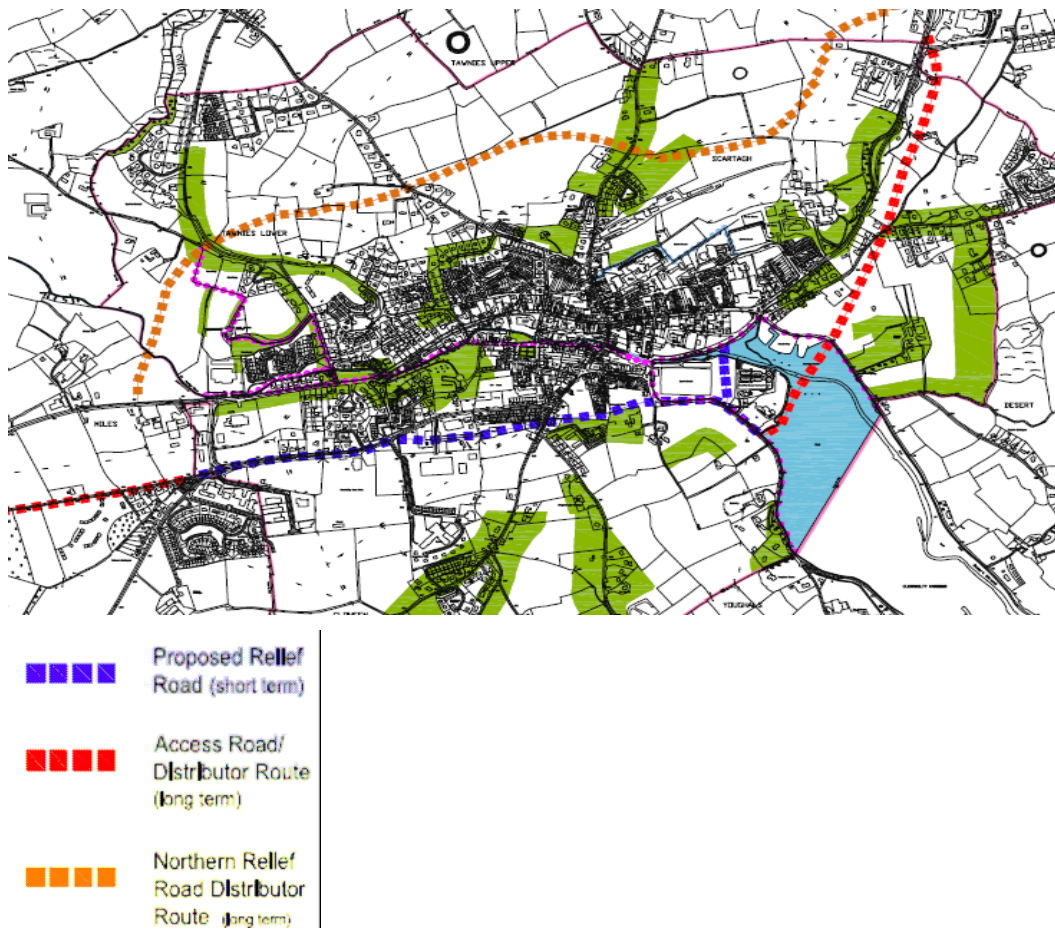
Currently a Traffic and Transportation study is being undertaken by RPS Consultant Engineers, this study is due for completion in August 2008. The Transportation Study is currently studying a number of options for the location of a new Clonakilty Relief Road. However three options for the Clonakilty Relief Road will be included within the Clonakilty Development Plan 2009 – 2015.

These options include;

- Existing protected line for a Southern Relief Road
- Southern Relief Road which runs from the N71 to the east of the town, southwards across Clonakilty Bay (SAC and SPA) to meet with the current relief road running along the south of the town centre.
- Northern Relief Road that would extend from the N71 to the east of the town northwards and would meet with the N71 to the west of the town.

It shall be an objective of the Plan to work with the various agencies to enhance the infrastructure of the town in all its aspects. It is also an objective of the plan to enhance public transportation facilities, cycling facilities, pedestrian amenities and to provide additional segregated cycle lanes and cycle parking facilities throughout the town and in particular the old town centre.

Figure 5.7.1: Relief Road Options for Clonakilty Town



Source: Map 3 Draft Clonakilty Town Development Plan

Access to Clonakilty Town

Significant economic growth and a consequent increase in car ownership throughout Ireland in recent years have added to the pressures on existing infrastructure. Clonakilty Town is located on the N71, which is a national secondary road. A number of Regional and local roads also connect the town with the surrounding hinterland. The town is located 52km west of Cork City, it is 30km north east of Skibbereen Town, 20km south west of Bandon Town and Clonakilty Town is 45km south west of Cork International Airport. The town is accessible via road and air; all routes are listed below in Table 5.7.1. A number of bus services depart from the bus station daily serving Clonakilty.

Table 5.7.1 Accessibility to Clonakilty Town

Road Network	Transport Network
National Secondary	N71: Cork – Bandon – Clonakilty – Skibbereen – Bantry – Kenmare – Clonakilty – Mallow -
Rail Network	Kent Station, Cork City (60km) – Kerry, Dublin.
Air	Cork International Airport (45km)

Table 5.72: Clonakilty Bus Services - Bus Éireann

	No. 47		No. 237		No.252**	
From	Cork(Parnell Place)	Goleen (O'Meara)	Cork(Parnell Place)	Clonakilty	Cork(Parnell Place)	Killarney
To	Goleen (O'Meara)	Cork(Parnell Place)	Clonakilty	Cork(Parnell Place)	Killarney	Cork(Parnell Place)
Journey Time (minute)*	65	65	80	80	70	70
Mon-Fri Operating Time	09:45-20:15	06:10-17:30	14:30	9:25	9:00	13:45
Mon-Fri Service frequency	7	8	1	1	1	1
Saturday Operating Time	09:45-20:15	06:10-17:30	14:30	9:25	9:00	13:45
Saturday Service frequency	7	8	1	1	1	1
Sunday & PH Operating Time	09:45-20:00	10:40-17:30	N/A	N/A	9:00	13:45
Sunday & PH Service frequency	6	5	0	0	1	1

* Journey time is measured between Cork and Clonakilty ** Operates 24th June to 1st September 2007 (as noted on CIE 03/06/08)

There is also one service in the AM peak from Clonakilty to Bandon and Bandon to Clonakilty. This service only operates during the school term and during weekdays.

5.7.3 Impact assessment – existing environmental problems and constraints

A Traffic and Transportation study on Clonakilty Town is currently being undertaken and recommendations have not yet been made. Therefore three options for a Clonakilty Relief Road are currently proposed in the Clonakilty Development Plan 2009 - 2015. It is considered that each of the proposed routes could have environmental impacts, especially the two southern routes which cut through the Clonakilty Bay SAC and SPA. Therefore it is recommended that in the event of implementation of any proposed new route, an Environmental Impact Assessment will need to be undertaken. Consideration should also be given to the environmental policies and objectives of the current and proposed plan should any of the proposed options be implemented.

5.7.4 Evolution without implementation of the plan.

In the absence of the Draft Town Development Plan specific transport objectives would still be provided through the County Development Plan. However the town plan provides a guidance that specifically relates to transport infrastructure within the Clonakilty area.

It is an objective of the plan to implement the outcome of the Clonakilty Traffic and Transportation Study, which proposes to advise on traffic mitigation measures for the town. In the absence of the Clonakilty Town Development Plan 2009 – 2015 recommendations of the transportation study would not be implemented and therefore it is likely that the town would become even more congested, causing increased air and noise pollution within the town centre. Without the plan it is likely that additional public transportation facilities, cycling facilities, pedestrian amenities and parking facilities would not be provided. Without these integral features of the plan the transport situation within the town itself would deteriorate as increased volumes of traffic over time were using the same routes that may presently be at or near capacity.

5.8 CULTURAL HERITAGE

This section of the SEA establishes Clonakilty Town Council's objectives and policies for the protection, conservation and enhancement of Clonakilty's architectural and archaeological heritage. The jurisdiction of the Clonakilty Town Development Plan 2009-2015 encompasses an important area in terms of architectural merit and archeological heritage. Urban development has increased significantly in recent years placing the archaeological heritage of the town under increasing threat. Therefore the strategy underlying the Plan specifically aims to address the following;

- The unique heritage of the town needs to be protected and leveraged in a balanced manner for the benefit of all stakeholders in the town.
- Clonakilty's unique architectural heritage is noted and a detailed inventory in respect of same is included. These heritage items are an asset to the town and it is an objective to continue to develop a heritage strategy that will enable the preservation of these structures for their intrinsic conservation value, their potential for enhancing the towns urban quality and their economic value enhancing role with respect to the tourist industry.

5.8.1 Policy

There are a number of specific planning polices and objectives in the Clonakilty Development Plan 2009 to 2015 to retain and improve those structures, buildings and streetscapes within the town which significantly add to the uniqueness of Clonakilty's urban landscape and to the amenity value of the town. The Plan also refers to national, regional and local plans including the Cork County Development Plan 2003 and draft Cork County Development Plan 2007.

5.8.2 Baseline

Cultural heritage includes inherited artifacts and intangible attributes that are inherited from past generations, maintained and bestowed for the benefit of future generations. The protection of heritage not only has environmental benefits and benefits for the quality of the people of Clonakilty, but it also brings economic benefits to the County by providing attractive towns, villages and countryside for visitors to enjoy.

National Monuments - Archaeological Sites and Monuments in State Ownership

There are no archaeological sites and monuments in State ownership located within the plan area. While no National Monuments occur within the boundary of the Clonakilty Town Council area it should be noted that under the National Monuments Acts any monument in the ownership or guardianship of the local authority may be declared a national monument. This applies to any Recorded Monument in local authority ownership or guardianship where the preservation of any such monument is a matter of national importance because of the archaeological, architectural, historical, traditional or artistic importance attaching to that monument. National Monuments Service will advise on any determinations regarding the status of such monuments. Under the national monuments acts (1930-2004) any works at or in proximity to such monuments will require ministerial consent.

Record of Protected Structures

There are currently 179 structures listed for protection in the Record of Protected Structures (Draft Clonakilty Development Plan, 2009). These structures range from cottages, convents, shop fronts, post offices and schools.

In addition to the Record of Protected Structures, structures of architectural heritage merit, although not put forward for inclusion in the Record of Protected Structures (RPS) may continue to contribute to the identity of a locality and should be taken into account in the preparation of the Development Plan. The Clonakilty area is unique in form and character. It is an objective to seek the identification and protection of all structures within the town that are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. Such structures include but are not exclusive to the Record of Protected Structures. The distribution of the Record of Protected Structures throughout Clonakilty are indicated on map 6A, 6B, 6C and 6D.

The Record of Protected Structures list is a list of the structures that constitute the Clonakilty Town Record of Protected Structures and are indicated in Volume II of the Clonakilty Town Development Plan 2009 – 2015.

National Inventory of Architectural Heritage - Recorded Structures

A record of buildings and structures of Architectural, Artistic, Cultural, Historical, Scientific, Social and Technical interest included and proposed for inclusion in the RPS for Clonakilty was carried out by Jane Wales for Cork County Council in April 2004. In total 207 buildings and structures were identified in this study, not all buildings and structures outlined within this report are protected structures, however it is envisaged that many, if not all of these structures will be incorporated into the Record of Protected Structures over the life of the Clonakilty Development Plan 2009 - 2015.

Architectural Heritage

The term “architectural heritage” is defined in the Architectural Heritage (National Inventory) & Historic Monuments Act, 1999 as meaning all:

- a) Structures and buildings together with their settings and attendant grounds fixtures and fittings;
- b) Groups of such structures and buildings, and Sites; and
- c) Which are of architectural, historical, archaeological, artistic, scientific, social or technical interest.

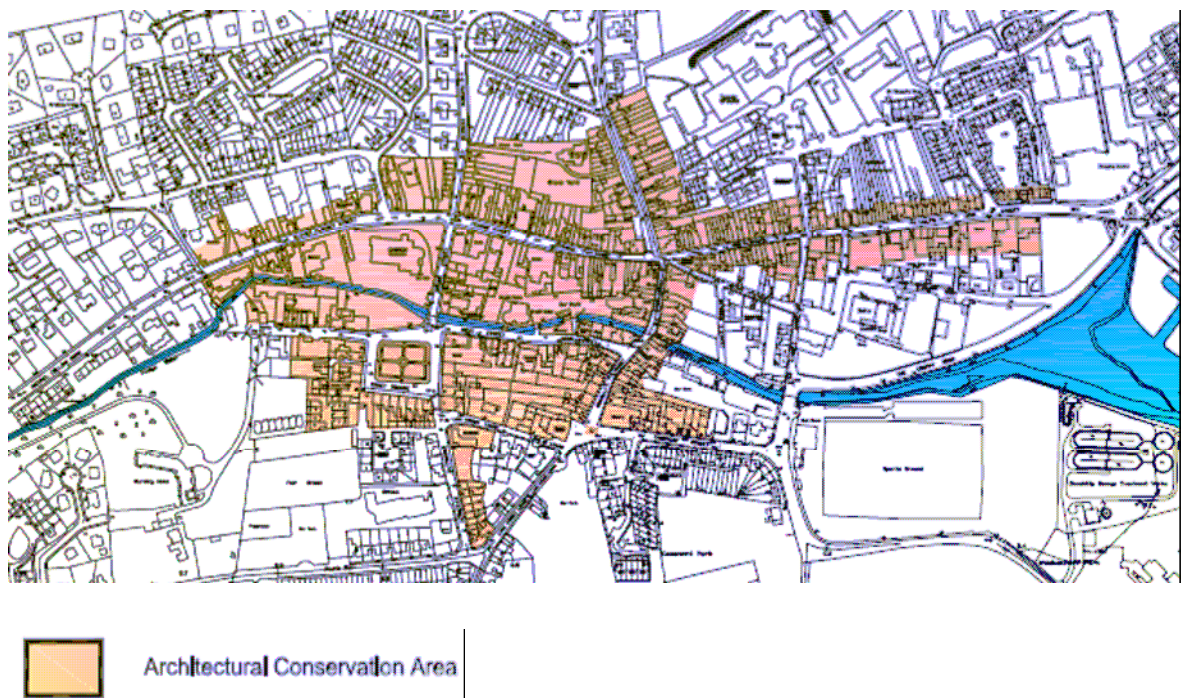
Architectural Conservation Areas (ACA's)

The built heritage of County Cork and Clonakilty town is also offered protection through the designation of Architectural Conservation Areas (ACAs). Most of the Town Centre of Clonakilty is designated as an ACA. An ACA is a place, area, group of structures or townscape, taking account of building lines and heights, that is of special architectural, historical, archaeological, artistic, cultural scientific, social or technical interest or that contributes to the appreciation of a Protected Structure, and whose character is an objective of a development plan to preserve.

In addition to the policy of the plan Architectural Conservation Areas are protected by legislation may be used to protect the following:

- Groups of structures of distinctiveness or visual richness or historical importance;
- The setting and exterior appearance that are of special interest, but the interiors of which do not merit protection;
- The setting of a Protected Structure where this is more extensive than its cartilage;
- Designed landscapes where these contain groups of structures as in, for example urban parks, the former demesnes of country houses and groupings of archaeological or industrial remains; and
- Groups of structures, which form, dispersed but unified entities but which are not with in the attendant grounds of a single dominant Protected Structure.

Figure 5.8.1 Clonakilty Town Architectural Conservation Area



Source: Map 7 Draft Clonakilty Town Development Plan 2009 - 2015

Archaeological Heritage

Archaeological heritage is a resource, which can be used to gain knowledge and understanding of the past and is therefore of great cultural and scientific interest. Archaeological heritage ranges from sites, features and objects of archaeological interest.

The Minister for the Environment and Local Government is responsible for the protection of archaeological heritage, including the licensing of archaeological excavations, through the exercise of powers under the National Monuments Acts 1930 to 2004.

There are a number of categories of monuments under the National Monuments Acts

- National monuments in the ownership or guardianship of the Minister or a Local Authority or national monuments which are subject to a preservation order;
- Historic monuments or archaeological areas recorded in the Register of Historic Monuments; or
- Monuments or places recorded in the Record of Monuments and Places.

The Archaeological Survey of Ireland (ASI) compiles the record of all archaeological monuments in the State and is responsible for the publication of Archaeological Inventories. The Record of Monuments and Places is compiled by The ASI and comprises lists and maps of all monuments with known locations.

It should be noted that any direct impacts on national monuments in State or Local Authority care or subject to a preservation order will require the consent of the Minister for the Environment, Heritage and Local Government under Section 14 of the National Monuments Act 1930 as amended by Section 5 of the National Monuments (Amendment) Act 2004.

Record of Monuments and Places

The National Monuments (Amendment) Act 1994 made provision for the compilation of a record of all known monuments in the County - The Record of Monuments and Places (RMP). The Record of Monuments and Places consists of a set of maps on which all the archaeological sites in the county known to the Minister in 1997 were marked. It is accompanied by a manual, which contains a descriptive listing of each site. All the sites marked on the RMP maps are protected under section 12 of the National Monuments (Amendment) Act 1994. As new features and monuments are discovered due to research and development driven archaeological assessment, monitoring, testing and excavation a second layer of monuments not yet included in the RMP is created.

Copies of the Record of Monuments & Places maps and accompanying manual can be viewed at the Copies of the Record of Monuments & Places maps and accompanying manual can be viewed at the Cork County Library, Model Business Park, Model Farm Road, Cork and at the Clonakilty Town Library, Old Mill, Kent Street, Clonakilty.

Clonakilty Town has a diverse range of monuments ranging from a number of historic eras. Monuments within the area include Castles, Ogham stones, Fulachta fiadh, Holy Wells, Enclosures etc. There are 7 monuments and places recorded within the boundary of Clonakilty Town. It is deemed that the Plan area is of high archaeological potential due to the potential for the presence of hitherto unknown sub-surface archaeological remains. This determination is based on the presence of substantial archaeological remains from many periods of the past within the Town Council area.

Tree Preservation Orders

In accordance with Section 205 of the Planning & Development Act (2000) it is the policy of the Council to ensure that the existing trees in the town are retained and protected by means of Tree Preservation Orders within the Clonakilty Development Plan 2009 - 2015. There are eight tree preservation orders in the Plan as indicated in table 5.8.1 below, map 3 of the Clonakilty Town Development Plan 2009 – 2015 indicates the location of protected trees in the Town Council area. These trees have been designated due to their landscape, amenity and ecological value. It is an objective, subject to safety considerations to preserve specimen trees in the town council area and environs and examining the possibility of conserving the visually and/or ecologically important ones by means of Tree Preservation Order.

Table 5.8.1 Tree Preservation Orders in Clonakilty Area

Tree Preservation Order Description and Location
• Trees in grounds of Bushmount House
• Trees along Western Road (Michael Collins Road)
• Trees in Emmet Square
• Trees in grounds of properties adjoining Emmet Square. (rear gardens)
• Trees situated along the river bank and Catholic Church
• Trees in Kent St
• Trees along Convent Road
• Trees in Orchard Gardens
• Trees in Scartagh adjacent to Community College
• Trees along field boundaries and avenue at Tawnies Cottage together with industrial specimen examples
• Any tree with a girth exceeding 100mm with the Architectural Conservation Zone

Industrial Heritage

Ireland's industrial heritage is being changed and destroyed at an unknown rate. Over the past decade there has been a growing public awareness of Ireland's industrial heritage, as seen in a number of sites which have been restored by enthusiasts and are now open to the public as tourist and educational attractions. Although there is now official recognition of the importance of the industrial heritage of Ireland, statutory protection is still low, due in the main to a backlog of listing of heritage structures. Clonakilty has been designated as West Cork's Heritage Town by Failte Ireland. Clonakilty has a rich industrial heritage; many of the old industrial buildings of the town have been restored to an appropriate modern use. The library and council offices are housed in an old corn mill while the Post Office now occupies the former Presbyterian Church.

The West Cork Regional Museum is also located in Clonakilty Town, which pays tribute to Clonakilty's industrial past - especially its linen industry.

The town is also home to the West Cork Model Railway Village, which is located to the south east of the town. The Model Village depicts in miniature, life and industry in West Cork as they were 50

years ago to interpret the industrial life of West Cork during the era 1930 to 1950. The theme is enhanced by the miniature-working railway to recreate the West Cork Railway line in miniature.

Gaeltacht Areas

There are no Gaeltacht areas within the subject area.

5.8.3 Impact assessment –existing environmental problems and constraints

Developments or works which occur in close proximity to archaeological monuments would have potential to impact existing archaeological monuments through disturbance or destruction of the monuments. New developments that are adjacent to and/or alterations/extensions to existing protected structures also need to be carefully managed to ensure that the cultural heritage of such areas are not disturbed or negatively impacted upon.

It is deemed that the Plan area is of high archaeological potential. This determination is based on the presence of substantial archaeological remains from many periods of the past within the development area.

5.8.4 Evolution without implementation of the plan

In the absence of the Plan specific objectives would still be provided through the Cork County Development Plan and National Legislation. However the Clonakilty Development Plan provides a guidance that encompasses principles from the Cork County Development Plan and the national legislation and is therefore more applicable to the area of Clonakilty.

If the plan were not implemented there would not be any local guidance, policies or objectives to protect and conserve archaeological sites, protected structures, trees of merit, Architectural Conservation Areas and buildings and sites of Architectural merit. Therefore these features of special architectural, historical, archaeological, artistic, cultural, social or technical interest could be damaged or even lost in some cases.

5.9 LANDSCAPE

Clonakilty contains significant areas of landscape importance, which are important not only for their intrinsic value as places of natural beauty but also because they provide a real asset for residents and visitors alike in terms of recreation, tourism and other uses. The importance of landscape is recognised in the Planning and Development Act 2000, which requires that Development Plans include objectives for the preservation of the landscape, views and prospects and the amenities of places and features of natural beauty.

5.9.1 Policy

There are a number of specific planning policies and objectives in the 2009 to 2015 Clonakilty Development Plan to protect features of Landscape and Natural Heritage importance which significantly add to the uniqueness of Clonakilty's landscape and to the amenity value of the town. The Plan also refers to national, regional and local plans including the Cork County Development Plan 2003 and draft Cork County Development Plan 2007.

5.9.2 Baseline

Landscape character is a distinct area of landscape that is relatively homogeneous in character. Each character represents its own landscape values and sensitivities. The character specified for a study area is generally a descriptive term made up of the prominent landform and land cover.

According to the draft Cork County Council Landscape Strategy the landscape of Clonakilty town is of very high value and of national importance. The landscape in this area is also very sensitive.

Landscape Types

Clonakilty Town comprises of a mix of landscape types including Indented Estuarine Coast and Rolling Patchwork Farmland. Much of the north and south of the town is elevated scenic landscape, there are also vast areas of trees, protected trees and hedgerows surrounding the town.

To the north of the town the landscape type is primarily Rolling Patchwork Farmland, this landscape comprises of rolling and fertile patchwork of fields. To the north of the town the landscape type is primarily Rolling Patchwork Farmland, this landscape comprises of rolling and fertile patchwork of fields. The rolling landform is characterised by low and subtly defined rounded hills with interweaving shallow valleys created by the irregular pattern of rivers. In terms of landcover, a mosaic of small to medium sized fertile fields, bounded by mature but relatively low broadleaf hedgerows, with some coniferous plantations on slopes and higher ground. Land use comprises intensive dairying and tillage, while farmsteads are scattered throughout the landscape, often concealed behind hill slopes and mature broadleaf hedgerows.

Almost all of Clonakilty town is classed as indented estuarine coast. This landscape type comprises of gently undulating topography incised by shallow river estuaries or 'drowned' valleys formed by glacial activity. Much of the coastline outside Mucross Head comprises low but steep cliffs and is punctuated by a series of promontories, such as Old Head of Kinsale, Seven Heads, Galley Head and Toe Head and which recede to bays, such as Courtmacsherry Bay, Rosscarberry Bay and Kinsale Harbour. The Clonakilty Bay, winds inland into agricultural areas, creating shallow tidal mudflats and occasional marshy areas. The agricultural areas of this landscape type are usually intensively farmed for dairy and tillage uses and are comprised of fertile undulating fields of moderate size bounded by broadleaf hedgerows, however much of Clonakilty town is urban in character therefore this would mainly apply to the more rural areas of the town and the environs.

Farmsteads, houses and outbuildings are generally visible throughout the landscape due to the relatively low height of the hedgerows. The Urban centre of Clonakilty is located within a sheltered inlet of the indented estuarine coast.

Values

The Rolling Patchwork Farmland landscape type located to the north of Clonakilty Town is valued for its fertile agricultural land, areas of ecological importance, its scenic amenity, including large areas of mature hedgerows and fertile patchwork field patterns and as a place to live, due in part to its attractive rural setting.

Indented Estuarine Coast is valued both nationally and internationally for its scenic amenity, its built and natural heritage, including such areas as Clonakilty Harbour, which is a particularly unique and important coastal habitat. The area attracts significant numbers of domestic and overseas visitors and tourists based on the unique quality of its scenic landscape, and its towns and villages of exceptional quality. The overall area also has a particularly complex and unique topography within Ireland, and which includes cliffs, promontories, inlets, estuaries and beaches including Inchydoney. Within Cork County the area is particularly important as a provider of significant amenities and recreational areas, particularly in the eastern part of the area, which is close to large centres of population. This landscape also contains some agricultural areas, which form an important component of the local economy.

Sensitivity

Elevated lands to the north and south of the town are sensitive to development. Lands to the east and south east of Clonakilty town are designated as Scenic Landscape Coastline in the Cork County Development Plan 2003 and Draft Cork County Development Plan 2007.

Clonakilty Bay to the south east of the town is a proposed National Heritage Area (DoEHLG site code 0091), a candidate Special Area of Conservation (DoEHLG site code 0091) and a Special Protection Area (DoEHLG site code 4081).

Scenic routes and views

Scenic Routes make up those areas of natural beauty and the important views and prospects that people in Cork (and visitors to the county) value most highly. There are three scenic routes located in close proximity to the town, these include Scenic Route A89, A90 and A91 as outlined in the Cork County Development Plan 2003 (S72/S73/S74 Scenic Routes in the Draft Cork County Development Plan 2007).

5.9.3 Assessment –existing environmental problems and constraints

It is considered that much of the lands surrounding the town are of high landscape character. Elevated lands to the north and south of the town are sensitive to development. Lands to the east and south east of Clonakilty town are designated as Scenic Landscape Coastline in the Cork County Development Plan 2003 and Draft Cork County Development Plan 2007. Three scenic routes are located in close proximity to the town and scenic views from Golf Links Road are also locally protected. In addition Clonakilty Bay to the east of the town is designated as a National Heritage Area, Special Area of Conservation and a Special Protection Area.

It is an objective of the Clonakilty Development Plan to Protect Features of Landscape and Natural Heritage importance and to preserve the scenic and amenity features of the shoreline around the town and other scenic landscapes and vistas in the town.

5.9.4 Evolution without implementation of the plan.

In the absence of the Plan specific objectives would be still be provided through the Cork County Development Plan and National and European Legislation. However the Clonakilty Development Plan provides a guidance that encompasses principles from the Cork County Development Plan and the national legislation and is therefore more applicable to the area of Clonakilty.

If the plan were not implemented lands within the town would not be zoned and it is likely that development would take place in an ad hoc, haphazard manner. It is likely that that development would take place on scenic landscapes and important vistas of the town. Therefore features of landscape value could be damaged or even lost in some cases.

6 OBJECTIVES, TARGETS AND INDICATORS

The sustainability criteria are broadly categorized in terms of the indicators outlined in the SEA Directive and in the Draft SEA of the Cork County Development Plan 2009-2015. In the course of carrying out the appraisal, the sustainability criteria were refined, combined and classified in order to avoid duplication and ensure a clear, focused and measurable set of criteria against which the strategy can be assessed. Set out in Table 6.1 are the draft SEA Objectives that are being considered to test the Clonakilty Development Plan. These objectives are based on the current understanding of the key environmental issues identified at a local level in Clonakilty and at a county level.

Table 6.1: Clonakilty Town Plan Objectives, Targets and Indicators

Issue	Objective	Target	Indicator	Responsibility
Biodiversity, Flora and Fauna				
B1	To avoid significant adverse impacts (direct, cumulative and indirect), to protected habitats, species or their sustaining resources in designated ecological sites by development within or adjacent to these sites.	No significant adverse impacts, (direct, cumulative and indirect impacts), to relevant habitats, species or their sustaining resources in designated ecological sites.	Number of significant adverse impacts (direct, cumulative and indirect impacts), to relevant habitats and species in designated ecological sites.	CCC DoEHLG
B2	To protect the marine environment, aquatic biodiversity, flora and fauna and to promote Coastal management strategies.	No significant adverse impacts, (direct, cumulative and indirect impacts), to relevant habitats, species or their sustaining resources in designated ecological sites.	Number of significant adverse impacts (direct, cumulative and indirect impacts), to relevant habitats and species in designated ecological sites.	CCC DoEHLG

Issue	Objective	Target	Indicator	Responsibility
Population and Human Health				
PH1	To improve the quality of life for the people of Clonakilty through high quality residential, working and recreational environments, sustainable travel patterns.	To improve quality of life, provision of improved physical and social infrastructure, to reduce journey to work times and allow for a better match between place of residence and place of work.	Journey to work times.	CCC
PH2	To protect human health from hazards or nuisances arising from traffic and incompatible landuses.	No spatial concentrations of health problems arising from environmental factors.	Occurrence of a spatially concentrated deterioration in human health.	CCC/CCC
Soils				
S1	To maximise the sustainable re-use of brownfield lands and the existing built environment, rather than developing greenfield lands.	All brownfield lands to be redeveloped at the end of the plan lifespan (subject to availability on the open market and demand for such land).	Area of brownfield land available.	CCC
S2	To maintain the quality of soils.	To reduce contamination and safeguard soil quality and quantity.	Cannot specifically monitor at present, however, when soil directive comes into force, will be obliged to consider impacts of policies on soils.	CCC

Issue	Objective	Target	Indicator	Responsibility
S3	To minimise waste production and reduce the volume of waste to landfill and to operate sustainable waste management practices.	To meet national and EU targets on the recycling of municipal waste and its diversion from landfill.	Volume of waste recycled and volume of waste sent to landfill.	CCC/CCC
Water				
W1i	Maintain or improve the quality of surface water to meet the requirements of the South Western River Basin Management Plan (SW RBMP) and Programme of Measures (POMs)	0 Faecal Coliform Counts per 100ml of groundwater.	Faecal Coliform Counts per 100ml of groundwater.	EPA CCC/CCC
W1ii		To improve biotic quality ratings, where possible to Q5.	Changes in water quality as identified during water quality monitoring programmes.	EPA CCC/CCC

Issue	Objective	Target	Indicator	Responsibility
W2i	To maintain and improve, where possible, the quality of rivers, lakes and surface water.	To maintain a biotic quality rating of Q4, in line with the requirement to achieve good water status under the Water Framework Directive, by 2015.	Biotic Quality Rating (Q Value) and Risk Assessment.	EPA CCC/CCC
W2ii		To improve biotic quality ratings, where possible, to Q5.	Biotic Quality Rating (Q Value) and Risk Assessment.	EPA CCC/CCC
W3	To maintain and improve where possible, the quality of estuarine and coastal waters.	To maintain or to improve trophic status, where relevant, to unpolluted in line with the requirement to achieve good water status under the Water Framework Directive, by 2015.	Trophic Status (ATSEBI)	EPA CCC/CCC
W4a	To prevent pollution and contamination of bathing water.	≤ 5,000 Total Coliform Counts per 100ml of bathing water.	Total Coliform Counts per 100ml of bathing water.	CCC
W4b		≤ 1,000 Faecal Coliform Counts per 100ml of bathing water.	Faecal Coliform Counts per 100ml of bathing water.	EPA CCC

Issue	Objective	Target	Indicator	Responsibility
Air and Climate				
A 1	To maintain and improve air quality in Clonakilty and reduce CO2 Greenhouse Gases (GHGs) to alleviate Climate Change.	Increased use of public transport. Increase numbers of cycle lanes and pedestrian routes in the study area. Increase number of permissions granted for renewable energy projects	Use of public transport. Provision of cycle lanes and walking routes. Number of permissions granted for renewable energy projects.	CCC/CCC
Energy				
E1	Use of renewable energy technology for projected power requirements over the lifetime of the Plan	Encourage use of renewable energy for domestic and small businesses. Use of renewable energy to supply National Grid where applicable	Number and type of renewable energy technologies employed in new developments	CCC/CCC
Material Assets				
M1	To serve new development under the plan with appropriate wastewater treatment.	No new developments granted permission which cannot be adequately served by a public waste water treatment plant over the lifetime of the plan.	Number of new developments granted permission which cannot be adequately served by a public waste water treatment plant over the lifetime of the plan.	CCC NRA

Issue	Objective	Target	Indicator	Responsibility
M2	To maintain and improve the quality of drinking water supplies.	To maintain and improve drinking water quality in Clonakilty to comply with the requirements of the European Communities (Drinking Water) Regulations 2000.	Drinking water quality standards (Microbiological, Chemical and Indicator parameters).	EPA CCC/CCC
Cultural Heritage				
CH1	To protect the archaeological heritage of Clonakilty and; the context of the above within the surrounding landscape where relevant.	No unauthorised developments permitted over the lifespan of the plan which result in full or partial loss of: entries to the Record of Monuments and Places; entries to the Register for Historic Monuments; National Monument subject to Preservation Orders, and; the context of the above within the surrounding landscape where relevant.	Number of unauthorised developments permitted over the lifespan of the plan which result in full or partial loss of: entries to the Record of Monuments and Places; entries to the Register for Historic Monuments; National Monument subject to Preservation Orders, and; the context of the above within the surrounding landscape where relevant.	CCC Heritage Section Cork Heritage Forum DoEHLG

Issue	Objective	Target	Indicator	Responsibility
CH2	To preserve and protect the special interest and character of Clonakilty's architectural heritage and the context of the above within the surrounding landscape where relevant.	No unauthorised developments permitted over the lifespan of the plan which result in physical loss or loss to the context in the surrounding landscape or streetscape of: entries to the Record of Protected Structures; Architectural Conservation Areas, or; entries to the National Inventory of Architectural Heritage.	Number of unauthorised developments permitted over the lifespan of the plan which result in physical loss or loss to the context in the surrounding landscape or streetscape of: entries to the Record of Protected Structures; Architectural Conservation Areas, or; entries to the National Inventory of Architectural Heritage.	CCC Heritage Section Cork Heritage Forum DoEHLG
Landscape				
Li	To protect Clonakilty's sensitive landscapes, landscape features and designated scenic routes and landscape	Number of unauthorised conspicuous developments located within sensitive landscapes or designated scenic landscape.	No unauthorised developments to be conspicuously located within sensitive landscapes or designated scenic landscape.	CCC/CCC
Lii		No unauthorised developments to adversely impact upon designated scenic views or scenic landscape.	Number of unauthorised conspicuous developments adversely impacting upon designated scenic views or scenic landscape.	CCC/CCC

7 ASSESSMENT OF ALTERNATIVES

7.1 INTRODUCTION

Article 5 of the SEA Directive requires the environmental report to consider ‘reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme’ and the significant effects of the alternatives selected. Alternatives must be realistic and capable of implementation and should present a range of different approaches within the statutory and operational requirements of the Town Plan.

Section 3.14 of the DoEHLG 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 Local Area Plans, 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 Clonakilty Development Plan are limited.

It is a mandatory objective of a Development Plan 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 sufficient lands are proposed to be rezoned for residential, employment and community uses within the town boundary in line with national, regional and local population projections, which will contribute to the generation of critical mass within the town of Clonakilty.

- **Alternative 1** The ‘Do-nothing’ Alternative;
- **Alternative 2** Rezone sufficient lands in accordance with national, Regional and Local projections; and
- **Alternative 3** Extend new development zonings on Greenfield lands in accordance with submissions to the development plan.

Under Alternative 1 the ‘do nothing’ scenario, Clonakilty would maintain its current physical and socio-economic characteristics. Development would be market dependent and would occur at a slower pace and in a less co-ordinated manner. Adopting the ‘do-nothing’ approach would have serious implications for the proper planning and sustainability of Clonakilty Town, as it would mean development would take place in a haphazard manner.

As a result of the do-nothing approach, policies and objectives of the plan would not be updated and therefore derelict and under-utilised buildings would dilapidate further. Physical, social and economic development would not be planned and promoted within the town. Therefore Option 1 would not achieve the priority objective of the Clonakilty Town Development Plan, which is to promote balanced and sustainable development that takes account of the values and concerns of all stakeholders in the town. Therefore this option is considered negative in terms of the environment and sustainability of Clonakilty and is therefore not the chosen option for the plan.

Alternative 2 is to rezone sufficient lands in accordance with national, Regional and Local projections through the intensification of the existing Town Centre, redeveloping brownfield sites and Greenfield sites only where there is a natural extension to existing zoning. This scenario allows for the intensification of the town centre and the consolidation and expansion of existing services to easily accessible lands. This scenario would meet a large number of the objectives of the Town Development Plan, as it would allow the rejuvenation of existing derelict sites, which would improve the town’s architectural character and townscape and consequently improve its tourist function. It would also be likely to have a positive impact on existing residents and traders in the town .

Therefore alternative 2 is the preferred option for the Clonakilty Town Development Plan 2009 - 2015.

Alternative 3 is to extend new development zonings on greenfield lands in accordance with submissions to the development plan within the Clonakilty Town Council area. Much of the town is already developed therefore this alternative would involve extending zonings into the only greenfield areas of the Town, most of which is located to the south and north of the town which is considered to be of high landscape character. Therefore this alternative would result in the rezoning of lands based on the requests of local landowners. It would entail the rezoning of greenfield lands that may or may not be located in sustainable locations and would result in overprovision of zoned lands and would not be in accordance with planned population projections for the town. Therefore alternative 3 is considered unsustainable due to the dispersed nature of growth and primarily due to its potential to have significant impacts on the environment.

7.2 ASSESSMENT OF OPTIONS

Table 7.2.1 below provides a description of the criteria used to assess the various environmental SEA topics against the proposed alternative.

Table 7.2.1 Scoring Symbol for the Purpose of Assessment of Alternatives

Impact	Negative	Negative indirect	Neutral	Positive (direct)	Positive (indirect)	Uncertain/ Questionable
Symbol	x	⊗	0	✓	⊗	?

Option 1- The “do-nothing” Option

Under the “do nothing” option, the Area would maintain its current physical and socio-economic characteristics. Development would be market dependent and would most likely occur at a slower pace and in an uncoordinated manner and in a haphazard approach, as the development plan principles would no longer apply.

Adopting the “do nothing” scenario would mean that parts of the area would remain derelict and under utilised with little physical, social or economic enhancement.

Implementation of Option 1 would not achieve the priority objective of the Clonakilty Town Development Plan, which is to promote balanced and sustainable development that takes account of the values and concerns of all stakeholders in the town. An overview of impacts by considering the “do nothing” scenario is provided below in Table 7.2.2.

Table 7.2.2: Option 1 the ‘Do-nothing’ Option

Environmental Issue	Score	Commentary
Biodiversity	☒	May result in pressures to the River Feagle and Cloankilty Bay NHA, cSAC and SPAs due to unplanned growth. Possible loss of hedgerows, tree lines and potentially sensitive habitats but not on a significant scale.
Population and Human Health	×	Under this scenario there would be a continuing reliance on private transport as development would be of an unplanned nature which would result in greater exposure to noise and air pollution.
Water	☒	Uncontrolled development could place pressure on surface water and on groundwater quality. Uncontrolled development within the town is likely to have negative impacts to the River Feagle and may have indirect impacts on the Clonakilty Bay. In addition development near the river and bay could cause pollution and could affect recreational fishing opportunities with a slight negative impact on water quality.
Soil	×	Unplanned development within the area could potentially result in the loss of fertile soils/resources but not on any significant scale.
Air & Climate	☒	Under this scenario there is no planned provisions for the facilitation of a green fabric and therefore there would be a greater reliance on the private car rather than cycleways and pedestrian links resulting in increased CO ₂ emissions and negative impacts to air quality and climate
Material Assets	×	This option could result in a number of one off septic tanks, connections to ESB rather than a planned and phased approach. Access to services and public facilities would not be planned under this scenario. It would result in the continued unsustainable development of one-off and ribbon housing along minor roads
Cultural Heritage	☒	There could be impacts on the recorded monuments and places sites and protected structures within the area as a consequence of this option. Given the overall high archaeological potential of the plan area sub-surface remains may be encountered and thereby impacted upon. Also under the do-nothing option, the plan would not designate new Architectural Conservation Areas (ACAs) or Tree Protection Orders (TPOs) and therefore it is possible that the special features of the ACAs and Trees of high landscape, amenity and/or ecological value could be lost or degraded.
Landscape	☒	Unformulated development in the town may result in impacts on the protected views.
Traffic	☒	Unplanned development is likely to result in dispersed development, which would increase the need and dependency upon private means of transport leading to traffic congestion and delays and pressure on the existing road network.

- **Option 2- Rezone sufficient lands in accordance with national, Regional and Local projections**

Alternative Option 2 is to rezone sufficient lands in accordance with national, Regional and Local projections through the intensification of the existing Town Centre, redeveloping brownfield sites and Greenfield sites only where there is a natural extension to existing zonings. This scenario allows for the intensification of the town centre and the consolidation and expansion of the urban centre of the town. This option allows the sustainable extension of existing services to easily accessible lands.

This scenario would meet a large number of the objectives of the Town Development Plan, as it would allow the rejuvenation of existing derelict sites, which would improve the town's architectural character and townscape and consequently improve its tourist function.

This option provides a structured sustainable vision that will realistically accommodate the urban growth in the proposed zoned lands in line with the projected population in line with national, regional and local policy. In addition it is envisaged that this option would providing a viable future to stabilise and revitalise Clonakilty Town.

It would also be likely to have a positive impact on existing residents and traders in the town. Therefore Option 2 is the preferred option for the Clonakilty Town Development Plan 2009 - 2015.

Table 7.2.3: Rezone sufficient lands in accordance with national, Regional and Local projections

Environmental Issue	Score	Commentary
Biodiversity	0	The intensification of the Town centre and redeveloping brownfield sites and Greenfield sites only where there is a natural extension to existing zonings would have a neutral effect on biodiversity as it would reduce impacts to greenfield areas and wildlife corridors outside the town, as well as any protected SPAs, SACs and pNHAs. Further expansion of Clonakilty Town centre and redevelopment of brownfield sites would have a neutral effect on flora and fauna as it would reduce impacts on greenfield areas and wildlife corridors outside the town, as well as any protected SPAs, SACs and pNHAs.
Population and Human Health	✓	It promotes greater use of public transport due to the intensification of the town centre and promotion of development on lands, which have been zoned in a planned manner. This option promotes growth and development to allow for greater open space, amenities and community facilities, which in turn would improve the quality of life for the individual. This option also poses the least amount of impacts on the environment out of the 3 options, which indirectly has a positive effect on human health.
Water	0	Policies in the plan ensure that development will only take place in areas where wastewater and water supply capacity have been assessed with the aim of reducing pressure on surface water and groundwater. In addition, this option will aim for the preservation and enhancement of good water quality in line with the Water Framework Directive
Soil	0	This scenario would involve uptake of land the majority of which is made ground and therefore impacts will be minimal.
Air & Climate	0	Development will be concentrated in areas well served by existing and planned infrastructure making it convenient for the population to utilise public transport and thereby reduce CO ₂ emissions and negative impacts to air quality and climate
Material Assets	✓	This option focuses development in existing development areas and also promotes development on brownfield sites and on Greenfield sites only where there is a natural extension to existing zonings. This option would help to rejuvenate existing derelict sites, which would improve the town's architectural character and townscape and consequently its tourist function. This option promotes development where there is already provision of services, water supply and transport systems can be planned to accommodate development.
Cultural Heritage	0	This option will concentrate development in areas already developed or zoned for development. There are policies and objectives within the plan to ensure that Cultural Heritage is protected and enhanced and therefore will prevent development impacting on cultural heritage.
Landscape	0	This option would lead to the development of a more compact urban structure and reduce the need for the development of greenfield areas on the edge of town. This option will concentrate development in the town and on lands zoned for development and will see development of brownfield or derelict sites, which should reduce the visual impact on the landscape of the area. Areas of high landscape value or sensitivity should be avoided.
Traffic	0	With the provision of sustainable public transport, it is likely that there will be an increase of use in public transport and reductions in the distances of commuting for the increasing population, as development is concentrated in the town and on lands planned and zoned for development.

Option 3 - Extend new development zonings on Greenfield Lands in accordance with submissions to the development plan

Alternative Option 3 is to extend new development zonings on greenfield lands in accordance with submissions to the development plan within the Clonakilty Town Council area. Much of the town is already developed therefore this option would involve extending zonings into the only greenfield areas of the Town, most of which is located to the south and north of the town which is considered to be of high landscape character. Therefore this option would result in the rezoning of lands based on the requests of local landowners. It would entail the rezoning of greenfield lands that may or may not be located in sustainable locations and would result in overprovision of zoned lands and would not be in accordance with planned population projections for the town.

This type of dispersed development would result in the loss of the greenfield land and agricultural lands. Developments on greenfield lands outside the town centre would need to be serviced in addition to the already zoned lands, which would be unsustainable. In addition there would be a reliance on private transport into Clonakilty Town. It would also result in urban sprawl and there would be a lack of distinction between the built up area and the open countryside.

Much of the greenfield lands within the town boundary is located to the north and south of the town. This area is of great amenity and recreational value to the town and its visual and landscape sensitivity extensive development, particularly commercial, could result in significant environmental impacts.

Therefore Option 3 is considered unsustainable due to its dispersed nature and primarily due to its potential significant impacts on the environment. An overview of impacts by considering Option 3 is provided below in Table 7.2.4.

Table 7.2.4: Extend new development zonings on Greenfield lands in accordance with submissions to the development plan.

Environmental Issue	Score	Commentary
Biodiversity	x	Any developments within greenfield sites could potentially have a negative impact on biodiversity to some degree. Much of the Greenfield lands in Clonakilty are in agricultural use. These lands could potentially be impacted directly and indirectly by development on both in this area and skirting this area. Any developments within greenfield sites could potentially have a negative impact on flora to some degree.
Population and Human Health	x	This scenario would create a higher dependency on the private motorcar, which may adversely affect human health due to deterioration of air quality, as development would not be proposed in a planned phased manner. It would increase the amount of development on open space within the town boundary; this would reduce the number of amenities for the population and tourists visiting the town of Clonakilty. Overall this option is considered negative in terms of human health and on the quality of life for the individual.
Water	x	Much of the greenfield lands in Clonakilty are in agricultural use, development on these lands could potentially have negative impacts on the water quality due to the increased demand for groundwater, which would place pressure on surface water and on groundwater quality. Similarly, dispersed development adjacent to Clonakilty Bay may have indirect affects on the water flowing into the bay.
Soil	☒	Development on greenfield lands would eventually result in loss of fertile soils/resources in favour of development of brownfield sites.
Air & Climate	0	Under this scenario there is no provision for the facilitation of a green fabric and therefore there would be a greater reliance on the private car rather than use of cycleways and pedestrian links resulting in increased CO ₂ emissions and negative impacts to air quality and climate

Environmental Issue	Score	Commentary
Material Assets	☒	This option would result in the development of greenfield sites instead of the re-use of brownfield sites and the redevelopment of derelict structures within the town. This option would therefore result in the further dilapidation of the town centre and would not be sustainable in the long term. This could have indirect impacts on the tourism industry in Clonakilty.
Cultural Heritage	☒	The development of greenfield lands may give rise to increased risk of impact on archaeology and built heritage given the overall high archaeological potential of the plan area due sub-surface remains may be encountered and thereby impacted upon.
Landscape	✗	This scenario would result in the development of greenfield lands within the town boundary and is likely to put pressure on the open landscapes to the north, south and west of the town. In addition, without development of brownfield or derelict sites in favour of greenfield sites, these areas will continue to be unused and negatively impact upon the landscape character of the town
Traffic	☒	If all Greenfield rezoning submissions were accepted and these lands developed in addition to the lands already zoned within the town, this would result in a haphazard approach to the town planning principles of the town. There would not be capacity to extend public transport links in a dispersed manner throughout the town, therefore this would increase the number of people travelling by private means of transport leading to traffic congestion and delays and pressure on existing road network.

7.3 CONCLUSION

Table 7.3.1. below summarises the scoring for each development option. Development Option 2 has clearly emerged as the preferred option for the preparation of the Clonakilty Development Plan.

Table 7.3.1 Summary of Development Option Score

SEA Objective	Option 1	Option 2	Option 3
Biodiversity	☒	0	✗
Population and Human Health	✗	✓	✗
Water	☒	0	✗
Soil	✗	0	☒
Air & Climate	☒	0	0
Material Assets	✗	✓	☒
Cultural Heritage	☒	0	☒

Landscape	<input checked="" type="checkbox"/>	0	x
Traffic	<input checked="" type="checkbox"/>	0	<input checked="" type="checkbox"/>

Alternative 2 is to rezone sufficient lands in accordance with national, Regional and Local projections through the intensification of the existing Town Centre, redeveloping brownfield sites and Greenfield sites only where there is a natural extension to existing zoning, which can be seen clearly in the development strategy of the plan in Volume II of the plan. This alternative aims to address a number of the points in which the draft plan aims to address in its underlying strategy as set out in section 2.11.1 in providing sufficient zoned and serviced lands for residential, recreational and amenity purposes along with a mix of residential densities, by liaising with the County Council with a view to encouraging balanced and sustainable development between the Town Council area and enabling Clonakilty to fulfill its potential as an Integrated Employment Centre.

This scenario allows for the intensification of the town centre and the consolidation and expansion of existing services to easily accessible lands. This scenario would meet a large number of the objectives of the Town Development Plan, as it would allow the rejuvenation of existing derelict sites, which would improve the town's architectural character and townscape and consequently improve its tourist function. It would also be likely to have a positive impact on existing residents and traders in the town. Therefore alternative 2 is the preferred option for the Clonakilty Town Development Plan 2009 - 2015. Each of the policies as set out in the plan are a direct result of this development strategy will be assessed in section 8 of this report.

8 EVALUATION OF THE DRAFT PLAN POLICIES

8.1 INTRODUCTION

The purpose of this section of the Environmental Report is to evaluate as far as is possible the environmental effects of this draft Town Plan and to set out measures envisaged to prevent, reduce and as far as possible offset any significant adverse effects on the environment. This section therefore evaluates the Draft Plan's Policies and objectives against the SEA objectives. As part of the methodology a matrix was used to assess the strategic objectives of the Clonakilty Town Development Plan against the objectives devised to ensure that the strategy is sustainable as indicated in Table 8.2 below. This process enables an overview of where potential significant environmental effects may arise from implementation of the Plan and allows for additional objectives to be generated, if necessary.

It is considered that overall the proposed strategy will not have a negative impact on the environment. All potential significant effects that have emerged as a result of baseline study and the assessment of the Policies and Objectives is documented in chapter 9 entitled 'Significant effects and Proposed Mitigation Measures'. Under this section mitigation measures will be put in place in order to prevent deterioration in environmental quality of the area. A Monitoring programme which will be linked to significant effects is set out in section 10 of this report.

The environmental objectives of Biodiversity Flora and Fauna, Population and Human Health, Soil water, Air and Climatic Factors, Energy, Material Assets, Cultural Heritage and Landscape area assessed against the policies and objectives outlined in the draft Clonakilty Town Development Plan 2009 – 2015.

8.2 ASSESMENT CRITERIA

The assessment criteria used is based on the likely significant effects of the Plan's Objectives on the environmental objectives as detailed in Table 8.1. The criteria used for the assessment is set out in practice in Table 8.2:

Table 8.1 Assessment Criteria

Type of Impact	Description	Symbol
Positive	Improves the quality of the environment (i.e. improves air quality, biodiversity etc. Positive impacts may be	+
	Short Term / Temporary	+T
	Long Term/ Permanent	+L
	Indirect	+ I

Negative	<p>Reduces the quality of the environment (i.e. reducing air quality or reducing species diversity). A negative impact can however be sufficiently minimised/eliminated by installation of appropriate mitigation measures.</p> <p>Negative impacts may be</p> <p>Short Term/Temporary</p> <p>Long Term/Permanent</p> <p>Indirect</p>	<p>-</p> <p>-T</p> <p>-L</p> <p>-I</p>
Short term/ Temporary	Usually lasts the duration of the project i.e. during the construction stage of a development i.e. during provision of infrastructure recommended in the Plan.	T +T or -T
Long term/ Permanent	Will last greater than 60 years	L +L or -L
Indirect	Effects that are not a direct result of the Plan, same as secondary effects.	I +I or -I
Neutral	No Impact	0
Questionable	Unknown	?

Table 8.2 Clonakilty Town Development Policy and Objectives Assessment Matrix

Strategic Objectives	Biodiversity Flora & Fauna		Population & Human Health		Soil			Water				Air & Climate	Energy	Material Assets		Cultural Heritage		Land- scape	Comments
	B1	B2	PH1	PH2	S1	S2	S3	W1i	W2i	W3	W4a	A1	E1	M1	M2	CH1	CH2	L1i	
Employment Enterprise																			
To work with Cork County Council, local and state enterprise agencies and business organisations to enable Clonakilty to have a satisfactory range of enterprises in its immediate vicinity in the interests of sustainability, to reduce commute times, to encourage the generation of a cohesive community, to reduce the existing dormitory character of new residential developments to enable the townspeople of Clonakilty to live and work within the Clonakilty environs.	+I	+I	+L	+L	+L	+L	o	o	o	o	o	+L	o	-T	o	-I	-I	+L	
To encourage and facilitate decentralisation of government departments to the town.	o	o	+L	o	+I	+I	o	o	o	o	o	o	o	-T	o	o	o	o	National Objective therefore outside control of plan
To work with Cork County Council and other agencies to enable Clonakilty to fulfill its potential as an Integrated Employment Centre.	o	o	+L	-I	+I	o	-I	o	o	o	o	-I	o	-T	o	o	o	o	
Tourism and Leisure																			
To take adequate account of and foster the Towns growing tourism industry.	o	o	+L	-I	o	o	o	o	o	o	o	-I	o	-T	o	o	o	o	
To strengthen the following elements of the Tourism industry and infrastructure in the town: existing tourist attractions, a pipeline of up coming attractions, Tourist accommodation including at least one and possibly two new hotels, Tourist shopping, Tourist transport, Tourist entertainment, Tourist food and drink.	o	o	+L	-I	?	?	?	?	?	?	?	-I	o	-T	o	o	o	o	No particular lands zoned for hotel uses, therefore will need to adhere to DC policies to ensure no potential impact on the environment
Consumer Retail and Commercial Services																			
To work with Cork County Council in promoting Clonakilty as the main retail centre in West Cork.	-I	-I	-I	-I	+I	o	-I	o	o	o	o	-I	o	-T	o	o	o	o	
To retain the existing town centre as the principal retail and service centre for the town. Subsidiary or neighbourhood centres shall be designed to serve the local community only and To ensure that they do not undermine the status of the town centre.	+I	+I	+I	+I	+I	+I	+I	+I	+I	o	o	o	o	-T	o	+I	+I	+I	
To encourage the relocation of incompatible uses in the town centre and to encourage the	+I	+I	+I	+L	+I	+I	o	o	o	o	o	+I	o	-T	o	+I	+I	+I	

Table 8.2 Clonakilty Town Development Policy and Objectives Assessment Matrix

Strategic Objectives	Biodiversity Flora & Fauna		Population & Human Health		Soil			Water				Air & Climate	Energy	Material Assets		Cultural Heritage		Land- scape	Comments
	B1	B2	PH1	PH2	S1	S2	S3	W1i	W2i	W3	W4a	A1	E1	M1	M2	CH1	CH2	L1i	
redevelopment of such sites for the full range of town centre uses to a high standard of urban design.																			
For large scale developments or redevelopments To encourage the provision of underground parking, etc.	+I	+I	+L	+L	+L	-I	-I	-I	-I	o	o	+I	o	-T	o	+I	+I	+I	
Residential Development and Zoning Objectives:																			
To seek to provide a broad range of residential accommodation types to satisfy the requirements of all stakeholders in the town.	o	o	+L	+I	o	o	o	o	o	o	o	o	+I	-T	o	+I	+I	o	
In order to ensure the provision of a satisfactory volume of low density residential development To designate certain residential zonings as low density residential areas and to resist the overdevelopment of the existing low density residential areas. This is in the interests of ensuring the provision of choice between high, medium and low density residential development and to attract people who might otherwise have a preference for low density one off houses in the country side to reside in an urban environment.	o	o	+I	+I	-I	-I	o	o	o	o	o	-I	+I	-T	-I	-I	-I	-I	Not a positive strategic objective as it goes against sustainable policy to promote higher densities in urban areas
In general all proposed housing schemes shall be integrated within an accessibility and interconnectability framework plan.	+L	+L	+L	+I	+I	+I	o	o	o	o	o	+L	o	o	o	o	o	+I	
Community Facilities																			
It will be an objective that the Town Council will encourage the promotion of Cultural events and festivals in the town and to promote a sense of multiculturalism and pluralism. It shall also be an objective to support the provision of cultural centres in the town.	o	o	+L	-I	o	o	o	o	o	o	o	-I	o	o	o	o	o	o	
Civic Facilities																			
To promote the old town centre as the preferred location for all developments that provide civic services and to reserve sufficient land area for such uses and to explore the possibility of providing a new arts/multimedia accommodation in the town centre.	+L	+L	+L	+L	+L	+L	o	+I	o	o	o	+I	o	o	o	+I	+L	+L	

Table 8.2 Clonakilty Town Development Policy and Objectives Assessment Matrix

Strategic Objectives	Biodiversity Flora & Fauna		Pop-ulation & Human Health		Soil			Water				Air & Climate	Energy	Material Assets		Cultural Heritage		Land-scape	Comments
	B1	B2	PH1	PH2	S1	S2	S3	W1i	W2i	W3	W4a	A1	E1	M1	M2	CH1	CH2	L1i	

Education Development

To encourage the provision of pre-school and crèche facilities in the town.	o	o	+I	+I	+I	+I	+I	o	o	o	o	+I	o	-T	o	+I	+I	+I	
To collaborate with the Department of Education and Cork County Council in assessing the need for additional educational facilities in the town an to locate same within walking distance of the existing and proposed principal residential areas of the town.	o	o	+I	+I	o	o	o	o	o	o	o	+I	o	-T	o	o	o	o	
to explore the possibility of siting of a third and fourth level educational element in the vicinity of the town centre.	-I	-I	+L	+L	-L	-I	o	o	o	o	o	+L	o	-T	o	?	?	?	No specific new zoning objective, therefore it is likely that development would be on greenfield lands
Mobility plans to be put in place to enhance accessibility particularly during peak times.	+L	+L	+L	+L	+L	+L	o	o	o	o	o	+L	o	+L	+L	+L	+L	+L	

Sport Recreation and Amenity

The County Council commissioned the Cunnane Stratton Reynolds (1998) Cork Recreation Needs Report in 1998. The County Council is currently preparing a successor document. This document contains some useful standards on provision of sports facilities and leisure facilities and To implement where possible such standards and guidelines and those of the successor document.	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	Revised document not issued?
Clonakilty Town Council commits itself to the provision of Recreation and Amenity facilities, including sports and arts/culture facilities, to serve, so far as is possible, the recreational needs of the population.	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	
The Council will also ensure that all new developments make adequate provision for the full range of recreational and amenity activities, sufficient to meet the needs of the development, and that such facilities are maintained in perpetuity for the benefit of the development.	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	
It is desirable that existing public or private open space, including sports grounds, or other recreation facilities, for other purposes will not be permitted unless a suitable alternative open space or the	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	

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enhancement/upgrading of an existing facility, can be achieved as a replacement in the same area.																			
The Council will investigate ways to improve the quality and capacity of existing facilities and ways to develop new recreational and amenity facilities through initiatives in both the public and private sector. Sources of funding will be investigated and pursued to achieve this at government level, with the sports governing bodies, through local community partnership and through private development proposals.	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	
The Council will continue to use it's power under Section 48 of the Local Government Planning and Development Act 2000 to impose development charges for Recreation and Amenity purposes. It is intended that the spending of funds raised in this way will be used to achieve both the enhancement of existing facilities and for the provision of new facilities as appropriate.	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	
Developers of new housing developments will be required to make provision for sport and recreational infrastructure commensurate with the needs of the development, as an integral element of their proposal. Such provision shall include direct provision of facilities on or off site, or, in exceptional circumstances, a financial contribution in lieu of provision shall be made to the Council to enable it to make appropriate alternative provision. The minimum standards for the provision of leisure facilities as part of new housing developments are detailed in Appendix A of the Clonakilty Town Development Plan 2009 - 2015.	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	
The Council will engage with the process of developing Walking Routes and will support such facilities in line with the recommendations of the policy.	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	

Table 8.2 Clonakilty Town Development Policy and Objectives Assessment Matrix

Strategic Objectives	Biodiversity Flora & Fauna		Pop-ulation & Human Health		Soil			Water				Air & Climate	Energy	Material Assets		Cultural Heritage		Landscape	Comments
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Industrial and commercial developments shall be levied in accordance with the Development Contribution Scheme adopted by the Council.	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	
The Council may, where circumstances necessitate, require developers of new residential developments to put in place arrangements for the maintenance of the recreation and amenity facilities pending being taken in charge/managed by the Local Authority. These arrangements will be finalised as part of the Planning Application process.	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	
To explore the possibility of developing a new town park and gallery/civic building in the town.	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	
To prepare a Recreation and Amenity Policy for Clonakilty.	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	
To enhance the provision of land area and floor space for appropriate and leisure facilities for a growing population.	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	
To provide and enhance the hard and soft landscaping of the public areas of the town including those in the suburbs.	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	This will promote walking and cycling in the town
It shall be an objective to explore with the County Council the possibility of providing one or more pedestrian walks in the vicinity of the proposed attenuation ponds to the west side of the town.	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	
It shall be an objective of the plan to develop lands that are in public ownership adjacent to the bay for amenity and recreational purposes.	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	Generally considered positive as it safeguards area from development.
Health and Well Being																			
To work with the County Council in ensuring a satisfactory spatial distribution of remedial and support health facilities and to work with the Southern Health Board to allocate and zone sufficient land for these purposes.	?	?	+L	+I	+I	+I	o	o	o	o	o	+I	o	-T	o	o	o	o	
To 'Health Proof' the Plans Objectives, Policies, Strategies, Zonings and Standards of this Plan and to enable Lifestyle factors that facilitate and	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	No evidence of this having been carried out

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encourage exercise and other healthy lifestyle activities and attitudes to be enhanced.																			
The planning authority will attempt to identify and articulate the effects of Age, Gender and Genetic factors on Health and Well Being and it will attempt to ameliorate these effects in devising and implementing its objectives, policies, zonings and standards.	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	No evidence of this having been carried out
It will be an objective of the Plan to estimate the long-term land use requirements of the Health and Well Being sector, to consider their pivotal role in the community and their particular locational requirements. To reserve suitable locations for such uses and to incorporate such land use requirements into the Objectives, Policies, Strategies, Zonings and Standards of the Plan.	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	No evidence of this having been carried out
Childcare and the Child Perspective																			
It will be an objective that the child perspective is included in all development plan Objectives, Policies, Strategies, Zonings and Standards and that adequate provision is made for childcare facilities, play areas, sports amenities and child amenities. It is also objective that the child perspective is included in the provision of infrastructure and accessibility facilities.	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	-T	o	+L	+L	+L	
To improve the public domain to facilitate the various categories of people with disabilities. It shall be an objective to include the child perspective and those of other minority stakeholders in the consideration of accessibility.	o	o	+L	+I	o	o	o	o	o	o	o	+I	o	o	o	o	o	o	
People with Disabilities																			
To improve the public domain to facilitate the various categories of people with disabilities. It shall be an objective to include the child perspective and those of other stakeholders with accessibility challenges in the in the development of the public domain in the town, in addition to the development of public and private buildings.	o	o	+L	+I	o	o	o	o	o	o	o	+I	o	o	o	o	o	o	
To have regard to and implement as far as possible the provisions of the Cork County Council (including	o	o	+L	+I	o	o	o	o	o	o	o	+I	o	o	o	o	o	o	

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Town Councils) Disability Access Policy.																			
Culture and Irish Language																			
To support existing cultural activities and resources and to include provision for the location of such expanded cultural floor space in the town centre.	o	o	+l	+l	o	o	o	o	o	o	o	+l	o	o	o	+l	+l	o	
It shall be an objective, subject to the availability of resources, to encourage an increase in the size of the artistic community during the course of the plan and to explore means to achieve the conditions to support such a community. Such efforts would also address means to promote artistic, cultural and entertainment activities in the town. It shall also be an objective to promote multiculturalism and cultural pluralism.	o	o	+l	o	o	o	o	o	o	o	o	o	o	o	o	+l	+l	o	
Voluntary Sector																			
To work with the various residents associations and the other voluntary and corporate organisations who have made and continue to make such a valuable contribution to the life and development of the Town.	o	o	+l	o	o	o	o	o	o	o	o	o	o	o	o	+l	+l	o	
Heritage, Conservation and Amenity																			
It shall be an objective of the Plan: To encourage the renewal of derelict sites, backland areas and street infill; to utilise the available legislation under the Derelict Sites Act 1990.	+l	+l	+L	+L	+l	+l	+l	+l	+l	+l	+l	+l	+l	-T	o	+L	+L	+L	
To preserve and enhance the views available from the roadways where there are a number of attractive viewing points.	+l	+l	+L	+l	o	o	o	o	o	o	o	o	o	o	o	+l	+l	+l	
It shall be an objective to preserve the ambience and character of the streets comprising the Clonakilty Heritage Trail indicated on Map 7, Architectural Conservation Area, of this plan.	o	o	+L	+l	o	o	o	o	o	o	o	o	o	o	o	+l	+l	+l	

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Evolution, Recycling and Renewal of Buildings, functions and Uses

To treat structures contained in the Record of Protected Structures as living, evolving structures with a modern day function and to assist property owners to adapt and recycle such buildings using appropriate conservation techniques to enable the buildings to perform a useful modern function while conserving the essential elements of their heritage value.	+I	+I	+L	+I	+I	+I	+I	o	o	o	o	o	o	o	o	o	+I	+I	+I	
--	----	----	----	----	----	----	----	---	---	---	---	---	---	---	---	---	----	----	----	--

Archaeological Heritage

Any direct impacts on national monuments in State or Local Authority care or subject to a preservation order will require the consent of the Minister for the Environment, Heritage and Local Government under Section 14 of the National Monuments Act 1930 as amended by Section 5 of the National Monuments (Amendment) Act 2004.	+I	+I	+L	+I	+I	+I	+I	o	o	o	o	o	o	o	o	o	+L	+L	+L	
The archaeological potential of the coastal and inter-tidal zone, where relevant, shall be carefully considered.	+I	+I	+L	+I	+I	o	?	?	?	?	o	o	o	o	o	o	+L	+L	+L	Likely impacts on water questionable?
Any potential impacts on archaeological heritage shall be subject to full archaeological assessment.	+I	+I	+L	+I	+I	+I	+I	o	o	o	o	o	o	o	o	o	+L	+L	+L	

Trees in Clonakilty

It shall be an objective, subject to safety considerations to preserve specimen trees in the town council area and examining the possibility of conserving the visually and/or ecologically important ones by means of Tree Preservation Order.	+L	+I	+L	+I	+I	+I	+I	o	o	o	o	o	o	o	o	o	+L	+L	+L	
---	----	----	----	----	----	----	----	---	---	---	---	---	---	---	---	---	----	----	----	--

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Strategic Objectives	Biodiversity Flora & Fauna		Pop-ulation & Human Health		Soil			Water				Air & Climate	Energy	Material Assets		Cultural Heritage		Land- scape	Comments
	B1	B2	PH1	PH2	S1	S2	S3	W1i	W2i	W3	W4a	A1	E1	M1	M2	CH1	CH2	L1i	
To undertake environmental appraisals, Environmental Impact Assessments and/or Appropriate Assessments in areas within or likely to affect pNHA's, cSAC's and SPAs; i.e. new roads and other infrastructure, other major developments, etc. It shall also be an objective to undertake such assessments in visually sensitive areas.	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	
It shall be an objective to upgrade the Wastewater Treatment Plan to ensure that the development of zoned land will not have an impact on Clonakilty Bay.	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	o	+L	+L	o	o	o	
To encourage the use brownfield sites in preference to greenfield sites.	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	
To prepare a habitat map (including wetlands) of the town.	+L	+L	+I	+I	+L	+L	o	+I	+I	+I	+I	o	o	o	o	+I	+I	+L	
To have regard to the relevant "Major Pressures reported in the assessment of Habitats and Species" in the Strategic Environmental Assessment with a view to ensuring that the implementation of the plan does not increase the major pressures on habitats and species in Clonakilty and adjoining areas.	+L	+L	+I	+I	+L	+L	o	+I	+I	+I	+I	o	o	o	o	+I	+I	+L	
Flooding																			
It is an objective of the Development Plan to progress the development of the Tidal Barrage across Clonakilty bay to alleviate the risk of tidal flooding within the town.	-T	-T	+I	+I	+I	+I	o	+I	+I	+I	+I	o	o	+I	+I	+I	+I	-L	An EIS and additional Environmental Reports were carried out in relation to this a planning application for a tidal barrage previously and it was not considered to have a significant environmental impact on Clonakilty Bay.
It is an objective of the Development Plan to implement the recommendations of the "Clonakilty Flood study Report" dated December 2003	+I	+I	+L	+L	+I	+I	o	+I	+I	+I	+I	+I	o	+I	+I	+I	+I	+I	
Waste																			
It shall be an objective to work with Cork County Council and other organisations in the management, reduction and recycling of waste in the town.	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	+L	o	+I	+L	+L	+L

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the town.																			
Air Quality																			
It shall be an objective of the Plan to encourage the use of smokeless coal in the town.	+L	+L	+L	+L	o	o	o	+I	+I	+I	+I	+L	o	+L	+L	o	o	o	
Energy Efficiency																			
As the population of Clonakilty continues to grow in the future, To ensure that growth is planned and that there are sufficient and appropriate lands zoned to accommodate such growth. A sustainable transport system is desirable to reduce car dependence and reduce GHG emissions. Sustainable construction and design in addition to clean and energy efficient technologies shall be encouraged at design stage.	+I	+I	+L	+L	+L	+I	+I	+I	o	o	o	+L	+L	-T	+I	+I	+I	+I	
Sustainable forms of development and sustainable sources of energy shall be encouraged during the life of the plan. To encourage sustainable building during the life of the plan.	+I	+I	+L	+L	+L	+I	+I	+I	o	o	o	+L	+L	-T	o	+I	+I	+I	
To consider the feasibility of district energy systems for public buildings in the Clonakilty urban area in general, such as combined heat and power and district heating, particularly for new developments.	+I	+I	+L	+L	+L	+I	+I	+I	o	o	o	+L	+L	-T	o	+I	+I	+I	
To encourage utilisation of energy efficient technology in office and apartment block developments.	+I	+I	+L	+L	+L	+I	+I	+I	o	o	o	+L	+L	-T	o	+I	+I	+I	
To encourage sustainable design for all new builds, which should incorporate clean and energy efficient technologies such as solar panels to provide hot water, high levels of fabric insulation, solar gain, and natural ventilation to reduce heating and cooling loads and maximise energy efficiency.	+I	+I	+L	+L	+L	+I	+I	+I	o	o	o	+L	+L	-T	o	+I	+I	+I	
Infrastructure																			
To work with the various agencies to enhance the infrastructure of the town in all its aspects.	+I	+I	+L	+L	+I	+I	+I	+L	+L	+L	+L	+L	+L	+L	+L	+L	+I	+I	+I

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To keep the existing protected line for a Southern Relief Road in the short term	-L	-L	o	-L	-I	-I	o	-L	-I	-L	-L	-L	o	o	o	-L	-L	-L	If developed this route could cause serious environmental impacts on the SAC and SPA OF Clonakilty Bay
Southern Relief Road which runs from the N71 to the east of the town, southwards across Clonakilty Bay (SAC and SPA) to meet with the current relief road running along the south of the town centre.	-L	-L	o	-L	-I	-I	o	-L	-I	-L	-L	-L	o	o	o	-L	-L	-L	If developed this route could have detrimental environmental impacts on the SAC and SPA OF Clonakilty Bay
Northern Relief Road that will extend from the N71 to the east of the town northwards and would meet with the N71 to the west of the town.	-I	-I	o	-I	-I	-I	o	-I	-I	-I	-I	-L	o	o	o	?	-I	-L	This route would run through the open countryside and would therefore have adverse impacts on soils and landscape.
It shall be an objective incorporate the findings of the Clonakilty Traffic and Transportation Study into the Plan when they become available.	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	
It will be an objective to enhance pedestrian, cycling, public transport, car parking facilities and amenities through the town and to implement the findings of the Clonakilty Traffic and Transportation Study in this regard.	+I	+I	+L	+L	?	?	o	o	o	o	o	+L	o	o	o	+I	+I	+L	Traffic and Transportation study not complete therefore assessment is based on the amenities proposed in the objective
To improve accessibility to Clonakilty from Cork Airport by improving road links and signage.	o	o	+I	o	o	o	o	o	o	o	o	+I	o	o	o	o	o	o	
The Council will more actively promote the rights of pedestrians by maintaining footpaths to high standards and upgrading and increasing the number of pedestrian crossings on the road and the main thoroughfare through the town centre.	o	o	+L	+L	o	o	o	o	o	o	o	+L	o	o	o	+I	+I	o	
To upgrade facilities for tour buses and scheduled public transport services including appropriate access and parking within the town.	o	o	+I	+I	o	o	o	o	o	o	o	+L	o	o	o	+I	+I	o	
As adequate parking provision is integral to all proposals to revitalise and develop the town centre it will be an objective to incorporate adequate proposals for car parking into all new developments in the town.	o	o	+I	+I	+I	?	o	o	o	o	o	+I	o	o	o	+I	+I	o	It is considered that if parking spaces were not provided, it is likely that circulating traffic would increase and parking on open space would occur.
To regulate delivery vehicles on a more rational basis so as to enhance the amenities of the old	o	o	+I	+L	o	o	o	o	o	o	o	+I	o	o	o	+I	+I	o	

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town core.																			
To maintain an awareness of the importance of pedestrians over car transport especially in the town centre. In addition there is a need to take account of all stakeholders including persons with disabilities so as to ensure access for all. To restore the priority to pedestrians in the old town centre, as the centre was originally designed with pedestrians in mind.	+I	+I	+L	+L	?	?	o	o	o	o	o	+L	o	o	o	+I	+I	+L	
Water Supply																			
To ensure the provision of an adequate supply of water for all existing and future developments.	+I	+I	+L	+L	+I	+I	o	+L	+L	+L	+L	o	o	-T	+L	o	o	o	
Drainage																			
It is a policy objective of the Town council to prohibit development over natural drainage channels.	+I	+I	+I	+I	o	+I	o	+L	+L	+L	+L	o	o	-T	+L	o	o	+L	
Telecomms																			
To work with the County Council and private telecoms providers to ensure excellent telecommunications and broadband access to all areas of the town and its environs including the provision of fibre optic cables to the town.	o	o	+L	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	
Energy, Electricity and Gas																			
In the light of the growing energy usage by cars it shall be an objective of this Plan to encourage proper and sustainable planning that encourages other modes of transport. This is particularly relevant given Clonakilty's picturesque, narrow streets, amenity and suitability for pedestrianisation and pedestrian priority. It shall also be an objective	+I	+I	+L	+L	+I	+I	+I	+I	+I	+I	+I	+L	+I	o	o	+I	+I	+I	

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	B1	B2	PH1	PH2	S1	S2	S3	W1i	W2i	W3	W4a	A1	E1	M1	M2	CH1	CH2	L1i	

to encourage the use of cycles.																			
Alternative renewable energy resources will be promoted in an effort to achieve the Government target of 7% renewable energy production by 2005. To facilitate this provision by segregated cycle and pedestrian facilities on all roads and streets in the town and to enhance the priority and safety and convenience of pedestrians and cyclists. The Town Council will Endeavour to promote renewable energy use in all its developments where this is feasible.	+I	+I	+L	+L	+I	+I	+I	+I	+I	+I	+I	+L	+L	o	o	+I	+I	+I	
To encourage An Bord Gais in the provision of a gas supply for the town.	o	o	+I	o	o	o	o	o	o	o	o	-I	-I	o	o	o	o	o	

Table 8.2 Clonakilty Town Development Policy and Objectives Assessment Matrix

Strategic Objectives	Biodiversity Flora & Fauna		Pop-ulation & Human Health		Soil			Water				Air & Climate	Energy	Material Assets		Cultural Heritage		Land-scape	Comments
	B1	B2	PH1	PH2	S1	S2	S3	W1i	W2i	W3	W4a	A1	E1	M1	M2	CH1	CH2	L1i	

Amendments to draft Clonakilty Town Development Plan April/May 2009

R-16: Primarily residential development of low to medium density,	o	o	+L	+L	-L	-T	o	o	o	o	o	+I	o	o	o	o	o	o	o	Extension to existing settlement pattern therefore minimizing impacts. May be impacts due to the development of Greenfield lands and may be temporary impacts during construction period however lands need to be developed in accordance with population projections as set out at County level. Furthermore development here acts as an alternative to development of lands in the environs of Clonakilty and is sequentially more sustainable.
R-07: Town centre uses incorporating social housing, with the option of social housing only on the site.	o	o	+L	+L	+I	o	o	o	o	o	o	+I	o	o	o	o	o	o	o	Positive as it would allow the development of a brownfield site adjacent to the town centre.
C-04: Offices and employment generating uses, such as government offices.'	o	o	+L	+L	+I	o	o	o	o	o	o	+I	o	o	o	o	o	o	o	Objective helps to achieve national objective of decentralisation
C-01: Tourist related uses subject to their being retained under the ownership and control of the hotel and to respect the residential and amenity character of the adjoining properties.	o	o	+L	+L	-L	-T	o	o	o	o	o	o	o	o	o	o	o	o	o	May be negative impacts due to the development of Greenfield lands, and may be temporary impacts during construction period. However it is considered that DC policy provision and landscaping will help to mitigate against any significant effects.
I-01: Industry/enterprise subject to such development not having an adverse impact on the amenities of the adjoining residential properties and taking account of proposed relief road.	o	o	o	+I	+I	o	o	o	o	o	o	+I	o	o	o	o	o	o	o	Existing use at present therefore unlikely to have negative impacts. Also keeps business located

Table 8.2 Clonakilty Town Development Policy and Objectives Assessment Matrix

Strategic Objectives	Biodiversity Flora & Fauna		Pop-ulation & Human Health		Soil			Water				Air & Climate	Energy	Material Assets		Cultural Heritage		Land- scape	Comments	
	B1	B2	PH1	PH2	S1	S2	S3	W1i	W2i	W3	W4a	A1	E1	M1	M2	CH1	CH2	L1i		
																			strategically within the town.	
R-09: Medium residential development subject to: 1. The proposed Northern relief road, from the main Cork Road to the southwestern tip of the lands zoned R-09, shall be constructed by the developer of the said proposed zoned lands. 2. The construction of dwellings shall not commence until that portion of the relief road from the main Cork Road to the southwestern tip of the lands zoned R-09 has been completed to the specification and satisfaction of the Town Council.	o	o	+L	+L	-L	-T	o	o	o	o	o	+I	o	o	o	o	o	o	o	May be temporary impacts during construction period. May be impacts due to the development of Greenfield lands, however lands need to be developed in accordance with population projections as set out at County level. Furthermore development here acts as an alternative to development of lands in the environs of Clonakilty and is sequentially more sustainable.
C-09 for Commercial/tourist use subject to the following: <ul style="list-style-type: none"> Conserving the heritage railway character of the site, Preserving the possibility of providing a pedestrian/cycle way from the town to the business park to the north east and Encouraging the development of an arts and crafts village type development on the site. 	o	o	+L	+I	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	Positive in terms of inclusion of compatible land uses in the town centre and promotion of brownfield development. Also positive in terms of adding to the attractiveness of the town.
R-17: Low density clustered development taking into consideration contour constraints and subject to a satisfactory proposal for the extension of the public sewerage network to facilitate this development.	o	o	+L	+L	-L	-T	o	o	o	o	o	+I	o	o	o	o	o	o	o	may be temporary impacts during construction period. May be impacts due to the development of Greenfield lands, however lands need to be developed in accordance with population projections as set out at County level. Furthermore development here acts as an alternative to

9 SIGNIFICANT EFFECTS AND PROPOSED MITIGATION MEASURES

9.1 INTRODUCTION

Annex 1 (f) and (g) of the Directive requires that the Environmental Report describe the likely significant effects on the environment and their interrelationship and the measures envisaged to prevent, reduce and/or offset as fully as possible any significant adverse effects on the environment from implementing the plan.

It should be noted that proposals to implement this plan may also require Environmental Impact Assessment (EIA) at planning application stage. Other impacts and necessary mitigation measures or actions may be identified during this process.

The likely significant effects of the Draft Plan have been informed by trends and potential impacts as identified in section 5 of this report and from impacts arising in the assessment of policies and objectives of the Plan as set out in table 8.2 of this report.

The following table 9.1 links significant effects with potential trends and impacts with proposed mitigation measures and monitoring as set out in table 10.1 below.

The mitigation measures identified in this Environmental Report have been included in the Draft Plan where relevant by way of changes to or inclusion of additional objectives and or policies. The following table references where mitigation measures have been included within the plan.

Table 9.1 Significant Effects, Proposed Mitigation Measures and Proposed Monitoring of Clonakilty Town Development Plan Environmental Report

Trend & Potential Impacts	Significant Effects	Mitigation Measures (and reference to where addressed in the Plan highlighted in brackets)	Monitoring (Refer to relevant Indicators, targets and responsibilities as indicated in table 10.1)
<p>Biodiversity</p> <p>Clonakilty Bay cSAC, pNHA and SPA is under pressure from a number of sources. There is no policy in the Plan for the protection of Clonakilty Bay and therefore this objective is considered a key requirement for the Plan.</p>	<p>Possibly significant if not mitigated against</p>	<p>SEA recommends inclusion of the following Objectives:</p> <ul style="list-style-type: none"> • Designated Sites. To maintain the conservation value of Clonakilty Bay (SPA and cSAC) during the lifetime of this plan and to ensure Appropriate Assessment is carried out where development projects are likely to have significant effects on this European site whether within or outside the boundary of the European Site. • There is a need for a policy to undertake environmental appraisals or Environmental Impact Assessments and Appropriate Assessments in areas within or likely to affect pNHA's, cSAC's and SPAs; i.e. new roads and other infrastructure, other major developments, etc. • The policies and objectives should take into account the relevant "Major Pressures reported in the assessment of Habitats and Species" with a view to ensuring the implementation of the plan does not increase the major pressures on habitats and species in Clonakilty and 	<p>Refer to Monitoring Programme As Indicated In Table 10.1: B1, B2, W1,</p>

Table 9.1 Significant Effects, Proposed Mitigation Measures and Proposed Monitoring of Clonakilty Town Development Plan Environmental Report

Trend & Potential Impacts	Significant Effects	Mitigation Measures (and reference to where addressed in the Plan highlighted in brackets)	Monitoring (Refer to relevant Indicators, targets and responsibilities as indicated in table 10.1)
		<p>adjoining areas.</p> <p>(Above mentioned objectives are satisfactorily addressed in sections 5.2 and 5.3 of Volume 2 of the draft Plan).</p>	
<p>Greenfield Development – All developments which take place on Greenfield sites are likely cause some degree of negative impact on biodiversity. Where developments i.e. roads, housing and other infrastructural developments have occurred on Greenfield sites they have replaced some semi natural and natural areas with artificial surfacing causing a gradual loss of biodiversity. Therefore it is recommended that the following policy or objective should be included within the plan; Brownfield sites should be used in preference to Greenfield sites for development.</p>	<p>Possibly significant if not mitigated against</p>	<p>SEA recommends inclusion of the following Objective:</p> <ul style="list-style-type: none"> • There is a requirement to include a policy to use Brownfield sites in preference to Greenfield sites. <p>(Above objective is satisfactorily addressed in section 5.3 of Volume 2 of the draft Plan).</p>	<p>Refer to Monitoring Programme As Indicated In Table 10.1: B1, B2, S1, S2, PH2</p>
<p>Invasive species –There is potential for invasive species to enter surface waters from a number of sources including runoff from garden centres, from boats and by dumping of waste from fish tanks and garden ponds. Therefore it is recommended that a policy or objective for protection against invasive species is required in the new Clonakilty Town Plan.</p>	<p>Possibly significant if not mitigated</p>	<p>SEA recommends inclusion of the following Objective:</p> <ul style="list-style-type: none"> • Invasive species. A policy for protection against invasive species is required in the new Clonakilty Town Plan. <p>(Above objective is satisfactorily addressed in section 5.3 of Volume 2 of the draft Plan).</p>	<p>Refer to Monitoring Programme As Indicated In Table 10.1: B1</p>

Table 9.1 Significant Effects, Proposed Mitigation Measures and Proposed Monitoring of Clonakilty Town Development Plan Environmental Report

Trend & Potential Impacts	Significant Effects	Mitigation Measures (and reference to where addressed in the Plan highlighted in brackets)	Monitoring (Refer to relevant Indicators, targets and responsibilities as indicated in table 10.1)
<p>Removal of Ecological Corridors - The removal of ecological networks / corridors is a significant issue. It is recognised that there has been a significant increase in hedgerow removal throughout Ireland in recent years. It is recommended that Clonakilty Town Council undertake habitat surveys of the study area with the aim of identifying hedgerows, habitat types, priority habitats, etc. These studies will provide a mechanism for management of hedgerows and other ecological corridors in the study area.</p>		<p>SEA recommends inclusion of the following Objective:</p> <ul style="list-style-type: none"> • There is a requirement to include a policy for the preparation of a habitat map (including wetlands) of the town. <p>(Above objective is satisfactorily addressed in section 5.3 of Volume 2 of the draft Plan).</p>	<p>Refer to Monitoring Programme As Indicated In Table 10.1: B1,</p>
<p>There is potential for impacts to the aquatic environment in the form of industrial and agricultural run-off, municipal sources of pollution, fragmentation of river corridors and soil erosion. These risks apply in particular to the River Feagle. Under the Water Framework Directive, water quality must achieve “good status” by 2015.</p>	<p>No significant effect proposed as a result of the implementation of the Plan.</p>	<p>SEA recommends inclusion of the following Objective:</p> <ul style="list-style-type: none"> • To ensure that zoned land will not be developed if such development will lead to overcapacity of the Wastewater Treatment Plan to ensure that the development of zoned land will not have an impact on Clonakilty Bay. <p>(Above objective is satisfactorily addressed in section 5.3 of Volume 2 of the draft Plan).</p>	<p>Refer to Monitoring Programme As Indicated In Table 10.1: A1</p>

Table 9.1 Significant Effects, Proposed Mitigation Measures and Proposed Monitoring of Clonakilty Town Development Plan Environmental Report

Trend & Potential Impacts	Significant Effects	Mitigation Measures (and reference to where addressed in the Plan highlighted in brackets)	Monitoring (Refer to relevant Indicators, targets and responsibilities as indicated in table 10.1)
Soils			
<p>Construction works should be planned to be carried out with the least foreseeable disturbance of soils. Where possible all topsoil and subsoils excavated on site should be used during construction works. Excess fill and unsuitable excavated material should be deposited in appropriate and approved infill sites, in compliance with the Waste Management Acts 1996 to 2003 and Section 5 of the Waste Management (Collection Permit) Regulations 2001. Conversely, if the importation of topsoil is required for landscaping purposes, the material should be brought from as near a site as possible, in order to reduce transport distances.</p>	<p>Possibly significant if not mitigated</p>	<p>SEA recommends the following policies:</p> <ul style="list-style-type: none"> • The Town Development Plan should include for implementation of the policies and objectives of the Soils Directive; • The Town Development Plan should include a policy for the Protection of Areas of Geological Interest; and • Where development does take place best practice should be implemented to prevent soil erosion and prevent escape of suspended solids into nearby watercourses. <p>(Above mentioned objectives are satisfactorily addressed in section 5.14 of Volume 2 of the draft Plan).</p>	<p>Refer to Monitoring Programme As Indicated In Table 10.1: S1, S2, S3</p>
Water			
<p>In terms of water it is considered that a number of new objectives should be included within the Draft Clonakilty Development Plan 2009-2015. The Water Framework Directive (WFD) has categorised the River Fealge and streams entering the Clonakilty Bay at Ring Bar Quay as being "At Risk of Not Achieving Good Status". The plan promotes the protection of</p>	<p>Possibly significant if not mitigated</p>	<p>SEA Recommends the following New Policies/Objectives Required:</p> <ul style="list-style-type: none"> • Encourage sustainable water usage (in SUDS). • Promote compliance with the Water Framework Directive and the 	<p>Refer to Monitoring Programme As Indicated In Table 10.1: W1, W2, W3, W4, M1</p>

Table 9.1 Significant Effects, Proposed Mitigation Measures and Proposed Monitoring of Clonakilty Town Development Plan Environmental Report

Trend & Potential Impacts	Significant Effects	Mitigation Measures (and reference to where addressed in the Plan highlighted in brackets)	Monitoring (Refer to relevant Indicators, targets and responsibilities as indicated in table 10.1)
<p>water quality and water supply through a number of policies and objectives including the provision of adequate infrastructure and the upgrading of the wastewater treatment plant. In particular it is a policy of the plan to ensure that further provision and use of septic tanks shall not be permitted, in general, within the development boundary of the town.</p>		<p>implementation of Management Plans for the South Western region.</p> <ul style="list-style-type: none"> • Maintain high status or good status of waters where they exist and to achieve good quality status in all other waters by 2015. Good water is measured in quantity, quality and ecology for surface water and quantity and quality for groundwater. • Continue monitoring of drinking waters. • Include an objective for the preparation of a water conservation strategy for Clonakilty Town. • Include a Policy/objective to ensure bathing waters in Clonakilty and adjoining areas, as appropriate, achieve “sufficient or better status by 2015”. <p>(Above mentioned objectives are satisfactorily addressed in sections 6.7 and 6.9 of Volume 2 of the draft Plan).</p>	
<p>Clonakilty has suffered from flooding problems as a result of elevated sea levels due to storm surges and high flows in the River Fealge, sometimes in combination. Therefore it is an objective of the plan to progress the development of the Tidal Barrage across Clonakilty bay to alleviate the risk of tidal flooding within the town.</p>	<p>Possibly significant if not mitigated</p>	<p>SEA Recommends the following New Objective:</p> <ul style="list-style-type: none"> • To ensure that all new developments should have regard to areas that maybe at risk from flooding. Flood Impact Assessment may be required at planning application stage to identify potential loss of flood plain storage and how it is to be offset in order to minimise 	<p>Refer to Monitoring Programme As Indicated In Table 10.1: PH2, W1</p>

Table 9.1 Significant Effects, Proposed Mitigation Measures and Proposed Monitoring of Clonakilty Town Development Plan Environmental Report

Trend & Potential Impacts	Significant Effects	Mitigation Measures (and reference to where addressed in the Plan highlighted in brackets)	Monitoring (Refer to relevant Indicators, targets and responsibilities as indicated in table 10.1)
		the impact on the river flood regime at application stage. (Above mentioned objectives are satisfactorily addressed in sections 6.9, 6.10 and 5.4 of Volume 2 of the draft Plan).	
Air and Climate			
Climate Change is a significant issue around the world today, therefore it is considered that consideration should be given to the promotion of Climate Change in the Plan.	Significant positive effect. Proposed Mitigation is pro-active rather than reactive.	SEA Recommends inclusion of the following or similar Objectives to help to combat Climate Change: <ul style="list-style-type: none"> • Sustainable forms of development and sustainable sources of energy should be encouraged in the new plan. There is a need to include a policy on sustainable building within the new plan. • The plan should encourage utilisation of energy efficient technology in office and apartment block developments. • Sustainable design should be encouraged for all new builds, which should incorporate clean and energy efficient technologies such as solar panels to provide hot water, high levels of fabric insulation, solar gain, and natural ventilation to reduce heating and cooling loads and maximise energy efficiency. • Existing vegetation and future 	Refer to Monitoring Programme As Indicated In Table 10.1: E1.

Table 9.1 Significant Effects, Proposed Mitigation Measures and Proposed Monitoring of Clonakilty Town Development Plan Environmental Report

Trend & Potential Impacts	Significant Effects	Mitigation Measures (and reference to where addressed in the Plan highlighted in brackets)	Monitoring (Refer to relevant Indicators, targets and responsibilities as indicated in table 10.1)
		<p>landscaping are important considerations for site selection. The minimisation of waste production during the construction process and provision for recycling of construction and demolition waste is another key factor in the design of sustainable buildings.</p> <p>(It is considered that section 5.13 and 6.13 adequately addresses issues of energy, sustainability and climate change)</p>	
Material Assets			
<p>A Traffic and Transportation study on Clonakilty Town is currently being undertaken, three options for the Clonakilty Relief Road are currently proposed in the Clonakilty Development Plan 2009 – 2015.</p>	<p>Potential significant effects if not assessed.</p>	<p>The SEA Recommends;</p> <ul style="list-style-type: none"> • That all new transport objectives that will be included within the plan should be assessed in terms of strategic environmental assessment and that; • That mobility management planning is a condition of planning permission for any organisation, which attracts more than 100 people per day. <p>(This objective is adequately addressed in section 6.5 of Volume 2 of the draft Plan)</p>	<p>Refer to Monitoring Programme As Indicated In Table 10.1: A1</p>

Table 9.1 Significant Effects, Proposed Mitigation Measures and Proposed Monitoring of Clonakilty Town Development Plan Environmental Report

Trend & Potential Impacts	Significant Effects	Mitigation Measures (and reference to where addressed in the Plan highlighted in brackets)	Monitoring (Refer to relevant Indicators, targets and responsibilities as indicated in table 10.1)
<p>Wastewater Treatment – The existing town sewerage system is currently at capacity. There is a possibility of unchecked increase in demand for wastewater treatment with potential for increased pollution to surface waters. Therefore correct treatment of wastewater is an important factor to consider in the quality of surface water.</p>	<p>Possibly significant if not mitigated</p>	<p>SEA recommends the inclusion of the following policies:</p> <ul style="list-style-type: none"> include a timescale for completion of the upgrade of the waste water treatment plant Wastewater Treatment Plants - monitor the performance of wastewater treatment plants and the sewerage network to capture leakages to GW and SW. It is important to have an adequate wastewater collection system infrastructure in place to cope the increased population increase as outlined in the NSS. The Plan should adhere to the principles of WWTS Bye Laws in order to protect water quality and ensure that WWTP comply with EPA Manuals. <p>(Above mentioned objectives are satisfactorily addressed in sections 5.4, 5.8 and 6.11 of Volume 2 of the draft Plan).</p>	<p>Refer to Monitoring Programme As Indicated In Table 10.1: M1, W1, W2, W3,</p>

Table 9.1 Significant Effects, Proposed Mitigation Measures and Proposed Monitoring of Clonakilty Town Development Plan Environmental Report

Trend & Potential Impacts	Significant Effects	Mitigation Measures (and reference to where addressed in the Plan highlighted in brackets)	Monitoring (Refer to relevant Indicators, targets and responsibilities as indicated in table 10.1)
Cultural Heritage			
Any direct impacts on national monuments in State or Local Authority care or subject to a preservation order will require the consent of the Minister for the Environment, Heritage and Local Government under Section 14 of the National Monuments Act 1930 as amended by Section 5 of the National Monuments (Amendment) Act 2004.	Possibly significant if not mitigated	SEA recommends following text: Any direct impacts on national monuments in State or Local Authority care or subject to a preservation order will require the consent of the Minister for the Environment, Heritage and Local Government under Section 14 of the National Monuments Act 1930 as amended by Section 5 of the National Monuments (Amendment) Act 2004. (Section 4.3.2 of Volume 2 of the Plan adequately addresses this)	Refer to Monitoring Programme As Indicated In Table 10.1: CH1, CH2
Need to ensure that archaeological inter-tidal zone and archaeological assessments are undertaken where relevant.	Possibly significant if not mitigated	SEA recommends following Policies: <ul style="list-style-type: none"> • The archaeological potential of the coastal and inter-tidal zone, where relevant, should be carefully considered. • Any potential impacts on archaeological heritage should be subject to full archaeological assessment. (Section 4.3.1 of Volume 2 of the Plan adequately addresses the above mentioned objectives)	Refer to Monitoring Programme As Indicated In Table 10.1: CH1, CH2

Table 9.1 Significant Effects, Proposed Mitigation Measures and Proposed Monitoring of Clonakilty Town Development Plan Environmental Report

Trend & Potential Impacts	Significant Effects	Mitigation Measures (and reference to where addressed in the Plan highlighted in brackets)	Monitoring (Refer to relevant Indicators, targets and responsibilities as indicated in table 10.1)
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Landscape			
<p>The implications of the development of the zoned lands proposed in the Plan on existing landscape form and features and on scenic views and routes should be investigated with a view to ensuring such views/ features are protected from proposed development of the area.</p>	<p>Possibly significant if not mitigated</p>	<p>SEA recommended new Policies/Objectives:</p> <p>It should also be an objective of the plan that the development of zoned lands within the Plan area does not impact negatively on the A89, A90 and A91 Scenic Routes in the Cork County Development Plan 2003 (S72/S73/S74 Scenic Routes in the Draft Cork County Development Plan 2007).</p> <p>(Section 4.8.2 of Volume 2 of the Plan adequately addresses this matter)</p>	<p>Refer to Monitoring Programme As Indicated In Table 10.1: L1</p>

9.3 CUMULATIVE EFFECTS

Cumulative effects are changes to the environment that are caused by an action in combination with other past, present and future human actions. Cumulative impacts can be created when insignificant impacts are joined together to create a cumulative impact. Cumulative effects can occur in various ways including 'Nibbling loss', Spatial and temporal crowding and growth inducing potential and are described as follows;

- **Nibbling loss'**: the gradual disturbance and loss of land and habitat
- **Spatial and temporal crowding**: Cumulative effects can occur when a lot of things are happening within too a small area and in too brief a period of time. This may result in the exceedance of a threshold and the environment may not be able to recover to pre-disturbance conditions and can occur quickly or gradually over a long period of time before the effects become apparent. Spatial crowding results in an overlap of effects among actions
- **Growth-inducing potential**: Each new action can induce further actions to occur. The effects of these "spin-off" actions (e.g., increased vehicle access into a previously unroaded hinterland area) may add to the cumulative effects already occurring in the vicinity of the proposed action, creating a "feedback" effect. Such actions may be considered as "reasonably-foreseeable actions".

Cumulative impacts of the draft Clonakilty Town Development Plan have been assessed by way of consideration of significant effects of the draft Plan as indicated in Table 9.1 of this Report and from review of other relevant plans and projects within and adjoining the Plan area. It is not considered that the subject draft Development Plan would have any significant cumulative impacts on the environment of the area.

Table 9.2 Assessments of Cumulative Impacts

Environmental Topic	Description of Cumulative effects	Significance	Mitigation (refer to Chapter 9 below)	Residual Significance
Biodiversity	The nibbling loss of vegetation and associated species, habitats - and their flora and fauna of development such as roads, housing and other infrastructural developments occurring often replace semi-natural and natural areas with artificial surfaces causing a gradual loss of biodiversity, flora and fauna.	Possibly significant if not mitigated	New Policies and Objectives have been included to mitigate against this mater under Biodiversity in table 9.1 of this Report and within the draft Plan.	Not significant
Population	Potential spatial and temporal crowding cumulative impacts due to increase of population within the Town in accordance with national projections. Increased use of resources such as water, and sewage etc, increased people on the transport network could all have cumulative impacts on the town.	Significant if not managed and mitigated	Sufficient lands rezoned in the draft plan to cater for population growth in a sustainable manner. Policies also included in the draft plan to monitor provision of services in line with provision of services.	Not significant
Clonakilty Bay SAC	Tidal Barrage has potential for cumulative impacts on the maintenance of the ecological integrity of the Clonakilty Bay European site.	Significant if not managed and mitigated	New wording to text of plan set out in appropriate assessment of the draft Plan. Further consultation with the NPWS required to determine likely impact.	Possibly significant pending determination of consultation with NPWS

10 MONITORING

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. Monitoring programmes for different Plans can also be combined e.g. monitoring of within the Clonakilty Town Development Plan can be combined with monitoring required for the Cork County Development Plans. This allows for consistency in monitoring across the county and assists in comparing results.

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 SEA “Environmental Objectives, indicators and targets. The Objectives, indicators and targets for the various environmental topics are set out below in Table 10.1. The indicators that area used will show changes that would be attributable to the implementation of the Plan. The indicators chosen are at a level, which is relevant to the Plan and are collated on and reported on by a variety of government agencies including EPA, NPWS, OPW and WFD.

Monitoring proposals must concentrate on likely significant environmental effects, which have been 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 Town Plan, takes place two years after the adoption of the Town Plan 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 having a significant adverse effect a variation may be considered during the lifetime of the plan.

It is largely the responsibility of Cork County Council to undertake the monitoring, however it is the responsibility of Clonakilty Town Council to interpret the monitoring data relevant to Clonakilty and to ensure new studies recommended in the Environmental Report (i.e. habitat survey) are undertaken.

Responsibilities and Frequency of Reporting

The Statutory Manager’s Report on progress in achieving objectives of the Town Plan, takes place two years after the adoption of the Town Plan 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 having a significant adverse effect a variation may be considered during the lifetime of the plan.

It is largely the responsibility of Cork County Council to undertake the monitoring, however it is the responsibility of Clonakilty Town Council to interpret the monitoring data relevant to Clonakilty and to ensure new studies recommended in the Environmental Report (i.e. habitat survey) are undertaken.

Identification of Significant Gaps in Environmental Information

During the preparation of this Environmental Report a number of gaps in environmental information have been identified, these comprise:

- The lack of local habitat surveys for non-designated sites and insufficient baseline data on habitats and species to allow for on-going monitoring. There is a need to prepare a local biodiversity action plan, which is expected to occur during the lifetime of the new 2009-2015 Plan. It is recommended that Clonakilty Town Council undertake habitat surveys of the study area
- No detailed wetland inventory in County Cork
- No Landscape assessment for Clonakilty Town
- Lack of information on fisheries
- Lack of monitoring on “Major Pressures reported in the assessment of Habitats and Species” in Clonakilty

Table 10.1 Monitoring

Issue	Objective	Impact	Target	Indicator	Responsibility	Frequency
Biodiversity, Flora and Fauna						
B1	To avoid significant adverse impacts (direct, cumulative and indirect), to protected habitats, species or their sustaining resources in designated ecological sites by development within or adjacent to these sites.	Loss of biodiversity and ecological networks and spread of invasive species	No significant adverse impacts, (direct, cumulative and indirect impacts), to relevant habitats, species or their sustaining resources in designated ecological sites.	Number of significant adverse impacts (direct, cumulative and indirect impacts), to relevant habitats and species in designated ecological sites.	CTC DoEHLG	Review each planning application as submitted

Issue	Objective	Impact	Target	Indicator	Responsibility	Frequency
B2	To protect the marine environment, aquatic biodiversity, flora and fauna and to promote integrated coastal zone management strategies.	Loss of aquatic biodiversity, flora and fauna.	No significant adverse impacts, (direct, cumulative and indirect impacts), to relevant habitats, species or their sustaining resources in designated ecological sites.	Number of significant adverse impacts (direct, cumulative and indirect impacts), to relevant habitats and species in designated ecological sites.	CTC DoEHLG	Review each planning application as submitted
Population and Human Health						
PH1	To improve the quality of life for the people of Clonakilty through high quality residential, working and recreational environments, sustainable travel patterns.	Deterioration in: streetscape quality due to increased litter; in human health and quality of life; Lack of a diversity in employment and accommodation	To improve quality of life, provision of improved physical and social infrastructure, to reduce journey to work times and allow for a better match between place of residence and place of work.	Journey to work times.	CCC	Review at next census
PH2	To protect human health from hazards or nuisances arising from traffic and incompatible landuses.	Poor Drinking water quality Poor Air quality; deterioration in human health and quality of life.	No spatial concentrations of health problems arising from environmental factors.	Occurrence of a spatially concentrated deterioration in human health.	CTC/ CCC	Review within 3 years of adoption of the Plan
Soils						
S1	To maximise the sustainable re-use of brownfield lands and the existing built environment, rather than developing greenfield lands.	Loss of biodiversity and quality soils through over use of greenfield sites instead of brownfield sites	All brownfield lands to be redeveloped at the end of the plan lifespan (subject to availability on the open market and demand for such land).	Area of brownfield land available.	CTC	Review within 3 years of adoption of the Plan
S2	To maintain the quality of soils.	Loss of biodiversity and quality soils	To reduce contamination and safeguard soil quality and quantity.	Cannot specifically monitor at present, however, when soil directive comes into force, will be obliged to consider impacts of policies on soils.	CCC	Review within 3 years of adoption of the Plan

Issue	Objective	Impact	Target	Indicator	Responsibility	Frequency
S3	To minimise waste production and reduce the volume of waste to landfill and to operate sustainable waste management practices.	Negative impacts to groundwater quality and increased litter;	To meet national and EU targets on the recycling of municipal waste and its diversion from landfill.	Volume of waste recycled and volume of waste sent to landfill.	CTC/CC C	Annually
Water						
W1i	Maintain or improve the quality of surface water to meet the requirements of the South Western River Basin Management Plan (SW RBMP) and Programme of Measures (POMs)	Negative impacts to surface water quality, fisheries and aquatic biodiversity	0 Faecal Coliform Counts per 100ml of groundwater.	Faecal Coliform Counts per 100ml of groundwater.	EPA CTC/CC C	As per monitoring cycle in accordance with the WFD monitoring programme
W1ii			To improve biotic quality ratings, where possible to Q5.	Changes in water quality as identified during water quality monitoring programmes.	EPA CTC/CC C	As per monitoring cycle in accordance with the WFD monitoring programme
W2i	To maintain and improve, where possible, the quality of rivers, lakes and surface water.	Negative impacts to surface water quality, fisheries and aquatic biodiversity; Poor quality water	To maintain a biotic quality rating of Q4, in line with the requirement to achieve good water status under the Water Framework Directive, by 2015.	Biotic Quality Rating (Q Value) and Risk Assessment.	EPA CTC/CC C	As per monitoring cycle in accordance with the WFD monitoring programme
W2ii			To improve biotic quality ratings, where possible, to Q5.	Biotic Quality Rating (Q Value) and Risk Assessment.	EPA CTC/CC C	As per monitoring cycle in accordance with the WFD monitoring programme
W3	To maintain and improve where possible, the quality of estuarine and coastal waters.	Poor quality water; Negative impacts to fisheries and aquatic biodiversity;	To maintain or to improve trophic status, where relevant, to unpolluted in line with the requirement to achieve good water status under the Water Framework Directive, by 2015.	Trophic Status (ATSEBI)	EPA CTC/CC C	As per monitoring cycle in accordance with the WFD monitoring programme

Issue	Objective	Impact	Target	Indicator	Responsibility	Frequency
W4a	To prevent pollution and contamination of bathing water.	Poor quality water; Negative impacts to fisheries and aquatic biodiversity and human health	≤ 5,000 Total Coliform Counts per 100ml of bathing water.	Total Coliform Counts per 100ml of bathing water.	CTC	Annually
W4b			≤ 1,000 Faecal Coliform Counts per 100ml of bathing water.	Faecal Coliform Counts per 100ml of bathing water.	EPA CCC	Annually
Air and Climate						
A 1	To maintain and improve air quality in Clonakilty and reduce CO2 Greenhouse Gases (GHGs) to alleviate Climate Change.	Poor Air quality and increasing contributions to climate change through greenhouse gas emissions	Increased use of public transport. Increase numbers of cycle lanes and pedestrian routes in the study area. Increase number of permissions granted for renewable energy projects	Use of public transport. Provision of cycle lanes and walking routes. Number of permissions granted for renewable energy projects.	CTC/ CCC	Review within 3 years of adoption of the plan
Energy						
E1	Use of renewable energy technology for projected power requirements over the lifetime of the Plan	Poor Air quality and increasing contributions to climate change	Encourage use of renewable energy for domestic and small businesses. Use of renewable energy to supply National Grid where applicable	Number and type of renewable energy technologies employed in new developments	CTC/CC C	Review each planning application as submitted
Material Assets						
M1	To serve new development under the plan with appropriate wastewater treatment.	Inadequate WWT for increased population; poor quality water and contamination	No new developments granted permission which cannot be adequately served by a public waste water treatment plant over the lifetime of the plan.	Number of new developments granted permission, which cannot be adequately served by a public waste water treatment plant over the lifetime of the plan.	CCC NRA	Review each planning application as submitted

Issue	Objective	Impact	Target	Indicator	Responsibility	Frequency
M2	To maintain and improve the quality of drinking water supplies.	Overuse of resources potentially resulting in inadequate water supply during the lifetime or post 2015.	To maintain and improve drinking water quality in Clonakilty to comply with the requirements of the European Communities (Drinking Water) Regulations 2000.	Drinking water quality standards (Microbiological, Chemical and Indicator parameters).	EPA CTC/CC C	As per monitoring cycle in accordance with the WFD monitoring programme
Cultural Heritage						
CH1	To protect the archaeological heritage of Clonakilty and; the context of the above within the surrounding landscape where relevant.	Impacts to RPS, RMPs, ACAs and the townscape of Clonakilty	No unauthorised developments permitted over the lifespan of the plan which result in full or partial loss of: entries to the Record of Monuments and Places; entries to the Register for Historic Monuments; National Monument subject to Preservation Orders, and; the context of the above within the surrounding landscape where relevant.	Number of unauthorised developments permitted over the lifespan of the plan which result in full or partial loss of: entries to the Record of Monuments and Places; entries to the Register for Historic Monuments; National Monument subject to Preservation Orders, and; the context of the above within the surrounding landscape where relevant.	CCC Heritage Section Cork Heritage Forum DoEHLG	Review each planning application as submitted

Issue	Objective	Impact	Target	Indicator	Responsibility	Frequency
CH2	To preserve and protect the special interest and character of Clonakilty's architectural heritage and the context of the above within the surrounding landscape where relevant.	Impacts to RPS, RMPs, ACAs and the townscape of Clonakilty; Visual impact to the streetscape of Clonakilty	No unauthorised developments permitted over the lifespan of the plan which result in physical loss or loss to the context in the surrounding landscape or streetscape of: entries to the Record of Protected Structures; Architectural Conservation Areas, or; entries to the National Inventory of Architectural Heritage.	Number of unauthorised developments permitted over the lifespan of the plan which result in physical loss or loss to the context in the surrounding landscape or streetscape of: entries to the Record of Protected Structures; Architectural Conservation Areas, or; entries to the National Inventory of Architectural Heritage.	CCC Heritage Section Cork Heritage Forum DoEHLG	Review each planning application as submitted
Landscape						
Li	To protect Clonakilty's sensitive landscapes, landscape features and designated scenic routes and landscape	Visual impacts to the landscape	Number of unauthorised developments located within sensitive landscapes or designated scenic landscape.	No unauthorised developments to be conspicuously located within sensitive landscapes or designated scenic landscape.	CTC/CC C	Review each planning application as submitted.
Lii			No unauthorised developments to adversely impact upon designated scenic views or scenic landscape.	Number of unauthorised developments adversely impacting upon designated scenic views or scenic landscape.		

11. NON-TECHNICAL SUMMARY

11.1 BACKGROUND

The Clonakilty Town Plan sets out the overall strategy for the development of Clonakilty town. The existing Town Development Plan was adopted in 2003 and remains in force until 2009.

Clonakilty Town Council is currently preparing a new Town Development Plan under The Planning and Development Act (2000) which requires the Planning Authority to prepare a “Development Plan” every six years for its jurisdiction.

As part of this development plan process, RPS are undertaking a Strategic Environmental Assessment (SEA) which is intended to identify and assess the issues facing the Clonakilty Town Council area going forward. This Environmental Report will be made available to the public along with the draft Clonakilty Development Plan. The Environmental Report has guided the preparation of objectives, policies and development scenarios for the Development Plan with an ultimate goal of achieving sustainable development within the Clonakilty Town Council area.

11.2 PROJECT OBJECTIVES AND METHODOLOGY

This Environmental Report provides a Strategic Environmental Assessment (SEA) of the new Clonakilty Draft Development Plan, including its main objectives and policies.

The SEA process aims to:

- Integrate environmental factors into the decision making process;
- Improve the updated Plan and enhance environmental protection; and
- Facilitate openness and transparency in the decision making process.

11.1.1 Strategic Environmental Assessment Stages

- **Screening** of Plans and Programmes establishes whether the relevant plan or programmes must undergo an SEA, in this case Clonakilty Town Council determined during their screening process in September 2007 that an SEA was warranted.
- **Scoping** of the Environmental Report: The competent authority, in this case Clonakilty Town Council, must give notice to the environmental authorities that they are preparing an environmental report on the significant effects of implementing the Plan. The three statutory consultees were notified in March 2008 that the SEA process had started and their views were sought.
- An **Environmental Report** – Clonakilty Town Council commissioned RPS in January 2008 to continue the SEA process and prepare an Environmental Report. The Environmental Report investigates, describes and evaluates the likely significant effects on the environmental of implementing the Town Plan.

Specifically, the aim of this Environmental Report is to identify:

- Existing environmental issues in Clonakilty Town;
 - The likely significant effects on the environment when the new Town Plan is implemented;
 - How the impact on the environment can be reduced or prevented; and
 - How to monitor environmental impacts over the lifetime of the Town Development Plan.
- A **Consultation period** on the Draft Plan and associated Environmental Report will be carried out between the **19th of August 2008 until the 28th of October 2008** when the Plan and environmental report will be available for public viewing at Clonakilty Town Council's office. The public can submit their written observations/comments on the documents during this time and all submissions must be submitted to the Town Manager, Clonakilty Town Council, by the **28th of October 2008**.
 - An **SEA Statement** – when the updated Town Plan is adopted an Environmental Statement identifying how environmental considerations and consultations were integrated into the Final Plan will be made available to the public and available to view at Clonakilty Town Council's office.

11.3 ENVIRONMENTAL BASELINE

The following sections describe the baseline, or existing environmental conditions collected and assessed for each of the topics required under the SEA Directive i.e. biodiversity, population and human health, flora and fauna, water, soil, air and climate, material assets, cultural heritage, transportation and landscape. It was considered necessary to combine some topics in order to avoid unnecessary duplication. Air and noise were not considered separately but were addressed under human health.

As required by the SEA Directive, the environmental report also comments on the likely evolution of the various indicators in the absence of the implementation of the preparation of the Clonakilty Development Plan 2009 - 2015.

The key findings of the baseline survey are described below and full details can be found in Chapter 5 of the Environmental report.

Biodiversity, Flora and Fauna

An examination of the existing environment within the study area reveals that the most sensitive area is Clonakilty Bay proposed Natural Heritage Area (pNHA), candidate Special Area of Conservation (cSAC) and Special Protection Area (SPA) lies partially within the boundary of Clonakilty town. The site is of conservation importance because it contains a diversity of coastal habitats it is also of importance for the bird life it supports. The area is under pressure from a number of sources, notably discharges from the Waste Water Treatment Plant, which is currently at capacity. Other potential sources of pollution include increased recreation and tourism developments, and additional infrastructural development including the new bypass and proposed tidal barrage.

Other constraints on the biodiversity of the town include; development on greenfield lands, the potential for invasive species to enter surface waters, the removal of Ecological Corridors and potential for impacts to the aquatic environment in the form of industrial and agricultural run-off, municipal sources of pollution, fragmentation of river corridors and soil erosion. However a number of policies have been recommended for inclusion in the draft plan to mitigate against these impacts.

An Appropriate Assessment of the Plan on Clonakilty Bay is also currently being prepared as a separate report, which will accompany this SEA and the Draft Plan.

Population and Human Health

This section looks at the well-being of the population of the town, the settlement strategy and economic development. The main threats include infrastructure constraints based on population growth, air pollution from vehicles, provision of useable amenity space, road safety, waste generation and development on greenfield lands.

The 2006 Census of population identified a population of 3,745 within the Clonakilty Town Council boundary area reflecting a rate of population growth in line with the national average. This section of the report outlines the policies relevant to population in the Clonakilty Town Council area and population, employment and household data primarily retrieved from the Census of Population 2006 and assesses progress made in these areas compared with the original Clonakilty Town Development Plan.

No environmental problems or constraints were identified. Sufficient lands will be rezoned for residential, employment and community uses within the town boundary in line with national, regional and local population projections, which will contribute to the generation of critical mass within the town of Clonakilty. The proposed plan should help to facilitate the growing population of Clonakilty in a sustainable manner and in accordance with various policies and objectives of both national and local plans.

Soil and Geology

Soils are offered protection through the proposed EC Directive 2004/35/EC of the European Parliament and of the Council for establishing a framework for the protection of soil and amending Directive 2004/35/EC. This Directive provides a common strategy for the protection and sustainable use of soil based on the principles of integration of soil concerns into other policies, preservation of soil functions within the context of sustainable use, prevention of threats to soil and migration of their effects, as well as restoration of degraded soils to a level of functionality consistent with the current and approved future use.

Constraints to development with regard to soils and geology include the unknown groundwater vulnerability, development of brownfield sites over greenfield sites and the need for the protection of areas of geological interest (GSIs).

Water

In terms of water it is considered that a number of additional objectives should be included within the Draft Clonakilty Development Plan 2009-2015. The Water Framework Directive (WFD) has categorised the River Fealge and streams entering the Clonakilty Bay at Ring Bar Quay as being "At Risk of Not Achieving Good Status". The plan promotes the protection of water quality and water supply through a number of policies and objectives including the provision of adequate infrastructure and the upgrading of the wastewater treatment plant. In particular it is a policy of the plan to ensure that further provision and use of septic tanks shall not be permitted, in general, within the development boundary of the town.

Clonakilty has suffered from flooding problems as a result of elevated sea levels due to storm surges and high flows in the River Fealge, sometimes in combination. Therefore it is an objective of

the plan to plan to progress the development of the Tidal Barrage across Clonakilty bay to alleviate the risk of tidal flooding within the town.

There are a variety of activities both within and outside the study area, which have the potential to impact on water quality. These include sewerage treatment works, domestic water treatment systems, housing, construction work, industry, landfill, spillages, increased road runoff and agriculture.

Air and Climate

Sustainability is a key constraint for future development. Emissions to the atmosphere, energy consumption and climate change are all interlinked. Future developments should give consideration to passive design and clean and energy efficient technologies such as renewables, district heating and co-generation.

In Ireland the transport sector is the fastest growing contributor of GHG emissions. A reliable efficient public transport system within the Clonakilty area would reduce car dependence and combat rising CO₂ emissions from vehicle exhausts.

Clonakilty is an area of high visual amenity. It will be important to ensure that for future energy developments and the associated infrastructure does not impact adversely on the landscape. Clonakilty has been identified as a strategically unsuitable zone for wind development in the Cork County Development Plan. Space may also be a constraint in particular when locating vertical ground source heat pumps and district heating plant.

As the population of Clonakilty continues to grow in the future, there is a need to ensure that growth is planned for and that there are sufficient and appropriate lands zoned to accommodate such growth. A sustainable transport system is required to reduce car dependence and reduce GHG emissions. Sustainable construction and design in addition to clean and energy efficient technologies should be encouraged at design stage. Perhaps planning applications and designs with renewable energy aspects could be given preferential consideration.

It is considered that sustainable forms of development and sustainable sources of energy should be encouraged in the new plan. There is a need to include a policy on sustainable building within the new plan. Future considerations should include examining the feasibility of district energy systems for public buildings and the Clonakilty urban area in general, such as combined heat and power and district heating, particularly for new developments.

Material Assets

Public transport initiatives are encouraged in the Plan with the aim of reducing the number of trips in unsustainable travel modes. Policies are aimed at reducing congestion, promoting public transport, creation of cycle lanes and accessible transport.

A Traffic and Transportation study on Clonakilty Town is currently being undertaken and recommendations have not yet been made. Therefore three options for a Clonakilty Relief Road are currently proposed in the Clonakilty Development Plan 2009 - 2015. It is considered that each of the proposed routes could have environmental impacts, especially the two southern routes which cut through the Clonakilty Bay SAC and SPA. Therefore it is recommended that in the event of implementation of any proposed new route, an Environmental Impact Assessment will need to be undertaken. Consideration should also be given to the environmental policies and objectives of the current and proposed plan should any of the proposed options be implemented.

The key consideration in going forward is the implementation of an efficient, sustainable and integrated transport system.

Cultural Heritage

Developments or works which occur in close proximity to archaeological monuments would have potential to impact existing archaeological monuments through disturbance or destruction of the monuments. New developments that are adjacent to and/or alterations/extensions to existing protected structures also need to be carefully managed to ensure that the cultural heritage of such areas are not disturbed or negatively impacted upon.

It is deemed that the Plan area is of high archaeological potential. This determination is based on the presence of substantial archaeological remains from many periods of the past within the development area.

Landscape

It is considered that much of the lands surrounding the town are of high landscape character. Elevated lands to the north and south of the town are sensitive to development. Lands to the east and south east of Clonakilty town are designated as Scenic Landscape Coastline in the Cork County Development Plan 2003 and Draft Cork County Development Plan 2007. Three scenic routes are located in close proximity to the town and scenic views from Golf Links Road are also locally protected. In addition Clonakilty Bay to the east of the town is designated as a National Heritage Area, Special Area of Conservation and a Special Protection Area.

It is considered that development should not have visual impacts on any of the above-mentioned features. The implications of the development of the zoned lands proposed in the Plan on existing landscape form and features and on scenic views and routes should be investigated with a view to ensuring such views/ features are protected from proposed development of the area.

11.4 CONSIDERATION OF ALTERNATIVES

Article 5 of the SEA Directive requires the environmental report to consider "*reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme*" and the significant effects of the alternatives selected. Alternatives must be realistic and capable of implementation and should present a range of different approaches within the statutory and operational requirements of the Plan.

Three alternative were considered for assessment as part of the SEA process:

It is a mandatory objective of a Development Plan 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 sufficient lands are proposed to be rezoned for residential, employment and community uses within the town boundary in line with national, regional and local population projections, which will contribute to the generation of critical mass within the town of Clonakilty.

- **Alternative 1** The 'Do-nothing' Alternative;
- **Alternative 2** Rezone sufficient lands in accordance with national, Regional and Local projections; and

- **Alternative 3** Extend new development zonings on Greenfield lands in accordance with submissions to the development plan.

Under Alternative 1 the 'do nothing' scenario, Clonakilty would maintain its current physical and socio-economic characteristics. Development would be market dependent and would occur at a slower pace and in a less co-ordinated manner. Adopting the 'do-nothing' approach would have serious implications for the proper planning and sustainability of Clonakilty Town, as it would mean development would take place in a haphazard manner.

As a result of the do-nothing approach, policies and objectives of the plan would not be updated and therefore derelict and under-utilised buildings would dilapidate further. Physical, social and economic development would not be planned and promoted within the town. Therefore Option 1 would not achieve the priority objective of the Clonakilty Town Development Plan, which is to promote balanced and sustainable development that takes account of the values and concerns of all stakeholders in the town. Therefore this option is considered negative in terms of the environment and sustainability of Clonakilty and is therefore not the chosen option for the plan.

Alternative 2 is to rezone sufficient lands in accordance with national, Regional and Local projections through the intensification of the existing Town Centre, redeveloping brownfield sites and Greenfield sites only where there is a natural extension to existing zoning, which can be seen clearly in the development strategy of the plan in Volume II of the plan. This alternative aims to address a number of the points in which the draft plan aims to address in its underlying strategy as set out in section 2.11.1 in providing sufficient zoned and serviced lands for residential, recreational and amenity purposes along with a mix of residential densities, by liaising with the County Council with a view to encouraging balanced and sustainable development between the Town Council area and enabling Clonakilty to fulfill its potential as an Integrated Employment Centre.

This scenario allows for the intensification of the town centre and the consolidation and expansion of existing services to easily accessible lands. This scenario would meet a large number of the objectives of the Town Development Plan, as it would allow the rejuvenation of existing derelict sites, which would improve the town's architectural character and townscape and consequently improve its tourist function. It would also be likely to have a positive impact on existing residents and traders in the town. Therefore alternative 2 is the preferred option for the Clonakilty Town Development Plan 2009 - 2015.

Alternative 3 is to extend new development zonings on greenfield lands in accordance with submissions to the development plan within the Clonakilty Town Council area. Much of the town is already developed therefore this alternative would involve extending zonings into the only greenfield areas of the Town, most of which is located to the south and north of the town which is considered to be of high landscape character. Therefore this alternative would result in the rezoning of lands based on the requests of local landowners. It would entail the rezoning of greenfield lands that may or may not be located in sustainable locations and would result in overprovision of zoned lands and would not be in accordance with planned population projections for the town. Therefore alternative 3 is considered unsustainable due to the dispersed nature of growth and primarily due to its potential to have significant impacts on the environment.

11.5 SIGNIFICANT EFFECTS AND MITIGATION

The likely significant effects of the Draft Plan have been informed by trends and potential impacts as identified in the review of European, National, Regional and Local planning and environmental legislation and guidance documents, existing environment as indicated from the environmental

baseline study and from impacts arising from the assessment of policies and objectives of the Plan. This process enabled an overview of where potential environmental trends and impacts may arise from implementation of the draft Plan and allowed for a cross check and where necessary provision of additional mitigatory measures including provision of new policies/objectives to be incorporated where possible in the draft Plan.

Chapter 9 of this environmental report sets out likely significant effects of the draft plan and where relevant proposes mitigation measures to ameliorate against any potential impacts. All of which have been successfully been incorporated into the draft plan. Potential impacts are also linked to the monitoring programme proposed for the Clonakilty Town Development Plan 2009 once adopted. Mitigation involves ameliorating significant negative environmental effects.

11.6 MITIGATION AND MONITORING

A Monitoring programme of the identified significant effects is set out in table 10.1 above (tables have not been included in this non technical summary as it was considered unnecessary in terms of duplication), which aims to prevent against deterioration of the environmental quality of the area during the lifetime of the plan. Monitoring proposals must concentrate on likely significant environmental effects, which have been 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.

Appendix 1 Designated Sites

Site synopsis

Site Name: Seven Heads SPA

Site Code: 004191

The Seven Heads SPA is situated to the south-west of the town of Courtmacsherry, Co. Cork. It encompasses the sea cliffs of the Seven Heads peninsula north-east to Barry's Point and also the cliffs of Dunworly Bay and Barry's Cove. The site includes the sea cliffs, which rise to over 50 m, notably south of Barry's Point, and the land adjacent to the cliff edge (inland for 300 m). The high water mark forms the seaward boundary. Most of the site is underlain by Devonian sandstones, siltstones and mudstones; similar rocks of Carboniferous age also occur at the eastern and western ends of the site.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for Chough.

Sea cliffs are the predominant habitat of the site; these occur along its length and are generally well-vegetated by a suite of typical sea cliff species. Above the cliffs areas of heath, improved grassland, unimproved wet and dry grassland, freshwater marsh and arable land occur.

The site supports an important population of breeding Chough, a Red Data Book species that is listed on Annex I of the E.U. Birds Directive; 13 breeding pairs were recorded from the site in the 1992 survey and 15 in the 2002/03 survey. In addition, flocks of up to 47 birds were noted in the 1992 survey and up to 25 in the 2002/03 survey.

Landuse at the site is predominantly grazing by stock, but some arable farming is also carried out, particularly on the Seven Heads Peninsula. The grazing regime, which results in a tight vegetation sward, is beneficial to Chough. Areas of semi-natural habitats occur in many places adjacent to the breeding cliffs, interspersed between other areas of relatively intensive grass production. The habitats present are quite robust, and there are few noticeable activities negatively impacting on the Chough population. However, changes in landuse, particularly a reduction in grazing levels, could pose a threat to the species. One other potential threat is the residue left in livestock dung due to the application of broad-spectrum anti-parasitic drugs.

The site supports a variety of breeding seabirds, i.e. Fulmar (18 pairs in 2002), Herring Gull (23 pairs in 2002), Great Black-backed Gull (12 pairs in 2002) and Cormorant (45 pairs in 2006). The site is also used by Peregrine (2 pairs in 2002).

The Seven Heads SPA is of particular importance for Chough; it also supports a population of Peregrine and a suite of breeding seabird species. The presence of Chough and Peregrine, both species that are listed on Annex I of the E.U. Birds Directive, is of particular significance.

13.11.2006

Site Name: Galley Head to Duneen Point SPA**Site Code: 004190**

The Galley Point to Duneen Point SPA is situated to the south-west of the town of Clonakilty, Co. Cork. It encompasses the sea cliffs south of Castlefreke dunes to Galley Head, north-eastwards along the coast to Dunowen Head and Ringlea Point as far as the north side of Duneen Point. The site includes the sea cliffs and the land adjacent to the cliff edge (inland for 300 m). The high water mark forms the seaward boundary. Most of the site is underlain by Devonian sandstones, siltstones and mudstones, but similar rocks of Carboniferous age also occur.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for Chough.

Sea cliffs are the predominant habitat of the site; these occur along its length and are generally well-vegetated by a suite of typical sea cliff species. Above the cliffs areas of heath, improved grassland, unimproved wet and dry grassland, and arable land occur.

The site supports an important population of breeding Chough, a Red Data Book species that is listed on Annex I of the E.U. Birds Directive; 11 breeding pairs were recorded from the site in the 1992 survey and 11 in the 2002/03 survey. In addition, flocks of 4-6 birds have been noted.

Landuse at the site is predominantly grazing by stock, but some arable farming is also carried out, particularly on Galley Head. The grazing regime, which results in a tight vegetation sward, is beneficial to Chough. Areas of semi-natural habitats occur in many places adjacent to the breeding cliffs, interspersed between other areas of relatively intensive grass production. The habitats present are quite robust, and there are few noticeable activities negatively impacting on the Chough population. However, changes in landuse, particularly a reduction in grazing levels, could pose a threat to the species. One other potential threat is the residue left in livestock dung due to the application of broad-spectrum anti-parasitic drugs.

The site supports a variety of breeding seabirds, i.e. Fulmar (106 pairs), Herring Gull (62 pairs), Cormorant (5 pairs), Shag (1 pair), Great Black-backed Gull (3 pairs) and Lesser Black-backed Gull (1 pair) – all seabird data from 1985. The site is also used by Peregrine (2 pairs in 2002).

The Galley Point to Duneen Point SPA is of particular importance for Chough; it also supports a population of Peregrine and a suite of breeding seabird species. The presence of Chough and Peregrine, both species that are listed on Annex I of the E.U. Birds Directive, is of particular significance

13.11.2006

Site Name: Clonakilty Bay SPA**Site Code: 004081**

Clonakilty Bay, which is located in west County Cork, is a wetland complex that stretches from the town of Clonakilty to the open sea. It comprises two small estuarine bays, Clonakilty Harbour and Muckcross Strand, separated by Inchydoney Island and its empoldered isthmus. Several small rivers flow into the site, notably the Fealge River. At low tide, substantial areas of sand and mud flats are exposed. The construction of a causeway across the inner part of Muckcross Strand created an extensive wetland complex known as Cloheen Strand Intake. The site also includes a well-developed sand dune system, with embryonic dunes, marram dunes, fixed dunes and decalcified dune heath all represented. The dune types, as well as the intertidal sand and mud flats, are habitats that are listed on Annex I of the E.U. Habitats Directive.

Intertidal sand and mud flats occupy the majority of the site area and these provide the main food resource for the wintering waterfowl. Sand flats dominate the inter-tidal area, although mud flats occur at the sheltered upper end of the inlets. The vegetation consists of algal mats (*Enteromorpha* spp.), with brown seaweeds (*Fucus* spp.) occurring where the shore is rocky. The invasive Common Cord-grass (*Spartina anglica*) occurs in places. The intertidal flats have a typical diversity of macro-invertebrates, including Lugworm (*Arenicola marina*), Peppery Furrow-shell (*Scrobicularia plana*), Ragworm (*Hediste diversicolor*), the marine bristle worms *Nephtys hombergii* and *N. cirrosa*, Laver Spire-shell (*Hydrobia ulvae*) and Common Cockle (*Cerastoderma edule*).

The Cloheen Strand Intake wetland contains a fine range of habitats from saline lagoons, to brackish grasslands, open freshwater marsh and wet grassland. The saline influence is evident by the occurrence of species such as Saltmarsh Rush (*Juncus gerardi*) and Sea Rush (*J. maritimus*). This area provides the main roosting area for birds at high tide. Birds also roost elsewhere above the shoreline and on the sandy beach associated with the dune system at Inchydoney Island.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Shelduck, Dunlin, Black-tailed Godwit and Curlew. The E.U. Birds Directive pays particular attention to wetlands, and as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

The site contains a good diversity of wintering waterbirds, with over 8,000 birds occurring regularly. The site is noted for its internationally important population of Black-tailed Godwit (888) - all count data refers to the 5-year mean peak 1994/95-1998/99. The ecology of this population has been studied in detail in recent years. Four species occur in nationally important numbers: Shelduck (155), Dunlin (1,303), Curlew (848) and Greenshank (31). Other species occurring in significant numbers are Mute Swan (48), Wigeon (530), Teal (192), Oystercatcher (338), Ringed Plover (97), Golden Plover (865), Grey Plover (66), Lapwing (2,135), Knot (158), Bar-tailed Godwit (76) and Redshank (263). The site is also used by Mallard (97), Turnstone (48), Red-breasted Merganser (11) and Cormorant (13).

The regular occurrence of Golden Plover and Bar-tailed Godwit is of note as both are listed on Annex I of the E.U. Birds Directive. An additional species listed on Annex I of this directive that has become regular in small numbers in recent years is Little Egret (average 5, maximum 7). Grey Heron (14) commonly uses the site and a heronry is located in the trees near Clonakilty. Cloheen Strand Inlet is also a regular wintering site for usually up to 3, but occasionally 7, Short-eared Owl, also an Annex I species.

The site is a regular staging post for scarce autumn migrants, especially Little Stint, Curlew Sandpiper and Spotted Redshank. In most years it is also visited by vagrant waders from North America.

Clonakilty Bay SPA is of high ornithological importance, particularly for its internationally important population of Black-tailed Godwit. In addition, there are four species with populations of national importance. The presence of the E.U. Birds Directive Annex I species, Golden Plover, Bar-tailed Godwit, Little Egret and Short-eared Owl is of note. The bird populations have been monitored since the 1970s and the site is counted monthly each winter (September to March) as part of the Irish Wetland Bird Survey (I-WeBS).

30.8.2007

Site Name: Kilkeran Lake and Castlefreke Dunes cSAC and pNHA**Site Code: 001061**

Kilkeran Lake and Castlefreke Dunes are situated about 6 km east-south-east of Rosscarbery. It is coastal site in which well-developed sand dunes have impounded two streams to create wetland areas of open water, freshwater marsh and swamp. The site also contains an area of mixed woodland.

The Castlefreke system contains three dune habitats listed on Annex I of the EU Habitats Directive including fixed dunes, a priority habitat, and the sand dune flora is rich for this area of West Cork. The dunes are dominated by Marram (*Ammophila arenaria*), with Sea Couch (*Elymus pycnanthus*), Sea Bindweed (*Calystegia soldanella*), Sharp Rush (*Juncus acutus*) and Frosted Orache (*Atriplex laciniata*) also occurring. A small stand of Monterey Pine (*Pinus radiata*) occurs, as do several dune slacks. The beach and sand dunes are generally in good condition, but lack of grazing has encouraged colonisation of some areas by Bracken (*Pteridium aquilinum*) and Bramble (*Rubus fruticosus*).

There are two main waterbodies on the site. Kilkeran Lake is a natural sedimentary lagoon, connected to the sea by a narrow, intermittently blocked channel. The lagoon has a sandy bed with some stones and is fringed by Common Reed (*Phragmites australis*) and the Club-rushes, *Scirpus maritimus* and *S. lacustris*. The aquatic flora includes Fennel Pondweed (*Potamogeton pectinatus*) and Tasselweed (*Ruppia* sp.). Kilkeran Lake is a brackish waterbody that receives freshwater from one main stream and saltwater during breaches of the outlet channel by the sea. Saltwater probably also enters the lagoon through seepage. The lagoon is prone to algal blooms and the once thriving trout fishery has now disappeared. The invertebrate fauna of the lagoon has been well-studied and several rare and lagoon-indicator species have been recorded. North-west of Kilkeran Lake areas of freshwater marsh, swamp and wet grassland are found, following the stream which enters the lagoon.

Lough Rahavarrig is largely overgrown, having been colonised by fen-type vegetation, including Greater Pond-sedge (*Carex riparia*) and Water Dock (*Rumex hydrolapathum*). Areas of Willows (*Salix* spp.) and reedbeds occur on the margins of the lake, where Skullcap (*Scutellaria galericulata*) is also found.

Sharp-leaved Fluellen (*Kickxia elatine*), a rare Red Data Book species, has been recorded from arable fields in the site. The uncommon sedge hybrid, *Carex paniculata* x *C. remota* (*C. x boeninghausiana*) has also been recorded from the site, north-west of Kilkeran Lake.

Kilkeran Lake was formerly used by large numbers of diving duck (Pochard and Tufted Duck) but these no longer occur, possibly due to poor water visibility as a result of eutrophication. The site is now visited by only very low numbers of waterfowl in winter. It has breeding Little Grebe and Mute Swan, and there is a sizeable heronry nearby.

This site contains two priority habitats listed on Annex I of the EU Habitats Directive. The presence of a lagoon on the site is of particular significance as these are becoming increasingly rare in Ireland and Europe and Kilkeran Lake is the best example of a sedimentary lagoon in south-west Ireland. The wide range of habitat types and high diversity of plant and animal species found adds considerably to the importance of the site. Part of the site is state-owned and managed for conservation purposes.

22.3.2000

Site Name: Courtmacsherry Estuary cSAC and pNHA**Site Code: 001230**

This site is located in West Cork, some 12 km south of Bandon and immediately east of the village of Timoleague. The estuary consists of the drowned valley of the Argideen River, which is now filled with sediments, resulting in an extensive mudflat. The site contains a complex of coastal habitats including ten habitats listed on Annex I of the EU Habitats Directive.

Most of the mudflat is unvegetated, although in places Cord-grass (*Spartina* sp.) occurs. Saltmarsh has developed in a number of areas, the abundant species mostly being Sea Club-rush (*Scirpus maritimus*), Common Scurvygrass (*Cochlearia officinalis*), Sea Arrowgrass (*Triglochin maritima*), Sea Plantain (*Plantago maritima*), Thrift (*Armeria maritima*) and Saltmarsh Rush (*Juncus gerardi*). On the outer edges such species as Greater Sea-spurrey (*Spergularia media*), Lesser Sea-spurrey (*S. marina*) and Lax-flowered Sea-lavender (*Limonium humile*) occur, while on their landward edge of the saltmarsh frequently support Creeping Bent (*Agrostis stolonifera*), Red Fescue (*Festuca rubra*), Silverweed (*Potentilla anserina*), Soft Rush (*Juncus effusus*), Common Sorrel (*Rumex acetosa*) and others. A particularly well developed intact saltmarsh occurs at Garranefeen Strand. The site also includes small areas of sand dune, sandy and shingle beaches, reedbeds of Common Reed (*Phragmites australis*), scrub, dry grassland, and areas of both wet and dry seminatural broadleaved woodland, parts of which are dominated by species of Oak (*Quercus* sp.). Of note is the presence of the rare Red Data Book plant species, Seakale (*Crambe maritima*) on shingle, as well as the scarce grass, Tor-grass (*Brachypodium pinnatum*), on cliffs between Broadstrand and Wood Point. The occurrence of the EU priority habitat fixed dune is also of significance.

The site is of ornithological importance for the many waders and wildfowl that feed on the mud and sandflats. The winter flocks of Golden Plover (2,600) and Black-Tailed Godwit (110) constitute nationally important numbers and at least nine other species occur in significant levels for the region - Wigeon (58), Mallard (69), Redbreasted Merganser (18), Oystercatcher (162), Lapwing (629), Dunlin (215), Bartailed Godwit (178), Curlew (731) and Redshank (139). Although these figures are the average peaks of 4 counts between 1984/85 and 1986/87, at times the numbers present far exceed those given. For example, in January 1992, 5,800 Golden Plover, 671 Wigeon, 731 Dunlin and 456 Oystercatchers were present.

The spread of Cord-grass on parts of the mudflats poses a threat to the quantity of the area for feeding birds and pollution is an ever-present threat in such a wetland.

Courtmacsherry Estuary is an important site for the complex of coastal habitats found there, including ten listed on Annex I of the EU Habitats Directive, and for the large numbers of birds that use the area.

22.3.2000

Site Name: Clonakilty Bay cSAC and pNHA**Site Code: 000091**

Clonakilty Bay in west Cork is an inter-tidal expanse that stretches from Clonakilty to the open sea, and comprises two small estuaries separated by Inchydoney Island. The site also includes adjacent sand dunes and inland marshes, and therefore is a coastal complex with a good diversity of habitats including several habitats listed on Annex I of the EU Habitats Directive.

Sand flats dominate the inter-tidal area, although mud flats occur at the sheltered upper end of the inlets. The vegetation consists of algal mats (*Enteromorpha* spp.) with brown seaweeds (*Fucus* spp.) occurring where the coast is rocky. The invasive Cord-grass (*Spartina* sp.) occurs in places. The intertidal flats have a typical diversity of macro-invertebrates, including *Arenicola marina*, *Scrobicularia plana*, *Hediste diversicolor*, *Nephtys hombergii*, *N. cirrosa*, *Hydrobia ulvae* and *Cerastoderma edule*. Sand dunes grade from a strandline, colonised by Frosted Orache (*Atriplex laciniata*), Sea Sandwort (*Honkenya peploides*) and Sea Rocket (*Cakile maritima*), through to fixed dunes vegetated by grasses, small herbs and several species of orchid. They also support an interesting array of introduced plants, amongst which Great Mullein (*Verbascum thapsus*), Viper's-bugloss (*Echium vulgare*) and Teasel (*Dipsacus fullonum*) are the most noticeable. Embryonic shifting dunes and white *Ammophila* dunes are also represented. Of particular interest is a small area of decalcified dune heath with some *Ulex europaeus*.

Inland of the western estuary, an extensive area of wetland occurs, which in itself contains a fine range of habitats from saline lagoons, to brackish grasslands, open freshwater marsh and Alder (*Alnus glutinosa*) scrub. Species found here are characteristic of marshy areas and include Creeping Bent (*Agrostis stolonifera*), Water Horsetail (*Equisetum fluviatile*), Marsh Cinquefoil (*Potentilla palustris*) and Marsh Willowherb (*Epilobium palustre*). The saline influence is evident by the occurrence of species such as Saltmarsh Rush (*Juncus gerardii*) and Sea Rush (*J. maritimus*).

The site contains a good diversity and density of waterfowl, with over 7,000 waders and wildfowl occurring regularly. Seven species have populations of national importance: Shelduck (168), Grey Plover (76), Lapwing (2,509), Dunlin (1,508) Curlew (1,231), Redshank (263) and Greenshank (27). The site is most noted, however, for its population of Black-tailed Godwit (866), which is of international importance and comprises over 10% of the national total. Amongst the other species which occur, there are notable populations of Golden Plover and Bar-tailed Godwit, both of which are listed on Annex I of the EU Birds Directive. All counts given are average winter peaks over either two or three seasons from 1994/95 to 1996/97. Herons commonly use the site and a heronry exists in the trees near Clonakilty.

Otter spraints were found frequently during a recent survey of the marsh area.

The site is under pressure from a number of sources, notably recreation and tourism developments and agricultural improvements, including drainage and fertilizer application.

This site is of considerable scientific interest because it contains a good diversity of coastal habitats. These habitats show a succession from salt to freshwater influences and include six, which are listed on Annex I of the EU Habitats Directive. Its value is enhanced considerably by the birdlife it supports. The occurrence of Black-tailed Godwit in internationally important numbers is particularly significant. The site also supports nationally important numbers of seven other species of waterfowl as well as two species listed on Annex I of the EU Birds Directive.

7.8.1999

Site Name: Seven Heads and Dunworly Bay pNHA**Site Code: 001077**

Seven Heads is the name given to the broad headland separating Clonakilty and Courtmacsherry Bays. It has a complex geology of slaty sandstone rocks close to the transition between the deposits of the Devonian and Carboniferous periods. The grain of the rock allows erosion by the sea along two lines, both SW-NE and NW-SE so that there are a number of narrow deep chasms cutting actively into the cliffs.

The interior of the headland is rich agricultural land and it is only the coastal fringe that is included in the site. Here there are many types of heath vegetation depending on the thickness of the soil, exposure and proximity to the sea. Predominantly it is an Autumn Gorse (*Ulex gallii*) heath with abundant Bell Heather (*Erica cinerea*) and Common Bent (*Agrostis capillaris*) but a number of other species are scattered through such as Wood Sage (*Teucrium scorodonium*), Burnet Rose (*Rosa pimpinellifolia*), Wild Thyme (*Thymus polytrichus*) and Heath Grass (*Danthonia decumbens*). Closer to the cliffs the shrubs become less frequent, allowing Fescues (*Festuca rubra*, *F. ovina*), Centaury (*Centaurium erythraea*), Eyebright (*Euprasia tetraquetra*) and Kidney Vetch (*Anthyllis vulneraria*) to take over. In the other direction where patches of drift soil occur, Bramble (*Rubus fruticosus*), Bracken (*Pteridium aquilinum*) and occasionally Irish Spurge (*Euphorbia hyberna*) and Madder (*Rubia peregrina*) grow in a bushier vegetation sometimes with Common Gorse (*Ulex europaeus*) as well as the Autumn Gorse. On the eastern side there are some seepage areas where Creeping Willow (*Salix repens*), Bog Pimpernel (*Anagallis tenella*) and a Marsh Orchid (*Dactylorhiza incarnata*) grow.

Seabirds are localised around the headland with a large colony of Cormorant (56 pairs in c. 1990) on Bird Island as well as Shag (13 pairs), Fulmar (2 Pairs), Herring Gull (65 pairs) and Great Black-backed Gull (10 pairs) elsewhere. The area in general is important for Choughs which breed on many of the cliffs and feed in the fields and heathland behind wherever there are livestock. There are Peregrines also so that the site includes two birds, included in the Red Data Book, and the E.U. Birds Directive Annex I, for which Ireland is internationally important.

The headland is also a resting place for pass The site also contains a totally contrasting area in the form of the reedbed at the head of Dunworley Bay. Here a good transition between saltmarsh and freshwater communities occurs with a small patch of wet woodland at the northern point. There are full saltmarsh communities containing Sea Purslane (*Atriplex portulacoides*), Sea Milkwort (*Glaux maritima*) and Sea Aster (*Aster tripolium*) blending into Reed (*Phragmites australis*), Pond Sedge (*Carex riparia*) and Reed Fescue (*Festuca arundinacea*) and, at the north end into Royal Fern (*Osmunda regalis*), Wild Angelica (*Angelica sylvestris*), Gypsywort (*Lycopus europaeus*) and Alder (*Alnus glutinosa*).

Some Curlew, Lapwing and Snipe use the area in winter but only in small numbers.

In summary the whole site contains a diversity of habitat with well developed heath and reedbed communities. Its bird fauna is also important.

Site Name: Dirk Bay pNHA**Site Code: 001498**

This site is located 9km. south-west of Clonakilty close to Galley Head.

Sand dunes and freshwater marsh comprise most of the site, which lies at the back of Red Strand. In the 1986 An Foras Forbartha County Report, a number of local or rare plant species were recorded in the dunes, namely: Dodder (*Cuscuta epithimum*), Wild Clary (*Salvia verbanaca*) and Autumn Lady's tresses (*Spiranthes spiralis*). During the rare plant survey of Co. Cork (1992-93), another local species was added to this list, namely: Cowslip (*Primula veris*), a rare plant in west Cork. The dune grassland slopes down to a reedswamp and, on the transitional marshy area, Strawberry Clover (*Trifolium fragiferum*) and Lesser Water-parsnip (*Berula erecta*) occur.

The presence of Wild Clary (*Salvia verbanaca*) is of particular interest, since it is a rare species listed in the Irish Red Data book.

A considerable part of the dune system has been re-seeded and fertilized for sheep grazing. Other parts are suffering from sand removal and rubbish dumping.

This site is of interest because sand dunes are an unusual habitat in west Cork and this system, although small and somewhat damaged, is of great botanical value.

Site Name: Rosscarbery Estuary pNHA**Site Code: 001075**

Rosscarbery Estuary is a sea inlet fed by small rivers from the north and north-west. The northern part of the estuary, above the causeway carrying the Skibbereen road, is maintained as a lake by a weir but the southern empties and fills normally on the tide. The mouth of the inlet is nearly closed by a broad spit of sand behind Creggan Strand but above this there are extensive sand flats where quays and a training wall indicate a former maritime importance. Currently the site is used for growing young oyster stock in cages.

Much of the boundary of the site follows the roads but there are three places where the vegetation of adjacent ground is interesting. One is the Creggan spit itself where a new dune ridge extends westwards into the channel. Marram (*Ammophila arenaria*) is scattered over this ground with such beach plants as Prickly Saltwort (*Salsola kali*), Frosted Orach (*Atriplex laciniata*) and Sea Bindweed (*Calystegia soldanella*). With stability Kidney Vetch (*Anthyllis vulneraria*), False Oat (*Arrhenatherum elatius*), Bulbous Buttercup (*Ranunculus bulbosus*) and Pyramidal Orchid (*Anacamptis pyramidalis*) occur in a noticeably mossy grassland.

Northwards this community runs into a sheltered saltmarsh where rushes *Juncus gerardii* and *J. acutus*, or saltmarsh Grass (*Puccinellia maritima*) dominate the ground. There are also sedges *Carex distans* and *C. extensa*, Fleabane (*Pulicaria dysenterica*) and Hard Grass (*Parapholis strigosa*) which is relatively rare on the Cork coast.

The western cliffs around Downeen Point are covered by maritime heath with a high species content. The community varies from a classical Autumn Gorse (*Ulex gallii*) stand with Moorgrass (*Molinia caerulea*), Wood Sage (*Teucrium scorodonia*) and Slender St John's Wort (*Hypericum pulchrum*) to a more open grassy cover of Fescues (*Festuca rubra*, *F. ovina*) and Cocksfoot (*Dactylis glomerata*) with Wild Carrot (*Daucus carota*), Birdsfoot Trefoil (*Lotus corniculatus*) and Sorrels (*Rumex acetosa*, *R. acetosella*) abundant. This is partly subject to spray during storms and Rock Spurrey (*Spergularia rupicola*), Centaury (*Centaureum erythraea*), Eyebright (*Euphrasia tetragueta*) and Scurvy Grass (*Cochlearia officinalis*) occur at random through the turf because of this input. Red Bartsia (*Odonites vernus*) occurs on maritime rocks in one of its native forms.

The estuary supports a variety of shorebirds in winter like many of the Cork inlets. Only Ringed Plover (average peak 226, 1984/85 - 86/87) reach numbers of national importance but there are notable flocks of eleven other species, among them Black-tailed Godwit (74), Curlew (805) Oystercatcher (94) and Greenshank (14). A feature of the site is the fluctuation of bird numbers recorded, perhaps because of the relatively small size of the estuary and the possibilities of disturbance. For example in the five recent counts (1984-87) there were no Ringed Plover present on three occasions while the total varied between 440 and 11 on the other two. In a previous series of counts the total peak wader number was 1400 in 1971/72 and 400 in 1974/75.

Site Name: Gallanes Lough pNHA**Site Code: 001052**

Gallanes Lough is situated approximately 1km. north-west of Clonakilty, beside the Ballinascarthy road. The following description of the site is based largely upon the 1986 An Foras Forbartha County Report.

Gallanes Lough is a small waterbody occurring in a flat part of a stream valley. Bulrush (*Typha latifolia*), water horsetail (*Equisetum fluviatile*), marsh cinquefoil (*Potentilla palustris*) and bottle sedge (*Carex rostrata*) fringe the lake. Much of this vegetation is in the form of a floating mat which forms a transition zone between open water and wet grassland. This slightly acid grassland is dominated by rushes (*Juncus* spp.) and creeping bent (*Agrostis stolonifera*) with royal fern (*Osmunda regalis*), common sorrel (*Rumex acetosa*) and ragged robin (*Lychnis flos-cuculi*) also common. A small amount of willow (*Salix aurita*) colonisation occurs.

Waterfowl find this lake attractive, with up to 500 wildfowl having been recorded at times including mallard, wigeon and sometimes whooper swans. The more recent N.H.A. survey noted two additional species, namely coot and mute swans. Waders, including snipe, lapwing and curlew, feed on the marshy areas around the lake with the recent survey noting snipe as being particularly common.

An invertebrate of interest, a small water boatman (*Microretia pygmaea*) has been recorded from the site and is thought to have been introduced by visiting waterfowl.

Improved farmland surrounds the site and fertilizer run-off may be leading to some enrichment of the lake waters. Agricultural improvements have taken place recently, while in the past some infilling of the lake margin has taken place close to the road. Further agricultural improvements, especially drainage, are a threat to the site.

This site is of ornithological interest because of the relatively high numbers of birds occurring within a small, easily accessible, site.

APPENDIX 2

APPROPRIATE ASSESSMENT OF DRAFT CLONAKILTY TOWN DEVELOPMENT PLAN

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1 INTRODUCTION

The purpose of Appropriate Assessment of local authority plans is to ensure that protection of the integrity of European 'Natura 2000' sites is included as an integral part of the planning process at a local level. By carrying out an Appropriate Assessment, Clonakilty Town Council also ensure that in adopting and implementing Clonakilty Development Plan 2009 - 2015 (henceforth referred to as 'the Town Plan') they are not likely to be in breach of the provisions of Articles 6(3) and 6(4) of the Habitats Directive.

The requirement for Appropriate Assessment of plans or projects originates from Article 6 (3) and (4) of *European Union (EU) Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora*, commonly known as the 'Habitats Directive', which is implemented in Ireland through the European Communities (Natural Habitats) Regulations of 1997. The wording of Article 6 (3) of the Directive is as follows:

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

The wording of Article 6 (4) of the Directive is as follows:

'If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.'

In February 2008, the statutory requirement for an Appropriate Assessment of all land use plans was further emphasised by a Department of the Environment, Heritage and Local Government Circular Letter (SEA 1/08 & NPWS 1/08), which was issued to all County and City Managers, Directors of Services for Planning and Town Clerks. The Circular Letter entitled 'Appropriate Assessment of Land Use Plans' emphasises the fact that an appropriate assessment of the ecological implications of any plan or project is required, whether it is within or outside a designated site, if it may impact upon the Conservation Objectives of that site. In May 2008, the Environmental Protection Agency circulated this letter as part of their guidance on the process to be employed in Strategic Environmental Assessment as part of "SEA Pack Vol. II 16 05 08".

The process is in its infancy in Ireland and to date very few Appropriate Assessments of local authority plans have been completed and there are currently no formal guidelines on the procedure to be employed. Staff from National Parks and Wildlife Service are however familiar with the requirements of Appropriate Assessment, and this document has been produced in consultation with NPWS staff. It is our understanding that guidelines are currently being prepared by the EPA, however until these become available, this on-going liaison and consultation process ensures that our Appropriate Assessment has been carried out in a manner that is acceptable to the relevant competent authorities.

In addition to the advice available from NPWS, the EU has published a number of documents which provide guidance on the requirements of Appropriate Assessment, including, *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites - Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*, which sets out the principles of how to approach decision making during the process and this have been followed as closely as possible. There are however a number of restrictions when attempting to apply this document in an Irish context, including first and foremost, the lack of formal statutory guidelines; and also, importantly, the relative lack of published data on many of the faunal and floral elements of the environment which comprise the Conservation Objectives of European sites.

2 METHODOLOGY

The Appropriate Assessment process progresses through four stages as follows:

- Stage 1 – Screening of Clonakilty Development Town;
- Stage 2 – Appropriate Assessment of Clonakilty Development Town;
- Stage 3 – Assessment of alternative solutions; and
- Stage 4 – Assessment of compensatory measures.

Stages 1 and 2 relate to Article 6(3) of the Habitats Directive; and Stages 3 and 4 to Article 6(4).

Stage 1 – Screening

The aim of Stage 1, 'Screening' is to determine whether or not Stage 2, the Appropriate Assessment is required, i.e. to determine whether or not the Objectives and Policies of the Clonakilty Development Town are likely to negatively affect the Conservation Objectives on any Natura 2000 site. This is done by examining the Objectives and the Policies of the plan; and the Conservation Objectives of any Natura 2000 sites that might potentially be affected.

Stage 2 – Appropriate Assessment

The aim of Stage 2, the 'Appropriate Assessment' proper, is to identify any negative impacts that the Zonings, Policies or Objectives of the Town Plan might have upon Natura 2000 sites and to propose changes to the Town Plan that will Avoid and Mitigate any such negative impacts. The Town Plan should then be amended accordingly, thereby avoiding the need to progress to Stage 3, which would effectively constitute a rejection of the plan in its current Form and require the Town Council to implement measures to mitigate or compensate for impacts on Natura 2000 sites.

A key consideration of Appropriate Assessment is that the Plan or Project under consideration, in this case the Town Plan, must take account of potential impacts on Natura 2000 sites 'in combination' with other plans or projects. Such Impacts are termed 'Cumulative Impacts and are discussed in Sections 4.2.3 and 4.3.3.

Stages 3 and 4 - Assessment of Alternative Solutions and Compensatory Measures

Provided the recommendations of Stage 2 are incorporated into future drafts of Clonakilty Development Town, Stages, 3 and 4, which relate to alternative solutions and compensatory measures under Article 6(4) of the EU Habitats Directive, will not be required.

Revisions

Any future revised drafts of Clonakilty Development Plan, including revisions to zoning proposals, will be reviewed in order to ascertain whether or not revisions to this Appropriate Assessment are required. If a revised Appropriate Assessment is required, it will be prepared

by RPS and issued to the Town Council. This process will continue at each revision stage of the Town Plan until publication of the final version.

3 STAGE 1 – SCREENING

3.1 INTRODUCTION TO THE SCREENING PROCESS

This stage involves establishing whether or not the plan is likely to have a significant effect on the Conservation Objectives of any Natura 2000 site. The screening process requires an initial review of the Town Plan to identify any Zonings, Policies or Objectives that might potentially have impacts upon Natura 2000 sites. These might include for example Zonings that include a requirement for new development land; Policies or Objectives that may result in increases in disturbance to sensitive fauna and flora; Policies and Objectives that could result in deterioration in water quality, etc.

For definition purposes the Natura 2000 site(s) include Special Areas of Conservation (habitats) and/ or Special Protection Areas (birds). With regard to SACs, Annex I refers to habitats and Annex II refers to species listed in the Habitats Directive. With regard to SPAs, Annex I refers to the EU Birds Directive. Also land that could have a potential to contain important bird areas that have not already been designated, as an SPA are taken into consideration.

Screening requires a review of all Natura 2000 sites that could potentially be subject to the impacts that have been identified. Clearly a key variable that will determine whether or not a particular Natura 2000 site is likely to be negatively effected by the draft plan's Policies and Objectives is its physical distance from Clonakilty, and it will generally, but not necessarily, be the case that the greater the distance the lower the possibility of impacts. It is not considered that any of the Policies or Objectives of Clonakilty Development Plan 2009 – 2015 have the potential to impact upon any Natura 2000 sites more than 15km from the town. A total of six Natura 2000 sites are located within 15km of the town. These are shown in Table 1, which also gives the distance and direction of each site from Clonakilty. Each site is then discussed with respect to its requirement or not for Appropriate Assessment.

Table 1: Details of the Natura 2000 Sites located within 15km of Clonakilty

Site Name	Site Designation	Site Code	Approximate Location Relative to Clonakilty
Clonakilty Bay	SPA	004081	Site lies partially within the town boundary
Clonakilty Bay	cSAC	000091	partially within the town boundary
Galley Head to Duneen Point	SPA	004190	4km to the south
Seven Heads	SPA	004191	7km to the southeast
Kilkeran Lake & Castlefreke Dunes	cSAC	001061	6km to the southwest
Courtmacsherry Estuary	cSAC	001230	7km to the east
Bandon River	cSAC	002171	14km to the northwest

Data and information for this screening assessment was collected from the following sources, consultation with NPWS; Natura 2000 Forms; 'Notice of Intention to Designate' Forms; NPWS Site Synopses; other published data on rare and protected species and personal knowledge of the sites.

3.2 COURTMACSHERRY ESTUARY CSAC

This closest part of the site to Clonakilty lies at Timoleague, approximately 7km to the east. Courtmacsherry estuary consists of the drowned valley of the Argideen River, which is now filled with sediments, resulting in extensive mudflats. The site contains a complex of coastal habitats including ten habitats that are listed on Annex I, including the priority habitat 'fixed (grey) dunes'. The majority of the site is composed of 'mudflats and sandflats' and 'estuaries'. Other Annex I habitats present are; 'shifting (white) dunes', 'embryonic shifting dunes', 'Mediterranean salt meadows', 'Atlantic salt meadows', 'perennial vegetation of stony banks', 'annual vegetation of drift lines' and 'Glassworts (*Salicornia*) and other annuals colonizing mud and sand'.

The site is also of ornithological importance for the non-breeding waders and wildfowl that feed on the mud and sandflats, including the Birds Directive Annex I species Golden Plover and Bar-tailed Godwit. Winter flocks of Golden Plover and Black-Tailed Godwit occur in nationally important numbers.

The Natura 2000 Form for the site states that there are no serious threats to the site and cites eutrophication from surrounding farmland, the spread of *Spartina* (cord grasses) and increases in amenity use as the only problems.

Due to the relatively large distance from Clonakilty town; the fact that Courtmacsherry Estuary lies in a different river catchment to Clonakilty; and the fact that none of the potential threats listed for the site is likely to be influenced by Clonakilty Town Plan, it is considered very unlikely that any Policies or Objectives of Clonakilty Development Plan 2009 - 2015 could have impacts within this cSAC. No projects or plans that might have 'in combination' impacts are known of. **Appropriate Assessment of Clonakilty Development Plan 2009 - 2015 in relation to the potential for negative impacts on Courtmacsherry Estuary cSAC is not required.**

3.3 SEVEN HEADS SPA

The closest part of this new SPA site lies 7km to the southeast of Clonakilty and extends eastwards to a distance of some 14km. The site is designated on the basis of its important breeding population of the Birds Directive Annex I species Chough, which is a largely sedentary species. It is unlikely that Choughs from Seven Heads occur in the immediate vicinity of Clonakilty town, and it is also considered very unlikely, due to the large distance involved, that there could be any indirect negative impacts or 'in combination' impacts on the site as a result of activities within the town. **Appropriate Assessment of Clonakilty Development Plan 2009 - 2015 in relation to the potential for negative impacts on Seven Heads SPA is not required.**

3.4 GALLEY HEAD TO DUNEEN POINT SPA

The closest part of this new SPA site lies 4km to the south of Clonakilty and extends south and eastwards to Galley Head, approximately 10km distant. Whilst no Natura 2000 Form is available for this site at present, consultation with staff from NPWS indicates that the site is designated on the basis of its important breeding population of the Birds Directive Annex I species Chough, which is a largely sedentary species. The site also supports breeding

Peregrine, also listed on Annex I of the Birds Directive; and small populations of breeding seabirds, namely, Fulmar, Herring Gull, Great Black-backed Gull and Lesser Black-backed Gull.

It is unlikely that Choughs from this site occur in the immediate vicinity of Clonakilty town on anything other than an occasional casual basis, and it is also considered very unlikely, due to the large distance involved, that there could be any indirect negative impacts or 'in combination' impacts on the site as a result of activities within the town. **Appropriate Assessment of Clonakilty Development Plan 2009 - 2015 in relation to the potential for negative impacts on Galley Head to Duneen Point SPA is not required.**

3.5 KILKERAN LAKE & CASTLEFREKE DUNES cSAC

This coastal site lies approximately 7km to the southwest of Clonakilty. The site consists of a well-developed sand dune system that has impounded two streams to form wetlands of open water, marsh and swamp. Kilkeran Lake is the best example of a sedimentary (percolation) lagoon in southwest Ireland, and although it suffers eutrophication from surrounding intensive agriculture, it retains an interesting flora and fauna with a high proportion of lagoonal specialists and several rare invertebrate species.

The site is designated on the basis of two Annex I priority habitats, 'coastal lagoons' and fixed (grey) dunes' and two other Annex I habitats, 'shifting (white) dunes' and 'embryonic shifting dunes'. Threats to the site listed in the Natura 2000 Form are eutrophication of the lake and undergrazing of the dunes resulting in invasion by Bracken (*Pteridium aquilinum*).

Due to the relatively large distance from Clonakilty town; and the fact the site lies within a different river catchment to any lands within Clonakilty town boundary, hence negating any possibility of hydrological or water quality impacts, it is considered very unlikely that any Policies or Objectives of the Town Plan could have impacts within this cSAC, and hence could not have 'in combination' impacts either. **Appropriate Assessment of Clonakilty Development Plan 2009 - 2015 in relation to the potential for negative impacts on Kilkeran Lake and Castlefreke Dunes cSAC is not required.**

3.6 BANDON RIVER cSAC

This site comprises stretches of the Caha and Bandon Rivers. The downstream end of the site lies 14km to the northwest of Clonakilty. The site is designated on the basis of the presence of the Annex I priority habitat 'remnant alluvial forests'; the Annex I habitat 'floating river vegetation', a large and important population of the Annex II species freshwater pearl-mussel and populations of the Annex II species brook lamprey and the Birds Directive Annex I species Kingfisher.

Threats listed in the Natura 2000 Form include local enrichment of the water from agricultural run-off and from forestry upstream; possible plans for flood alleviation and agricultural improvement and reclamation.

Due to the relatively large distance from Clonakilty town; the fact that the whole of Clonakilty lies outside the Bandon River catchment; and the fact that none of the potential threats listed for the site is likely to be influenced by Clonakilty Town Plan, it is considered very unlikely that any Policies or Objectives of Clonakilty Development Plan 2009 - 2015 could have impacts within this cSAC. No projects or plans that might have 'in combination' impacts are known of. **Appropriate Assessment of Clonakilty Development Plan 2009 - 2015 in relation to the potential for negative impacts on Bandon River cSAC is not required.**

3.7 CLONAKILTY BAY cSAC

Clonakilty Bay is a large expanse of intertidal habitat, sand dunes and inland marshes, extending south from Clonakilty town to the open sea, and including Mucross Strand and White's Marsh, which lie to the southwest of Inchydoney Island. The site supports important sandflats and mudflats and a small area of fixed sand dunes that are in relatively good condition.

A number of Annex I habitats occur at the site, including the two priority habitats 'fixed (grey) dunes' and 'decalcified fixed dunes'. The most widespread Annex I habitat is 'mudflats and sandflats', with small areas also of 'annual vegetation of drift lines', 'embryonic shifting dunes' and 'shifting (white) dunes'. The site is also of importance to non-breeding waterfowl, for which it is designated as an SPA (see Section 3.8). The Birds Directive Annex I species Golden Plover and Bar-tailed Godwit occurring in small numbers and the site supports and internationally important winter population of Black-tailed Godwit.

The site lies partially within Clonakilty Town Boundary; and the River Fealge, which flows through the town discharges into the estuary. The threats to the site listed in the Natura 2000 Form are increased recreational pressure, direct land claims and pollution from Clonakilty town and surrounding agricultural land.

There are potential impacts on the Conservation Objectives of the site as a result of Policies, Objectives, Zoning or other issues described in the Town Plan, including water quality and pollution impacts, land claim impacts and access / disturbance impacts. **Appropriate Assessment of Clonakilty Development Plan 2009 - 2015 in relation to the potential for negative impacts on *Clonakilty Bay* cSAC is required.**

3.8 CLONAKILTY BAY SPA

Clonakilty Bay, which lies to the south of Clonakilty, supports an important wintering bird population, including small but significant populations of Golden Plover and Bar-tailed Godwit, both of which are listed on Annex I of the EU Birds Directive. The Annex I species Short-eared Owl and Little Egret also occur. Internationally important numbers of Black-tailed Godwit are present in autumn and winter, and nationally important numbers of Shelduck, Ringed Plover and Greenshank occur.

The site lies partially within Clonakilty Town Boundary, and the River Fealge, which flows through the town discharges into the estuary. The threats to the site listed in the Natura 2000 Form are, the possibility of landfill and increased recreational pressure on the beaches causing disturbance to birds. The Natura 2000 Form also mentions pollution from Clonakilty town and surrounding agricultural land but states that this is unlikely to affect wintering bird populations.

There are potential impacts on the Conservation Objectives of the site as a result of Policies, Objectives, Zoning or other issues described in the Town Plan, including those mentioned in the Natura 2000 Form and also land claim impacts and access / disturbance impacts. **Appropriate Assessment of Clonakilty Development Plan 2009 - 2015 in relation to the potential for negative impacts on *Clonakilty Bay* SPA is required.**

4 STAGE 2 – APPROPRIATE ASSESSMENT

4.1 INTRODUCTION TO THE APPROPRIATE ASSESSMENT

The Screening Stage (Stage 1) has concluded that Appropriate Assessment (Stage 2) of Clonakilty Development Plan 2009 - 2015 is required to identify Zonings, Policies and Objectives (i.e. critical infrastructure) of the plan that might potentially impact negatively on the Conservation Objectives of the following Natura 2000 Sites:

- **Clonakilty Bay cSAC;**
- **Clonakilty Bay SPA;**

The negative impacts that have been identified, which are discussed in this section, require the implementation of 'Avoidance' or 'Mitigation' measures, which will require amendments to Clonakilty Development Plan 2009 - 2015 in order to avoid the need to progress to Stages 3 and 4 of the Appropriate Assessment process; the assessment of alternative solutions and compensatory measures.

Documentation that has been referred to in this Section of the Assessment includes, the Natura 2000 Forms and Site Synopses for the sites, the *Interpretation Manual of European Union Habitats* (EU, 1999) and NPWS's, *The Status of EU Protected Habitats and species in Ireland* (NPWS, 2008). Consultation with NPWS has also undertaken in the form of discussions between Rick Mundy and Jervis Good, NPWS Regional Ecologist. In addition, written submissions from EPA, OPW and DoEHLG received in response to SEA formal consultation have been reviewed.

4.2 CLONAKILTY BAY cSAC

4.2.1 Summary of the Key Features of the Site and of the Environmental Conditions which Support Them

This section provides details of the Habitats Directive Annex I habitats and the Annex II species for which this cSAC has been designated; that may occur or are known to occur close enough to Clonakilty that there are potential negative impacts as a result of adoption of the Zonings, Policies or Objectives of the Town Plan, and of the environmental factors which support these features.

4.2.1.1 Annex I Habitats

The most widespread Annex I habitat within the cSAC is 'mudflats and sandflats'. This habitat type is found throughout much of the site and extends right up to the northern boundary of the cSAC, within the boundary of Clonakilty town. NPWS (2008) list aquaculture, fishing, bait digging, removal of fauna, reclamation of land, coastal protection works and invasive species, particularly cord-grass (*Spartina* spp.) as threats to the integrity of this habitat type. The prevention of negative impacts from these threats can be viewed as the broad Conservation Objectives for this habitat type. Coastal protection works in the form of the proposed Clonakilty Bay barrage pose a significant potential threat to this site. The quality of this habitat can be also reduced by pollution and hence good water quality of water entering the estuary, for example from the Fealge river which runs through Clonakilty town should be considered a

Conservation Objective for the cSAC. The importance of this habitat type as a feeding ground for waders and wildfowl is emphasised in the description of the habitat type (EU, 1999), issues relating to birds are dealt with in the *Clonakilty Bay* SPA Section of this Assessment, Section 4.3, and the issues discussed with respect to that site apply also to this habitat type within *Clonakilty Bay* cSAC (see Section 4.2.1.3).

The site is also designated on the basis of five other Annex I habitats, however none of these are likely to be found close to Clonakilty town. These include two priority habitats 'fixed (grey) dunes' and 'decalcified fixed dunes' and two further sand dune Annex I habitats are also present, 'embryonic shifting dunes' and 'shifting (white) dunes'. The sand dune systems within which these habitats are found are located on the southern side of Inchydoney Island more than 3km from Clonakilty town. The habitat type 'annual vegetation of drift lines' is found along beeches and within Clonakilty Bay cSAC these are also restricted to the southern side of Inchydoney Island. All of these habitat types are highly vulnerable to damage from recreational uses, including trampling (NPWS, 2008) and hence the avoidance of excessive human disturbance to these habitats should be considered as a Conservation Objective for the cSAC.

The Natura 2000 Form for the cSAC also indicates that the site is of importance to non-breeding waterfowl, for which it is designated as an SPA (see Section 4.3).

4.2.1.2 Annex II species

No Annex II species are mentioned in the Natura 2000 Form, however the site Synopsis for the site mentions the occurrence of mammal species otter at Clogheen Marsh in the southwest of the site, and otter is known to occur in the Fealge river within Clonakilty town (RM *pers. obs.*). It is likely that this species occurs commonly throughout the cSAC and in the broader environs of Clonakilty, and it is considered unlikely that any Zonings, Policies or Objectives of the town plan will result in significant negative impacts on this species.

4.2.1.3 Environmental Factors that might be affected by the plan

The following broad environmental categories can be considered as significant influences on the Conservation Objectives of the cSAC. The ways in which these could potentially be negatively impacted upon by the Zoning, Policies or Objectives of the Town Plan are discussed here.

Water quality

The River Fealge flows through Clonakilty town and directly into *Clonakilty Bay* cSAC. Whilst none of the Annex I habitats for which the site is designated are considered to be highly dependent upon a supply of fresh water, pollution of this watercourse could potentially result in changes to the flora and invertebrate fauna of the mudflats, sand flats and waters of the bay, and hence impact upon the food chains and ecosystems that these flora and invertebrates support, including the important bird populations that use Clonakilty Bay. Pollution is mentioned as a threat to the site in the Natura 2000 Form.

Section 6.4.3 of Volume I of the Town Plan 'Survey and Analysis' states the following "*There is a combined surface and foul sewer network draining most of the town. It is proposed to do an assessment of existing system in the light of the projected increase in population. This may include recommendations to have a separate foul and surface collection system.*" Objective 6.11.5 refers to the progression of the upgrade of the town's waste water treatment plant and Objective 6.11.4 stipulates that new developments should use separate systems for

foul and storm water sewage, however there is no Objective in the Town Plan to separate the existing combined storm water and foul sewer networks and any future flooding of this combined sewer will therefore presumably result in foul sewage entering Clonakilty Bay.

The Environmental Impact Statement for Clonakilty Waste Water Treatment Plant Upgrade (White Young Green, 2006) included surveys of the flora and invertebrate fauna in Clonakilty Bay and also sediment chemistry analysis. Measured sediment parameters during the EIS study were generally within normal, acceptable, limits however organic enrichment has been recorded as a problem in previous studies (Lewis, 2003). Overall, the EIS does not indicate that current inputs of sewage to the bay are having a significant negative impact on the Conservation Objectives of the 'mudflats and sandflats' habitat, and may actually be benefiting estuarine birds by increasing the abundance of their invertebrate food. The EIS considered that the new WWTP may improve this habitat quality for benthic fauna communities, but the extent to which this might occur in Clonakilty Bay as a result of construction of the new WWTP was considered to be indeterminate in the EIS.

Based primarily on the findings of this EIA (White Young Green, 2006), it is not considered that water quality issues resulting from Policies or Objectives of the Town Plan (or in the case of separating storm water and foul sewage, the lack thereof) are likely to result in any negative impact on the Conservation Objectives of the cSAC.

Disturbance

The Annex I habitats 'fixed (grey) dunes'; 'decalcified fixed dunes'; 'embryonic shifting dunes'; 'shifting (white) dunes' and 'annual vegetation of drift lines' which occur on the southern side of Inchydoney Island are all highly sensitive to human disturbance, particularly trampling or vehicular activity, often resulting from recreational uses; hence the avoidance of excessive human disturbance to these habitats should be considered as a Conservation Objective for the cSAC.

The Natura 2000 Form indicates that the main land use of the cSAC is recreation, and states that 'increasing recreational pressure poses the most serious threat to the stability and structure of the sand dunes.' The site Synopsis states that 'The site is under pressure from a number of sources, notably recreation and tourism developments...'

These areas of habitat are located a considerable distance from Clonakilty town, (more than 3km) and there are therefore no potential direct impacts on them as a result of activities in Clonakilty town. However, Policies or Objectives of Clonakilty Town Plan that might increase recreation and tourism activity in the Inchydoney Island area should be viewed as having the potential to impact upon the Conservation Objectives of the cSAC.

The importance of the Annex I habitat type 'mudflats and sandflats' as a feeding ground for waders and wildfowl is emphasised in the description of the habitat type (EU, 1999). Increased visitor activity in the Clonakilty Bay area could potentially reduce the quality of this habitat type for birds by increasing disturbance levels.

Tidal Movements

The integrity and function of the Annex I habitat 'mudflats and sandflats' is dependent upon the regular cycle of exposure and flooding resulting from the tidal cycle and the disruption of this cycle as a result of construction of a tidal barrage has the potential to negatively impact upon this habitat and therefore upon the Conservation Objectives of the cSAC. This is discussed further in Section 4.2.2.2.

4.2.2 Summary of Policies and Objectives of the Clonakilty Development Plan 2009 - 2015 that may impact upon the Conservation Objectives of the site.

A number of the Zonings, Policies and Objectives of the Town Plan have some potential to result in negative impacts on the Conservation Objectives of *Clonakilty Bay* cSAC. The Town Plan has been reviewed and any Zoning, Policies or Objectives considered likely, if implemented, to have a negative effect on the Conservation Objectives of *Clonakilty Bay* cSAC have been identified. Each such Zoning, Policy or Objective is discussed and assessed in this Section. Details of any changes to Zonings, Policies or Objectives that are recommended as a result of this assessment are detailed in Section 5.

4.2.2.1 Zoning

Map 2 'Constraints / Potential'; Map 3 'Zoning Objectives' and Map 4 Development Plan Objectives' all indicate the route of an 'Access Road / Distributor Road (long term)' which passes through *Clonakilty Bay* cSAC to the south of the town. As this appears to be a long-term aspiration rather than a formal Zoning of the plan it is not considered that the presence of this feature on these maps constitutes an impact on the Conservation Objectives of *Clonakilty Bay* cSAC however the restrictions imposed by this designation on the potential for construction of a road at this location should be acknowledged in the text of the Town Plan (see Section 4.2.2.2).

Other than this issue, it is not considered that any of the Zonings indicated on the Maps accompanying Clonakilty Town Plan, and Discussed in Section 3.4 of the Town Plan, are likely to have any negative impact on the Conservation Objectives of *Clonakilty Bay* cSAC.

4.2.2.2 Strategic Context Objectives (Section 2.11 of the Town Plan)

Section 2.11.1, Paragraph 4: “The strategy underlying the Plan specifically aims to address the following matters: The objective of conserving and developing the unique and extraordinary potential of the towns bay area and extensive shoreline.”

The bay and shoreline referred to are included within *Clonakilty Bay* cSAC. The restriction imposed by this designation should be acknowledged in the Town Plan, and reflected in the wording of this paragraph of the Strategic Context Objectives (see Section 5).

Section 2.11.1, Paragraph 5: “The strategy underlying the Plan specifically aims to address the following matters: It shall be a strategic objective to encourage the construction of the Flood Water Barrage to the south of the town and to adopt the recommendations of the Clonakilty Flood survey in order to alleviate potentially damaging instances of future flooding.”

This Paragraph of the Strategic Context Objectives refers to two separate potential flooding issues; 1) tidal flooding and 2) freshwater flooding from the Fealge River. The proposed tidal barrage is designed primarily to prevent tidal flooding (but may also be of value in alleviating fresh water flooding) whilst the Clonakilty Flood Study (2004) referred to flooding from the Fealge River and made recommendations in that regard. Hence it is proposed that this Paragraph is split into two separate Paragraphs (see Section 5).

The location of the proposed barrage lies within *Clonakilty Bay* cSAC, and if improperly designed or operated such a barrage would be likely to have negative impacts on the

Conservation Objectives of the site. Hence, the restrictions imposed by this designation should be acknowledged in the Town Plan and reflected in the wording of the new Paragraph of the Strategic Context Objectives that refers to the proposed tidal barrage.

Section 2.11.2 Paragraph 2: “In approaching these objectives the overall strategy will be to implement the following in varying degrees of detail: The indicative provision of a relief road along with provision of other accessibility measures such as cycle lanes, pedestrian areas etc. to ensure maximum accessibility for all stakeholders and modes of movement.”

This is the only direct reference in Volume II of the Town Plan ‘Policies and Objectives’, to the proposal for the provision of the ‘Access Road / Distributor Road (long term)’ that is indicated on Map 2 ‘Constraints / Potential’; Map 3 ‘Zoning Objectives’ and Map 4 Development Plan Objectives’. As stated in Section 4.2.2.1 of this Assessment, this route passes through *Clonakilty Bay* cSAC to the south of the town. As this appears to be a long-term aspiration rather than a formal Zoning of the plan it is not considered that the presence of this feature on these maps constitutes an impact on the Conservation Objectives of *Clonakilty Bay* cSAC however the restrictions imposed by this designation on the potential for construction of a road at this location should be acknowledged in this Strategic Context Objective (see Section 5).

4.2.2.3 Objectives

Objective 6.10: “It is an objective of the Development Plan to progress the development of the Tidal Barrage across Clonakilty bay to alleviate the risk of tidal flooding within the town.”

The location of the proposed barrage lies within *Clonakilty Bay* cSAC, and if improperly designed or operated such a barrage would be likely to have negative impacts on the Conservation Objectives of the site. Hence, the restrictions imposed by this designation should be acknowledged in the Town Plan and reflected in the wording of this Objective.

4.2.3 Potential ‘Cumulative Impacts’

A key consideration of Appropriate Assessment is that the Plan or Project under consideration, in this case the Town Plan, must take account of potential impacts on Natura 2000 sites ‘in combination’ with other plans or projects. No other significant developments or plans are known of that may result in such cumulative impacts on *Clonakilty Bay* cSAC.

4.2.4 Appropriate Assessment of Clonakilty Development Plan 2009 - 2015 in relation to the potential for negative impacts on *Clonakilty Bay* cSAC

Table 4.1 brings together in tabular Form the details described in Section 4.2.1 and 4.2.2. The matrix identifies the key features for which the cSAC is designated; the environmental factors on which those features depend; the elements of the plan that may result in negative impacts on those environmental factors; the avoidance and mitigation measures required and the actions required to implement these measures, namely additional Policies and amendments to existing Policies and Objectives of the plan, and changes to zonings.

Table 4.1: Potential Impacts on the Conservation Features of *Clonakilty Bay* cSAC Resulting From the Policies and Objectives of Clonakilty Development Plan

Qualifying features	Conditions that support the qualifying features and which might be potentially affected by Clonakilty Town Plan	Possible Impacts of Clonakilty Town Plan	Possible 'in combination' impacts from other plans and projects	Avoidance and mitigation measures required	Actions required
<p>Priority Annex I habitats: 'fixed (grey) dunes'; 'decalcified fixed dunes'.</p> <p>Annex I habitats: 'shifting (white) dunes'; 'embryonic shifting dunes'; and 'annual vegetation of drift lines'</p>	<ul style="list-style-type: none"> Low levels of human disturbance such as trampling and vehicle use. 	<ul style="list-style-type: none"> Increased disturbance resulting from increased visitor number to the Clonakilty Bay area. 	<ul style="list-style-type: none"> None known. 	<ul style="list-style-type: none"> Appropriate, sustainable development of the Clonakilty Bay area. 	<ul style="list-style-type: none"> Revision to Strategic Context Objective, Section 2.11.1, Paragraph 4.
<p>Annex I habitat: 'mudflats and sandflats'</p>	<ul style="list-style-type: none"> Unaltered, natural, tidal flow and tidal cycle within Clonakilty Bay. Low levels of human disturbance to birds using this habitat. 	<ul style="list-style-type: none"> Disruption to tidal flow and the tidal cycle as a result of construction and operation of the proposed Clonakilty Bay barrage. Increased disturbance resulting from increased visitor number to the Clonakilty Bay area. 	<ul style="list-style-type: none"> None known. 	<ul style="list-style-type: none"> Appropriate construction and operation of any barrage that is constructed. Appropriate, sustainable development of the Clonakilty Bay area. 	<ul style="list-style-type: none"> Revision to Strategic Context Objective, Section 2.11.1, Paragraph 5; and revision to Objective 6.10. Revision to Strategic Context Objective, Section 2.11.1, Paragraph 4; and 2.11.2, Paragraph 2.

4.3 CLONAKILTY BAY SPA

4.3.1 Summary of the Key Features of the Site and of the Environmental Conditions which Support Them

This section provides details of the Birds Directive Annex I bird species for which this SPA has been designated; and of other important bird populations, that may occur or are known to occur close enough to Clonakilty that there are potential negative impacts as a result of adoption of the Zonings, Policies or Objectives of the Town Plan, and of the environmental factors which support these features.

4.3.1.1 Birds Directive Annex I Species

Clonakilty Bay SPA supports an important wintering bird population, including small but significant populations of Golden Plover and Bar-tailed Godwit, both of which are listed on Annex I of the EU Birds Directive. The Annex I species Short-eared Owl and Little Egret also occur, the latter as a resident breeding species; the breeding site is approximately 2km from Clonakilty town.

Golden Plover, Bar-tailed Godwit and Little Egret all utilise broadly similar habitats, including intertidal mudflats and sandflats and freshwater and brackish marshes. Little Egrets also require undisturbed areas of trees in which to nest. Short-eared Owl is most likely to occur in marshland and grassland habitats.

4.3.1.2 Other Important Bird Populations

The Natura 2000 Form indicates that internationally important numbers of Black-tailed Godwit are present in autumn and winter, and that nationally important numbers of Shelduck, Ringed Plover and Greenshank occur. Crowe (2005) states that Clonakilty Bay is internationally important for Black-tailed Godwit and nationally important for Shelduck, Curlew and Greenshank, and on occasion for Lapwing, Dunlin and Redshank.

During the non-breeding period when these species are present in Clonakilty Bay, all utilise broadly similar habitats, including intertidal mudflats and sandflats and freshwater and brackish marshes.

4.3.1.3 Environmental Factors that might be affected by the plan

The following broad environmental categories can be considered as significant influences on the Conservation Objectives of the SPA. The ways in which these could potentially be negatively impacted upon by the Zoning, Policies or Objectives of the Town Plan are discussed here.

Water quality

The River Fealge flows through Clonakilty town and directly into Clonakilty Bay cSAC. The Natura 2000 Form states "Some pollution is likely to be entering the bay from Clonakilty Town and the surrounding agricultural lands though this is unlikely to affect the wintering bird populations." Pollution of this watercourse could potentially result in changes to the flora and

invertebrate fauna of the mudflats, sand flats and waters of the bay, however, as stated in the Natura 2000 form, it is unlikely that this will have a negative impact on wintering bird populations.

The Environmental Impact Statement for Clonakilty Waste Water Treatment Plant Upgrade (White Young Green, 2006) indicates that current inputs of sewage to the bay may actually be benefiting estuarine birds by increasing the abundance of their invertebrate food.

Hence, it is not considered that water quality issues resulting from Policies or Objectives of the Town Plan are likely to result in any negative impact on the Conservation Objectives of the SPA.

Tidal Movements

All of the significant bird populations of Clonakilty Bay are dependent to some extent upon the intertidal mudflats and sandflats of the bay and this is the most important habitat type in the SPA with respect to birds. The integrity and function of the habitat is dependent upon the regular cycle of exposure and flooding resulting from the tidal cycle and the disruption of this cycle as a result of construction of a tidal barrage has the potential to negatively impact upon this habitat and therefore upon the Conservation Objectives of the SPA. This is discussed further in Section 4.3.2.2.

Disturbance

The Natura 2000 Form for Clonakilty Bay cSAC indicates that the main land use of the bay is recreation. Crowe (2005) states under 'Activities and Threats that, "this site is a particularly notable tourist location, and regular disturbance is caused by a number of aquatic and land-based activities." The Natura 2000 form for the site includes as a threat that, "an increase in the recreational use of the beaches could cause disturbance to the birds."

4.3.2 Summary of Policies and Objectives of the Clonakilty Development Plan 2009 - 2015 that may impact upon the Conservation Objectives of the site.

A number of the Zonings, Policies and Objectives of the Town Plan have some potential to result in negative impacts on the Conservation Objectives of *Clonakilty Bay* SPA. The Town Plan has been reviewed and any Zoning, Policies or Objectives considered likely, if implemented, to have a negative effect on the Conservation Objectives of *Clonakilty Bay* SPA have been identified. Each such Zoning, Policy or Objective is discussed and assessed in this Section. Details of any changes to Zonings, Policies or Objectives that are recommended as a result of this assessment are detailed in Section 5.

4.3.2.1 Zoning

Map 2 'Constraints / Potential'; Map 3 'Zoning Objectives' and Map 4 Development Plan Objectives' all indicate the route of an 'Access Road / Distributor Road (long term)' which passes through *Clonakilty Bay* SPA to the south of the town. As this appears to be a long-term aspiration rather than a formal Zoning of the plan it is not considered that the presence of this feature on these maps constitutes an impact on the Conservation Objectives of *Clonakilty Bay* SPA however the restrictions imposed by this designation on the potential for construction of a road at this location should be acknowledged in the text of the Town Plan (see Section 4.3.2.2).

Other than this issue, it is not considered that any of the Zonings indicated on the Maps accompanying Clonakilty Town Plan, and Discussed in Section 3.4 of the Town Plan, are likely to have any negative impact on the Conservation Objectives of *Clonakilty Bay* SPA.

4.3.2.2 Strategic Context Objectives (Section 2.11 of the Town Plan)

Section 2.11.1, Paragraph 4: “*The strategy underlying the Plan specifically aims to address the following matters: The objective of conserving and developing the unique and extraordinary potential of the towns bay area and extensive shoreline.*”

The bay and shoreline referred to are included within *Clonakilty Bay* SPA. The restriction imposed by this designation should be acknowledged in the Town Plan, and reflected in the wording of this paragraph of the Strategic Context Objectives (see Section 5).

Section 2.11.1, Paragraph 5: “*The strategy underlying the Plan specifically aims to address the following matters: It shall be a strategic objective to encourage the construction of the Flood Water Barrage to the south of the town and to adopt the recommendations of the Clonakilty Flood survey in order to alleviate potentially damaging instances of future flooding.*”

This Paragraph of the Strategic Context Objectives refers to two separate potential flooding issues; 1) tidal flooding and 2) freshwater flooding from the Fealge River. The proposed tidal barrage is designed primarily to prevent tidal flooding (but may also be of value in alleviating fresh water flooding) whilst the Clonakilty Flood Study (2004) referred to flooding from the Fealge River and made recommendations in that regard. Hence it is proposed that this Paragraph is split into two separate Paragraphs (see Section 5).

The location of the proposed barrage lies within *Clonakilty Bay* SPA, and if improperly designed or operated such a barrage would be likely to have negative impacts on the Conservation Objectives of the site. Hence, the restrictions imposed by this designation should be acknowledged in the Town Plan and reflected in the wording of the new Paragraph of the Strategic Context Objectives that refers to the proposed tidal barrage.

Section 2.11.2 Paragraph 2: “*In approaching these objectives the overall strategy will be to implement the following in varying degrees of detail: The indicative provision of a relief road along with provision of other accessibility measures such as cycle lanes, pedestrian areas etc. to ensure maximum accessibility for all stakeholders and modes of movement.*”

This is the only direct reference in Volume II of the Town Plan ‘Policies and Objectives’, to the proposal for the provision of the ‘Access Road / Distributor Road (long term)’ that is indicated on Map 2 ‘Constraints / Potential’; Map 3 ‘Zoning Objectives’ and Map 4 Development Plan Objectives’. As stated in Section 4.3.2.1 of this Assessment, this route passes through *Clonakilty Bay* SPA to the south of the town. As this appears to be a long-term aspiration rather than a formal Zoning of the plan it is not considered that the presence of this feature on these maps constitutes an impact on the Conservation Objectives of *Clonakilty Bay* SPA however the restrictions imposed by this designation on the potential for construction of a road at this location should be acknowledged in this Strategic Context Objective (see Section 5).

4.3.2.3 Objectives

Objective 6.10: “It is an objective of the Development Plan to progress the development of the Tidal Barrage across Clonakilty bay to alleviate the risk of tidal flooding within the town.”

The location of the proposed barrage lies within *Clonakilty Bay* SPA, and if improperly designed or operated such a barrage would be likely to have negative impacts on the Conservation Objectives of the site. Hence, the restrictions imposed by this designation should be acknowledged in the Town Plan and reflected in the wording of this Objective.

4.3.3 Potential ‘Cumulative Impacts’

A key consideration of Appropriate Assessment is that the Plan or Project under consideration, in this case the Town Plan, must take account of potential impacts on Natura 2000 sites ‘in combination’ with other plans or projects. No other significant developments or plans are known of that may result in such cumulative impacts on *Clonakilty Bay* SPA.

4.3.4 Appropriate Assessment of Clonakilty Development Plan 2009 - 2015 in relation to the potential for negative impacts on Clonakilty Bay SPA

Table 4.2 brings together in tabular Form the details described in Section 4.3.1 and 4.3.2. The matrix identifies the key bird populations for which the SPA is designated; the environmental factors on which they depend; the elements of the plan that may result in negative impacts on them; the avoidance and mitigation measures required and the actions required to implement these measures, namely additional Policies and Objectives and amendments to existing Policies and Objectives of the plan, and changes to zonings.

Table 4.2: Potential Impacts on the Conservation Features of *Clonakilty Bay* SPA Resulting From the Policies and Objectives of Clonakilty Development Town Plan

Qualifying features	Conditions that support the qualifying features and which might be potentially affected by Clonakilty Town Plan	Possible Impacts of Clonakilty Town Plan	Possible 'in combination' impacts from other plans and projects	Avoidance and mitigation measures required	Actions required
<p>Birds Directive Annex I species: Bar-tailed Godwit; and Golden Plover.</p> <p>Other species of wader and wildfowl that use the mudflats and sandflats including the important populations of, Shelduck; Lapwing; Ringed Plover; Black-tailed Godwit; Curlew; Dunlin; Redshank; and Greenshank.</p>	<ul style="list-style-type: none"> • Unaltered, natural, tidal flow and tidal cycle within Clonakilty Bay. • Low levels of human disturbance to birds using this habitat. 	<ul style="list-style-type: none"> • Disruption to tidal flow and the tidal cycle as a result of construction and operation of the proposed Clonakilty Bay barrage. • Increased disturbance resulting from increased visitor number to the Clonakilty Bay area. 	<ul style="list-style-type: none"> • None known. 	<ul style="list-style-type: none"> • Appropriate construction and operation of any barrage that is constructed. • Appropriate, sustainable development of the Clonakilty Bay area. 	<ul style="list-style-type: none"> • Revision to Strategic Context Objective, Section 2.11.1, Paragraph 5; and revision to Objective 6.10. • Revision to Strategic Context Objective, Section 2.11.1, Paragraph 4; and 2.11.2, Paragraph 2.

Table 4.2: Potential Impacts on the Conservation Features of *Clonakilty Bay* SPA Resulting From the Policies and Objectives of Clonakilty Development Town Plan (continued)

Qualifying features	Conditions that support the qualifying feature and which might be potentially affected by Clonakilty Town Plan	Possible Impacts of Clonakilty Town Plan	Possible 'in combination' impacts from other plans and projects	Avoidance and mitigation measures required	Actions required
Birds Directive Annex I species: Little Egret	<ul style="list-style-type: none"> • Unaltered, natural, tidal flow and tidal cycle within Clonakilty Bay. • Low levels of human disturbance to birds using this habitat. 	<ul style="list-style-type: none"> • Disruption to tidal flow and the tidal cycle as a result of construction and operation of the proposed Clonakilty Bay barrage. • Increased disturbance resulting from increased visitor number to the Clonakilty Bay area. 	<ul style="list-style-type: none"> • None known. 	<ul style="list-style-type: none"> • Appropriate construction and operation of any barrage that is constructed. • Appropriate, sustainable development of the Clonakilty Bay area. 	<ul style="list-style-type: none"> • Revision to Strategic Context Objective, Section 2.11.1, Paragraph 5; and revision to Objective 6.10. • Revision to Strategic Context Objective, Section 2.11.1, Paragraph 4; and 2.11.2, Paragraph 2.
Birds Directive Annex I species: Short-eared Owl	<ul style="list-style-type: none"> • Sufficient area of undisturbed feeding habitat, primarily wet grassland and exposed mud. 	<ul style="list-style-type: none"> • Increased disturbance resulting from increased visitor number to the Clonakilty Bay area. 	<ul style="list-style-type: none"> • None known. 	<ul style="list-style-type: none"> • Appropriate, sustainable development of the Clonakilty Bay area. 	<ul style="list-style-type: none"> • Revision to Strategic Context Objective, Section 2.11.1, Paragraph 4; and 2.11.2, Paragraph 2.

5 REQUIRED ACTIONS

As a result of this Appropriate Assessment, the following changes should be made to the Volume 2 'Policies and Objectives' of Clonakilty Development Plan 2009 – 2015, in order to avoid potential negative impacts on the Conservation Objectives of, *Clonakilty Bay* cSAC or *Clonakilty Bay* SPA.

Section 2.11.1, Paragraph 4: *“The strategy underlying the Plan specifically aims to address the following matters: The objective of conserving and developing the unique and extraordinary potential of the towns bay area and extensive shoreline.”* should be revised to read as follows:

“The strategy underlying the Plan specifically aims to address the following matters: The objective of conserving and developing the unique and extraordinary potential of the towns bay area and extensive shoreline, including maintenance of the ecological integrity of the Clonakilty Bay European sites (Clonakilty Bay cSAC and Clonakilty Bay SPA).”

Section 2.11.1, Paragraph 5: *“It shall be a strategic objective to encourage the construction of the Flood Water Barrage to the south of the town and to adopt the recommendations of the Clonakilty Flood survey in order to alleviate potentially damaging instances of future flooding.”* should be split into two separate Paragraphs and revised to read as follows:

“It shall be a strategic objective to implement the recommendations of the “Clonakilty Flood Study Report” dated December 2003.” and

“It shall be a strategic objective to progress the development of a tidal barrage across Clonakilty bay to alleviate the risk of tidal flooding within the town, where it will not to have significant adverse effects on the Conservation Objectives or ecological value of the Clonakilty Bay European sites (Clonakilty Bay cSAC and Clonakilty Bay SPA).”

Section 2.11.2 Paragraph 2: *“In approaching these objectives the overall strategy will be to implement the following in varying degrees of detail: The indicative provision of a relief road along with provision of other accessibility measures such as cycle lanes, pedestrian areas etc. to ensure maximum accessibility for all stakeholders and modes of movement.”* should be revised to read as follows:

“In approaching these objectives the overall strategy will be to implement the following in varying degrees of detail: The indicative provision of a relief road along with provision of other accessibility measures such as cycle lanes, pedestrian areas etc. to ensure maximum accessibility for all stakeholders and modes of movement. The provision of any relief road that passes across Clonakilty Bay to the south of the town will pass through Clonakilty Bay cSAC and Clonakilty Bay SPA and will therefore be subject to the restrictions and conditions imposed by these designations, including Environmental Impact Assessment and Article 6 Appropriate Assessment.”

Objective 6.10: *“It is an objective of the Development Plan to progress the development of the Tidal Barrage across Clonakilty bay to alleviate the risk of tidal flooding within the town.”* should be revised to read as follows:

“It is an objective of the Development Plan to progress the development of the Tidal Barrage across Clonakilty bay to alleviate the risk of tidal flooding, within the town, where it will not to have significant adverse effects on the Conservation Objectives or

ecological value of the Clonakilty Bay European sites (*Clonakilty Bay* cSAC and *Clonakilty Bay* SPA).”

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