



Appendix B

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Appropriate Assessment (AA) Natura Impact Report,
Strategic Environmental Assessment (SEA) Environmental Report &
SEA Statement

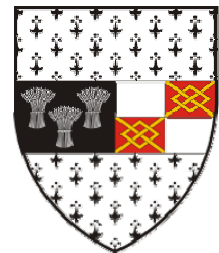
NATURA IMPACT REPORT

IN SUPPORT OF THE
APPROPRIATE ASSESSMENT
OF THE
Masterplan for Abbey Creative Quarter

IN ACCORDANCE WITH THE REQUIREMENTS OF
ARTICLE 6(3) OF THE EU HABITATS DIRECTIVE

for: Kilkenny County Council

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SEPTEMBER 2015

Table of Contents

Section 1	Introduction.....	1
1.1	Background.....	1
1.2	Legislative Context	1
1.3	Stages of Appropriate Assessment	2
Section 2	Stage 1 Screening.....	3
2.1	Description of the Masterplan for Abbey Creative Quarter, Kilkenny	3
2.2	European Sites within 15 km of the Masterplan Area.....	5
2.3	Assessment Criteria	10
2.4	Other Plans and Projects	11
2.5	Conclusion of Screening Stage.....	14
2.6	Note on consideration of changes to Draft Masterplan after public display, before approval 14	
Section 3	Stage 2 Appropriate Assessment.....	16
3.1	Introduction	16
3.2	Potential Significant Effects	16
3.3	Conservation Objectives	19
Section 4	Mitigation Measures	21
Section 5	Conclusion.....	29

List of Tables

Table 2-1 European Sites within 15 km of the Masterplan Area	9
Table 2-2 Screening of European sites within 15 km of the Masterplan Area.....	11
Table 2-3 Plans & Programmes Likely to Cause In-Combination Effects.....	11
Table 3-1 European Sites subject to Stage 2 Appropriate Assessment.....	16
Table 3-2: Elements of the Masterplan and potential impacts on the River Barrow and River Nore cSAC and River Nore SPA.....	18
Table 4-1: Mitigation measures that safeguard European sites from potential significant effects associated with individual elements of the Masterplan identified during the AA.....	26

List of Figures

Figure 2.1 European Sites within 15 km of the Masterplan Area.	6
Figure 2.2 Map showing the extent of the Masterplan Area in relation to the River Barrow and River Nore cSAC.....	7
Figure 2.3 Map showing the extent of the Masterplan boundary in relation to the River Nore SPA.	8

List of Appendices

Appendix I: Kilkenny City and Environs Development 2014-2020 Environmental Provisions (Appendix A of Masterplan for Abbey Creative Quarter Kilkenny)	
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Section 1 Introduction

1.1 Background

This document presents the Natura Impact Report in support of the Appropriate Assessment of the approved Masterplan for Abbey Creative Quarter, Kilkenny, in accordance with the requirements of Article 6(3) of the EU Habitats Directive¹. This report is divided into the following five sections:

Section 1	Introduction
Section 2	Stage 1 Screening
Section 3	Stage 2 Appropriate Assessment
Section 4	Mitigation
Section 5	Conclusion

1.2 Legislative Context

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

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

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

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

Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”

¹ Directive 92/43/EEC

These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011. These regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in judgements of the Court of Justice of the European Union (CJEU).

1.3 Stages of Appropriate Assessment

This Natura Impact Report has been prepared in accordance with the following guidance:

- *Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities.* Department of the Environment, Heritage and Local Government, 2010.
- *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*, European Commission Environment DG, 2002.
- *Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC*: European Commission, 2000.

There are up to four successive stages involved in the Appropriate Assessment process (European Commission 2002). The outcome at each stage determines whether the next stage in the process is required. The following describes each of the four stages:

Stage One: Screening

This is the first stage in the process and is carried out to determine the necessity for a more detailed Stage 2 Appropriate Assessment where potential impacts on European sites are deemed to be of significance. The screening process identifies the likely impacts upon a European site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant.

Stage Two: Appropriate Assessment

This stage involves the consideration of the impact on the integrity of the European site of the project, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts. If adequate mitigation is proposed to ensure no significant adverse impacts on European sites, then the process may end at this stage. However, if the likelihood of significant impacts remains, then the process must proceed to Stage 3.

Stage Three: Assessment of Alternative Solutions

The process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the European site.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain

The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures. First, the project should aim to avoid any impacts on European sites by identifying possible impacts early in the process and writing the plan in order to avoid such impacts. Second, mitigation measures should be applied, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If the plan is still likely to result in impacts on European sites, and no further practicable mitigation is possible, then it must be rejected. If no alternative solutions are identified and the plan is required for imperative reasons of overriding public interest (IROPI test) under Article 6(4) of the Habitats Directive, then compensation measures are required for any remaining adverse effect.

In the case of this Natura Impact Report, it was found that the Masterplan only requires Stage 2 Appropriate Assessment (AA).

Section 2 Stage 1 Screening

2.1 Description of the Masterplan for Abbey Creative Quarter, Kilkenny

The former Smithwicks Brewery is located on the banks of the River Nore, in the centre of Kilkenny City. The Brewery, which had been in operation for 300 years on the site, was closed by Diageo in 2013, having decided to centralise beer production at its St James's Gate Brewery in Dublin. A decision was made by the elected members of the Kilkenny local Authorities (Kilkenny County Council and Kilkenny Borough Council) in early 2012 to purchase the site of the Brewery from Diageo. The site was purchased with a view to job creation and the provision of public amenity areas on the site.

In order to identify options for the re-development of the site, the Royal Institute of the Architects of Ireland, (RIAI), and Kilkenny Local Authorities joined in an urban design process for the Brewery site. Supported by the Departments of Arts, Heritage and the Gaeltacht, under the Government's Policy on Architecture 2009-2015, a Colloquium was held in December 2012 and February 2013. This process involved eleven of Ireland's leading architects, along with planning, engineering and property advisors. The architects and other design and economic professionals conducted a site visit in December 2012 to determine the development potential of the site, taking into consideration the city in its totality, including its economy, history and demographics, to ensure that the development of the site delivers the best design solutions. The experts conducted a site visit in December 2012, and the identified a number of different design approaches and philosophies for consideration by the Council. This unique partnership came up with a number of design and development concepts for the site which were unveiled in Kilkenny Castle in May 2013.

It was Kilkenny County Council's aspiration, to create an urban design layout and architectural framework to provide a new urban mixed use quarter for Kilkenny City in a socially inclusive and sustainable manner, which will:

- Have a well defined sense of place, Have a healthy mix of uses including educational, employment, residential, enterprise development, recreational and community uses,
- Have suitable short to medium term uses on site while development proposals are evolving over time.
- Encourage sustainable transport with safe and direct routes for pedestrians and cyclists and provide for the availability of public transport into the city centre and connections with adjacent areas.
- Develop a framework for providing a high standard of architecture and urban design which will induce a dynamic/vibrancy to the character of the area,
- Draws from the unique natural, cultural and built heritage of the area and adds to that context,
- Have a high visual and varied environmental quality aimed at enhancing quality of life.
- Promote an awareness of the principles of sustainability in architectural design to produce buildings that are benign in the use of resources while being attractive and aesthetically pleasing.
- Be substantially achievable in a 15 to 20 year time frame.

In November 2013, an initial Masterplan document was published for a period of consultation. Following that period of consultation, an AA screening report was carried out in March 2014. The AA Screening examined the likely impacts that could arise from the Masterplan in the context of a number of factors that could potentially affect the integrity of the Natura 2000 network. The AA concluded that the Masterplan may have significant impacts on the Natura 2000 network and that a Stage 2 AA is required. The undertaking of Stage 2 AA necessitates the undertaking of SEA as Article 3 (2) of the SEA Directive requires that SEA is carried out for plans and programmes which are being subjected to Stage 2 AA.

A Chief Executive's report on the initial Masterplan and consultation period was prepared and presented to the Council in November 2014. It recommended that taking account of the submissions made and the issues presenting that the initial Masterplan document published in November 2013 be revised taking account of:

- The adopted Kilkenny City and Environs Development Plan 2014 – 2020;
- Appropriate Assessment and Strategic Environmental Assessment;
- Archaeological recommendations from further archaeological assessment;
- Submissions made to the initial Masterplan; and
- Further public consultation.

As part of the revisioning of the Masterplan various public consultation exercises were undertaken by the Council.

Following public display, the Masterplan document has been approved by Kilkenny County Council by way of Resolution. Variation No. 1 to the City Development Plan includes high level objectives for the Masterplan area and provides for the placing of the Masterplan on a statutory footing by way of a separate and subsequent Variation to the Kilkenny City & Environs Development Plan 2014-2020. Variation No. 1 and associated SEA and AA documents are available alongside the approved Masterplan and its associated SEA and AA documents.

2.2 European Sites within 15 km of the Masterplan Area

2.2.1 SACs and SPAs

This section of the screening process describes the European sites within 15 km of the Masterplan Area. A distance of 15 km is currently recommended in the DoE document *Guidance for Planning Authorities*² and as a precautionary measure, to ensure that all potentially affected European sites are included in the screening process. A map indicating the locations of the sites in relation to the Masterplan Area is presented in Figure 2.1. Table 2-1 below lists the European sites that occur within 15 km of the lands referred to by the Masterplan Area.

Three European sites are identified within 15 km of the Masterplan Area; the River Barrow and River Nore cSAC (NPWS Site Code: 002162), River Nore SPA (NPWS Site Code: 004233), and Thomastown Quarry cSAC (NPWS Site Code: 002252). The Masterplan Area is bordered by a section of the River Nore to the east. This section of river is within the River Barrow and River Nore cSAC (see Figure 2.2) and the River Nore SPA (see Figure 2.3). The (non-designated) River Breaghagh (tributary of the River Nore) flows west to east through the Masterplan Area, and discharges into the River Nore.

The qualifying features for each site have been obtained through a review of information pertaining to each site available from the NPWS website.

Information regarding the main threats to European sites was derived from a variety of sources:

- Ireland's Article 17 Report to the European Commission "Status of EU Protected Habitats and Species in Ireland" (NPWS, 2013).
- Site Synopses.
- NATURA 2000 Standard Data Forms.

Since the conservation management objectives for the European sites focus on maintaining the favourable conservation status of the qualifying interests of each site, the screening process concentrated on assessing the potential implications of the Masterplan against the qualifying interests of each site.

Designated sites beyond the 15km radius which are downstream/south of the Masterplan area include Lower River Suir cSAC, Hook Head cSAC, River Barrow Estuary pNHA and Hook Head pNHA. These have also been taken into account by the assessment.

² DoEHLG (2010). Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities.

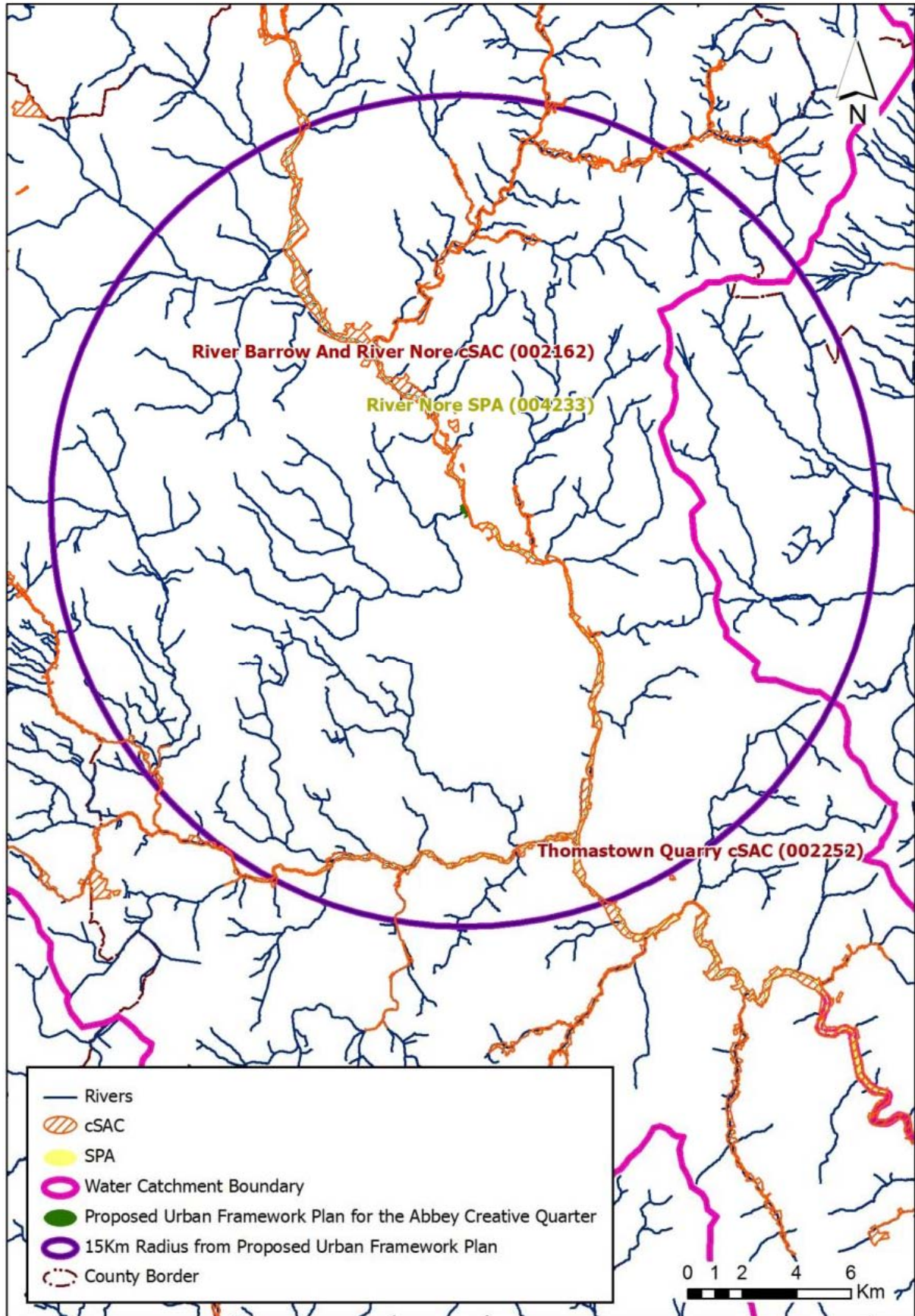


Figure 2.1 European Sites within 15 km of the Masterplan Area.

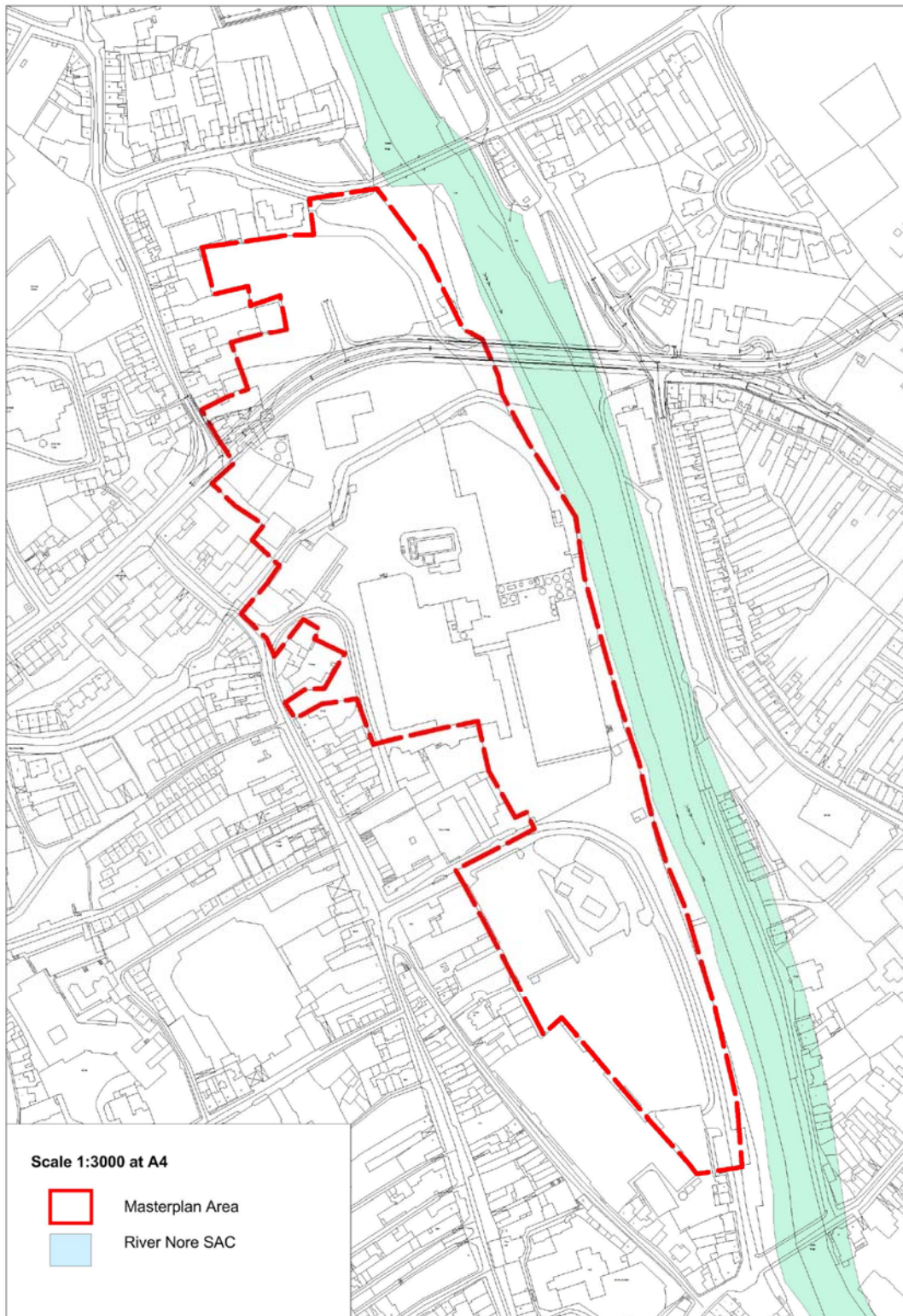


Figure 2.2 Map showing the extent of the Masterplan Area in relation to the River Barrow and River Nore cSAC.³

³ Mapping of the cSAC boundary by NPWS was undertaken using OSI six inch mapping as a basemap and therefore does not overlay correctly with more recent mapping. The true boundary of the cSAC is likely to match the more recently mapped SPA boundary as shown in Figure 2.3 below and therefore can be assumed to directly border the eastern boundary of the Masterplan Area.

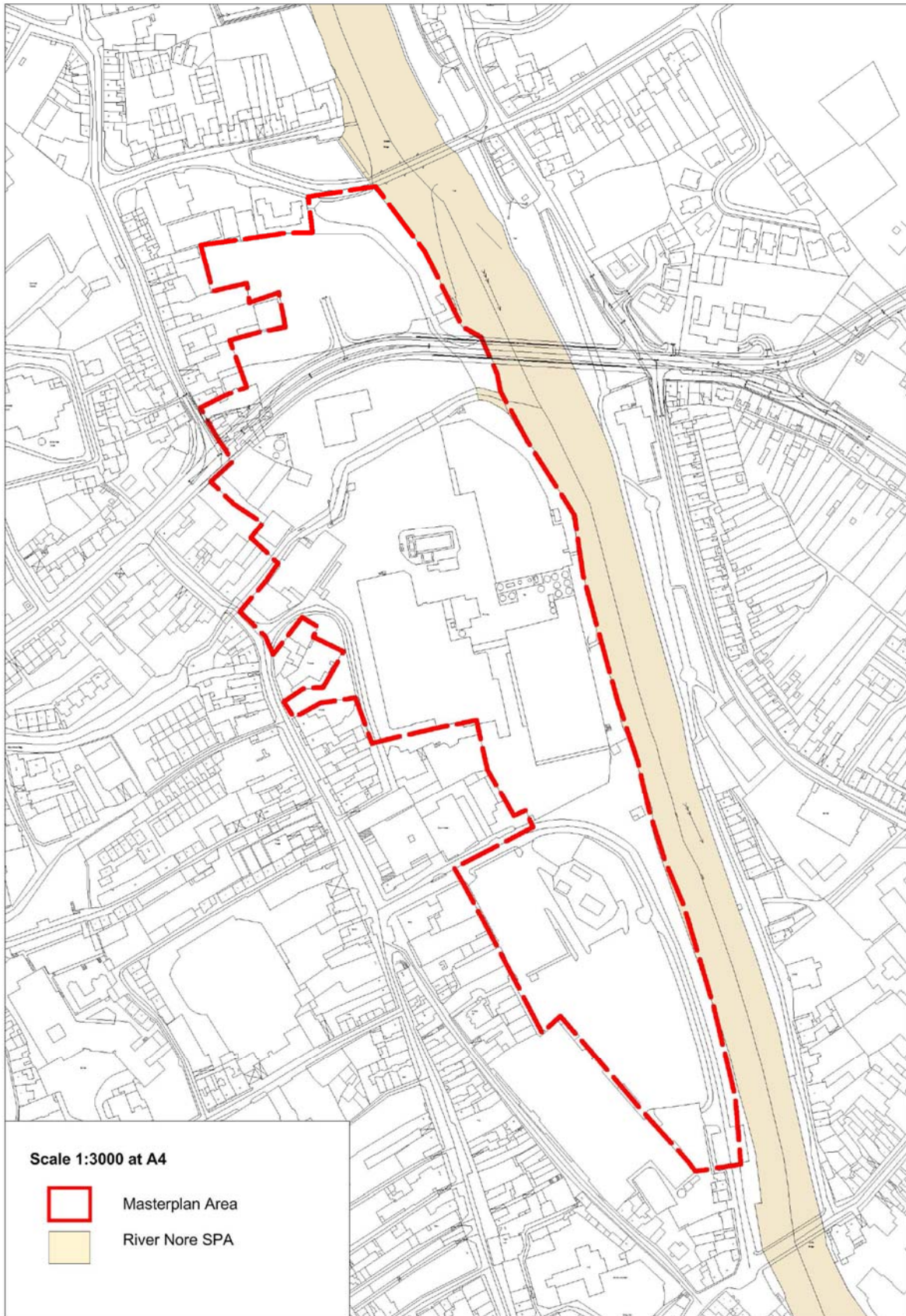


Figure 2.3 Map showing the extent of the Masterplan Area in relation to the River Nore SPA.

Table 2-1 European Sites within 15 km of the Masterplan Area

Site Code	Site Name	Qualifying Feature	Threats to Site Integrity
002162	River Barrow and River Nore cSAC	<p>Annex I Habitats</p> <p>[1130] Estuaries [1140] Tidal Mudflats and Sandflats [1310] Salicornia mud [1320] Spartina swards [1330] Atlantic salt meadows [1410] Mediterranean salt meadows [3260] Floating River Vegetation [4030] Dry Heath [6430] Hydrophilous Tall Herb [7220] Petrifying Springs [91A0] Old Oak Woodlands [91E0] Residual Alluvial Forests</p> <p>Annex II Species</p> <p>[1016] Desmoulin's Whorlslug (<i>Vertigo moulinsiana</i>) [1029] Freshwater pearl mussel (<i>Margaritifera margaritifera</i>) [1092] White-clawed crayfish (<i>Austropotamobius pallipes</i>) [1095] Sea lamprey (<i>Petromyzon marinus</i>) [1096] Brook lamprey (<i>Lampetra planeri</i>) [1099] River lamprey (<i>Lampetra fluviatilis</i>) [1102] Allis shad (<i>Alosa alosa</i>) [1103] Twaite shad (<i>Alosa fallax fallax</i>) [1106] Salmon (<i>Salmo salar</i>) [1421] Killarney fern (<i>Trichomanes speciosum</i>) [1990] Pearl mussel (<i>Margaritifera durrovensis</i>) [1355] Otter (<i>Lutra lutra</i>)</p>	<p>The principle threats to the River Barrow and River Nore cSAC are pollution caused by increased fertiliser application, sewage and industrial waste. Species for which the site is designated are highly susceptible to siltation and pollution of water courses. Proposed developments in the vicinity of the cSAC may give rise to siltation and run-off of pollutants. The river has also been designated for its population of otter, a species vulnerable to the felling of mixed wood and scrub. Otters may become displaced due to disturbance in proximity to the cSAC.</p>
004233	River Nore SPA	[A229] Kingfisher (<i>Alcedo atthis</i>)	<p>Two threats ranked as having a medium negative impact have been recorded for this site; landfill, landfill, land reclamation, drying out, and pressures from port areas. The site is also susceptible to alterations in hydrology and disturbance. The site is of national importance for its Kingfisher population. Kingfisher are likely to be vulnerable to disturbance effects of development works in proximity of the site. Any loss or disturbance to bankside habitat could also impact on the breeding population.</p>
002252	Thomastown Quarry cSAC	[7220] Petrifying springs	<p>A proposed road scheme adjacent to this site poses the threat of direct habitat loss and indirect hydrological impacts. No other threats are known to this site.</p>

2.3 Assessment Criteria

2.3.1 Is the Plan Necessary to the Management of European Sites?

Under the Habitats Directive, Plans that are directly connected with or necessary to the management of a European site do not require AA. For this exception to apply, management is required to be interpreted narrowly as nature conservation management in the sense of Article 6(1) of the Habitats Directive. This refers to specific measures to address the ecological requirements of annexed habitats and species (and their habitats) present on a site(s). The relationship should be shown to be direct and not a by-product of the plan, even if this might result in positive or beneficial effects for a site(s).

The Masterplan for the Abbey Creative Quarter will incorporate measures that will benefit the protection of European designated sites; however its primary purpose is not the nature conservation management of the sites, but to provide for development. Therefore, the Masterplan is not considered by the Habitats Directive to be directly connected with or necessary to the management of European designated sites.

2.3.2 Elements of the Masterplan with Potential to Give Rise to Significant Effects

The Masterplan sets out a framework on how the lands should be re-developed as a mixed use quarter and makes recommendations with regards the overall uses, layout, and design of the area. As detailed above, the Masterplan Area occurs directly adjacent to the River Nore. The River Breagagh (tributary of the River Nore) also passes through the site. Redevelopment of the area is likely to proceed in a phased project by project basis. Future re-development of the area as set out in the Masterplan will require major construction works that could give rise to potential impacts on European sites in the surroundings such as:

- Demolition works and site clearance.
- Refurbishment and restoration of existing buildings.
- Construction of new public squares and buildings.
- Development of a linear park along the River Nore, including the provision to create access to the river for water based leisure facilities.
- Construction of new infrastructure including urban streets.
- Tourism developments, expanding the provision of outdoor activities.
- Development of a skate park and other open areas.

In the long term, the re-development of the area is likely to increase the level of human activity in proximity to the River Nore.

2.3.3 Direct, Indirect or Secondary Impacts

In determining the potential for significant effects, a number of factors have been taken into account. Firstly, the sensitivity of the European sites as outlined in Section 2.2.1 above. Secondly, the Masterplan and the potential effects associated with its implementation on the sites were considered. The outcome of this screening is presented in Table 2-2 below.

In relation to the River Barrow and River Nore cSAC, potential adverse impacts on qualifying habitats and species could arise due to any deterioration in water quality. The River Nore forms the eastern boundary of the Masterplan Area while a major tributary of the Nore (River Breagagh) passes through the area (see Figure 2.2 and Figure 2.3 above). Works required during the proposed redevelopment could lead to sedimentation or contamination by pollutants of the River Nore. Such pollution could directly affect aquatic flora and fauna within the cSAC. This could have knock on indirect effects throughout the food chain on invertebrates, birds, fish and mammals. Many of the qualifying habitats and species of the River Barrow and River Nore cSAC are dependent on good water quality.

Disturbance effects on key species could also occur during the redevelopment works and due to any increases in human activity in proximity to the River Nore.

In relation to the River Nore SPA, potential adverse impacts are possible due to disturbance of breeding Kingfisher associated with redevelopment works that will be undertaken in proximity to the River Nore. Disturbance is also possible due to any increase in human activity in proximity to the river. The development of the area could potentially result in loss or disturbance of habitat used by Kingfisher along the banks of the River Nore.

Given the type of provisions of the Masterplan and the distance from the Masterplan Area, no impacts are foreseen on Thomastown Quarry cSAC.

Table 2-2 Screening of European sites within 15 km of the Masterplan Area

Site Name	Potential Impacts arising from the Masterplan	AA Required
River Barrow and River Nore cSAC	The Masterplan Area occurs adjacent to the River Barrow and River Nore cSAC, the River Breaghagh which traverses the Masterplan Area is directly linked to the cSAC. Potential for significant impacts on the cSAC arise due to possible deterioration of water quality of the River Nore during redevelopment works. Disturbance to key species may also result from any increase in human activity in proximity to the River Nore.	Yes
River Nore SPA	The Masterplan Area occurs adjacent to the River Barrow and River Nore SPA, the River Breaghagh which traverses the Masterplan Area is directly linked to the SPA. There is potential for impacts due to disturbance effects during redevelopment work or due to an increase in human activity in proximity to the River Nore. Habitat loss or disturbance along the banks of the River Nore as a result of the implementation of the Masterplan could potentially impact on the local Kingfisher population.	Yes
Thomastown Quarry cSAC	This site occurs ca 15 km South-east of the Masterplan Area, impacts on this cSAC are not foreseen and this site is not considered further in the Appropriate Assessment.	No

2.4 Other Plans and Projects

Article 6(3) of the Habitats Directive requires an assessment of a plan or project to consider other plans or programmes that might, in combination with the plan or project, have the potential to adversely impact upon European sites. Table 2-3 below lists the plans or programmes that may interact with the Masterplan for the Abbey Creative Quarter to cause in-combination effects to European sites. The plans or programmes are listed according to a four tier spatial hierarchy: International; National; Regional; and Local.

Table 2-3 Plans & Programmes Likely to Cause In-Combination Effects

Directive/P/P	Purpose	Interactions resulting in Cumulative Impacts
International		
EU Water Framework Directive (2000/60/EC)	Objectives seek to maintain and enhance the quality of all surface waters in the EU.	No risk of likely significant in-combination effects will result as the primary purpose of the Directive is to improve environmental quality.
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.	No risk of likely significant in-combination effects will result as the primary purpose of the Directive is to improve environmental quality.
EU Groundwater Directive (2006/118/EC)	This directive establishes a regime, which sets underground water quality standards and introduces measures to prevent or limit inputs of pollutants into groundwater.	No risk of likely significant in-combination effects will result as the primary purpose of the Directive is to improve environmental quality.
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	Potential in-combination impacts may arise where there is a requirement to provide for new infrastructure such as flood walls or flood defences.

Directive/P/P	Purpose	Interactions resulting in Cumulative Impacts
	domestic and economic development in flood risk zones, this poses a threat of flooding in coastal and river basin areas.	Avoidance on, or near protected areas should be implemented or where this is not possible, favouring infrastructure that carries a lower risk of damage to protected areas should be emphasised in the plan.
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 pollution.	No risk of likely significant in-combination effects will result as the primary purpose of the Directive is to improve environmental quality.
The Urban Wastewater Treatment Directive (91/271/EEC)	The primary objective is to protect the environment from the adverse effects of discharges of urban wastewater, by the provision of urban wastewater collecting systems (sewerage) and treatment plants for urban centres. The Directive also provides general rules for the sustainable disposal of sludge arising from wastewater treatment.	No risk of likely significant in-combination effects will result as the primary purpose of the Directive is to improve environmental quality.
Sewage Sludge Directive (86/278/EEC)	Objective is to encourage the appropriate use of sewage sludge in agriculture and to regulate its use in such a way as to prevent harmful effects on soil, vegetation, animals and man. To this end, it prohibits the use of untreated sludge on agricultural land unless it is injected or incorporated into the soil.	No risk of likely significant in-combination effects will result as the primary purpose of the Directive is to improve environmental quality.
The Integrated Pollution Prevention Control Directive (96/61/EC)	Objective is to achieve a high level of protection of the environment through measures to prevent or, where that is not practicable, to reduce emissions to air, water and land from industrial sources.	No risk of likely significant in-combination effects will result as the primary purpose of the Directive is to improve environmental quality.
National		
National Spatial Strategy 2002-2020	Objectives of the NSS are to achieve a better balance of social, economic and physical development across Ireland, supported by more effective planning.	Potential in-combination impacts may arise where there is a requirement to provide for new infrastructure which may impact on the River Nore. Provision of infrastructure may result in: <ul style="list-style-type: none"> • Habitat loss • Alteration of hydrology • Deterioration in water quality • Disturbance to key species during construction / operation
Eirgrid Transmission Development Plan 2012 - 2022	This ten year plan presents those components of the overall long-term development of the transmission system where there is a high level of certainty. In addition, other likely areas where development projects may soon be required are also discussed.	Potential in-combination impacts may arise where there is a requirement to provide for new infrastructure which may impact on the River Nore. Provision of infrastructure may result in: <ul style="list-style-type: none"> • Habitat loss • Alteration of hydrology • Deterioration in water quality • Disturbance to key species during construction / operational phases
Regional		
Regional Planning Guidelines for the South-East Region 2010 – 2022.	Policy document which aims to direct the future growth of the South-east Area over the medium to long term and works to implement the strategic planning framework set out in the National Spatial Strategy (NSS)	Potential in-combination impacts may arise where there is a requirement to provide for new infrastructure which may impact on the River Nore. Provision of infrastructure may result in: <ul style="list-style-type: none"> • Habitat loss • Alteration of hydrology • Deterioration in water quality • Disturbance during construction / operation
Local		
Kilkenny City and Environs Development Plan 2014 - 2020 Kilkenny County Development Plan 2014-2020 Carlow County Development Plan 2015 - 2021 Laois County Development Plan 2012-2018 North Tipperary	Overall strategies for the proper planning and sustainable development of the administrative area of the relevant Local Authorities.	Development plans in existence throughout the surrounding counties and cities acting alone or in combination can have a cumulative impact on European sites located within County Kilkenny. In relation to the River Barrow and River Nore cSAC and River Nore SPA potential for in-combination impacts exists due to the site extending into the surrounding counties of Laois (upstream), Carlow (upstream), and Kildare (upstream). Provision of infrastructure may result in: <ul style="list-style-type: none"> • Habitat loss • Alteration of hydrology

Directive/P/P	Purpose	Interactions resulting in Cumulative Impacts
<p>County Development Plan 2010 - 2016 South Tipperary County Development Plan 2009 – 2015 Waterford County Development Plan 2011 – 2017 Waterford City Development Plan 2013 – 2019 Wexford County Development Plan 2013 - 2019</p>		<ul style="list-style-type: none"> • Deterioration in water quality • Disturbance during construction / operation
<p>Existing and future linear parks and greenfield areas</p>	<p>Such linear parks and greenfield areas provide for various objectives including sustainable mobility, ecological connectivity and flood risk management.</p>	<p>The potential for in-combination impacts exists as the provision of green infrastructure may result in:</p> <ul style="list-style-type: none"> • Habitat loss • Alteration of hydrology • Deterioration in water quality • Disturbance during construction / operation
<p>Central Access Scheme Kilkenny City</p>	<p>The Central Access Scheme for Kilkenny consists on a linkage road between St Candice's Place on the west of the city to the Castlecomer Road on the east. The Scheme will require the development of a bridge over the River Nore.</p>	<p>Potential in-combination impacts may arise where the requirement for infrastructural developments are carried out in proximity and within the River Nore. An Environmental Impact Statement (EIS) has been carried out for the Central Access Scheme. Potential effects arising from this development to be mitigated include:</p> <ul style="list-style-type: none"> • Habitat loss • Disturbance to key species • Fragmentation • Deterioration in water quality <p>An ecological report which was commissioned by the main contractor on the Central Access Scheme and undertaken by ECOFACT identifies that the river in proximity to the bridge works undertaken in October 2014 was impacted previously. However, no impacts on the river are foreseen as a result of implementing the plan - therefore in-combination impacts should not arise. All lower level projects are required to be subject to Appropriate Assessment.</p> <p>As part of Kilkenny County Council's due diligence a further ecological report was commissioned and published in December 2014. This report concludes that:</p> <p>"The works in the River Nore have resulted in a relatively small area at the site being denuded of natural substratum. This is now being re-colonised by macroinvertebrates.</p> <p>It is not possible to determine to what extent silt generated by the works contributed to the silted substratum in the slack water immediately upstream of the weir. However, it must be borne in mind that conditions here would not be suitable for most protected aquatic species, apart from lamprey ammocoetes, for which a small amount of additional siltation would not be problematic.</p> <p>Downstream of the weir, silt is absent from the substratum and the macroinvertebrate faunal composition does not show any indication of a siltation impact. The river here is at Q4, the same as upstream of the works. This indicates that any silt generated had only a temporary impact here. High flows in the River Nore in mid-November (see Appendix 4) would, presumably, have flushed silt deposits near the site of the works to more depositing locations farther downstream."</p>

2.5 Conclusion of Screening Stage

The likely impacts that could arise from the Masterplan for the Abbey Creative Quarter have been examined in the context of a number of factors that could potentially affect the integrity of the Natura 2000 network. On the basis of the findings of this Screening for Appropriate Assessment, it is concluded that the Masterplan:

- (i) is not directly connected with or necessary to the management of a European site; and
- (ii) may have significant impacts on the Natura 2000 network.

Therefore, applying the Precautionary Principle and in accordance with Article 6(3) of the Habitats Directive, a Stage 2 Appropriate Assessment is required. That stage is set out in Section 3 of this report.

2.6 Note on consideration of changes to Draft Masterplan after public display, before approval

A number of changes were made to the original Draft Masterplan before approval on foot of submissions made on the Draft Masterplan and associated documents.

These changes were screened for the need to undergo AA and it was determined that Stage 2 AA was not required to be undertaken on the changes.

The earlier of the Natura Impact Report which accompanied the Draft Masterplan on public display has however been updated in order to take account of these changes and in order to take account of suggestions and recommendations contained in submissions.

Changes to the Masterplan and the outcome of the AA screening are detailed on the table overleaf.

Table 2-4 Changes to the Masterplan and the outcome of the SEA and AA Screenings

Change to Masterplan	Outcome of SEA and AA Screenings
Change the last statement of the Vision Statement in Section 2.2.1 of the Masterplan as follows... 'where smarter travel principles are provided for will apply throughout'.	No potential for adverse impacts on European sites is foreseen. Such a change would not necessitate Stage 2 Appropriate Assessment.
Include ideas from Appendix F into Opportunities in Section 3.2.2	No potential for adverse impacts on European sites is foreseen. Such a change would not necessitate Stage 2 Appropriate Assessment.
Clearer labelling of buildings in Section 5.3 of the Masterplan document	No potential for adverse impacts on European sites is foreseen. Such a change would not necessitate Stage 2 Appropriate Assessment.
Change Vision Statement in Section 2.2.1 of the Masterplan to include reference to higher level education as follows: sustaining growth in employment, 3rd and 4th level education and advancing economic activity.	No potential for adverse impacts on European sites is foreseen. Such a change would not necessitate Stage 2 Appropriate Assessment.
Insert in Section 4.2.3 of the Masterplan at the end of the second last bullet point as follows: Works associated with the development of the linear park will comply with the archaeological strategy.	No potential for adverse impacts on European sites is foreseen. Such a change would not necessitate Stage 2 Appropriate Assessment.
Insert the following at Section 4.4.4 of the Masterplan: The Appropriate Assessment for the linear park shall be informed by an ecological impact assessment which shall consider issues including ecological connectivity and species such as otters and kingfishers (including potential interactions with food sources and aquatic and terrestrial habitats) and bats (including potential interactions with roosts, foraging sites and lighting). The ecologist working on AA for the project shall be consulted at the start of the project so that any necessary mitigation or design changes can be incorporated early in the project.	No potential for adverse impacts on European sites is foreseen. Such a change would not necessitate Stage 2 Appropriate Assessment.

Change to Masterplan	Outcome of SEA and AA Screenings
<p>Change fourth last bullet point in Section 3.1.10 in the Draft Masterplan from: 'Maintain the quality of the urban fabric of the city by extending the medieval character of the streetscapes in the city centre to the site' to "Maintain the quality of the urban fabric of the city by planning for the area as a seamless complement to the medieval city"</p>	<p>No potential for adverse impacts on European sites is foreseen. Such a change would not necessitate Stage 2 Appropriate Assessment.</p>
<p>Add the following text to Section 4.4.4 of the masterplan: 'Any contaminated soils identified during the development of existing brownfield lands shall be remediated and managed appropriately. The Southern Regional Waste Management Plan should also be taken into account as appropriate in this regard.'</p>	<p>No potential for adverse impacts on European sites is foreseen. Such a change would not necessitate Stage 2 Appropriate Assessment.</p>

Section 3 Stage 2 Appropriate Assessment

3.1 Introduction

The main objective of this stage (Stage 2) in the AA is to determine whether the Masterplan would result in significant adverse impacts on the integrity of any European site with respect to the site's structure, function, and/or conservation objectives.

The Stage 1 Screening has identified two sites with potential to be affected by the implementation of the Masterplan, the River Barrow and River Nore cSAC and the River Nore SPA (see Table 3-1 below). Therefore, a Stage 2 Appropriate Assessment is required. The potential adverse effects considered at this stage will either be effects occurring as a result of the application of the Masterplan alone or in combination with other plans, programmes, and/or projects.

Table 3-1 European Sites subject to Stage 2 Appropriate Assessment

Site Code	Site Name	Location	Threats to Sites Integrity
002162	River Barrow and River Nore cSAC	The River Barrow and River Nore cSAC occurs adjacent to the Masterplan Area.	The principle threats to the River Barrow and River Nore cSAC are pollution caused by increased fertiliser application, sewage and industrial waste. Species for which the site is designated are highly susceptible to siltation and pollution of water courses. Proposed developments in the vicinity of the cSAC may give rise to siltation and run-off of pollutants. The river has also been designated for its population of otter, a species vulnerable to the felling of mixed wood and scrub. Otters may become displaced due to disturbance in proximity to the cSAC.
004233	River Nore SPA	The River Nore SPA occurs adjacent to the Masterplan Area.	No known threats have been identified on the National Parks and Wildlife Service Natura 2000 Standard Data Form. The site however is susceptible to alterations in hydrology and disturbance. The site is of national importance for its Kingfisher population. Kingfishers are likely to be vulnerable to disturbance effects of development works in proximity of the site. Any loss or disturbance to bankside habitat could also impact on the breeding population.

3.2 Potential Significant Effects

As outlined in the European Commission Environment DG document *"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"*, impacts that could potentially occur through the implementation of the Masterplan can be categorised under a number of headings:

- Loss / reduction of habitat area (e.g. due to the development of new projects).
- Disturbance to Key Species (e.g. increased public access to protected sites, or during the construction phase of infrastructure projects).
- Habitat or species fragmentation.
- Reduction in species density.
- Changes in key indicators of conservation value such as decrease in water quality / quantity (e.g. through inadequate wastewater treatment, run-off of pollutants during construction and operation of developments, agricultural runoff).

The Masterplan is a low level plan that provides a framework for development within the Abbey Quarter, Kilkenny, an area of 8.25 hectares or 20.4 acres. The Masterplan prescribes the particular locations (site specific) of the proposed development works. Overall, the Masterplan underpins the development of walking trails/linear park, new civic spaces, and works to upgrade existing buildings within the Abbey Quarter. The potential significant effects of the Masterplan are discussed in the following sections while a summary of potential impacts associated with the different provisions of the Masterplan are summarised in Table 3-2.

3.2.1 Reduction of Habitat Area

Direct habitat loss is caused where there is complete removal of a habitat type. Habitat loss can also occur through the reduction of habitat quality and a loss of important habitat functions. It can arise from the introduction of invasive species, toxic contamination or physical alteration.

The Masterplan supports the development of lands adjacent to European sites. Should any development of new infrastructure occur along the banks of the river, loss of semi natural habitat connected to the cSAC is possible. Considering that the designated site boundary is confined to the river corridor, habitat loss within the cSAC is not foreseen as a result of the implementation of the Masterplan.

3.2.2 Fragmentation

Habitat and species fragmentation can occur through the breaking up of or loss of habitats resulting in interference with existing ecological units. Fragmentation can also result from impediments to the natural movements of species. This is relevant where important corridors for movement or migration are likely to be disrupted such as along river corridors when construction introduces a barrier to the free movement of species from one area of habitat to another.

Impacts can include habitat or species fragmentation where, for example, works to develop a linear park could potentially fragment habitats along the river corridor and possibly impede free movement of species along the river corridor. Disturbance impacts to birds, as outlined in Section 3.2.3 below could also lead to fragmentation of bird populations. The River Nore is of high importance for Kingfisher, a species that is Amber listed on the Birds of Conservation Concern Ireland (BoCCI) and Annex I listed on the EU Birds Directive. A survey in 2010 recorded 22 pairs of Kingfisher (based on 16 probable and 6 possible territories) within the SPA. Research undertaken by Birdwatch Ireland shows that the Kingfisher on the River Nore are vulnerable to amenity type developments.

3.2.3 Disturbance to Key Species

Disturbance to species supported by a European site is likely to increase where there is an increase in activity levels from recreation and amenity or from developments within or adjacent to designated areas. Sources of disturbance include noise, vibration, light, construction and operation activities, or other sources of disturbance arising from recreation and amenity or from the inappropriate timing of works.

Kingfishers, for which the River Nore SPA is designated, are vulnerable to disturbance from noise, vibration, light and construction activities which may arise as a result of the implementation of the Masterplan. Otter are also known to occur within the River Barrow and River Nore cSAC. Otter are vulnerable to disturbance due to construction works, aquacultural practices, and increased amenity uses along waterways, such as the development of a linear park, arising from proposed developments as part of the Masterplan. White-clawed Crayfish have been recorded approximately 3.5 km downstream of the Masterplan Area. White-clawed Crayfish require good water quality and are vulnerable to pollution; developments at the Abbey Quarter have the potential to alter the water quality of the Nore through potential runoff of pollutants during the construction phase of the Masterplan.

The Masterplan supports the development of a linear park, and the subsequent promotion of tourism and recreation in close proximity to the River Nore. These projects have the potential to cause

disturbance impacts to key species as they are located adjacent to the River Barrow and River Nore cSAC and the River Nore SPA.

Potential impacts that could occur on kingfisher and otter species, if unmitigated, include disturbance to breeding sites (which are unlikely to be present taking into account the characteristics of the site) during construction and operation. However the mitigation of such effects will be facilitated by various Masterplan/ Variation / City and Environs Development Plan provisions which contribute towards the protection of these species and their habitats⁴.

3.2.4 Changes in Key Indicators of Conservation Value

The key indicators of conservation value for the River Barrow and River Nore cSAC, potentially affected by the Masterplan, is surface water quality and quantity. Impacts on this European site may occur where there are hydrological connections between the cSAC and development areas. Implementation of the Masterplan may result in alterations to the hydrological regime due to development works being provided for. The potential for run off of silt and other pollutants may arise from development works within the plan area.

Table 3-2: Elements of the Masterplan and potential impacts on the River Barrow and River Nore cSAC and River Nore SPA.

Element of the Plan	Potential Impact
Demolition works and site clearance	This provision may potentially lead to: <ul style="list-style-type: none"> • Run-off of silt and/or other harmful pollutants • Disturbance to key species
Refurbishment and restoration of existing buildings	This provision may potentially lead to: <ul style="list-style-type: none"> • Run-off of silt and/or other harmful pollutants • Disturbance to key species
Construction of new public squares and buildings	This provision may potentially lead to: <ul style="list-style-type: none"> • Run-off of silt and/or other harmful pollutants • Disturbance to key species
Development of a linear park along the River Nore, including the provision to create access to the river for water based leisure facilities	The provision to provide for a new linear park along the River Nore may potentially lead to: <ul style="list-style-type: none"> • Run-off of silt and/or other harmful pollutants • Disturbance to key species • Fragmentation

⁴ E.g.

The Appropriate Assessment for the linear park shall be informed by an ecological impact assessment which shall consider issues including ecological connectivity and species such as otters and kingfishers (including potential interactions with food sources and aquatic and terrestrial habitats) and bats (including potential interactions with roosts, foraging sites and lighting). The ecologist working on AA for the project shall be consulted at the start of the project so that any necessary mitigation or design changes can be incorporated early in the project.

Ensure that an ecological impact assessment is carried out for any proposed development likely to have a significant impact on rare and threatened species including those species protected by law and their habitats.

Ensure appropriate avoidance and mitigation measures are incorporated into development proposals as part of any ecological impact assessment.

Proposals must demonstrate that they will not adversely affect any habitats and/or species of interest or compromise the river's function as a green infrastructure corridor

To ensure the protection of the special character and setting of protected structures, ACAs and Recorded Monuments, and protected species when considering proposals for floodlighting.

Element of the Plan	Potential Impact
Construction of new infrastructure including urban streets	This provision may potentially lead to: <ul style="list-style-type: none"> • Disturbance to key species • Run –off of silt and/or other pollutants (Alterations of key
Tourism developments, expanding the provision of outdoor activities	The provision to provide for tourism and outdoor activities in proximity to the River Nore may potentially lead to: <ul style="list-style-type: none"> • Disturbance to key species (construction and operational phases) • Run –off of silt and/or other pollutants (construction phase)
Development of a skate park and other open areas	The provision to provide for a skate park and other open areas may potentially lead to: <ul style="list-style-type: none"> • Disturbance to key species (construction and operational phases) • Run –off of silt and/or other pollutants (construction phase)

3.3 Conservation Objectives

The Habitats Directive requires the focus of the assessment at this stage to be on the integrity of the site as indicated by its Conservation Objectives. It is an aim of NPWS to draw up conservation management plans for all areas designated for nature conservation. These plans will, among other things, set clear objectives for the conservation of the features of interest within a site. While detailed management plans have not yet been published for any European site under consideration, detailed Site Specific Conservation Objectives (SSCOs) have been published for the River Barrow and River Nore cSAC (NPWS 2011). However, only generic Conservation Objectives have been set for the River Nore SPA. The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites. The maintenance or restoration of habitats and species within European sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

The generic Conservation Objective that has been provided for the River Nore SPA, is as follows:

To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:

- Kingfisher (*Alcedo atthis*) - (breeding)

SSCOs aim to define favourable conservation condition for the qualifying habitats and species at that site. The maintenance of the favourable condition for these habitats and species at the site level will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and

- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis

The conservation objectives of each qualifying habitat and species for the River Barrow and River Nore cSAC are presented as a selection of attributes against which targets are set (NPWS 2011). All of these attributes in relation to each relevant feature have been considered in relation to the potential impacts associated with the provisions of the Masterplan.

Those species and habitats for which the cSAC is designated that are sensitive to potential impacts from the, considering their known occurrence downstream (and proximate) to the lands in question include: Floating River Vegetation, River and Brook Lamprey (*Lampetra planeri*, *Lampetra fluviatilis*), Otter (*Lutra lutra*), Atlantic salmon (*Salmo salar*), and White-clawed crayfish (*Austropotamobius pallipes*). Conservation Objectives were downloaded from the NPWS website (www.npws.ie) in June 2015.

Section 4 Mitigation Measures

Where it cannot be demonstrated that there will be no adverse effects from the implementation of the Masterplan, mitigation measures have been devised. The measures that have been incorporated are compatible with those proposed by the SEA Environmental Report and with other relevant plans and programmes e.g. Programme of Measures proposed by the River Basin Management Plan and SEA. The Masterplan is a lower tier plan to the Kilkenny City and Environs Development Plan 2014 – 2020 (KCEDP). The protective measures presented in the KCEDP are therefore also applied to developments within the Abbey Quarter. A series of objectives and development standard measures within the KCEDP will compliment the Masterplan’s mitigation measures to safeguard the integrity of the Natura 2000 network of sites.

As outlined in Section 3.2 above of this assessment a number of potential significant effects associated with the implementation of the Masterplan have been identified.

The Appropriate Assessment process has informed the content of the Masterplan during its development. In addition to proposed changes to text within the plan as outlined below, the AA has also influenced the content of mapping and figures presented within the Masterplan document.

A series of measures have been incorporated into the Masterplan to safeguard the integrity of European sites. These measures include text and objectives in the Masterplan which acknowledge compliance with Article 6 of the EU Habitats and Birds Directives as appropriate. Those measures aimed at safeguarding the protection of European sites that have been incorporated into the Masterplan are outlined in Section 4.2.1 below. Relevant provisions contained within the overarching KCEDP that further provide for the protection of European sites are presented in Section 4.2.2 below.

The means by which potential impacts from different provisions of the Masterplan are mitigated is summarised in Table 4-1 below.

4.1.1 Mitigation measures within the Masterplan

Section 1.4 Appropriate Assessment:

This Masterplan requires that:

1. All projects and plans arising from the Masterplan will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the Council has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and a Stage 2 Appropriate Assessment where necessary, that:
 - a. The Plan or project will not give rise to significant adverse direct, indirect or secondary effects on the integrity of any European site (either individually or in combination with other plans or projects); or
 - b. The Plan or project will have significant adverse effects on the integrity of any European site (that does not host a priority natural habitat type/and or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or
 - c. The Plan or project will have a significant adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, restricted to reasons of human health or public safety, to beneficial consequences of
 - d. Primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. In this case, it will be a requirement to

follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000.

2. No projects giving rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Masterplan (either individually or in combination with other plans or projects) Proposals for development within the Masterplan area must comply as appropriate with the relevant provisions included within the Kilkenny City Development Plan 2014-2020. A number of City Plan provisions which contribute towards environmental protection and sustainable development are reproduced in Appendix A [*of the Masterplan document, which are reproduced as Appendix I of this NIR report*].
3. Proposals for development should ensure that they are consistent with all the provisions contained within the City Plan.

Section 3.1.3 Statutory Planning and Policy Framework

The following is an objective of the Masterplan under Section 3.1.3:

- o To provide a hierarchy of parks, open spaces and outdoor recreation areas and to use the river corridors of the River Nore, Breaghagh, and Pococke to provide open space for the city while having due consideration to their ecological sensitivity.

Section 3.1.8 Site Analysis – Linear Park

It is an objective of the Council to;

Objective 6B - To complete the River Nore Linear Park within the lifetime of the Plan.

The Masterplan will propose the creation of a linear park along the River Nore to extend the existing walkways through the city centre while being cognisant of the river as a Natura 2000 site, a Special Area of Conservation (SAC) and a Special Protection Area (SPA).

Section 3.1.9 Site Analysis – River Bank Conditions

It is an objective of the Masterplan to improve access to the river through the Masterplan area. The detail of this access will be considered in the preparation of the detailed design of the Linear Park and with consideration of the environmental requirements arising from the designation of the River Nore as a SAC and SPA.

Section 4.3.2 Environmental Considerations

An 'Environmental Considerations' section, Section 4.3.2 has also been incorporated into the Masterplan. This section addresses the need for appropriate assessment (AA) at project level, particularly in relation to the provision to provide for a linear park along the River Nore.

Section 4.3.8 New Street/Lanes Strategy

- o Create extensions of existing slipways located to the west of Parliament Street on an east west axis reminiscent of the historical burgage plot
- o Implement the recommendations of the Cycle Routes Study Implement traffic management and calming schemes for the City as the need arises.
- o Have regard to the Architectural Heritage
- o Have regard to natural heritage and ensure compliance with the requirements of the EU Habitats and Birds Directives.

Section 4.4.7 Water Conservation

Text within this section:

Details of this proposal will need to consider the potential for adverse effects on the ecology of the River Barrow and Nore cSAC and the River Nore SPA as required under Article 6 of the EU Habitats Directive.

4.1.2 Kilkenny City and Environs Development Plan 2014 – 2020 Environmental Provisions

The Masterplan sits as a lower tier to the overarching KCEDP and therefore provisions of the KCEDP must be complied with during the implementation of the Masterplan. Appendix A of the Masterplan document (reproduced as Appendix I of this report) outlines the relevant provisions included within the KCEDP relating to environmental protection for which developments arising from the implementation of the Masterplan must comply as appropriate. These provisions, Objectives and development standards presented within the KCEDP that will act to protect the Natura 2000 network are outlined below.

Chapter 1 Introduction

Section 1.3 Appropriate Assessment

Objective 1A:

To implement the provisions of Articles 6(3) and 6(4) of the EU Habitats Directive.

Objective 1B:

To ensure that any plan or project within the functional area of the Planning Authority is subject to appropriate assessment in accordance with the Guidance Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities, 2009 and is assessed in accordance with Article 6 of the Habitats Directive in order to avoid adverse impacts on the integrity and conservation objectives of the site.

Chapter 6 Recreation, Tourism & Arts

Section 6.1.2.1 River Nore Linear Park

Objective 6C:

To establish an environmental management plan for the River Nore Linear Park.

6.1.3.1 Development associated with water sports

Development Management Standard:

Most development associated with water sports such as slipways, boathouses, toilet and changing facilities, parking areas and access will require planning permission, and all will require screening for Appropriate Assessment. The Councils will require a high quality of design both in terms of layout, buildings and other structures and in the treatment of boundaries either adjacent to the road or the actual waterway. The Councils will normally require details of landscaping and surface treatments to accompany all planning applications. The Council will require that development along rivers set aside land for recreation routes that could be linked to the wider network of green infrastructure, subject to environmental considerations and compliance with the Habitats Directive.

Chapter 7: Heritage

Section 7.2.1.3 Rare and Protected Species and their Habitats.

Objective: 7A

To protect and, where possible, enhance the plant and animal species and their habitats that have been identified under European legislation (EU Habitats Directive, EU Birds Directive).

Section 7.2.1 Rare and Protected Species and their Habitats

Objective 7B:

To protect and, where possible, enhance the natural heritage sites designated under EU Legislation and National Legislation (Habitats Directive, Birds Directive, European Communities (Birds and Natural Habitats) Regulations 2011 and Wildlife Acts). This protection will extend to any additions or alterations to sites that may arise during the lifetime of this plan.

Objective 7C:

To protect and, where possible, enhance the plant and animal species and their habitats that have been identified under European legislation (Habitats and Birds Directive) and protected under national Legislation (European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011), Wildlife Acts 1976-2010 and the Flora Protection Order (SI94 of 1999).

Section 7.2.3 Nature Conservation Outside of Internationally and Nationally Protected Areas

Objective 7E:

To protect and, where possible, enhance wildlife habitats and landscape features which act as ecological corridors/networks and stepping stones, such as river corridors, hedgerows, gardens and road verges, and to minimise the loss of habitats and features of the wider countryside (such as ponds, wetlands, trees) which are not within designated sites. Where the loss of habitats and features of the wider countryside is unavoidable as part of a development, to ensure that appropriate mitigation and/or compensation measures are put in place, to conserve and enhance biodiversity and landscape character and green infrastructure networks.

Section 7.2.5 Woodlands, Trees and Hedgerows

Development management standards

- To protect existing woodlands, trees and hedgerows which are of amenity or biodiversity value and/or contribute to landscape character of the city and environs, and to ensure that proper provision is made for their protection and management, when undertaking, approving or authorising development.
- To ensure that when undertaking, approving or authorising development that sufficient information is provided to enable an assessment of impacts on woodlands, trees, and hedgerows.
- Require the planting of native broadleaved species, and species of local provenance, in new developments as appropriate.

Objective: 7F

The Council will promote the planting of native tree and shrub species, by committing to using native species (of local provenance wherever possible) in its landscaping work and on Council property.

Section 7.2.6: Inland Waters, Rivers, Streams, Wetlands and Groundwater

Development Standard:

To consult with Inland Fisheries Ireland and the National Parks and Wildlife Service prior to undertaking, approving or authorising any works or development which may have an impact on rivers, streams and waterways.

Development Standard:

Proposals must demonstrate that they will not adversely affect any habitats and/or species of interest or compromise the river's function as a green infrastructure corridor.

Section 7.2.7 Invasive Species

Development management standard

Ensure, as far as is possible, that the potential for spread of invasive species is examined as part of any application.

Section 7.2.8 Native Plant Species

Development Management Standard:

To promote the use of native plants and seeds from indigenous seed sources in all landscape projects.

Chapter 8 Infrastructure and Environment

Pollution Control

Development Management Standards

- To seek to minimise noise and dust through the planning process by ensuring that the design of developments incorporate measures to prevent or mitigate the transmission of dust, noise, and vibration, where appropriate.
- To ensure that lighting is carefully and sensitively designed
- To require that the design of external lighting minimises the incidence of light spillage or pollution into the surrounding environment

Section 8.1.4.1 Water Services Objectives

Objective 8A

Implement the programme as outlined in the Water Services Investment Programme.

Objective 8C

Meet in full the requirements of the E.U. Urban Waste Water Treatment and Water Framework Directives and Drinking Water Regulations.

Section 8.2.3 Water Quality

Objective 8E

To promote compliance with environmental standards and objectives established:

- For bodies of surface water, by the European Communities (Surface Waters) Regulations 2009; and
 - For groundwater, by the European Communities (Groundwater) Regulations 2010;
- Which standards and objectives are included in the South East River Basin Management Plan.

Water Quality Management Standards

- To have regard to the Groundwater Protection Scheme and the Water Services Acts 2007 & 2012 in decision-making on the location, nature and control of developments and activities in order to protect groundwater.

Section 8.2.5 Surface Water Drainage

Development Management Standards

- Development must, so far as is reasonably practicable, incorporate the maximum provision to reduce the rate and quantity of runoff e.g. :-
 - Hard surface areas (car parks, etc.), should be constructed in permeable or semi-permeable materials,
 - On site storm water ponds to store and/or attenuate additional runoff from the development should be provided,
 - Soak-aways or french drains should be provided to increase infiltration and minimise additional runoff.
 - The Planning Authority will normally require that all new large scale developments (such as commercial, mixed use and apartment schemes), and in smaller developments where feasible, include rainwater harvesting and/or grey water recycling in their design.
- Individual developments shall be obliged, in all cases where surface water drainage measures are required, to provide a surface water drainage system separated from the foul drainage system.
- For all green-field developments in general the limitation of surface water run-off to pre-development levels will be required. Where a developer can clearly demonstrate that capacity exists to accommodate run-off levels in excess of green-field levels then the planning authority shall give consideration to such proposals on a case by case basis.
- In line with the above Kilkenny Local Authorities will consider all drainage proposals consistent with SuDS (Sustainable Drainage Systems)
- For developments adjacent to watercourses of a significant conveyance capacity any structures (including hard landscaping) must be set back from the edge of the watercourse to allow access for channel clearing/maintenance. A setback of 5m-10m is required depending on the width of the watercourse. Development consisting of construction of embankments, wide bridge piers, or similar structures will not normally be permitted in or across flood plains or river channels.

Table 4-1: Mitigation measures that safeguard European sites from potential significant effects associated with individual elements of the Masterplan identified during the AA.

Element of the Plan	Potential Impact	Mitigation
Demolition works and site clearance	<p>This provision may potentially lead to:</p> <ul style="list-style-type: none"> • Run-off of silt and/or other harmful pollutants • Disturbance to key species 	<p>Mitigation measures within the Masterplan:</p> <p>Section 1.4 AA, Appropriate Assessment Mitigation Measures;</p> <p>Relevant KCEDP Objectives (see details above) : 1A, 1B, 6C, 7A, 7B, 7C, 7E, 8E</p> <p>Relevant KCEDP Development Standards (see details above):</p> <ul style="list-style-type: none"> • Section 6.1.3.1 Development Associated with Water Sports • Section 7.2.5 Woodlands, Trees and Hedgerows • Section 7.2.6 Inland Waters, Rivers, Streams, Wetlands and Groundwater • Section 7.2.7 Invasive Species • 7.2.8 Native Plant Species • Chapter 8 Pollution Control (noise, dust, light, etc.)
Refurbishment and restoration of existing buildings	<p>This provision may potentially lead to:</p> <ul style="list-style-type: none"> • Run-off of silt and/or other harmful pollutants • Disturbance to key species 	<p>Mitigation Measures within the Masterplan:</p> <p>Section 1.4 AA, Appropriate Assessment Mitigation Measures;</p> <p>KCEDP Objectives: 1A, 1B, 6C, 7A, 7B, 7C, 7E, 8E</p> <p>Relevant KCEDP Development Standards (see details above):</p> <ul style="list-style-type: none"> • Section 6.1.3.1 Development Associated with Water Sports

Element of the Plan	Potential Impact	Mitigation
		<ul style="list-style-type: none"> Section 7.2.5 Woodlands, Trees and Hedgerows Section 7.2.6 Inland Waters, Rivers, Streams, Wetlands and Groundwater Section 7.2.7 Invasive Species 7.2.8 Native Plant Species Chapter 8 Pollution Control (noise, dust, light, etc.)
<p>Construction of new public squares and buildings</p>	<p>This provision may potentially lead to:</p> <ul style="list-style-type: none"> Run-off of silt and/or other harmful pollutants Disturbance to key species 	<p>Mitigation Measures within the Masterplan:</p> <p>Section 1.4 AA, Appropriate Assessment Mitigation Measures;</p> <p>KCEDP Objectives: 1A, 1B, 6C, 7A, 7B, 7C, 7E, 8E</p> <p>Relevant KCEDP Development Standards (see details above):</p> <ul style="list-style-type: none"> Section 6.1.3.1 Development Associated with Water Sports Section 7.2.5 Woodlands, Trees and Hedgerows Section 7.2.6 Inland Waters, Rivers, Streams, Wetlands and Groundwater Section 7.2.7 Invasive Species 7.2.8 Native Plant Species Chapter 8 Pollution Control (noise, dust, light, etc.)
<p>Development of a linear park along the River Nore, including the provision to create access to the river for water based leisure facilities</p>	<p>The provision to provide for a new linear park along the River Nore may potentially lead to:</p> <ul style="list-style-type: none"> Run-off of silt and/or other harmful pollutants Disturbance to key species Fragmentation 	<p>Mitigation Measures within the Masterplan:</p> <p>Section 1.4 AA, Appropriate Assessment Mitigation Measures;</p> <p>Section 3.1.3 Statutory Planning and Framework Objectives;</p> <p>Section 3.1.8 Site Analysis – Linear Park, Objective 6B;</p> <p>KCEDP Objectives: 1A, 1B, 6C, 7A, 7B, 7C, 7E, 8E</p> <p>Relevant KCEDP Development Standards (see details above):</p> <ul style="list-style-type: none"> Section 6.1.3.1 Development Associated with Water Sports Section 7.2.5 Woodlands, Trees and Hedgerows Section 7.2.6 Inland Waters, Rivers, Streams, Wetlands and Groundwater Section 7.2.7 Invasive Species 7.2.8 Native Plant Species Chapter 8 Pollution Control (noise, dust, light, etc.)
<p>Construction of new infrastructure including urban streets</p>	<p>This provision may potentially lead to:</p> <ul style="list-style-type: none"> Disturbance to key species Run –off of silt and/or other pollutants (Alterations of key 	<p>Mitigation Measures within the Masterplan:</p> <p>Section 1.4 AA, Appropriate Assessment Mitigation Measures;</p> <p>Section 4.3.8 New Street/Lanes Strategy Objectives;</p> <p>KCEDP Objectives: 1A, 1B, 6C, 7A, 7B, 7C, 7E, 8E</p> <p>Relevant KCEDP Development Standards (see details above):</p> <ul style="list-style-type: none"> Section 7.2.5 Woodlands, Trees and Hedgerows Section 7.2.6 Inland Waters, Rivers, Streams, Wetlands and Groundwater Section 7.2.7 Invasive Species 7.2.8 Native Plant Species Chapter 8 Pollution Control (noise, dust, light, etc.)
<p>Tourism developments, expanding the provision of outdoor activities</p>	<p>The provision to provide for tourism and outdoor activities in proximity to the River Nore may potentially lead to:</p> <ul style="list-style-type: none"> Disturbance to key 	<p>Mitigation Measures within the Masterplan:</p> <p>Section 1.4 AA, Appropriate Assessment Mitigation Measures;</p> <p>Section 3.1.3 Statutory Planning and Policy Framework Objectives;</p> <p>Section 3.1.9 Site Analysis – River Bank Conditions Objective;</p>

Element of the Plan	Potential Impact	Mitigation
	<p>species (construction and operational phases)</p> <ul style="list-style-type: none"> • Run –off of silt and/or other pollutants (construction phase) 	<p>KCEDP Objectives: 1A, 1B, 6C, 7A, 7B, 7C, 7E</p> <p>Relevant KCEDP Development Standards (see details above):</p> <ul style="list-style-type: none"> • Section 6.1.3.1 Development Associated with Water Sports • Section 7.2.5 Woodlands, Trees and Hedgerows • Section 7.2.6 Inland Waters, Rivers, Streams, Wetlands and Groundwater • Section 7.2.7 Invasive Species • 7.2.8 Native Plant Species • Chapter 8 Pollution Control (noise, dust, light, etc.)
<p>Development of a skate park and other open areas</p>	<p>The provision to provide for a skate park and other open areas may potentially lead to:</p> <ul style="list-style-type: none"> • Disturbance to key species (construction and operational phases) • Run –off of silt and/or other pollutants (construction phase) 	<p>Mitigation Measures within the Masterplan:</p> <p>Section 1.4 AA, Appropriate Assessment Mitigation Measures;</p> <p>Section 3.1.3 Statutory Planning and Policy Framework Objectives;</p> <p>KCEDP Objectives: 1A, 1B, 6C, 7A, 7B, 7C, 7E, 8E</p> <p>Relevant KCEDP Development Standards (see details above):</p> <ul style="list-style-type: none"> • Section 7.2.5 Woodlands, Trees and Hedgerows • Section 7.2.6 Inland Waters, Rivers, Streams, Wetlands and Groundwater • Section 7.2.7 Invasive Species • 7.2.8 Native Plant Species • Chapter 8 Pollution Control (noise, dust, light, etc.)

Section 5 Conclusion

Stage 1 Screening and Stage 2 Appropriate Assessment of the approved Masterplan for Abbey Quarter in Kilkenny have been carried out. Implementation of the Masterplan has the potential to result in impacts to the integrity of the Natura 2000 network, if unmitigated.

The risks to the safeguarding and integrity of the qualifying interests and conservation objectives of the Natura 2000 network have been addressed by the recommended inclusion of mitigation measures and additional text to the document that will prioritise the avoidance of impacts in the first place and mitigate impacts where these cannot be avoided. In addition, all lower level plans and projects arising through the implementation of the Plan will themselves be subject to Appropriate Assessment when further details of design and location are known.

Having incorporated these suggested mitigation measures; it is considered that the Masterplan will not have a significant adverse effect on the integrity of the Natura 2000 network (this includes downstream Natura 2000 sites including the Lower River Suir cSAC)⁵. Various measures have been integrated into the Masterplan to facilitate this (see Section 4).

⁵ Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

- (a) no alternative solution available;
- (b) imperative reasons of overriding public interest for the plan/programme/project to proceed; and
- (c) adequate compensatory measures in place.

APPENDIX I

Kilkenny City and Environs Development 2014-2020 Environmental Provisions

Appendix A of Masterplan for Abbey Creative Quarter, Kilkenny

Proposals for development within the Masterplan area must comply as appropriate with the relevant provisions included within the Kilkenny City Development Plan 2014-2020. A number of City Plan provisions which contribute towards environmental protection and sustainable development are reproduced on the table below.

Proposals for development should ensure that they are consistent with all the provisions contained within the City Plan.

Environmental/ Sustainable Development Component	Kilkenny City Development Plan Provision (policy/objective/development management standard)
<p>Biodiversity and Flora and Fauna</p>	<ul style="list-style-type: none"> • To implement the provisions of Articles 6(3) and 6(4) of the EU Habitats Directive • To ensure that any plan or project within the functional area of the Planning Authority is subject to appropriate assessment in accordance with the Guidance Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities, 2009 and is assessed in accordance with Article 6 of the Habitats Directive in order to avoid adverse impacts on the integrity and conservation objectives of the site. • To protect and where possible enhance the natural heritage sites designated in National legislation (the Wildlife Acts and the Flora Protection Order). This protection will extend to any additions or alterations to sites that may arise during the lifetime of this plan. • To protect and, where possible, enhance wildlife habitats and landscape features which act as ecological corridors/networks and stepping stones, such as river corridors, hedgerows, gardens and road verges, and to minimise the loss of habitats and features of the wider countryside (such as ponds, wetlands, trees) which are not within designated sites. Where the loss of habitats and features of the wider countryside is unavoidable as part of a development, to ensure that appropriate mitigation and/or compensation measures are put in place, to conserve and enhance biodiversity and landscape character and green infrastructure networks. The Council will promote the planting of native tree and shrub species, by committing to using native species (of local provenance wherever possible) in its landscaping work and on Council property. • To implement, in partnership with the Kilkenny Heritage Forum and all relevant stakeholders, a County Heritage Plan and County Biodiversity Plan • To allow for green links and biodiversity conservation and to preserve, provide and improve recreational open space. • Ensure that an ecological impact assessment is carried out for any proposed development likely to have a significant impact on rare and threatened species including those species protected by law and their habitats. Ensure appropriate avoidance and mitigation measures are incorporated into development proposals as part of any ecological impact assessment. • Proposals must demonstrate that they will not adversely affect any habitats and/or species of interest or compromise the river's function as a green infrastructure corridor • To consult with Inland Fisheries Ireland and the National Parks and Wildlife Service prior to undertaking, approving or authorising any works or development which may have an impact on rivers, streams and waterways. • To protect existing woodlands, trees and hedgerows which are of amenity or biodiversity value and/or contribute to the landscape character of the city and environs, and to ensure that proper provision is made for their protection and management, when undertaking, approving or authorising development. • To ensure that when undertaking, approving or authorising development that sufficient information is provided to enable an assessment of impacts on woodlands, trees, and hedgerows. • Retain hedgerows, and other distinctive boundary treatment such as stone walls, when undertaking, approving or authorising development; where the loss of the existing boundary is unavoidable as part of development, to ensure that a new hedgerow is planted using native species, and species of local provenance to replace the existing hedgerow and/or that the wall is re-built using local stone and local vernacular design. • Ensure, as far as is possible, that the potential for spread of invasive species is examined as part of any application.

	<ul style="list-style-type: none"> To promote the use of native plants and seeds from indigenous seed sources in all landscape projects To ensure the protection of the special character and setting of protected structures, ACAs and Recorded Monuments, and protected species when considering proposals for floodlighting. See also measures on this table under Soil, Water, Flood Risk Management and Drainage and Water Services.
Human Health and Provision Sustainable Planning and Development for People	<ul style="list-style-type: none"> To ensure the highest standards of environmental protection in the assessment of planning applications for all development proposals. To integrate the planning and sustainable development of the county with regard to the social, community and cultural requirements of the county and its population. See also measures on this table under Soil, Water, Water Services, Air and Climatic Factors and Flood Risk Management and Drainage
Soil/Geology	<ul style="list-style-type: none"> Development will be encouraged and facilitated where it can be demonstrated that the development of the potentially contaminated site will result in a recreational and social benefit to the local area/community provided that identified remediation measures for the lands are carried out. The Council will require that a detailed investigation is carried out and appropriate measures are taken to ensure that the land is treated properly before development takes place. The Council will consult the Geological Survey of Ireland when considering undertaking, approving or authorising developments which are likely to affect Geological Sites. See also measures on this table under Biodiversity, Flora and Fauna, Water, Water Services and Flood Risk Management and Drainage
Water	<ul style="list-style-type: none"> Meet in full the requirements of the E.U. Urban Waste Water Treatment and Water Framework Directives. To have regard to the Groundwater Protection Scheme and the Water Services Acts 2007 & 2012 in decision-making on the location, nature and control of developments and activities in order to protect groundwater. To promote compliance with environmental standards and objectives established: for bodies of surface water, by the European Communities (Surface Waters) Regulations 2009; for groundwater, by the European Communities (Groundwater) Regulations 2010; which standards and objectives are included in the South East River Basin Management Plan. See also measures on this table under Biodiversity, Flora and Fauna, Soil, Water Services and Flood Risk Management and Drainage
Flood Management Risk and Drainage	<ul style="list-style-type: none"> To adopt a comprehensive risk based planning approach to flood management to prevent or minimise future flood risk. In accordance with the Guidelines, the avoidance of development in areas where flood risk has been identified shall be the primary response To promote compliance with environmental standards and objectives established: for bodies of surface water, by the European Communities (Surface Waters) Regulations 2009 and for groundwater, by the European Communities (Groundwater) Regulations 2010; which standards and objectives are included in the South East River Basin Management Plan. To complete the mapping of source protection areas and to map Source Protection Areas for any new public water supply schemes as appropriate. Where flood risk may be an issue for any proposed development, a flood risk assessment shall be carried out that is appropriate to the scale and nature of the development and the risks arising. This FRA shall be undertaken in accordance with the Flood Risk Management Guidelines. All new development must be designed and constructed to meet the following minimum flood design standards: Where streams open drains or other watercourses are being culverted - the minimum permissible culvert diameter is 900mm. (Access should be provided for maintenance as appropriate.); To give adequate allowance for climate change in designing surface water proposals a multiplication factor of 1.2 shall be applied to all river return periods up to 100 years except in circumstances where the OPW have provided advice specifying the particular multiplication factor for return periods up to 100 years.; In the case of rainfall a multiplication factor of 1.1 shall be applied to rainfall intensities to make allowance for climate change requirements.; In the design of surface water systems, regard shall be had to the Greater Dublin Regional Code of Practice for Drainage Works114 and associated GSDSDS technical documents. Development must, so far as is reasonably practicable, incorporate the maximum provision to reduce the rate and quantity of runoff e.g.: Hard surface areas (car parks, etc.), should be constructed in permeable or semi-permeable materials, On site storm water ponds to store and/or attenuate additional runoff from the development should be provided, Soak-aways or french drains should be provided to increase infiltration and minimise additional runoff. Individual developments shall be obliged, in all cases where surface water drainage measures are required, to provide a surface water drainage system separated from the foul drainage system. In the case of single dwellings or extensions, except in circumstances where an existing surface water drainage system is available to the proposed site for development and

	<p>which, in the opinion of the planning authority has adequate capacity to accommodate the identified surface water loading, surface water shall be disposed of, in its entirety within the curtilage of the development site by way of suitably sized soak holes.</p> <ul style="list-style-type: none"> • In the case of brown-field development, while existing surface water drainage measures will be taken into account, some attenuation measures for surface water may be required at the discretion of the planning authority in the interests of balanced and sustainable development • In line with the above Kilkenny Local Authorities will consider all drainage proposals consistent with SuDS (Sustainable Drainage Systems). • For developments adjacent to watercourses of a significant conveyance capacity any structures (including hard landscaping) must be set back from the edge of the watercourse to allow access for channel clearing/maintenance. A setback of 5m-10m is required depending on the width of the watercourse. Development consisting of construction of embankments, wide bridge piers, or similar structures will not normally be permitted in or across flood plains or river channels. • See also measures on this table under Human Health
<p>Air and Climatic Factors and Sustainable Transport</p>	<ul style="list-style-type: none"> • To prepare a Climate Change Adaptation plan following the adoption of the Development Plan • To review the progress of the Climate Change Strategy, report on the progress to date and thereafter develop a Climate Change Adaptation strategy and action plan in line with national policy • Prepare and implement traffic management and calming schemes for the City & Environs in line with the 3 year Roads Programmes. • To review the Mobility Management Plan (2009) and adopt a new MMP for the period 2015-2020 • Complete the demarcation of the Gateways as depicted on the map and prioritise pedestrian and cyclist movement within the Gateways. • To prepare and support the implementation of a Green Infrastructure Strategy for Kilkenny city and environs, as resources allow. • Complete the River Nore Linear Park within the lifetime of the Plan. • Plan for the provision of the Greensbridge Way and the Ossory Bridge connection. • To ensure that developments which are subject to the requirements of the Air Pollution Act 1987 and Air Pollution (Licensing of Industrial Plant) Regulations 1988 or any subsequent regulations meet appropriate emission standards and other relevant national and international standards. • To seek to minimise noise and dust through the planning process by ensuring that the design of developments incorporate measures to prevent or mitigate the transmission of dust, noise and vibration, where appropriate • Ensure traffic noise levels are considered as part of all new developments along the N77 and N10, or other roads as identified in the Noise Action Plan. • Require planning applications to demonstrate the development proposal's accessibility for pedestrians and cyclists. Planning applications for residential/commercial or mixed use developments need to: <ul style="list-style-type: none"> ○ Demonstrate detailed layouts and design which reflect the importance of walking and cycling by providing safe and direct access to local services and public transport nodes. ○ Demonstrate how walking and cycling is integrated with open space provision. ○ Demonstrate that the proposal is easily accessible to pedestrians and cyclists alike with the layouts displaying high internal pedestrian and cyclist permeability. ○ Show a high quality of internal routes which are safe, secure and convenient for users. ○ Require that adequate covered facilities for the secure parking of bicycles are provided at convenient locations close to building entrances in order to encourage cycling. The number of bicycle parking spaces required will be in accordance with Table T1 below. • See also measures on this table under Human Health
<p>Water Services</p>	<ul style="list-style-type: none"> • Prioritise the upgrading of the Purcellsinch wastewater treatment plant. • Investigate the feasibility of installing anaerobic digestion facilities at the Purcellsinch wastewater treatment plant • Implement the programme as outlined in the Water Services Investment Programme. • See also measures on this table under Human Health
<p>Waste Management</p>	<ul style="list-style-type: none"> • To implement the Joint Waste Management Plan for the South East Region • To have regard to the waste produced by proposed developments including the nature and amount of waste produced and proposed method of disposal. • Proposed apartment and housing developments must be appropriately laid out to enable the implementation of three bin collection systems. • Proposed apartment, housing and commercial developments must be either serviced by existing infrastructure or make appropriate provision for bring sites in their layout. The sites shall be made available to the Council at the developer's own expense and will be maintained by the Council or its agents. Adequate access must be provided in developments to service proposed bring sites.

	<ul style="list-style-type: none"> • For significant construction/demolition projects, the developer shall include construction and demolition waste management plans, to be prepared in accordance with the Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects. These plans should seek to focus on waste minimisation in general and optimise waste prevention, re-use and recycling opportunities, and shall provide for the segregation of all construction wastes into recyclable, biodegradable and residual wastes. • For any development, the developer shall ensure that all operations at the site during the construction and demolition phase shall be managed and programmed in such a manner as to minimise waste production and that procedures are in place to deal with any litter arising.
<p>Archaeological Heritage</p>	<ul style="list-style-type: none"> • Protect archaeological sites and monuments (including their setting), underwater archaeology, and archaeological objects, including those that are listed in the Record of Monuments and Places, and in the Urban Archaeological Survey of County Kilkenny or newly discovered sub-surface and underwater archaeological remain • Endeavour to preserve in situ all archaeological monuments, whether on land or underwater, listed in the Record of Monuments and Places (RMP), and any newly discovered archaeological sites, features, or objects by requiring that archaeological remains are identified and fully considered at the very earliest stages of the development process and that schemes are designed to avoid impacting on the archaeological heritage. • Ensure that development within the vicinity of a Recorded Monument is sited and designed appropriately so that it does not seriously detract from the setting of the feature or its zone of archaeological potential. Where upstanding remains of a Recorded Monument exist a visual impact assessment may be required to fully determine the effect of any proposed development. • To require archaeological assessment, surveys, test excavation and/or monitoring for planning applications in areas of archaeological importance if a development proposal is likely to impact upon in-situ archaeological monuments, their setting and archaeological remains. • Require the retention of surviving medieval plots and street patterns and to facilitate the recording of evidence of ancient boundaries, layouts etc. in the course of development. • To protect and retain the historic integrity of the city walls, in accordance with the Kilkenny City Walls Conservation Plan. • To seek the conservation of St Francis Abbey and its setting • To ensure the protection of the special character and setting of protected structures, ACAs and Recorded Monuments, and protected species when considering proposals for floodlighting. • See also measures on this table under Landscape
<p>Architectural Heritage</p>	<ul style="list-style-type: none"> • To ensure the protection of the architectural heritage of Kilkenny City & Environs by including all structures considered to be of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest in the Record of Protected Structures. • To respond to the Ministerial recommendation to include in the Record of Protected Structures, structures which have been identified as being of Regional, National or International significance in the National Inventory of Architectural Heritage survey of the city and county published in 2006. • To carry out a review of the Record of Protected Structures for the functional area of Kilkenny City and Environs • To ensure the preservation of the special character of each ACA listed)above and within the county particularly with regard to building scale, building lines, height, general land use, building materials, proportions, historical plot sizes, historic street furniture and paving • To designate ACAs where appropriate and provide a local policy framework for the preservation of the character of these areas. • To ensure the protection of the special character and setting of protected structures, ACAs and Recorded Monuments, and protected species when considering proposals for floodlighting. • To improve the visual appearance of the car parking area at the Market Yard and to ensure a high standard of architectural design for any development at Bateman Quay. • See also measures on this table under Landscape
<p>Landscape and Visual Sensitivities</p>	<ul style="list-style-type: none"> • To protect and, where possible, enhance wildlife habitats and landscape features which act as ecological corridors/networks and stepping stones, such as river corridors, hedgerows, gardens and road verges, and to minimise the loss of habitats and features of the wider countryside (such as ponds, wetlands, trees) which are not within designated sites. Where the loss of habitats and features of the wider countryside is unavoidable as part of a development, to ensure that appropriate mitigation and/or compensation measures are put in place, to conserve and enhance biodiversity and landscape character and green infrastructure networks. • To protect existing woodlands, trees and hedgerows which are of amenity or biodiversity value and/or contribute to the landscape character of the city and environs, and to

	<p>ensure that proper provision is made for their protection and management, when undertaking, approving or authorising development.</p> <ul style="list-style-type: none"> • To protect views and prospects identified on Figure 7.5 by requiring new development or extensions to existing development to be designed and located so as not to have a significant impact on its character. • To encourage street layouts in newly developed areas which create new vistas to existing and new landmarks, in particular within brownfield sites, the Western Environs and the Loughmacask Local Area Plan lands. • Where the Council believes development has the potential to either diminish or enhance significant views into and/or out of the city and environs, it may require that a visual impact assessment be carried out prior to development being undertaken on any site. • Safeguard the importance of significant archaeological or historic landscapes from developments that would unduly sever or disrupt the relationship, connectivity and/or inter-visibility between sites. • To seek the protection, and enhancement of significant historic gardens, parklands and designed landscapes in the city and environs, their setting and views to and from them • To require an assessment of the potential visual, heritage and environmental impacts of proposals to floodlight buildings and structures • To ensure that any development occurring along the River Nore will be sensitive in its design and mindful of its proximity to the river. • See also measures on this table under Biodiversity, Flora and Fauna, Archaeological Heritage and Architectural Heritage
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