

DRAFT LIMERICK DEVELOPMENT PLAN 2022-2028

Natura Impact Report of Proposed Material Amendments

12th March 2022

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Section 1: Introduction

1.1 Background

This Natura Impact Report (NIR) has been prepared in support of the Appropriate Assessment (AA) of the Draft Limerick County Development Plan 2022-2028 in accordance with the requirements of Article 6(3) of Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (hereafter referred to as the “Habitats Directive”).

This report is part of the ongoing appropriate assessment process that is being undertaken alongside the preparation of the Draft Plan. The Chief Executives Report on the submissions received during the public consultation, which included an Environmental Assessment of the Proposed Material Alterations, issued to the Elected Members on 26 November 2021. This report was prepared following the first public display period, which ran from 26th of June to 6 September 2021. The Elected Members considered the proposed amendments set out in the Chief Executives report at a number of workshops in January and February and at a Special Council meeting, held on 18 February 2022 made additional material amendments to the Draft Plan. These amendments are discussed in Chapters 3 and 5.

1.2 Legislative Context

The Habitats Directive provides legal protection for habitats and species of European importance. The overall aim of the Habitats Directive is to maintain or restore the “favourable conservation status” of habitats and species of European Community Interest. These habitats and species are listed in the Habitats and Birds Directives (Council Directive 2009/147/EC on the conservation of wild birds) with Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated to afford protection to the most vulnerable of them. These two designations are collectively known as European Sites (also known as Natura 2000 sites).

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora, known as the ‘Habitats Directive’ - provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Articles 3 - 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 sites. Natura 2000 sites are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79 / 409 / EEC). Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans or projects affecting Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate Assessment as follows, *“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”*

Article 6(4) deals with the steps that should be taken when it is determined, as a result of Appropriate Assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions, imperative reasons of overriding public interest and compensatory measures need to be addressed in this case. Article 6(4) states: *“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member 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.”* The requirements of Articles 6(3) and 6(4) of the Habitats Directive have been transposed into Irish legislation by means of the Habitats Regulations, 1997 (S.I. No. 94 of 1997) and the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 / 2011).

AA is required by the Habitats Directive, as transposed into Irish legislation by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and the Planning and Development Act 2000 (as amended). AA is an assessment of the potential for adverse or negative effects of a plan or project, in combination with other plans or projects, on the conservation objectives of a European Site. These sites consist of SACs and SPAs and provide

for the protection and long-term survival of Europe's most valuable and threatened species and habitats.

1.3 Approach

The AA is based on best scientific knowledge and has utilised ecological and hydrological expertise. In addition, a detailed online review of published scientific literature and grey literature was conducted. This included a detailed review of the National Parks and Wildlife (NPWS) website including mapping and available reports for relevant sites and in particular sensitive qualifying interests/special conservation interests described and their conservation objectives. The ecological desktop study completed for the AA of the amendments comprised the following elements:

- Identification of European Sites within the Plan boundary with identification of potential pathway links for specific sites (if relevant);
- Review of the NPWS site synopsis and conservation objectives for European Sites with identification of potential pathways from the Plan area; and
- Examination of possible effects of the amendments on the Natura 2000 network.

There are four main stages in the AA process as follow:

Stage One: Screening - The process that 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. This is dealt with in section 3 of this report.

Stage Two: Appropriate Assessment - The consideration of the impact on the integrity of the European Site of the project or plan, 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 Three. Stage 2 of the relevant material alterations is dealt with in section 5 of this report.

Stage Three: Assessment of Alternative Solutions - The process that examines alternative ways of achieving the objectives of the project or plan that avoids adverse impacts on the integrity of the European Site.

Stage Four: Assessment - where no alternative solutions exist and where adverse impacts remain an assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures. This approach aims to avoid any impacts on European Sites by identifying possible impacts early in the plan-making process and avoiding such impacts. Second, the approach involves the application of mitigation measures, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If potential impacts on European Sites remain, the approach requires the consideration of alternative solutions. If no alternative solutions are identified and the plan/project is required for imperative reasons of overriding public interest, then compensation measures are required for any remaining adverse effect(s).

The assessment of potential effects on European Sites is conducted following a standard source- path-receptor model, where, in order for an effect to be established all three elements of this mechanism must be in place. The absence or removal of one of the elements of the model is sufficient to conclude that a potential effect is not of any relevance or significance.

In the interest of this report, receptors are the ecological features that are known to be utilised by the qualifying interests or special conservation interests of a European Site. A source is any identifiable element of the Plan provision that is known to interact with ecological processes. The pathways are any connections or links between the source and the receptor.

The AA exercise has been prepared taking into account legislation including the aforementioned legislation and guidance including the following:

- Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government, 2009;
- "Commission Notice: Managing Natura 2000 sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC", European Commission 2018;
- "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; and

- “Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC”, European Commission, 2000.

1.4 Limerick’s Landscape

Limerick’s natural heritage is an integral part of our inheritance and forms part of our sense of identity, providing resources of social, educational, recreational and aesthetic value. Heritage does not just include buildings; it includes landscapes, rivers, woodlands, hedgerows, geology, plants and animals. There a number of designated sites throughout Limerick coupled with a number of ecologically sensitive sites. Limerick City Centre lies at the heart of Limerick and within the City, there are a number of sensitive sites. The significance of the Shannon Estuary and its importance forms the northern boundary of county, the River Shannon and Fergus Rivers Special Protection Areas is of significant importance in terms of providing a habitat for bird species.

Many of the natural heritage designations such as Special Areas of Conservation and Special Protection Areas have been designated by European legislation. Natural Heritage Areas are designated by national legislation. Protection and conservation of our natural heritage assets is critical in terms of enhancing natural resources, as well as protecting habitats and species in their natural environment. Some 13% of the land area of Limerick comprises designated areas, including Special Areas of Conservation, Special Protection Areas and Natural Heritage Areas. Protection of biodiversity, which is threatened globally and locally by demands of people and increasingly by climate change is a significant challenge. Loss or damage to sites and places of biodiversity value caused by changes in land use and pressure for development is a constant battle. The Draft Limerick Development Plan 2022-2028 considers Limerick's natural heritage in its various forms, with all the diversity of habitats, which occur within Limerick, both urban and rural. At this stage in the Plan making process, it considers the effects of the proposed amendments to the Natura 2000 network. Habitats range from those associated with the Estuary in the north of the County, urban habitats, through to those in rural settings throughout the county and mountain and upland habitats in the Galtee Mountains in southeast Limerick.

One of the key ecological parameters is water quality and work carried out under the Water Framework Directive will be of particular importance. The Local Authority Water Protection Office (LAWPRO) are being consulted on an ongoing basis during the plan preparation. Other areas will also need to be considered such as wetlands, peatlands and flood plains. In relation to peatlands, the Irish Peatland Conservation Council (IPCC) produces a list of peatlands in each county and has a list of Limerick bog and fen habitats. With wetlands and

flood plains being considered there are obviously linkages with the Strategic Flood Risk Assessment being carried out as part of the Plan preparation process. There is the potential to link this with the provision of green infrastructure and ecological connectivity, ecological networks and zoning and this will be examined in the Environmental Report. Other potential considerations are:

- Important sites for Limerick's Flora, including Flora Protection Order (FPO) sites. There are many areas in and around Limerick City, which contain species such as the Triangular Club rush, which is located along the River Shannon and some of its tributaries, particularly around the city.
- Other sites of high biodiversity value or ecological importance, for example, Bird Watch Ireland's Important Bird Areas' (Crowe et al., 2009). In Limerick City, Westfields and Coonagh are important sites.

The conservation, protection and enhancement of these important sites are key to safeguarding the natural heritage of Limerick, while allowing the development of Limerick in line with the policies of the Draft Development Plan.

1.5 Key Submissions received to the plan to date from an ecological perspective

Three submissions received as part of the initial pre-draft public consultation process have particular relevance to the ecological issues in the Draft Plan. These submissions were from the Development Applications Unit (National Parks and Wildlife Service), Inland Fisheries Ireland and the Environmental Protection Agency. The importance of the submission from the NPWS through the Development application unit is emphasised as follows: "the Department's comments, if any, on a draft plan and the associated AA should be taken into account by the planning authority before the plan is adopted" (Department of Environment, Heritage and Local Government 2010, p. 56). The submissions are summarised below.

1.5.1 Development Applications Unit (DAU):

This submission outlines that Government policy on nature conservation is clearly set out in the National Biodiversity Action Plan 2017-2021 (NBAP) and Ireland is fully committed to halting the loss of biodiversity and the degradation of ecosystem services as set out in the EU Biodiversity Strategy to 2020. It is also a signatory to the United Nations (UN) Convention on Biological Diversity Strategic Plan for Biodiversity 2011-2020. These policies are reflected in Ireland's vision for biodiversity.

Biodiversity in general is under threat at a global, national and local scale. Therefore, there is an urgent need to protect our natural resources for present and future generations. A

Development Plan that has biodiversity embedded in its core policies will help build a county that is a healthy place for its people and visitors, and provide fully functioning and resilient ecosystems.

While it is important that the plan sets out the legislative requirements in relation to the protection of designated sites and protected species under both European (i.e. Birds and Habitats Directive) and national legislation (i.e. Wildlife Act 1976-2018), the plan should also ensure that legislative requirements and Government policy on biodiversity generally can be delivered and that account is taken of Objective 1 in the NBAP to “*Mainstream biodiversity into decision-making across all sectors*”. There are real opportunities to protect and enhance biodiversity when considered early in any development proposal and, in particular, at a strategic level during the plan-making process.

Reports under the Habitats and Birds Directives, respectively, have shown that even with strict protection habitats and species are continuing to deteriorate or decline. It is noted that Limerick City and County Council is committed to the protection of the designated sites across the County. It is important that the Plan recognises the potential for tourism and recreation related proposals to impact such sites. Many species listed for protection within European sites also depend on habitats and landscape features outside of the designated site boundaries. The loss of these features, due to development pressure can indirectly cause disturbance and deterioration to the conservation status of internationally important species. This issue is addressed in relation to the amendments both in the Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) for the Plan.

It is recommended that natural heritage objectives are clear and robust, and include an objective to protect, conserve and enhance biodiversity both within and outside protected sites. This is critical in ensuring that the Council meets its obligations in relation to nature conservation and biodiversity. Where development projects arising from the plan are not subject to the legal requirements to prepare either an Environmental Impact Assessment Report (EIAR) or Natura Impact Statement (NIS), the impacts to biodiversity may best be facilitated through the preparation of an Ecological Impact Assessment (EclA), and it is recommended including this as an objective in the Plan.

In the submission, the Department welcome a commitment in the plan to the preparation of an overall green infrastructure (G.I.) strategy for the Limerick, as defined by the EU and draw the council’s attention to the EU definition of G.I. as an important link in the connectivity of European sites in the County. A clear distinction should be made between G.I. and Greenways, Blueways and tourist trails within the Plan. As advised in the National Greenway Strategy, greenways and other associated linear trails should be designed to take into account, and avoid where necessary, the sensitivities of natural heritage. Whilst the

development of Greenways, Blueways and tourist trails is generally welcomed, the same risks to biodiversity are associated with these type of trails, as with any other development.

Developments should avoid the fragmentation of landscape features, including ecological corridors, which allow for the mobility of species in a changing climate. Hedgerows are essential wildlife corridors and of great ecological importance. Removal of hedgerows at key locations can lead to habitat fragmentation, thereby threatening the coherence of this important ecological network.

It is recommended that clear policy objectives are included in the Plan to ensure that undesignated wetland areas are protected.

Qualifying interest species of the Lower River Shannon SAC include Atlantic Salmon and Lamprey species, which are migratory. In addition, the European Eel is classified as critically endangered. Barriers to fish migration occur within the SAC and it is recommended that this issue is considered in the Plan. There may be scope for barrier removal or mitigation in conjunction with Local Authority projects and this should be explored with Inland Fisheries Ireland.

It is recommended that the requirements of the National Peatland Strategy and the National Raised Bog SACs Management Plan 2017-2022 are reflected in the policy in relation to peatlands in the Plan.

Limerick is fortunate to be one of only six counties in Ireland to have a Lesser Horseshoe Bat population, however there are significant concerns for the Limerick population and the forthcoming Plan could play a significant role in determining the future of the population. A major concern is the isolation of the population from other populations and the potential isolation of subpopulations within Limerick.

The Barn Owl is a protected species of threatened status (red-listed) at national level. Barn Owls are attracted to feeding on the rough grass growing on the margins of motorways, and it is recommended that an objective is included in the Draft Plan to support any emerging solution to reduce mortality of Barn Owls on motorways and large roads in co-operation with Transport Infrastructure Ireland and other stakeholders.

1.5.2 Inland Fisheries Ireland

The submission refers to the protection of habitats and outlines that current SEA must recognise that protection of the aquatic environment is not solely dependent on water quality but includes protection of the physical environment, hydrological processes and biodiversity. Effects of diffuse pollution are often more destructive than individual point source pollution events. Sub-lethal pollution levels also have ecological effects.

Physical habitat is very important. The Water Framework Directive requires conservation of habitats for ecological communities and physical habitats should be protected as well as hydrological processes.

The submission notes that the SEA will be flawed if it does not recognise that protection of the aquatic environment/habitats not only requires the protection of water quality but also necessitates the protection and maintenance of physical habitats and hydrological processes.

Impacts of development can include destruction of in-stream habitats, interference with spawning and nursery areas, obstruction of passage and removal of pools and changes in flow regime and fragmentation of habitat.

Infrastructure provision should keep pace with development and in instances where it is not available planning permission should be refused on the grounds it is premature or constrained by appropriate conditions.

Areas adjacent to watercourses should be managed which will lessen their effects on rivers and watercourses. Riparian buffer zones are areas near watercourses, which help shade and protect them from the effects of nearby land use. They must be sufficiently wide to achieve this effect and can require a zone of 30m in width.

Inland Fisheries Ireland should be consulted on any proposed developments that could affect river ecosystems and associated habitat. IFI can provide guidance on the establishment and/or protection of riparian habitat.

Urban watercourses are important fish and wildlife habitats and may also have an amenity value. It is essential that they be maintained in an environmentally sensitive manner. The publication "Planning for Watercourses in the Urban Environment" has much useful information on the topic.

The submission requests that the Draft Plan provides for the maintenance and preservation of all watercourse and associated riparian habitats in urban areas and ensure that the amenity potential which watercourse provides in rural area is protected.

1.5.3 Environmental Protection Agency

The submission from the EPA outlines that the Plan should include specific actions/objectives and commitments to protect designated habitats and protected species (and associated ecological corridors/linkages) within, and adjacent to, the Plan area.

Section 2: Draft Limerick Development Plan 2022-2028, June 2021

The Draft Limerick Development Plan 2022-2028 is being prepared as part of the review of the existing Limerick County Development Plan 2010 – 2016 (as extended) and the Limerick City Development Plan 2010 – 2016 (as extended). The existing plans need updating, as there has been significant change in the intervening years since the preparation of both plans. The Draft Plan, dated June 2021 set out the overall vision for Limerick to be a Green City Region on the waterfront, and by 2030 Limerick will become a green city region on the Shannon Estuary connected through people and places. This will be achieved through engagement, innovation, and resilient urban development and self-sustaining rural communities.

The main part of the Draft Plan, the Written Statement, was divided into 13 separate chapters setting out various policies and objectives under the headings of:

1. Introduction, Vision and Strategic Overview
2. Core Strategy and Settlement Strategy
3. Spatial Strategy (replaces chapter 3 and 10 of the previous draft plan, with elements of chapter 3 relocated to chapter 2 and 4).
4. Housing - This Chapter set out the policies and objectives for the provision of housing in Limerick.
5. A Strong Economy - This Chapter set out the policy objectives for economic development both urban and rural, to deliver a strong resilient economy, including Enterprise and Employment and Retail Development opportunities
6. Environment, Heritage, Landscape and Green Infrastructure (formerly Chapter 5)- This Chapter set out the policy objectives for the preservation and protection of our natural and built heritage, adoption of Green Infrastructure and Biodiversity, Open Space, Parks and Recreation.
7. Sustainable Mobility and Transport - This Chapter set out detailed policy objectives in relation to Roads and Transport, Mobility and Traffic Safety
8. Infrastructure - This Chapter set out detailed policy objectives in relation to services infrastructure including energy networks and environmental services.

9. Climate Action, Flood Risk and Transition to a Low Carbon Economy - This Chapter set out detailed policy objectives in relation to climate action and the role of planning in climate change mitigation, climate change adaptation including flooding and the transition towards a more climate resilient economy

10. Sustainable Communities and Social Infrastructure (formally Chapter 9) - This Chapter set out the policy objectives for community development and place making, to deliver sustainable and liveable communities and neighbourhoods over the lifetime of the Plan and beyond.

11. Development Management Standards -This Chapter incorporated detailed development management objectives and standards to be applied to future development proposals in Limerick.

12. Land Use Zoning Strategy – This Chapter set out a series of land use zoning objectives and accompanying definitions, which were given graphic representation through the accompanying zoning maps. The purpose of zoning is to indicate the land use objectives for all lands within Limerick.

13. Implementation and Monitoring - This Chapter outlined the implementation and monitoring mechanisms to be put in place to ensure effective and sustainable delivery of the Plan to allow greater transparency on the progress in its implementation.

Section 3: Screening for Appropriate Assessment

3.1 Introduction

This stage of the process identifies any potential significant effects of proposed material amendments on European Sites in accordance with the requirements of Article 6(3) of the EU Habitats Directive (92/43/EEC). This section deals with screening of the proposed amendments.

An important element of the AA process is the identification of the “conservation objectives”, “Qualifying Interests” (QIs) and/ or “Special Conservation Interests” (SCIs) of European Sites requiring assessment. QIs are the habitat features and species listed in Annexes I and II of the Habitats Directive for which each European Site has been designated and afforded protection. SCIs are wetland habitats and bird species listed within Annexes I and II of the Birds Directive. It is also vital that the threats to the ecological / environmental conditions that are required to support QIs and SCIs are considered as part of the assessment.

The following NPWS Generic Conservation Objectives have been considered in the screening:

- For SACs, to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected; and
- For SPAs, to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA. Where available, Site-Specific Conservation Objectives (SSCOs) designed to define favourable conservation status for a particular habitat or species at that site have been considered.

3.2 Identification of Relevant European Sites

The Department of the Environment (2009) Guidance on AA recommends a 15 km buffer zone to be considered. A review of all sites within this zone has allowed a determination to be made that in the absence of significant hydrological links, the characteristics of the Plan will not impose effects beyond the County boundary.

Details of European Sites that occur within the Plan area listed below. European Sites and are mapped in Figure 1.1 and 1.2 below. Information on QIs, SCIs and site-specific vulnerabilities have been considered and are available on www.npws.ie.

The NPWS list the following 15 Natura 2000 sites in Limerick:

Site Name: Askeaton Fen Complex SAC (002279)

Site Name: Ballyhoura Mountains SAC (002036)

Site Name: Barrigone SAC (000432)

Site Name: Blackwater River (Cork/Waterford) SAC (002170)

Site Name: Carrigeenamronety Hill SAC (002037)

Site Name: Clare Glen SAC (000930)

Site Name: Curraghchase Woods SAC (000174)

Site Name: Galtee Mountains SAC (000646)

Site Name: Glen Bog SAC (001430)

Site Name: Glenstal Wood SAC (001432)

Site Name: Lower River Shannon SAC (002165)

Site Name: River Shannon and River Fergus Estuaries SPA (004077)

Site Name: Slievefelim to Silvermines Mountains SPA (004165)

Site Name: Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (004161)

Site Name: Tory Hill SAC (000439)

Figure 1.1 Special Areas of Conservation (SAC)

Source: NPWS

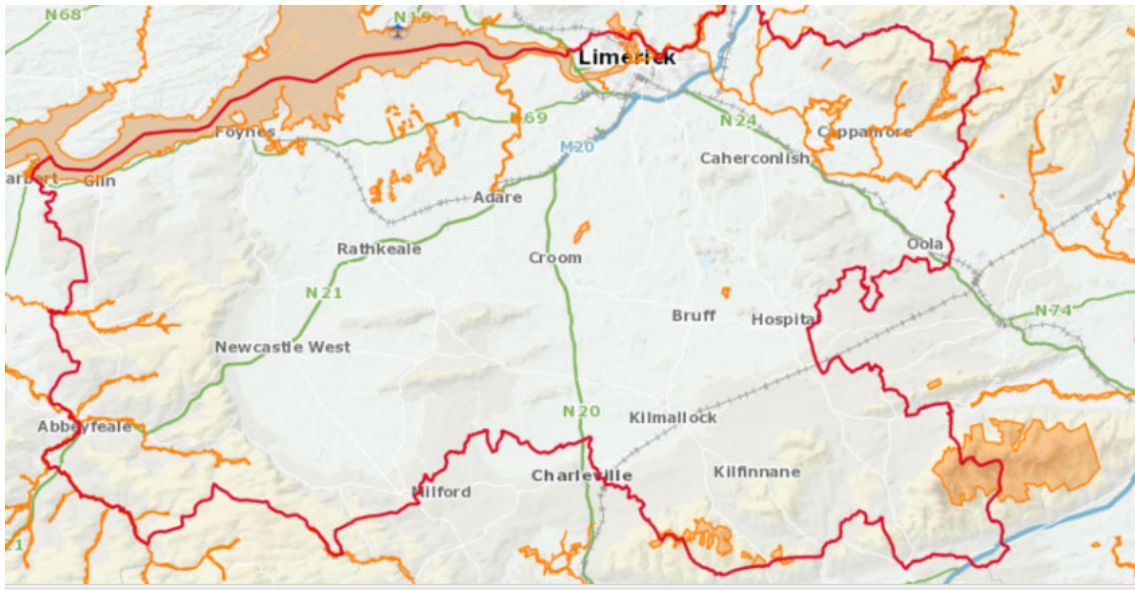
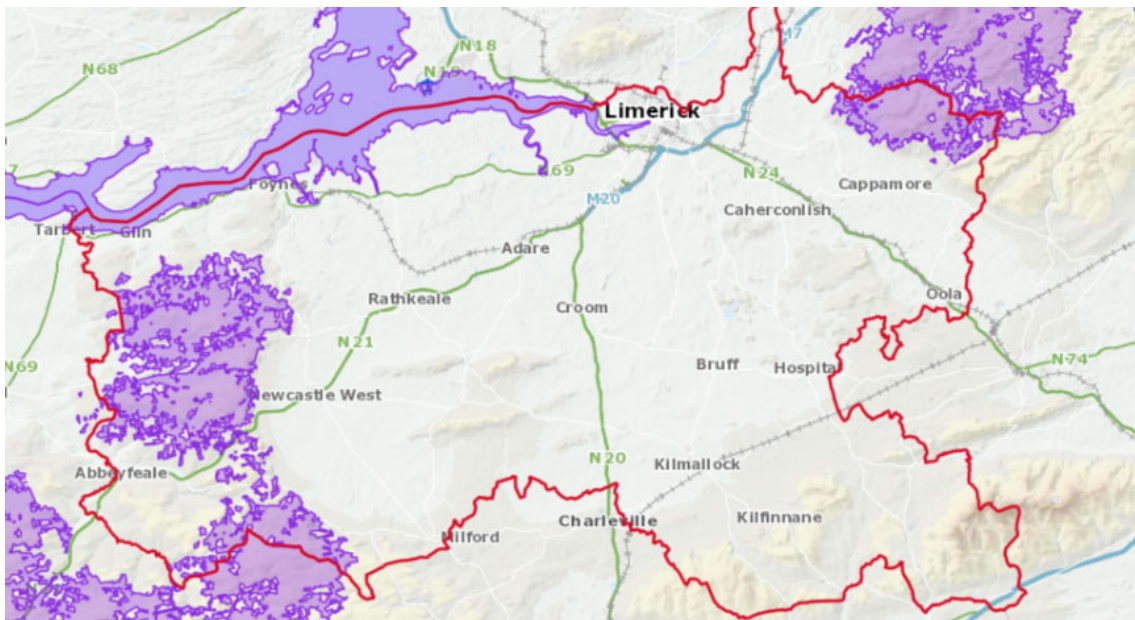


Figure 1.2 Special Protection Areas (SPA)

Source: NPWS



At this stage of the Draft Plan –making process the potential impact of the proposed amendments that could affect the designated sites are considered. Many of the amendments are location specific and would not have effects on particular sites as a result. The Environmental Report, prepared as part of the SEA process with its more general focus, has identified three sites that might be affected by the amendments. The sites that might be affected are the River Shannon and River Fergus Estuaries SPA (004077), the Lower River Shannon SAC (002165) and the Stack's to Mullaghareirk Mountains, West Limerick Hills and

Mount Eagle SPA (004161). The NIS with specific focus on possible effects of the amendments on Natura 2000 sites will further examine these effects in Chapter 5.

3.3 Assessment Criteria and Screening of Proposed Amendments.

3.3.1 Is the Plan Necessary to the Management of European Sites

The Plan including any amendments is a land use planning document prepared under the Planning Acts. It is not intended for management of Natura 2000 sites, but to coordinate and plan the future development of Limerick. Therefore, the Plan is not considered directly connected with or necessary to the management of European Sites. However, the Draft Plan policies and objectives are considered through the AA process to ensure they do not have an adverse impact on the integrity of Natura 2000 sites.

3.3.2 Elements of Proposed Amendments with Potential to Give Rise to Effects

Amendments which could potentially have effects on the Natura 2000 site network include:

- Amendments that call for the establishment of trails, walkways and other forms of transport links might have effects on the Natura 2000 site network unless they are designed with the needs of local ecology in mind. This is discussed further in Chapter 5.
- Amendments which call for the zoning of green field sites, which are in flood plains but outside the Natura 2000 site networks could also have effects on the movement of species across the wider countryside, in addition to effects on local hydrology.
- Amendments which call for encroachment into Natura 2000 site which might lead to the loss of area and site disruption.

Pressures could follow from the operational phase of development following adoption of amendments. This could include run-off, wastewater discharges to ground water or disturbance. These can often be indirect effects but when tracked through the source pathway receptor model could, for instance, indicate effects in local ground and surface waters which might ultimately lead to designated sites such as the Lower River Shannon SAC site. The Draft Plan has been formulated to ensure that land uses, developments and effects arising from permissions based upon this Plan (either individually or in combination with other plans or projects) will not give rise to significant adverse impacts on the integrity of any Natura sites, having regard to their conservation objectives.

3.3.3 Appropriate Assessment Screening of adopted Chief Executives Material Amendments

Of the amendments that were presented in the SEA screening, which accompanied the Chief Executives report, dated 26 November 2021, on the submissions to the Draft Plan, it is considered that several would have had the potential to exert an influence on the Natura 2000 site network in the plan area. Those that were likely to have adverse effects were not implemented. Those whose implementation would be likely to have beneficial effects were implemented. Both types are shown below in order to indicate how the needs of the Natura 2000 site network was taken into account.

1. Setting targets for renewable energy production. Submission 225.

Table X: Renewable Energy allocations for differing technologies

Output Current and Projected	Wind	Anaerobic Digestion	Solar	Hydro	Geothermal
Current capacity MW	234.35	2.0	113.49	0.1 MW	0
Target Capacity MW (2030)	386.45 (+65%)	20 (+1000%)	227.0 (+100%)	0.3MW (+300%)	0.5MW

The targets for wind energy have been set with regard to existing wind farms only and are mindful of the fact that the vast bulk of Limerick wind farms are now located within what are now Special Protection Areas for the Hen Harrier. These designations took place in 2008. No new applications have been received since 2008 within the SPAs, but the fact remains that existing wind farms are operational in what are now designated sites.

The targets have been set with regard to repowering of existing wind farms rather than based on construction of new wind farms. This means that a large number of older less capable turbines could be replaced by smaller more efficient turbines. A reduction in turbine numbers would be beneficial from an ecological perspective as it would prevent further displacement or disturbance effects and minimise the chances of direct mortality through collision. One harrier has collided with a wind turbine in Limerick in 2010.

2. Remove mention of development of a new pedestrian bridge from Barrington Pier and Ted Russell Park to Atlas Avenue as a longer-term aspiration to create new connections. Submission 103.

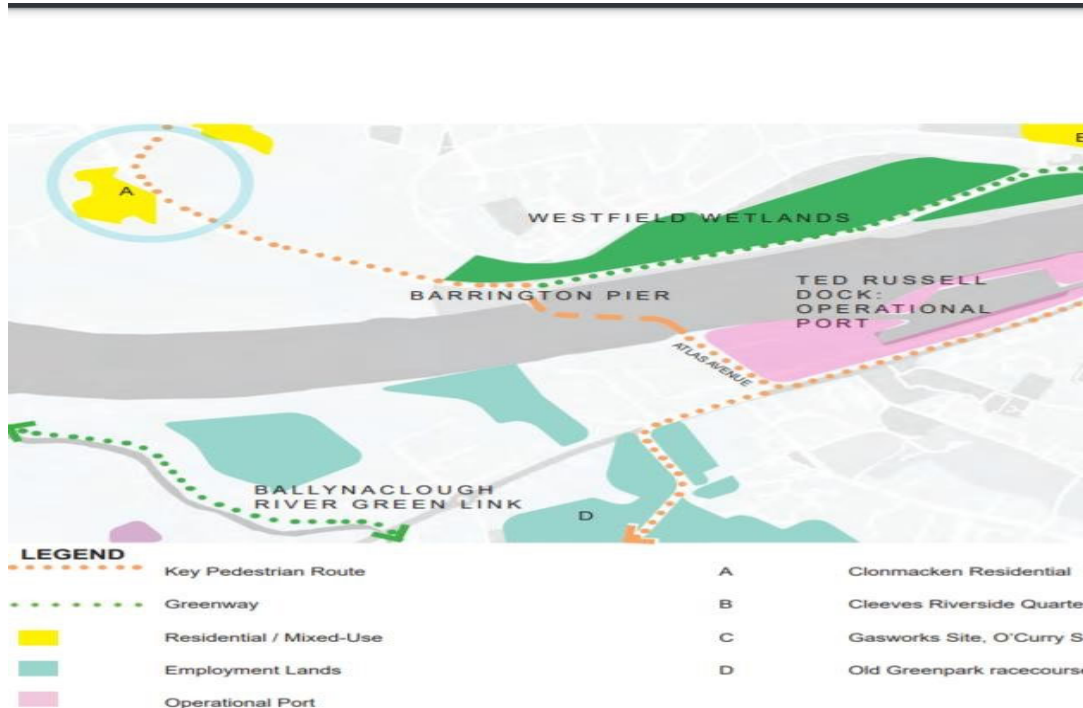


Figure 1.3: showing suggested route of the proposed pedestrian crossing between Barrington's Pier and Ted Russell Docks on the southern side of the river. Source: Limerick 2030.

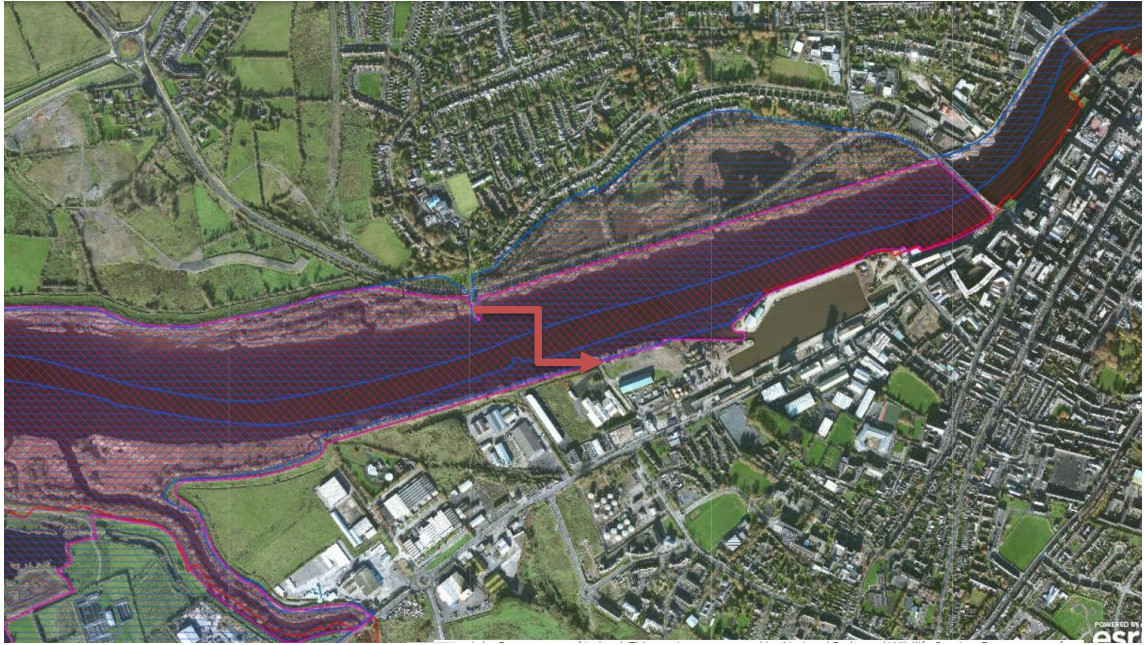


Figure 1.4: showing the location of the proposed pedestrian bridge within both the Lower River Shannon SAC site and the River Shannon and Fergus Estuary SPA. Source: NPWS

The pedestrian bridge crosses the River Shannon at a point where it is designated as both a Special Area of Conservation Site (Lower River Shannon 002165) and as a Special Protection Area (River Shannon and Fergus Estuaries 004077). The River Shannon SAC is designated for series of tidal habitats in this location, while the River Shannon and Fergus SPA is designated for the protection of wildfowl. There is also a population of the Flora Protection Order Species Triangular Club Rush in this area, specifically at Barringtons Pier (Reynolds 2013 p. 38). The Triangular Club-rush (*Scirpus triquetrus*) is a rare and highly threatened vascular plant in Ireland with restricted distribution to tidal stretches of the River Shannon in “Limerick City and for some distance downstream” (Parnell and Curtiss 2012, p.77). It is protected under the Wildlife Acts (1976 and 2000) and is listed on the Flora Protection order 2015.

Given the range of tidal habitats including mudflats, fringing reed stretches (a feature of the upper estuary), the presence of two Natura 2000 sites and the presence of a Flora Protection Order species, it was decided to remove any reference to a pedestrian crossing in this location due to the potential ecological damage that might result. From an SEA strategic infrastructure perspective, it would have denied access to the port, an important part of Limerick Maritime Infrastructure.



Figure 1.5: Triangular Club Rush (*Scirpus triquetrus*). Source: BEC consultants

3. Potential Rezoning for marine use at Foynes Island, Submission 84.



Figure 1.6: showing area in red for proposed zoning for marine use.

The area outlined in red was requested for zoning for marine related usage. Part of the area outlined in red in Figure 5 includes cut across part of the Lower River Shannon SAC site.

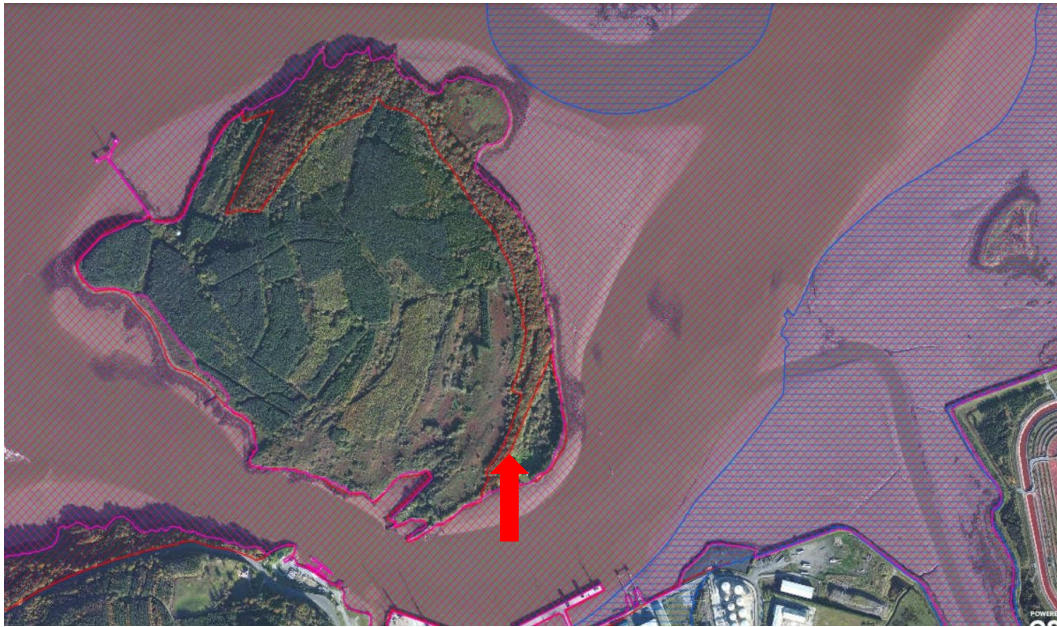


Figure 1.7: the arrow shows the area of the SAC through which the area for the proposed re-zoning cuts.

The proposed rezoning is to the south east of the island with the potential to cause further disturbance to the eastern portion of the island. There are mudflats in the lee of the island, which are part of larger complex of mudflats in the estuary. This is the reason why many wintering wildfowl species visit the estuary as they are feeding grounds for them. The actual loss of this habitat and the disturbance effects of the proposed re-zoning would be factors here.

Close to the proposed re-zoning area is Sturamus Island. This has been mentioned as a Tern colony in the site synopsis. This is very low-lying and is almost covered at high tide. In a visit to the island in 2017, no terns were present but such low-lying islands are valuable resting and preening areas for wildfowl and this too would have to be taken into account.

On Foynes island itself the proposed re-zoning cuts through some of the Lower River Shannon SAC site. This part of the island has mixed woodland close to the shore. Patches of the broadleaved woodland here has been described as having links with the

Annex habitat old oak woodland (Doherty 2015 p.8) and it is not certain as to whether or not this would apply to the area in question.

One of the main reasons that the current zoned area is considered as suitable for maritime use is because no Annex species lay within that area. Further detailed ecological reports would be required to ascertain the impact on the designated site of further extending the zoning.

For these reasons the proposals for rezoning was not accepted.

4. Change the zoning from Semi Natural Open Space to Utilities (solar arrays) in the area of the landfill cells, a narrow margin around the cells and the compound at Longpavement Submissions 218, 277.

The area of the compensatory habitat in the south of the Longpavement site remains untouched by the change in zoning. The area of the identified for solar arrays can also be allowed to revegetate naturally to create a grassland community similar to the one which currently exists. It should be noted that the grassland species that are present at the moment were the result of planting. In the event that solar arrays proceeded on site, it is recommended that the area be allowed to revegetate naturally to ensure that the grassland species would reflect local species and local genetic material. This is in line with current good practice (DNFC July 2021) which calls for the use of local seed materials and site management rather than the use of outside seed stock. The solar array will not encroach into the Lower River Shannon SAC site at the eastern site boundary.



Figure 1.8: The red arrow shows the compensatory habitats for works on the Limerick main drainage scheme in the early 2000s. It is a series of constructed wetlands and wetland vegetation.

5. Amendments sought by the Department of Housing, Local Government and Heritage.

The submission requested the amendment to Objective EH 01 as follows:

Add the following text to Objective EH 01: The Council, will through the planning enforcement process where applicable, seek to restore the ecological functions of designated sites, where they have been damaged through inappropriate development;

Amend Objective EH 012 with the inclusion of the following text at the end of part b) Projects which would be detrimental to existing Blue – Green Infrastructure features will not be permitted

Comment: the addition of additional text to Objective EH 01 above has the potential, through the planning and enforcement process to restore damage to designated sites, through the established planning condition and enforcement process.

**It should be noted that blue green infrastructure is taken to mean what the DHLGH indicated in its pre-draft submission to the plan last year. This means, not pathway or man-made constructions, but rather natural habitats and landscape features. This is in line with Policy EHP1 which is to “protect and conserve Limerick’s natural heritage and biodiversity”.

Screening determination of Chief Executives proposed material alterations:

Progression to Stage 2 was not judged necessary, as any of the suggested amendments that might have significant effects on the Natura 2000 network were not recommended to proceed. Those suggested amendments that would have beneficial effects were recommended to proceed.

3.3.4 Appropriate Assessment Screening of Elected Members proposed Additional Material Amendments.

The table below sets out the screening of the proposed amendments from the Special Council Meeting of 18 February 2022 and identifies proposed amendments that require further assessment, i.e. progression to Stage 2 of the process.

Proposed changes to text are underlined.

Amendment Proposed by Elected Member 18 February 2022	AA Screening	Comment
Proposed not to accept the Chief Executives recommendation and that draft plan revert to the Rural Settlement Strategy Map, which was put on public display at Draft Plan stage.	AA not required.	Subject to the requirements of the 2021 EPA guidance re wastewater treatment for single dwellings which ensure environmental standards are complied with.
Proposed the removal of RPS. No. 4057 - 'Biarritz', O'Connell Avenue from the Record of Protected Structures	AA not required	Single structure outside Natura 2000 network, no effects.
Proposed to extend the development boundary of Carrigkerry.	AA required	Encroaches into SPA site, assessment required
Proposed to extend the development boundary of Templeglantine.	AA not required	No Natura 2000 site in question. Grassland habitats common in locality.
Proposed an amendment to the zoning of the lands (0.3 ha.), adjoining the Model School from Existing Residential to Community and Education.	AA not required	Outside Natura network, Limited loss of amenity grassland.

<p>Proposed an amendment to Objective CGR O4 e) Urban Lands and Compact Growth in Chapter 3 – Spatial Strategy as follows:</p> <p>e) Require multiple owners of large-scale urban sites, <u>in instances where phased development is proposed, or where such land adjoins other undeveloped, zoned land in third party ownership</u>, to develop a masterplan for the coherent and sustainable development of such lands, addressing issues of the sustainable use of available lands, preservation of existing residential amenity, access, urban design and connectivity. These Masterplans shall set out the framework for the sustainable, phased and managed development of a particular area. The Masterplan should include the written consent of all landowners, where applicable, a conceptual layout, infrastructure proposals including any consultation with service providers and phasing details. <u>The masterplan should clearly detail how adjoining undeveloped, zoned land in third party ownership, can be accessed and serviced in an integrated and coherent manner.</u></p>	<p>AA not required</p>	<p>Outside Natura network, within previously zoned land.</p>
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<p>Propose an amendment to Objective ECON O13 a) Strategic Employment Locations Limerick City and Environs - Chapter 5 – A Strong Economy as follows:</p> <p>Ensure <u>that a comprehensive framework plan shall be prepared and agreed with the Planning Authority in advance of development on the ‘High Tech/Manufacturing’ zoned lands to the west of Raheen Business Park. The framework should clearly set out the key infrastructure requirements for the site and identify, responsibility for and the timeframe for delivery of such infrastructure. The Framework Plan shall be subject to the following:</u></p> <ul style="list-style-type: none"> • Cognisance to the residential amenities of the properties to the north and western side of the site and the adjacent agricultural land; • Access to the ‘High Tech/ Manufacturing’ zoned land to the west of the R510 will be limited to the existing roundabout to the east of the site; • Applications for development in the low-lying area in the southern section of this zone shall have regard to the attenuation infrastructure and shall include a site-specific flood risk assessment, including proposals to mitigate and control the level of run off and attenuation. 	<p>AA not required</p>	<p>Outside Natura 2000 network, within previously zone land.</p>
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<p>Proposed an amendment to the High Tech/Manufacturing land use zoning objective and purpose text in Chapter 12 – Land Use Zoning Strategy as follows: Objective: To provide for office, research and development, high technology, <u>regional distribution/logistics</u>, manufacturing and processing type employment in a high quality built and landscaped campus style environment.</p> <p>Purpose: To facilitate opportunities for high technology, advanced manufacturing including pharmaceutical and food production, major office, <u>regional distribution/logistics</u>, and research and development-based employment, within high quality, highly accessible, campus style settings. The zoning is for high value-added businesses and corporate facilities that have extensive/specific land requirements, such as those located at Raheen Business Park and the National Technology Park.....</p>	<p>AA not required</p>	<p>Outside Natura 2000 network</p>
<p>Proposed an amendment to the High Tech/ Manufacturing Land Use Zoning Matrix as follows: Change Logistics from 'Open for Consideration' to '<u>Generally Permitted</u>' and Warehousing from 'Generally Not Permitted' to</p>	<p>AA not required</p>	<p>See above.</p>

<p>'Generally Permitted' in the High Tech/ Manufacturing zone.</p>		
<p>Proposed to amend the Core Strategy Table figures in relation to the projected growth for Patrickswell as follows: -Population growth totals 2028 – 1669 <u>1270</u> -Population growth as % of 2016 base - <u>50%</u> -Additional households forecasted 2022 –2028 - <u>158</u> households -Amend the City and Environs Population Growth and Additional Household Figures to reflect this change.</p>	<p>AA not required</p>	<p>Outside Natura 2000 network, within previously zone land.</p>
<p>Proposed a change of zoning from Agriculture to Enterprise and Employment at Ballykeeffe - the proposed amendment relates to 4 plots of lands Plot A (5.57ha), Plot B (4.25ha), Plot C (5.57ha) and Plot D (10.22ha). Lands zoned Semi - Natural Open Space are precluded from the rezoning, it only applies to Agriculturally zoned lands.</p>	<p>AA required</p>	<p>May have implications for AA species, which might use open grassland.</p>
<p>Proposed an amendment to the Zoning Map for Bruff to rezone 0.2 hectares of land from Open Space and Recreation to Residential and maintain 0.8 hectares of land as Open Space and Recreation use to facilitate the provision of public walks and trails adjacent to the Morningstar River,</p>	<p>AA not required</p>	<p>Outside Natura 2000 site, buffer remains between the development site and the river and any material/debris entering the water will be diluted before entering the Natura 2000 network</p>

<p>in accordance with Objectives BR 02 and BR 06 of the Draft Plan.</p>		<p>owing to the significant distance between the site and the closest Natura 2000 site.</p>
<p>Proposed an amendment to Objective ECON 040 – Location of Tourism Accommodation as follows: Ensure that holiday home developments accommodation including campsite (i.e. static and touring caravans, campervans, glamping pods, and tents) developments should be concentrated within or adjoining existing towns, villages and settlements, where they can best support the provision of services and minimise the impact on the open landscape. Such developments should respect the existing fabric of the settlement, both in scale and design.</p> <p><u>In limited cases, such accommodation may be appropriate in rural locations, where it compliments an existing tourism asset and where there is a justifiable need, such as its proximity to established tourism trails/routes. In rural locations, structures should be integrated into the existing landscape or proposals should demonstrate that an appropriate landscape will be designed around the structure.</u></p> <p><u>Proposals to reinstate, conserve and/ or renovate existing, vacant,</u></p>	<p>AA not required</p>	<p>Outside Natura 2000 network. Emphasis on limited cases in appropriate rural locations.</p>

<p><u>derelict or disused buildings for holiday accommodation in both urban and rural areas, will be considered subject to normal planning and environmental criteria. All such development will be considered, having regard to the environmental conditions and sensitivities, scenic amenity, availability of services and the cumulative impact of such developments on the environment.</u></p>		
<p>Proposed a further amendment to Objective ECON 040 – Location of Tourism Accommodation as follows:</p> <p><u>(b) In limited cases, such accommodation may be appropriate in rural locations, where it compliments an existing tourism asset /service and where there is a justifiable need, such as its proximity to established tourism trails/routes/food and craft businesses. In rural locations, structures should be integrated into the existing landscape or proposals should demonstrate that an appropriate landscape will be designed around the structure.</u></p>	AA not required	See above.
<p>Proposed a New Policy as follows: Objective ECON OXX-: <u>It is an objective of the Council to cluster niche tourist / visitor services and infrastructure, including locations where the service or tourist attraction currently exists.</u></p>	AA not required	Clustering allows facilities to use existing infrastructure and reduces pressure on green field sites.

<p>Amendment proposed to Objective CGR 05 as follows:</p> <p>It is an objective of the Council to utilise the provisions of the Urban Regeneration and Housing Act 2015 (As amended), including the continued maintenance of a Vacant Site Register to facilitate the appropriate re-use and development of vacant and underutilised sites on zoned lands in Limerick that are in need of renewal or revitalisation.</p> <p><u>a) This objective shall also apply to all lands in the ownership of Limerick City and County Council.</u></p> <p><u>b) This objective shall not apply to any lands where public utilities are not available or are deemed inadequate.</u></p>	<p>AA not required</p>	<p>Applies to levy policy and finance.</p>
<p>Proposed an amendment to Objective CGR 07 – Derelict Sites as follows: It is an objective of the Council to utilise the provisions of the Derelict Sites Act 1990, including the maintenance of a Derelict Site Register and CPO powers to address instances of dereliction and decay in the urban <u>and rural</u> environment and bring properties back into active re-use.</p>	<p>AA not required</p>	<p>See above.</p>

<p>Proposed an amendment to Objective CGR 016 – Requirements for Developments within Level 4 Settlements as follows:</p> <p>It is an objective of the Council within these settlements to facilitate development, subject to compliance with the following:</p> <p>a) To ensure that the scale of the new housing developments both individually and cumulatively shall be in proportion to the pattern and grain of existing development. Generally, no one proposal for residential development shall increase the existing housing stock by more than 10 – 15% within the lifetime of the Draft Plan, unless the applicant can demonstrate that the settlement has adequate capacity in terms of both physical and social infrastructure to support additional growth.</p> <p>b) The development of these centres shall provide for serviced sites and a variety of other house types and densities as appropriate.</p> <p>c) New commercial developments shall generally be located within the core area and shall contribute positively to the village urban fabric and streetscape.</p> <p>d) New community and social facilities shall be provided in conjunction with residential development as required.</p> <p>e) <u>Where there is no treatment</u></p>	<p>AA not required</p>	<p>Within settlement boundaries and will be guided by 2021 EPA guidance to ensure best practice.</p>
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<p><u>plant or limited capacity in the existing treatment plant, sewerage treatment for serviced sites shall generally be by means of individual treatment systems, subject to satisfactory site assessment and compliance with EPA guidelines. All systems shall constructed so as to allow connection to public sewers in due course when capacity becomes available.</u></p>		
<p>Proposed an amendment to Objective CGR 018 – Requirements for Developments within Level 5 Settlements as follows: It is an objective of the Council within these settlements to facilitate development, subject to compliance with the following: a) The scale of new residential schemes shall be in proportion to the pattern and grain of existing development and shall be located within the development boundary, thus avoiding 'leap frogging' of development and delivering compact growth and providing for the organic and sequential growth of the settlement. Infill and brown field sites will be the preferred location for new development. In this regard, any development shall enhance the existing village</p>	<p>AA not required</p>	<p>Within settlement boundaries and will be guided by 2021 EPA guidance to ensure best practice.</p>

<p>character and create and create or strengthen a sense of identity and distinctiveness for the settlement.</p> <p>b) New commercial developments shall generally be located within the core area and shall contribute positively to the village urban fabric and streetscape.</p> <p>c) New community and social facilities shall be provided in conjunction with residential development as required.</p> <p><u>d) The development of these centres shall provide for serviced sites and a variety of other house types and densities as appropriate.</u></p> <p><u>e) Where there is no treatment plant or limited capacity in the existing treatment plant, sewerage treatment shall generally be by means of individual treatment systems, subject to satisfactory site assessment and compliance with EPA guidelines. All systems shall be so constructed so as to allow connection to public sewers in due course when capacity becomes available.</u></p>		
<p>Proposed an amendment to Objective HO 04 – Re-use of Existing Buildings as follows: It is an objective of the Council to encourage redevelopment and reuse, including energy retrofitting, of existing housing stock <u>and conversion of other suitable</u></p>	<p>AA not required</p>	<p>Deals with individual buildings.</p>

<u>buildings to sustainable housing accommodation.</u>		
Proposed to re-zone lands at Clonmacken, south of the Clondell Road from Agriculture to Residential Zoning (4ha.)	AA required.	Part of the land are at flood risk and may be used by wildfowl species from the nearby Special Protection Area.
Proposed an amendment to the Zoning Map for Ballingarry Village to include the land (3.08ha.) as Serviced Sites.	AA not required	Within settlement boundaries and of limited scale, outside Natura 2000 network.
Proposed an amendment to change Objective IN O10 Surface Water and SuDS and Development Management Standard Section 11.3.11 SuDS re Greenroofs	AA not required	Should have local ecological benefits in terms of both green space and surface water management.
Proposed that the zoning of the lands at Rhebogue are changed from Groody Valley Green Wedge to New Residential (0.94ha.)	AA required.	Encroachment onto Green Space close to the Lower River Shannon SAC site.

<p>A2a – Proposed that the ‘Community and Education’ land use zone be changed to ‘Mixed Use’ (1.7ha) at Downes site, Pa Healy road</p> <p>A2b – Proposed the insertion a new section 10.4.2.14 Pa Healy Road into the Draft Plan in chapter 10: Compact Growth and Revitalisation as follows: Section 10.4.2.14 <u>Pa Healy Road</u> <u>The 1.7 ha. Site is in a prominent location with road frontage onto the Pa Healy Road. The site and adjoining land (former Dawn Dairies) require significant regeneration. In a coordinated and holistic manner, facilitating mixed uses and associated synergies whilst ensuring sustainable compact growth. Objective – Pa Healy Road: It is an objective of the Council to:</u></p> <p><u>A) Require the preparation of a masterplan for the land which utilises the low-lying land to the west for recreational purposes and facilitates a mixed-use/ residential development to the west with vehicular access off the existing permitted entrance which was constructed as part of the link road (Pa Healy Road);</u></p> <p><u>B) Enhance the character of the area through urban design and placemaking, incorporating buildings of high-quality design</u></p>	<p>AA not required</p>	<p>Outside Lower River Shannon SAC site.</p>
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<p><u>having regard to the sites prominent location on the Pa Healy Road;</u></p> <p><u>C) Require provision of an integrated sustainable mobility network, with walking, cycling and public transport as the main components;</u></p> <p><u>D) Facilitate connectivity between the low lying land to the west and the adjoining O'Briens public park to the south;</u></p> <p><u>E) Ensure green infrastructure is a key component of the design and layout;</u></p> <p><u>F) Promote a site-specific approach, reflecting emerging best practice, in addressing flood risk and prepare a Site Specific Flood Risk Assessment in accordance with the Planning System and Flood Risk Management Guidelines for Planning Authorities.</u></p> <p>A2c – Proposed amendment to Section 12.3 of the draft plan as follows: Mixed Use Land Use Zoning as follows:</p> <p>Objective: To provide for a mixture of residential and compatible commercial uses.</p> <p>Purpose: To facilitate the use of land for a mix of uses, making provisions, where appropriate for 'primary' uses i.e. residential and combined with other compatible uses e.g. offices as 'secondary'. These secondary uses will be considered by the Local Authority, having regard to the particular</p>		
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<p>character of the area. A diversity of uses for both day and evening is encouraged. These areas require high levels of accessibility, including pedestrian, cyclists and public transport (where feasible). Opportunity sites set out in Chapter 3 Spatial Strategy, include Mixed Use zoned lands located at Towlerton, Parkway Valley, Thomond Park and the Pa Healy Road, which have been accounted for in the Core Strategy figures. In addition, the Draft Retail Strategy has identified capacity for additional retail floor space in Moyross, which could be accommodated on the Mixed Use lands at The Bays identified for employment uses only.</p>		
<p>Proposed that the Enterprise and Employment land use zone is changed to Mixed Use (0.9 hectares) on Shannon Minerals Site, Pa Healy Road</p>	<p>AA not required</p>	<p>Brown field site within zoned area, outside Lower River Shannon SAC site.</p>
<p>Proposed the designation of Roxborough as a Level 6 Settlement to allow for limited small scale residential development within the existing reduced speed zone area.</p>	<p>AA not required</p>	<p>Outside Natura 2000 network</p>

<p>Include additional text as follows: <u>Roxborough benefits from a National School and Golf Club, public lighting, mains water and broadband. Approximately 90 dwellings are located within 500m of the National School, while the settlement is 2.5km from Raheen Business Park and 5km from the City Centre</u></p>		
<p>Proposed that the Annacotty Business Park boundary be extended to encompass some 7 hectares of additional lands to safeguard the expansion of the business Park and to facilitate and promote enterprise and employment in Limerick City and County, as identified on the Map below.</p>	<p>AA not required</p>	<p>Outside Natura 2000 network, and would involve only agricultural grassland</p>
<p>Add additional text under Section 1.3, Bullet Point 1, Chapter 1: The Limerick Brand shall be used to internationalise the city. Any further brands created within and by the Local Authority, including organisations owned by the Local Authority, shall work within the framework outlined in the ‘Limerick Atlantic Edge, European Embrace’ brand.</p>	<p>AA not required</p>	<p>Applies only to marketing and not to land use.</p>
<p>Proposed an amendment to the zoning of the lands at Greenpark from Enterprise and Employment and Open Space to New Residential (14.71ha.)</p>	<p>AA not required</p>	<p>Already zoned but with buffer between the zoning and the creek. This buffer is identified for retention.</p>

<p>A2a - Proposed an amendment to the zoning of lands adjoining the Dooradoyle District Centre from Semi Natural Open Space to Enterprise and Employment.</p> <p>A2b - Proposed an objective in Chapter 5 A Strong Economy as follows: <u>Dooradoyle Urban Quarter: It is an objective of the Council to:</u></p> <p><u>a) Promote the continued development of lands around the Dooradoyle District Centre and adjoining lands as a Strategic Employment Location through the delivery of additional office based employment uses in a phased manner in conjunction with supporting infrastructure development.</u></p> <p><u>b) Promote improvements to connectivity, signage and permeability within the wider area including pedestrian and cycle facilities linking to Portland Park and provide for the link road from Dooradoyle Road to Rosbrien Road</u></p> <p><u>c) Facilitate the early upgrading of the existing flood defence infrastructure, thus ensuring the long-term flood protection of the wider lands in Dooradoyle in a manner compatible with any future City Wide Flood Relief Scheme.</u></p> <p><u>d) Ensure any application on lands at risk of flooding is accompanied by a Site Specific Flood Risk Assessment which shall</u></p>	<p>AA required</p>	<p>Green field site, subject to flooding, may be used by Wildfowl species from the nearby SPA.</p>
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<p><u>demonstrate that any development does not result in additional significant flood risk in the area and does not impede the future delivery of a wider flood relief scheme for Limerick.</u></p> <p><u>e) Require an overall framework plan / masterplan to be prepared for the lands in advance of, or as part of, any application for a portion of the currently undeveloped lands.</u></p>		
<p>Proposed amendment to zone 33 hectares at Ballysimon House, Commons Road, Ballysimon for the development of a Data Centre.</p>	<p>AA not required</p>	<p>Outside Natura 2000 site network</p>
<p>Proposed a change of zoning from Agriculture to District Centre of 1.6ha. at the Jetland District Centre, Caherdavin, Ennis Road.</p>	<p>AA required.</p>	<p>Possible hydrological links with nearby SAC site and forms part of green space network.</p>
<p>Proposed an amendment to Development Management Standards Section 11.3.5 Roads, footpaths, water services and landscaping as follows: Road and footpath design and construction shall be in accordance with DEHLG 'Recommendation for Site Development Works for Housing Areas' (1998) and design should also be informed by the Design Manual for Urban Roads and Streets, DTTS 2019, <u>DMURS Interim Advice Notice, COVID – 19 Pandemic Response and Whole of</u></p>	<p>AA not required</p>	<p>Relates to construction details of foot paths cycle paths. No effects anticipated.</p>

<p><u>Government National Disability Inclusion Strategy (NDIS) 2017 - 2022</u> and any subsequent government guidance documents. Where there is a deviation in the general requirements, the primary consideration will be the safety of pedestrians, cyclists and access for emergency vehicles. Dished kerbs shall be provided at junctions and vehicular entrances, to facilitate people with ease of movement. <u>An assessment of pedestrian crossing requirements to be made at junctions and vehicular entrances with consideration given to appropriateness of dropped kerbs and/or continuous footpaths in each instance.</u></p>		
<p>Proposed amendment to text of the Draft Plan Section 6.5 Sustainable Mobility as follows: The promotion of use and increased delivery of sustainable modes of transport is fundamental to achieving Ireland’s carbon emission reduction requirements of 30% <u>51%</u> by 2030.</p> <p>Proposed amend text to text of Draft Plan Section 6.2.1 Climate Action Plan 2019 <u>2021</u>.</p> <p>Proposed amendment to text under Section 6.5.2 Promoting Active Travel as follows: A transition towards more sustainable modes of transport is essential to reduce Ireland’s carbon emissions and</p>	<p>AA not required</p>	<p>Clarifies climate targets.</p>

reach the Government's goal of a 50% <u>51%</u> reduction in carbon emissions by 2050 <u>2030</u> .		
(a) Proposed amendment to the Legend of the Transport Map for the City and Environs as follows: Proposed <u>Indicative</u> Cycle way/Walkway. (b) Proposed further amendment to the Transport Map for the City and Environs to include an indicative cycleway via Belfield Gardens.	AA not required	Within zoned area, outside of Natura 2000 network.
Proposed an amendment to Objective ECON 036 Tourism to include an additional point as follows: <u>It is an objective of the Council to support and promote the development of the Shannon River Interpretative Centre in Limerick City.</u>	AA not required	Provides policy support for the centre. Any proposal will be located on zoned area outside of Natura 2000 network.
Proposed the following amendments to Objective ECON 037 Limerick Greenway: Change the title of the Objective to Limerick Greenway <u>Greenways</u> and add an additional point as follows: <u>X) Support the development of a greenway link from Limerick City to connect with the Suir Blueway in Cahir, County Tipperary in so far as it falls within County Limerick, subject to ecological assessment and design.</u>	AA not required	Requirement for ecological design and assessment in place from the outset in the policy.

<p>Proposed the change of zoning from Agriculture to New Residential of 2.9ha. at Ballyclough, Castletroy</p>	<p>AA required</p>	<p>Adjacent to Mulkear River, would require examination of appropriate mitigation measures.</p>
<p>Proposed amendment to objective CAF021 as follows:</p> <p>d) No works including the undertaking of ground level changes shall commence on the lands in the National Technology Park subject to flood risk, until all flood mitigation measures proposed on the site <u>to facilitate future development of the IDA lands</u> have been put in place. <u>These measures shall form part of a, project-specific flood risk assessment being completed as part of the planning application.</u></p>	<p>AA not required</p>	<p>Ensures compliance with flooding guidance from 2009.</p>
<p>Proposed to extend the development boundary in Knocklong.</p>	<p>AA not required</p>	<p>Minor extension of boundary, outside of the Natura 2000 network.</p>
<p>A1a - Change of zoning from Residential to Mixed Use (1.613ha.) in Glin A1b - Include new objective GL08 as follows: <u>Mixed use zoned land: The purpose of this zoning is to facilitate a variety of uses that would support the further development of the village, including residential, health care, hotel, and tourism related activities. Notwithstanding the land-</u></p>	<p>AA not required</p>	<p>Change of use within existing zoned area outside of the Lower River Shannon SAC site.</p>

<p><u>use zoning objective and purpose set out in section 12.3, volume 1 and the land use zoning matrix, in order to protect the village centre, retail uses that could more appropriately be located in the village centre and or compete with existing uses in the village centre will not be permitted on this land.</u></p>		
<p>Add 1.2 ha of residential land in Glin</p>	<p>AA not required</p>	<p>Minor change of zoning and extension of boundary outside of Natura 2000 sites.</p>
<p>Proposed amendment to Table 2.6 Density Assumptions per Settlement Hierarchy so that the density assumption for Newcastle West (Key Town) are reduced from 35 to 22 Units per Hectares.</p>	<p>AA not required</p>	<p>Concerns density within existing zoned areas.</p>
<p>Proposed amendment to the Cappamore Zoning Map as follows: A1 - Remove Site No. 2 (Area 0.152ha) and realign the boundary to reflect existing residential on the ground; A2 - Change sites No.5 and No.6 from Serviced Sites to New Residential; A3 - Zone the William O'Brien lands (Submission received) to include 0.65 ha Enterprise and Employment and; A4 - 0.66ha as Serviced Sites.</p>	<p>AA not required</p>	<p>Minor changes to zoning within the village of Cappamore outside of the Natura 2000 site network.</p>
<p>Proposed change of zoning from lands currently proposed for residential use to Community use</p>	<p>AA not required</p>	<p>Minor changes to zoning within the village of Doon outside of the</p>

and zoning of additional lands for residential use (1.73 ha) in Doon.		Natura 2000 site network.
Proposed the removal of RPS. No. 229 – Leonard's Thatched Cottage, Castle-Erkin, Pallasgreen from the Record of Protected Structures.	AA not required	Refers to individual structure outside the Natura 2000 network.
Proposed amendment to Objective SCSi 09 Educational Facilities to include the following: <u>(d) It is an objective of the Council to commence work, in conjunction with the Department of Education, to identify potential school sites in the city and environs that will address the future educational needs of the projected population.</u>	AA not required	Establishes working group in relation to educational sites rather than land use itself.
Insert into Section 11.4.6: Table DM 4 Design Guidelines for Rural Houses the following text: <u>A variety of house types of innovative designs, including timber houses will be considered subject to the dwelling integrating into the local environment and compliance with building regulations.</u>	AA not required	Refers to individual structure outside the Natura 2000 network.
Proposed a new policy for inclusion in Section 3.7.16 Homeless Accommodation as follows: Limerick City and County Council will implement measures to address the homeless crisis in Limerick.	AA not required	Refers to homeless policy not land use.
Proposed to change the zoning on lands of approx 1.2 hectares within	AA not required	Change of use within existing zoned area

Ballykeeffe from Enterprise and Employment” to Residential.		outside of the Lower River Shannon SAC site.
Proposed to change the zoning on lands of approx 14 hectares within Ballykeeffe from Agriculture to Enterprise Employment.	AA required	Change of zoning of flood risk lands from open space to development use. This may be used by wildfowl species from the nearby SPA.

3.3.5 Screening of European Designated Sites

Table 3.1 examines whether there is potential for effects on European Sites. Sites are screened based on one or a combination of the following criteria:

- The existence of potential for pathways for significant effects, such as hydrological links, Plan proposals and the site to be screened;
- The distance of the relevant site from the County boundary; and
- The existence of a link between identified threats or vulnerabilities at a site to potential impacts that may arise from the Plan.

Table 3.1: Screening for European Designated Site

Site Code	European Site	Distance (km)	Qualifying Features (Qualifying Interest and Special Conservation Interests)	Potential effects	Potential Pathway for Significant effects	Potential for in combination effects
0002279	Askeaton Fen Complex SAC	36km	Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> [7210] Alkaline fens [7230]	None, due to distance from the site of proposed amendments which are largely in the city area or where outside are confined to local settlements with localised effects.	No	No
002036	<u>Ballyhoura Mountains SAC</u>	70km	Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010] European dry heaths [4030] Blanket bogs (* if active bog) [7130]	None, due to distance from the site of proposed amendments which are largely in the city area or where outside are confined to local settlements with localised effects.	No	No
00432	<u>Barrigone SAC</u>	30km	<i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous	None, due to distance from the site of proposed amendments which are largely in the city area or where outside are confined to local settlements with localised effects	No	No

			<p>substrates (Festuco-Brometalia) (* important orchid sites) [6210]</p> <p>Limestone pavements [8240]</p> <p>Euphydryas aurinia (Marsh Fritillary) [1065]</p>			
00217	Blackwater River (Cork/Waterford) SAC	72km	<p>Estuaries [1130]</p> <p>Mudflats and sandflats not covered by seawater at low tide [1140]</p> <p>Perennial vegetation of stony banks [1220]</p> <p>Salicornia and other annuals colonising mud and sand [1310]</p> <p>Atlantic salt meadows (Glauco-Puccinellietalia maritima) [1330]</p> <p>Mediterranean salt meadows (Juncetalia maritimi) [1410]</p> <p>Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260]</p>	None, due to distance from the site of proposed amendments which are largely in the city area or where outside are confined to local settlements with localised effects.	No	No

		<p>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</p> <p>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0]</p> <p><i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029]</p> <p><i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092]</p> <p><i>Petromyzon marinus</i> (Sea Lamprey) [1095]</p> <p><i>Lampetra planeri</i> (Brook Lamprey) [1096]</p> <p><i>Lampetra fluviatilis</i> (River Lamprey) [1099]</p> <p><i>Alosa fallax fallax</i> (Twaite Shad) [1103]</p> <p><i>Salmo salar</i> (Salmon) [1106]</p> <p><i>Lutra lutra</i> (Otter) [1355]</p>			
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			Trichomanes speciosum (Killarney Fern) [1421]			
002037	Carrigeenamro nety Hill SAC	30km	European dry heaths [4030] Trichomanes speciosum (Killarney Fern) [1421]	None, due to distance from the site of proposed amendments which are largely in the city area or where outside are confined to local settlements with localised effects	No	No
000930	Clare Glen SAC	24km	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Trichomanes speciosum (Killarney Fern) [1421]	None, due to distance from the site of proposed amendments which are largely in the city area or where outside are confined to local settlements with localised effects	No	No
000174	Curraghchase Woods SAC	14km	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] Taxus baccata woods of the British Isles [91J0] Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]	None, due to distance from the site of proposed amendments which are largely in the city area or where outside are confined to local settlements with localised effects	No	No

			Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303]			
000646	Galtee Mountains SAC	74km	<p>Northern Atlantic wet heaths with Erica tetralix [4010]</p> <p>European dry heaths [4030]</p> <p>Alpine and Boreal heaths [4060]</p> <p>Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230]</p> <p>Blanket bogs (* if active bog) [7130]</p> <p>Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110]</p> <p>Calcareous rocky slopes with chasmophytic vegetation [8210]</p> <p>Siliceous rocky slopes with chasmophytic vegetation [8220]</p>	None, due to distance from the site of proposed amendments which are largely in the city area or where outside are confined to local settlements with localised effects	No	No

001430	Glen Bog SAC	22km	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0]	None, due to distance from the site of proposed amendments which are largely in the city area or where outside are confined to local settlements with localised effects	No	No
001432	Glenstal Wood SAC	18km	<i>Trichomanes speciosum</i> (Killarney Fern) [1421]	None, due to distance from the site of proposed amendments which are largely in the city area or where outside are confined to local settlements with localised effects	No	No
002165	Lower River Shannon SAC	1km	Sandbanks which are slightly covered by sea water all the time [1110] Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] Perennial vegetation of stony banks [1220]	Amendments that call for the zoning of undeveloped green fields lands in the city, can affect local hydrology. Though the sites are outside the Lower River Shannon SAC site, the loss of floodplain habitats could affect the movement of species such as otters. Habitats such as these would function as stepping stones for such species as mentioned in Article 10 of the Habitats Directive.	Yes	Yes

		<p>Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]</p> <p>Salicornia and other annuals colonising mud and sand [1310]</p> <p>Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]</p> <p>Mediterranean salt meadows (Juncetalia maritimi) [1410]</p> <p>Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]</p> <p>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]</p> <p>Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]</p> <p>Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]</p>			
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			<p>Petromyzon marinus (Sea Lamprey) [1095]</p> <p>Lampetra planeri (Brook Lamprey) [1096]</p> <p>Lampetra fluviatilis (River Lamprey) [1099]</p> <p>Salmo salar (Salmon) [1106]</p> <p>Tursiops truncatus (Common Bottlenose Dolphin) [1349]</p> <p>Lutra lutra (Otter) [1355]</p>			
004077	River Shannon and River Fergus Estuaries SPA	1km	<p>Cormorant (Phalacrocorax carbo) [A017]</p> <p>Whooper Swan (Cygnus cygnus) [A038]</p> <p>Light-bellied Brent Goose (Branta bernicla hrota) [A046]</p> <p>Shelduck (Tadorna tadorna) [A048]</p> <p>Wigeon (Anas penelope) [A050]</p> <p>Teal (Anas crecca) [A052]</p>	<p>Amendments that call for the zoning of undeveloped green fields lands in the city, can affect local hydrology. Though the sites are outside the Lower River Shannon SAC site, the loss of floodplain habitats could affect the movement of species such as Lapwing. Sites such as these are suitable for feeding and resting away from the main river channel.</p> <p>With the mobile nature of bird populations such sites are important for</p>	Yes	Yes

		<p>Pintail (<i>Anas acuta</i>) [A054]</p> <p>Shoveler (<i>Anas clypeata</i>) [A056]</p> <p>Scaup (<i>Aythya marila</i>) [A062]</p> <p>Ringed Plover (<i>Charadrius hiaticula</i>) [A137]</p> <p>Golden Plover (<i>Pluvialis apricaria</i>) [A140]</p> <p>Grey Plover (<i>Pluvialis squatarola</i>) [A141]</p> <p>Lapwing (<i>Vanellus vanellus</i>) [A142]</p> <p>Knot (<i>Calidris canutus</i>) [A143]</p> <p>Dunlin (<i>Calidris alpina</i>) [A149]</p> <p>Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</p> <p>Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</p> <p>Curlew (<i>Numenius arquata</i>) [A160]</p> <p>Redshank (<i>Tringa totanus</i>) [A162]</p>	<p>functioning of Special Protection Areas even if they are outside its designated boundaries.</p>		
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			<p>Greenshank (<i>Tringa nebularia</i>) [A164]</p> <p>Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</p> <p>Wetland and Waterbirds [A999]</p>			
004165	Slievefelim to Silvermines Mountains SPA	18km	Hen Harrier (<i>Circus cyaneus</i>) [A082]	None, due to distance from the site of proposed amendments which are largely in the city area or where outside are confined to local settlements with localised effects	No	No
004161	Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA	Within	Hen Harrier (<i>Circus cyaneus</i>) [A082]	There is a proposal for a slight encroachment of the development boundary of Carrigkerry into the SPA. This is close to the village centre and hence already subject to human disturbance and has been the subject of previous planning permissions	Yes	Yes
000439	Tory Hill SAC	20km	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210]	None, due to distance from the site of proposed amendments which are largely in the city area or where outside are confined to local settlements with localised effects.	No	No

			Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davalliana</i> [7210] Alkaline fens [7230]			
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3.4 Other Plans and Programmes

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 affect European Sites. Section 6.0 below outlines a selection of plans or projects that may interact with the Plan to cause in-combination effects to European Sites. Projects within the Draft Plan area and receiving environment will be considered. Given the uncertainties that exist with regard to the scale and location of developments facilitated by the Draft Plan, it is recognised that the identification of in-combination effects is limited and that the assessment of in-combination effects will need to be undertaken in a more comprehensive manner at the project level.

3.5 AA Screening Conclusion

The effects that could arise from some of the amendments have been examined and could affect the integrity of Lower River Shannon SAC site and have indirect effects on the River Shannon and Fergus Estuary SPA. See Table 3.1. The Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA could also be affected. On the basis of the findings of this Screening for AA, it is concluded that the Plan and amendments:

- Is not directly connected with or necessary to the management of any European Site; and
- May, if unmitigated, have significant effects on three no. European Sites.

Therefore, a Stage 2 AA is required for the Plan (see Section 4 of this report).

Section 4: Stage 2 Appropriate Assessment

4.1 Introduction

The Stage 2 AA assesses whether the amendments to the Plan alone, or in-combination with other plans, programmes, and/or projects, would result in adverse impacts on the integrity of the 3 European Sites brought forward from screening, with respect to site structure, function and/or conservation objectives.

The Draft Limerick Development Plan is a land use plan and is not intended for the purposes of managing Natura 2000 sites. The primary legislation behind the preparation of a development plan is the Planning and Development Act 2000 (as amended) and Section 28 Guidelines. These inform the policy content of the plan. The policy content of the plan guides development and land use in Limerick, and it is through this that effects can occur on Natura 2000 sites. This Natura Impact Statement (NIS) presents the results of the assessment of the effects of the plan policies on the Natura 2000 site network. It also sets out mitigation and monitoring measures

4.2 Characterisation of European Sites Potentially Affected

The AA Screening identified three European Sites with pathway receptors for potential effects arising from the implementation of the Plan. Table 3.1 above sets out each of the qualifying features of the 14 European Sites brought forward from Stage 1. Each of these site characterisations were taken from the NPWS website. The three sites are the Lower River Shannon SAC site (002165), the River Shannon and Fergus Estuary (004077) and The Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (004161).

4.3 Identifying and Characterising Potential Significant Effects

The following parameters can be used when characterising impacts¹:

Direct and Indirect Impacts - An impact can be caused either as a direct or as an indirect consequence of a Plan/Project.

Magnitude - Magnitude measures the size of an impact, which is described as high, medium, low, very low or negligible.

Extent - The area over that the impact occurs – this should be predicted in a quantified manner.

Duration - The time that the effect is expected to last prior to recovery or replacement of the resource or feature.

- Temporary: Up to 1 Year;
- Short Term: The effects would take 1-7 years to be mitigated;
- Medium Term: The effects would take 7-15 years to be mitigated;
- Long Term: The effects would take 15-60 years to be mitigated; and
- Permanent: The effects would take 60+ years to be mitigated.

Likelihood – The probability of the effect occurring taking into account all available information.

- Certain/Near Certain: >95% chance of occurring as predicted;¹
- Probable: 50-95% chance as occurring as predicted;
- Unlikely: 5-50% chance as occurring as predicted; and
- Extremely Unlikely:<5% chance as occurring as predicted.

Ecologically Significant Impact - An impact (negative or positive) on the integrity of a defined site or ecosystem and/or the conservation status of habitats or species within a given geographic area.

Integrity of a Site - The coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.

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. Site-Specific Conservation Objectives (SSCOs) have been prepared for a number of European Sites. These detailed SSCO aim to define favourable conservation condition for the qualifying habitats and species at that site by setting targets for

¹ These descriptions are informed by publications including: Chartered Institute of Ecology and Environmental Management (2016) "Guidelines for ecological impact assessment"; Environmental Protection Agency (2002) "Guidelines on the Information to be contained in Environmental Impact Statements"; and National Roads Authority (2009) "Guidelines for Assessment of Ecological Impacts of National Roads Schemes".

appropriate attributes that define the character habitat. 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 species can be described as being achieved when: 'population data on the species concerned indicate that it is maintaining itself, and the natural range of the species is neither being reduced or 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'.

Favourable conservation status of a habitat can be described as being achieved when: 'its natural range, and area it covers within that range, is stable or increasing, and the ecological factors that 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'.

Conservation Objective for SACs:

- To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species that the SAC has been selected.

Conservation Objective for SPAs:

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

4.4 Assessment of likely Significant Effects on Designated Sites

Assessment of potential impacts on European Sites is conducted utilising a standard source-path-receptor model. The 2001 European Commission AA guidance outlines the following potential changes that may occur at a designated site, which may result in effects on the integrity and function of that site: loss/reduction of habitat area; habitat or species fragmentation; disturbance to key species; reduction in species density; changes in key indicators of conservation value (water quality etc.); and climate change.

4.4.1 Loss/Reduction of Habitat Area

The Draft Plan provides a framework for granting consent for land use developments and activities across the whole County. Potential effects arising from developments and activities include land take, habitat destruction, disturbance effects, light pollution, dust, hydrological interactions, airborne pollution and excessive noise. Three Natura 2000 sites

occurring within or partially within the County have the potential to be impacted by the Amendments, but one in particular the Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (004161) will suffer direct encroachment.

4.4.2 Habitat or species Fragmentation

The Draft Plan provides a framework for granting consent for land use developments and activities across various sectors. Potential effects arising from developments and activities include the fragmentation of habitat and or species through, for example, light pollution, habitat loss or removal of stepping stone habitats. The Draft Plan includes measures to minimise potential fragmentation and to facilitate the enhancement of ecological corridors such as riparian zones, planting of native tree species, management of habitats such as woodlands and minimising inappropriate lighting ((relevant policies and objectives are expanded on in Section 5.0).

Further to the above, there are provisions related to non-designated sites and specific ecological resources and/or habitats such as waterways, wetlands and peatlands that will ensure that habitat or species fragmentation does not occur in relation to the connectivity of the ecological resources necessary to maintain the ecological integrity of European Sites.

4.4.3 Disturbance to Key Species

The Draft Plan provides a framework for granting consent for land use developments and activities across various sectors. Disturbance effects are caused by any activity or development that has potential to alter the movement patterns or distribution of species, for example direct disturbance through human activity/movement as a result of recreation/tourism or noise pollution.

Other disturbance effects could relate to a reduction in habitat quality for species. Policies to ensure the protection of habitat quality have been built into the plan as identified below. Disturbance to Flora Protection Order species has also been included in analysis of the amendments below.

4.4.4 Reduction in species density

Species densities are reliant on species distributions, habitat condition, connectivity of ecological resources and availability of resources such as prey/food. The Draft Plan introduces potential sources for effects to affect these four determinant factors for species densities in the form of construction phase effects such as habitat destruction, light pollution, hydrological interaction or operational effects such as disturbance effects, habitat

encroachment and trampling. However, the Plan contains provisions to enhance biodiversity, landscape and the environment within Limerick. The Draft Plan includes provisions related to non-designated sites and specific ecological resources and/or habitats such as waterways, wetlands and peatlands that will ensure that habitat or species fragmentation does not occur in relation to the connectivity of the ecological resources necessary to maintain the ecological integrity of European Sites. Measures relating to light pollution, noise pollution, habitat loss and fragmentation are addressed below including policies and objectives within the draft plan. Measures are also included that will help protect and improve water quality interactions, which can influence species densities, including those relating to water services infrastructure, protective buffer zones and water quality standards.

4.4.5 Changes of Indicators of Conservation Value

Indicators of conservation value are identified as key ecological resources such as water quality, air quality, habitat quality, population health of key species or ‘keystone species’ etc. The protection of these resources is a key focus of the Draft Plan. The Draft Plan contains many policies and objectives to ensure the protection of both ground and surface water quality. It is important that the amendments are in line with these. Development within the vicinity of groundwater or surface water dependent European Sites will not be permitted where there is potential for a significant impact upon the groundwater or surface water supply to the European Sites. Additionally, various other policies provide broader scope to ensure the protection of the wider landscape associated with riparian zones and habitats sensitive to hydrological interactions. These are outlined in section 5.0 below.

4.4.6 Climate change

The Draft Plan includes provisions that potentially conflict with climate mitigation and provisions that will help to contribute towards climate mitigation. Greenhouse gas emissions arising from the Plan will not affect changes projected to arise from climate change to the degree that it would affect the European Sites considered.

Section 5: Assessment of Draft Development Plan Amendments

5.1 Introduction

Each amendment proposed in the Draft Limerick Development Plan was assessed as part of the Environmental Report. This has a wider focus than the NIS, but from the Environmental Report it was possible to identify those amendments that would have the potential to have effects on the Natura 2000 site network and possible ecological impacts.

5.2 Assessment of Proposed Amendments to the Draft Plan

A Chief Executive's Report on Public consultation was circulated to the Elected Members on 26 November 2021. This also included Volume 3(a) Environmental Assessments of Proposed Material Amendments. These amendments are outlined in section 3.3.3 above. The reports were considered over a series of briefing meetings, which culminated in a Special Council Meeting of 18 February 2022, where the final amendments were considered by the Elected Members.

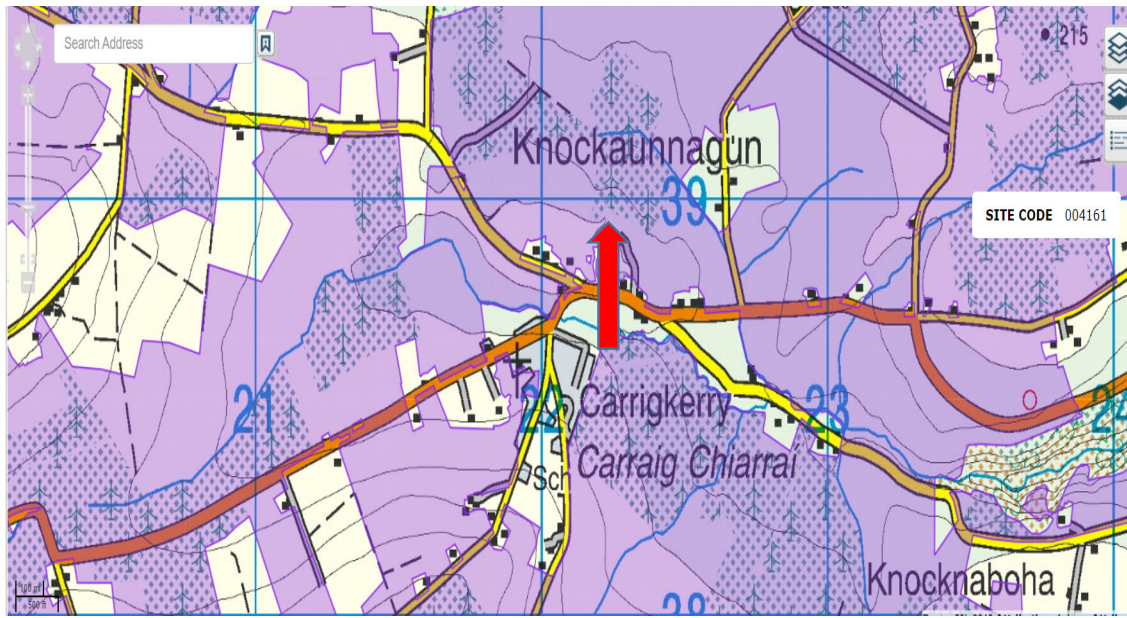
This section sets out the additional amendments made by the elected members at that council meeting and examine the potential for effects that they might have on the Natura 2000 site network. As indicated above there is potential for effects on the three sites. These are carried forward from Table 3.1 above.

1. Extend the development boundary of Carrigkerry, indicated by dashed red line.



Reasons given for amendment:

- The proposed lands are an integral part of the village core and take account of permission recently granted.
- The proposed lands will support compact growth, in line with national and regional planning policy.



The shaded areas shows the extent of the of the Special Protection Area designation. The Carrigkerry boundary extension lies within it.

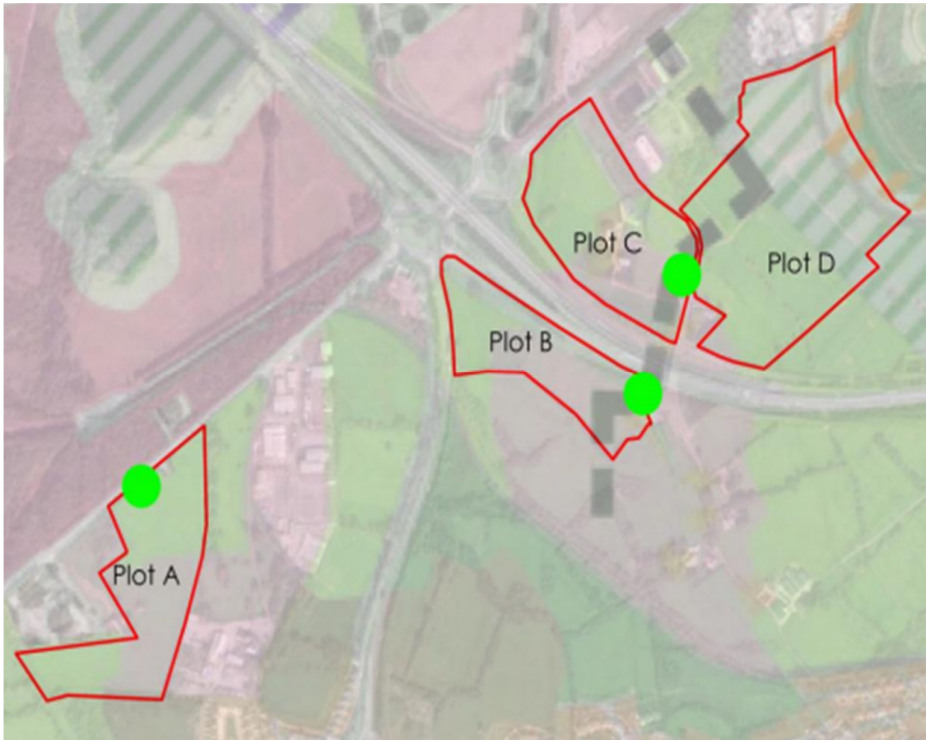
NIS commentary:

Though there is a slight encroachment into the West Limerick Hills SPA, it is considered that since this area is close to the village core it is already subject to human disturbance and would not be suitable foraging or nesting habitat for the hen harrier. Noted also that a 2009 circular from the NPWS mentions that rural housing does not generally affect the ecological status of the hen harrier. An outline planning permission had been granted in 2018 and a subsequent application was granted in 2021. The boundary extension reflects this planning context. Furthermore, the lands in question are not suitable hen harrier habitat.

Conclusion: The effects of the expansion would not be significant. However, as mitigation it is recommended that areas at the outskirts of the boundary extension be allowed to revegetate naturally as rough upland grassland to ensure that foraging habitat remains in the area.

2. Change of Zoning City and Environs on Lands at Ballykeeffe

Propose a change of zoning from Agriculture be changed to Enterprise and Employment at Ballykeeffe - the proposed amendment relates to 4 plots of lands Plot A (5.57ha), Plot B (4.25ha), Plot C (5.57ha) and Plot D (10.22ha). Lands zoned Semi - Natural Open Space are precluded from the rezoning, it only applies to Agriculturally zoned lands.



Reasons given for proposed amendment:

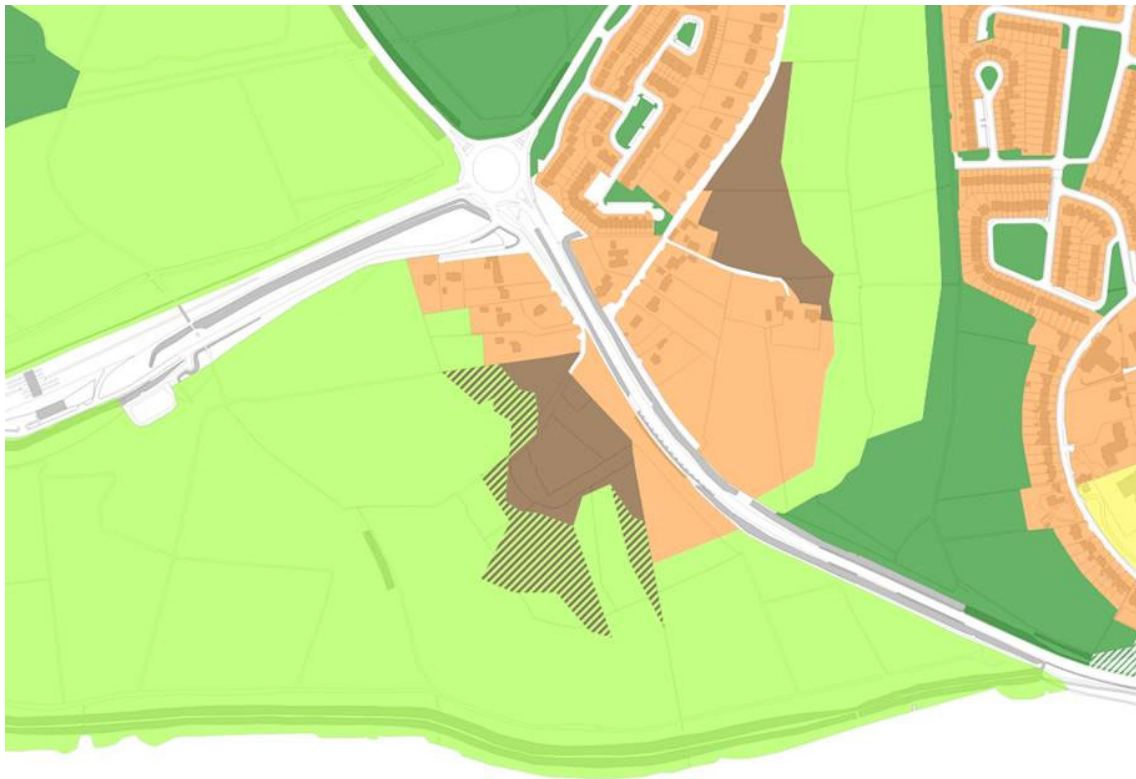
- The flood risk assessment accompanying the Draft Development Plan is based on the precautionary approach and the Flood Guidelines sets out that there are no uncertainties in datasets and assessment techniques
- Areas at risk of flooding along the Dock Road and adjoining the former Racecourse are zoned for Enterprise and Employment, with a high risk of flood. Flood risk is not an impediment to development for Enterprise and Employment.
- The Development Plan Justification Test submitted in support of the proposed amendment justifies the suitability of the lands for Enterprise and Employment and proposes measures to prevent flood inundation, including the raising of floor levels.
- Strategic location of the site with accessibility and connectivity to the inter-regional transport network and other transport modes supports optimisation of land use at this location for economic development.

NIS commentary: The site is within Flood Zone A. Apart from the risk of flooding and consequent effects on local hydrology it also means that there will be loss of open grassland within the plan area which might be used by bird species from the nearby SPA. See section 5.4 below. This has been included as there are number of amendments within the plan area to re-zone lands, prone to flooding, previously zoned for semi-natural open space or

agriculture within the plan for development uses. Article 10 of the Habitats Directive encourages the retention or management of landscape features, outside of the Natura 2000 site network to assist with the dispersal of species. It has been said that ..."grassland in urban areas especially that which is close to the coast is used by water birds to feed when food is scarce in their natural estuarine habitats or when weather and tides there are not suitable" (Ni Lamhna, Nairn Benson and Kelly (2012, pp. 204-5).

Conclusion: see section 5.3 below. While this zoning would result in the eventual loss of habitat which might be used by wildfowl dispersing from the main river channel during flood events (either tidal or weather related) the effects is expected to be localised, in that Limerick is fringed by agricultural grasslands within a short flight time away. From this perspective it is considered that the effects would be localised, i.e. having an effect only within the southern environs area of the city.

3. Proposal to re-zone from Agriculture to Residential zoning of 4ha. in Clonmacken, south of the Clondell Road.



The shaded lands are the land in question; these are the additional lands to be zoned which are in a flood zone.

Reasons given for proposed amendment:

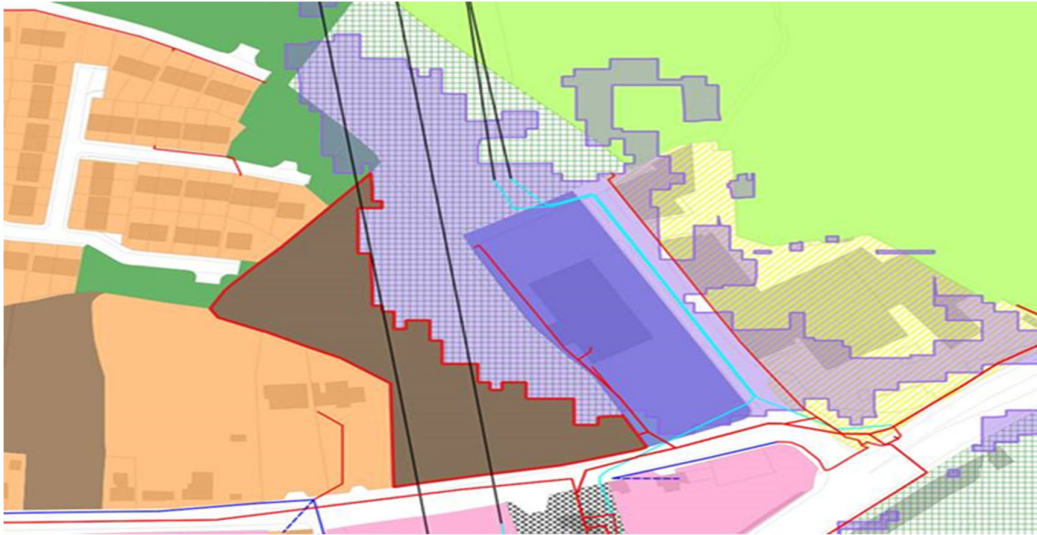
- The site is located in close proximity to the City Centre, will facilitate the development of compact growth in line with national and regional planning policy;
- Site is located in an established residential area with sustainable transport links to the Jetland District Centre and City Centre;
- SHD pre-planning discussions will facilitate the delivery of residential units over the lifetime of the plan and contribute to population growth;
- The Site-Specific Flood Risk Assessment, that was submitted in support of the proposed amendment, indicates that enabling/mitigation works would bring much of the site out of the flood risk zones. A Justification Test indicating that the site passes the Development Plan justification test was also submitted.

NIS response: The lands that are shaded in black are in addition to the lands that are zoned. They are in a flood zone. Similar to the other lands, the gradual zoning and consequent loss of flood prone lands to development zoning, would mean the loss of habitat suitable for foraging wildfowl, close to the estuary. This is likely to be limited, as part of the site is covered in scrub which would not be attractive to wildfowl species.

Conclusion: Limited effects as the site is partly covered in scrub, a habitat which wildfowl do not favour. In this case, it is considered that any potential effects on the nearby SAC or SPA would be very limited and not significant.

4. Change to Zoning at Rhebogue from Groody Green Wedge to Residential

Proposes that the zoning of the lands at Rhebogue identified on the image below, outlined in red are changed from Groody Valley Green Wedge to New Residential (0.94ha.).



Reasons given for proposed amendment:

Two parallel 110kv high voltage electricity cables and pylons transverse the site. The significant cost of relocating the cables has not been defined. No cost benefit analysis supports the viability or otherwise of relaying the ESB cables underground. It is premature to determine that the repositioning of electrical infrastructure would severely restrict the development of the site when the details are unknown. Practicality, cost and viability must be determined.

NIS commentary: Following consultation with the ESB, the Planning Authority have been informed that relocation of the high voltage infrastructure cannot be facilitated at this location. Therefore, the potential development of the site is seriously restricted. Retention of green wedge zoning would also ensure maintenance of levels of open space within the plan area. As outlined above the retention of such open space has beneficial ecological effects and avoids the gradual loss of green areas within the urban boundaries. The Groody Green Wedge is used by a number of species associated with both the nearby SPA and SAC Both Otters and Lapwing, for instance, use the River Groody Green Wedge and the retention of green space on the edge of the green wedge reduces chances of disturbance to species that use the green wedge. This will help ensure the integrity of network of green spaces around the urban area which is consistent with Article 10 and can facilitate species movement.

Conclusions: the retention of green wedge zoning on the site would help prevent further encroachment onto the River Groody Green wedge itself which plays host to, amongst

others, otters and lapwing both part of the qualifying interests of the Lower River Shannon SAC site and the River Shannon and Fergus Estuaries SPA. However, this area is on the fringe of the green wedge set amongst other developed lands and it's rezoning, from an ecological perspective would be likely to be limited especially if it would not encroach into the flood prone area east of the site, indicated by the blue shading above.

5 **Amendment that the lands adjoining the Dooradoyle District Centre outlined in red below, be zoned "Enterprise and Employment" rather than "Semi Natural Open Space"**

1. Change of zoning



2) Add an objective to Chapter 4 (A Strong Economy) as follows: Dooradoyle Urban Quarter:

- To promote the continued development of lands around the Dooradoyle District Centre and adjoining lands as a Strategic Employment Location through the delivery of additional office based employment uses in a phased manner in conjunction with supporting infrastructure development.
- To promote improvements to connectivity, signage and permeability within the wider area including pedestrian and cycle facilities linking to Portland Park and provide for the link road from Dooradoyle Road to Rosbrien Road
- To facilitate the early upgrading of the existing flood defence infrastructure, thus ensuring the long-term flood protection of the wider lands in Dooradoyle in a manner compatible with any future City Wide Flood Relief Scheme.
- Any application on lands at risk of flooding to be accompanied by a Site Specific Flood Risk Assessment which shall demonstrate that any development does not result in additional

significant flood risk in the area and does not impede the future delivery of a wider flood relief scheme for Limerick.

- An overall framework plan / masterplan is to be prepared for the lands in advance or as part of any application for a portion of the currently undeveloped lands.

Reasons given for proposed amendment:

The Dooradoyle area represents a strategically located parcel of lands providing a gateway to the city on an important public transport corridor within the built-up area of the southern suburbs of Limerick. The Dooradoyle District Centre and adjoining lands, extending to over 30 hectares, represent a strategically important large scale under-developed site within the inner suburbs with potential to be further developed at the heart of a comprehensive mixed-use Urban Quarter. The existing Crescent Shopping Centre alone already employs nearly 1,500 workers, and when fully built out the total site area has the capacity to accommodate in the order of 2,000 additional employees (additional jobs mainly in offices, technology and support services). Dooradoyle District Centre is therefore considered to be a Strategic Employment Location and has the potential for a significant intensification of employment. The designation as a Strategic Employment Location would ensure compliance with higher tier plans and Section 28 Guidelines.

The lands are sequentially favourable for development, being located on the transition of the City and Southern Environs and comprise a significant infill site, which will be in accordance with national planning objectives for consolidated compact urban growth. The river, N18 and disused rail line historically have provided a physical barrier to permeability in the area, which may be addressed as part of the comprehensive development of the lands. Development of the lands on the old boundary of the City and County Council's would be representative of the new single Authority approach to the sustainable and appropriate development of Limerick.

The development of the lands would further utilise existing infrastructure such as public transport and services.

Additionally with reference to the submission on the draft Development Plan by Irish Rail to the provision of a commuter rail station at Dooradoyle and forthcoming publication of LSMATS setting out the future sustainable transport.

Therefore, these lands should be identified as a key opportunity site for Limerick City and to give effect to such a designation, there is a requirement to have the lands appropriately zoned.

The provision of Enterprise and Employment lands at this location will provide additional choice of land for companies and investment as an attraction to investment in Limerick in the short term having regard to the existing infrastructure including services, high quality bus services and pedestrian and cycle facilities.

Enterprise and Employment uses are classed as less vulnerable uses under the Flood Risk Guidelines and a suite of documentation is included as Appendices to this rationale, including:

- Appendix 1 – Dooradoyle Urban Quarter Strategic Flood Risk Assessment Summary Report

- Appendix 2 – Plan Making Justification Test
- Appendix 3 – Strategic Flood Risk Assessment
- Appendix 4 – Geotechnical Analysis
- Appendix 5 – Downstream Breach Assessment
- Appendix 6 – IDA Submission on Draft Development Plan

It is further noted that the IDA submission on the draft Development Plan contends sufficient employment lands to attract inward employment investment are not provided for by the draft Development Plan. The proposed amendments will help address this concern.

The IDA has indicated in its submission it is targeting 76 investments for the mid west region between now and 2024. Thus, more lands are needed immediately and not at the next development plan in a number of years time, or there is risk of lost investment in the County.

NIS Commentary: The site is within Flood Zone A and the OPW have raised concerns that development of the site is premature pending the Limerick City Flood Relief Scheme being progressed.

The loss of land specifically zoned as semi-natural open space because of its location within a floodplain and its undeveloped grassland would mean a loss of habitat network within the City boundaries. Article 10 of the Habitats Directive encourages the retention or management of landscape features, outside of the Natura 2000 site network to assist with the dispersal of species. Cumulatively the loss of this and other open space habitat will

affect the ability of species to move about and within the urban area and reduce the usefulness of the city area for the bird species listed of conservation interest within the Special Protection Area (see 5.3 below).

Conclusion: The loss of low-lying wet grassland with associated drains would mean the loss of suitable foraging habitat for wildfowl dispersing from the nearby River Shannon SPA. The loss of drains would also remove habitats for amphibians such as frogs and newts. This would result in the direct loss of habitats but these would be outside the qualifying interests of both the nearby SAC and SPA. The drains would need to be surveyed for the presence of Flora Protection Order species such as the triangular club rush and the Opposite Leaved Pondweed. However, the effects are judged to be local and limited and there are similar habitats along the river and the wildfowl are within short flying distances of other agricultural grasslands in the hinterland of Limerick city.

6. Change Agricultural zoning (1.6 hectares) to District Centre zoning at lands located within the Jetland District Centre at Caherdavin, Ennis Road

Propose a change of zoning from Agriculture to District Centre of 1.6ha. as per the image below at the Jetland District Centre, Caherdavin, Ennis Road



Reasons given for proposed amendment:

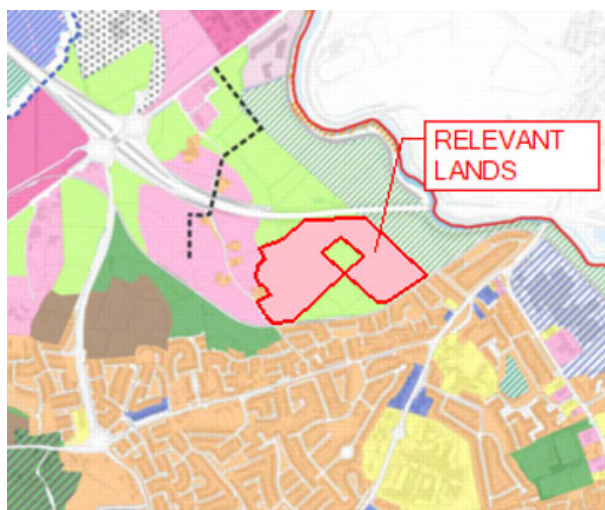
- A comprehensive planning application has been submitted on the land for HSE sponsored Primary Care Centre.
- A comprehensive Site-Specific Flood Risk Assessment (SSFRA) and Justification Test was submitted demonstrating that the site is at low risk of flooding and can be developed in accordance with Department Flooding Guidelines.

- Contrary to the consideration of the planning authority it is submitted that the proposed development does comply with the Justification Test, having regard to its location within and adjoining the core of an urban area.
- A substantial part of the site, adjoining the road is brownfield in nature and is in need of regeneration.
- There is no other alternative site available in the northwestern suburbs of Limerick City, surrounded by residential development, accessible by public transport with the ability to create synergies with other services and facilities, that can accommodate the development proposal.

NIS Commentary: The site is located in Flood Zone A. The site is currently undeveloped and its retention as such within the urban area would add to the network of green space available which would be in line with Article 10 of the Habitats Directive. As indicated elsewhere the zoning of previously unzoned flood vulnerable lands will have the effects of reducing the amount of green space available for passive amenity and for use by wildlife within the urban boundary.

Conclusion: The proposed amendment would lead to a loss of green space within the city area, which would have a local effect. There is the possibility of a hydrological link to the Shannon, but overall the potential for effects on the SAC/SPA site is considered to be slight, both due to distance but also to the fact that good practice measures to prevent pollution is now part of standard work practices. The effects are regarded as localised.

7. Amend City and Environs Zoning Map to change the zoning on lands of approx. 14 hectares within Ballykeeffe, from Agriculture to Enterprise Employment



Reasons given for proposed amendment:

- The lands subject to this proposed change are similar to Enterprise and Employment zoned lands at Greenpark. The relevant lands are located on the opposite side of the River to the Greenpark Lands.
- The lands are also located adjacent to a disused rail line, which has the potential for sustainable mass travel from the lands to the city centre and other areas of the City and County.
- The defended site (and proposed development area) is not within the existing area of risk (although is largely within Flood Zone A) so risk is from residual risk of breach rather than direct inundation. The embankment defences are part of the OPW arterial drainage scheme and are of unknown condition and standard of protection, although the defence height (as modelled by CFRAM and RPS) provides protection to the site in the 0.5% and 0.1% tidal events.
- Any detailed development proposals can address and manage flood risk with the site plans, typically through appropriate setting of finished floor levels, ground raising and use of the sequential approach within the development to ensure more vulnerable elements of the design are at a higher level.
- It is noted within Page 26 of the “The Planning System and Flood Risk Management - Guidelines for Planning Authorities” under the heading “Justification Test” that “...strategically located urban centres and particularly city and town centre areas whose continued growth and development is being encouraged in order to bring about compact and sustainable urban development and more balanced regional development.” We therefore believe these lands on the city boundary adjacent to established residential and industrial developments can contribute to the compact development of the City, avoid urban sprawl and therefore the use of justification test when assessing flood risk is appropriate.
- These lands meet the requirements for sustainable development under the Flood Risk Management Guidelines, the aim of which is to ensure that sustainable development can proceed in towns and cities, despite the fact most are located in flood plains. As the lands are already defended these lands are not flood plains and any development of these lands will not unduly effect lands up or down stream of the river.

NIS Commentary: A portion of the lands are within Flood Zone A and B. Similar to other areas the loss of agriculturally zoned lands to more intensively development zonings would mean the eventual loss of open space in the city areas which could be used by both wildfowl

species from the Special Protection Area and also add to risk of flood displacement within the city area and effects on local hydrology.

Conclusion: See section 5.3 below. While this zoning would result in the eventual loss of habitat which might be used by wildfowl dispersing from the main river channel during address conditions (either tidal or weather related) the effects are expected to be localised i.e. having an effect only within the southern environs area of the city, in that Limerick is fringed by agricultural grasslands within a short flight time away..

8. Change of zoning from Agriculture to New Residential zoned land (2.9 ha), Ballycough, Castletroy

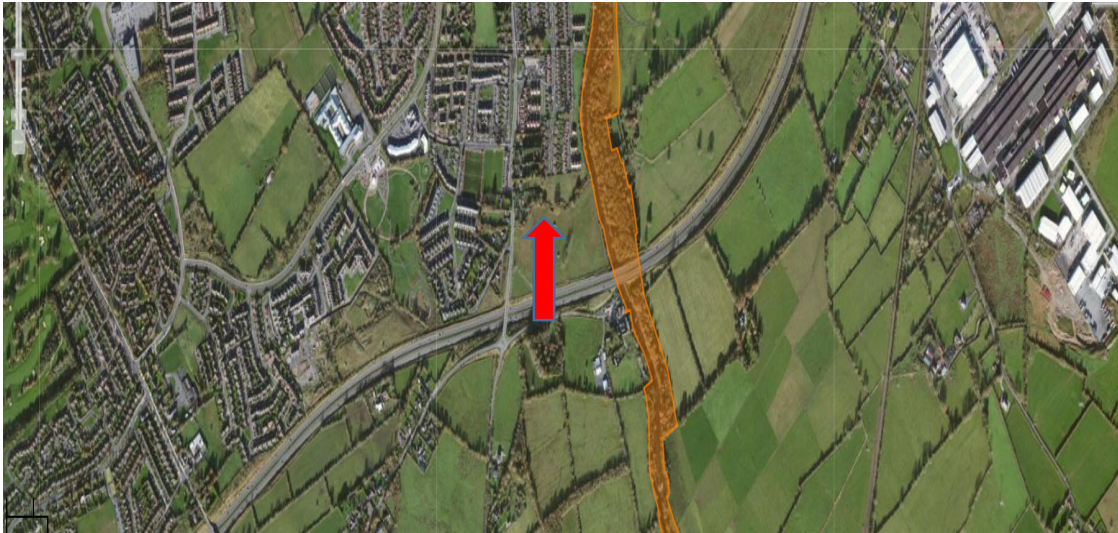
Propose the change of zoning from Agriculture to New Residential of 2.9ha. at Ballycough, Castletroy



Reasons given for proposed amendment:

- Compact growth, the site is connected by footpath to and within walking distance of the thriving Newtown Shopping Centre and the many local educational / community facilities.
- The site is accessible by public transport.

- Requirement for additional zoned land.
- Lands are not identified on CFRAM maps as being at flood risk.
- Noise separation corridor of 80m proposed.



The arrow indicates the land in question, while the shaded areas indicates the Lower River Shannon SAC site to the west.

NIS Commentary: Any development of the lands would require an appropriate level of assessment of all the relevant issues on site, including noise, surface water management and ecology. The site is adjacent to the Mulkear River, which is part of the Lower River Shannon SAC site. Without mitigation measures there is the potential for effects on this site. It is recommended that a buffer be observed between any potential development and the SAC site and that the line of trees and vegetation along the banks of the Mulkear be retained, to avoid encroachment into the river zone. This mitigation should be built into any site level assessment of development projects. With this mitigation in place, there should not be significant effects on the nearby SAC site.

Conclusion: with the mitigation measures mentioned above, the possibility of effects on the nearby SAC site is not judged to be significant. The buffer would prevent light spill into the SAC site, while the vegetated strip would enhance the buffer between the site and the Lower River Shannon's Qualifying Interests.

5.3 The Importance of the River Shannon and Fergus Estuary Special Protection Area

The Special Protection Area has been designated for its internationally important population of wintering wildfowl. The ecology of coastal wildfowl and their use of coastal and near

coastal habitats is complex; the following lengthy quote is from The River Shannon & River Fergus Estuaries Special Protection Area (Site Code 4077) Conservation Objectives Supporting Document (NPWS, 2012) and indicates the situation:

“A single wetland site seldom meets all the ecological requirements of a diverse assemblage of waterbirds”. Although some waterbird species will be faithful to specific habitats within the SPA, many will at times use habitats situated within the immediate hinterland of the site or in areas ecologically connected to the SPA. These areas may be used as alternative high tide roosts, as a foraging resource or, be simply flown over, either during migration or on a more frequent basis throughout the non-breeding season as waterbirds move between different areas used (e.g. commuting corridors between feeding and roosting areas). In a Limerick context waders, such as snipe and lapwing use such areas in the city and environs as alternative feeding areas from those along the Shannon as tide and weather conditions change.

Reliance on alternative habitats will vary between species and from site to site. Use of alternative habitats is also likely to vary through time, from seasonally through to daily, and different habitats may be used by day and night (Shepherd et al. 2003). Different waterbird species may utilise wetland habitats in different ways. For example, while the majority of wading birds forage across exposed tidal flats, species such as Lapwing and Golden Plover are considered to be ‘terrestrial waders’ typically foraging across grassland and using tidal flats primarily for roosting. When tidal flats are covered at high water, intertidally-foraging waterbirds are excluded and many will move to nearby fields to feed. Terrestrial foraging is also important when environmental factors (e.g. low temperature) reduce the profitability of intertidal foraging (e.g. Zwarts & Wanink, 1996b). Some waterbird species are simply generalists, and make use of a range of habitats, for example the Black-tailed Godwit that forage across intertidal mudflats but also readily use grassland habitats. Other species such as Greenland White-fronted Goose (*Anser albifrons flavirostris*) or Bewick’s Swan (*Cygnus columbianus bewickii*) are herbivores and are therefore reliant on terrestrial areas, often outside of the SPA boundary, and use the wetland site primarily for roosting. Some species switch their habitat preference as food supplies become depleted; an example being Light-bellied Brent Geese that exploit grasslands increasingly when intertidal seagrass and algae become depleted.

Thus the area designated as a SPA can represent a variable portion of the overall range of the listed waterbird species. To this end, data on waterbird use of areas adjacent to or ecologically connected to the SPA are often collected. Indeed for some species a mix of site-related and wider countryside measures are needed to ensure their effective conservation

management (Kushlan, 2006). Furthermore, it is recommended that assessments that are examining factors that have the potential to affect the achievement of the site’s conservation objectives should also consider the use of these ‘ex-situ’ habitats, and their significance to the listed bird species”.

Table 4.3 Qualifying Interests of the River Shannon and Fergus Estuary Special Protection Area.

Cormorant (<i>Phalacrocorax carbo</i>) [A017]
Whooper Swan (<i>Cygnus cygnus</i>) [A038]
Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]
Shelduck (<i>Tadorna tadorna</i>) [A048]
Wigeon (<i>Anas penelope</i>) [A050]
Teal (<i>Anas crecca</i>) [A052]
Pintail (<i>Anas acuta</i>) [A054]
Shoveler (<i>Anas clypeata</i>) [A056]
Scaup (<i>Aythya marila</i>) [A062]
Ringed Plover (<i>Charadrius hiaticula</i>) [A137]
Golden Plover (<i>Pluvialis apricaria</i>) [A140]
Grey Plover (<i>Pluvialis squatarola</i>) [A141]
Lapwing (<i>Vanellus vanellus</i>) [A142]
Knot (<i>Calidris canutus</i>) [A143]
Dunlin (<i>Calidris alpina</i>) [A149]
Black-tailed Godwit (<i>Limosa limosa</i>) [A156]
Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]
Curlew (<i>Numenius arquata</i>) [A160]
Redshank (<i>Tringa totanus</i>) [A162]
Greenshank (<i>Tringa nebularia</i>) [A164]
Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]
Wetland and Waterbirds [A999]

Source: www.NPWS.ie

The tidal and mud flat habitats along the estuary are of huge importance as a feeding resource for many of Ireland’s coastal birds (Wilson and Carmody , 2009, p.3) . In these locations, there would be flights to and from these areas for feeding purposes. It is not just estuarine habitats that would be of interest to feeding birds. Wildfowl species including geese and swans would often move inland to feed on agricultural grasslands. Ponds, lakes and wet grasslands inland would also attract birds away from the main river channel. This would mean that bird usage of the area would be both along the shore line and inland. This is reflected in the decision in the Shannon Bird survey to record species up to 500m inland, though of course many progress farther than that.

Inland grassland and wetland sites are attractive to goose and swan species and other wildfowl and can play an important role in helping to sustain them during wintering periods. Amenity grasslands and urban open space areas can also play an important part in this regard. The movement of these feeding flocks can be restricted by the presence of development. The list of birds as qualifying interests in the River Shannon and Fergus Estuaries SPA (Table 4.3) is widely varied with similarly varied flighting, roosting, feeding and dispersal characteristics.

Section 6: In Combination Effects

As the draft plan is a policy document, it makes sense to consider cumulative effects of plans and policy documents that are in operation at the same time.

Consideration of legacy plans such as the Limerick City Development Plan 2010 – 2016 (as extended), the Limerick County Development Plan 2010 – 2016 (as extended) is the first step in assessing cumulative effects in that prior to this plan there would have been a rather more disjointed approach to the development of city and county. They can now be considered as one development area, which means that there will be consistency of ecological policies across them. This makes sense as Natura 2000 sites do not follow administrative boundaries and policy consistency is important in their conservation.

The Draft Plan review has to be considered with changes to the city area, of which the Limerick and Castletroy, and the Southern Environs will now form part. Due to Limerick’s status as the major city in the Midwest, it is necessary to consider the plan review and its effects at a larger scale. Table 4.11 below shows the main plans and projects ongoing in Limerick and it is these that provide the most immediate back drop to the review. These are the plans and projects that are assessed with in-combination effects in mind.

Table 4.4 In combination effects.

Projects and Plans	Comments
Limerick Economic and Spatial Plan 2030	This plan identifies seven key locations in Limerick for re-development, which will complement the SIFP in that the aims of both as they relate to Limerick are similar. Both offer detailed area based suggestions of redevelopment of selected areas.
Regeneration areas	The Limerick Regeneration Framework Implementation Plan envisages one of the largest

	<p>capital programmes and largest regeneration programme in the State. The Plan includes investment on physical, on social and on economic programmes. From the point of view of population and human health the effects are meant to be beneficial.</p>
<p>Iarnrod Eireann: Redevelopment of Colbert Station and improvements to Limerick and Cork Line (2020)</p>	<p>The upgrading of rail infrastructure will have beneficial effects on the connectivity of the city as a whole and for movement of goods to and from the city. The line to Foynes which runs through part of the LDP area, may be upgraded in the long term but its effects are not anticipated to be significant in that this initial upgrade if it takes place will be for freight rather than passenger traffic. However, it has the potential to be part of a more sustainable transport network for the county as a whole. The improvement of the Limerick to Cork line with removal of level crossings reducing journey times will improve connectivity between Cork and Limerick. Rail improvements are also associated with the M20 road scheme.</p>
<p>Colbert Quarter Development.</p>	<p>This is multiagency development led by the Land development agency and combines the lands owned by several state agencies. This is a total of 50ha of lands close to the strategically important rail link from Colbert Station. It is central location and its development would be key part of revitalising Limerick City. It is intended to be a development with multiple uses but will have a strong residential component.</p> <p>Its location close to the rail link is similar to many ways to that of the Cork SDZ in Monard which is located close to the Cork Dublin line. Unlike Monard however the fact that the lands in question in Limerick are owned by state agencies and within the city boundaries make it far easier to develop.</p>

Shannon Integrated Framework Plan	The SIFP operates throughout the estuary, which means that docklands which in the city area are included as well as locations in Foynes and Askeaton. The SIFP has been viewed as being a model of good practice in the RSES and much valuable ecological survey work has resulted from it.
City Development Plan 2010 and County Development Plan 2010.	Since the amalgamation the implementation of the both plan have proceeded in tandem. The draft LDP will function across city and county plan areas, which should ensure greater planning policy consistency throughout the new metropolitan area.
Smarter Travel and successor programmes (which was a demonstration project until 2018)	Designed to promote sustainable travel patterns which will promote cycling and pedestrian access throughout the city and plan area.
Limerick Shannon Metropolitan Area Transport Strategy.	Outlines a coherent transport strategy for the region. This will mean an emphasis on more efficient transport and an expansion of cycle routes.
Limerick Northern Distributor Road (LNDR) and other large road infrastructure schemes such as the M20 and Foynes to Limerick scheme.	<p>The LNDR project to create a by-pass of the city with a route running to the north and the east would reduce the volumes of city traffic with consequent improvements in both traffic flows and the city environment. This would also assist in dealing with traffic flows on a citywide basis and complement the southern ring road.</p> <p>The M20 scheme would improve connectivity between Limerick and Cork which is an object not just of the LDP but also of the RSES. A programme of rail improvement works has been put forward in association with it.</p>
Upgrade of Bunlicky Wastewater Treatment Plant	Communications from Water Services and Irish Water indicate that a programme of works will be ongoing to ensure that capacity keeps pace with demand. This is essential for the future development of the City

	<p>and plan area. Capacity in infrastructure is of significant importance, as an enabler of growth, to support Limerick’s regional importance and has the largest treatment plants in the region which should keep pace with development demands.</p>
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6.1 Regeneration areas

The Limerick Regeneration Framework Implementation Plan includes measures for Kings Island, Moyross, Ballinacurra Weston and Southill. These masterplans provide the strategic basis for the implementation of work programmes over a 10 year period. The master plans are built on three key pillars: Social regeneration, Physical regeneration and Economic regeneration. All elements of the regeneration plans have been subjected to SEA/AA, as they were developed. As they operate within previously zoned areas their ecological effects, subject to ongoing assessment of new variations of relevant plans is not anticipated to be significant.

6.2 Shannon Integrated Framework Plan

This plan is intended to promote the sustainable development of the estuary as a whole and operates in the functional area of Limerick City and County Council, Clare County Council and Kerry County Council. With respect to the Limerick City, it called for the zoning of the dockland area for development purposes. This area is outside the Draft Plan boundary but may have an effect in creating employment for its residents. However, the underlying tenet of the SIFP is to promote development of the estuary as a whole. Any increased economic activity is bound to benefit the docks area and complement employment generation in the city. The Docklands for instance had been designated as a Strategic Employment Location in the existing City Development Plan (2010) and is described as an “under-utilised asset”. This had been the subject of assessment when the city plan was varied and as it related to previously developed dock land areas, it was not considered that there would be significant effects.

6.3 Limerick Economic and Spatial Plan 2030

This plan identifies seven key locations in Limerick for re-development, which will complement the SIFP in that the aims of both as they relate to Limerick are similar. Both offer detailed area based suggestions of redevelopment of selected areas. The Limerick 2030 plan was updated as part of the Draft Development Plan review process.

6.4 City Development Plan and County Development Plans (as extended)

The new Draft Plan will take the place of both the older City and County Plans, which will take in the larger metropolitan area of Limerick City and environs and Limerick County. As can be seen from the process to date there has been an update of environmental policies in the new plan, which should confer additional protection on the ecology of the area.

6.5 Smarter Travel and Successor Programmes

This initiative was designed to promote networks of cycle and pedestrian ways throughout the City and plan area and was also designed to maximise the use of public transport. In this regard, it fits well with the Colbert station project (see above). This initiative is updating traffic, pedestrian and cycle movement to suit a new era in Limerick traffic management and this has helped update plan policy in this regard.

6.6 Limerick Northern Distributor Road (LNDR)

This project to create a by-pass of the city with a route running to the north and the east would reduce the volumes of city traffic with consequent improvements in both traffic flows and the city environment. This would also assist in dealing with traffic flows on a citywide basis and complement the southern ring road, which runs to the south of the metropolitan area.

6.7 M20 and Foynes to Limerick Scheme

The Limerick to Foynes road scheme has been assessed with its own SEA and AA during its incorporation into the Limerick County Development Plan in 2017. Similarly, the M20 project will be assessed on its own merits when more details become available. It should be noted that the previous iteration of the M20 was assessed in the time frame of the last plan.

6.8 Upgrade of Bunlicky Wastewater Treatment Plant

Information from Development Management planners indicate that future development plans are afoot to ensure that facilities keep pace with demand. This is essential for the future development of the City and environs.

Section 7: Reasons for Choosing the Plan as Presented

One of the reasons for choosing the plan was that its contents had been informed by the Strategic Flood Risk Assessment. This has been a key element in informing the content of the NIS, in that flood prone areas are often closer to the main River Channel. In this case, it is the Shannon, which is a Special Protection Area and the Lower River Shannon Special Area of Conservation. Many of the sites mentioned as being rezoned from less intensive open space zonings (Amenity or Agricultural) to more intensive agricultural uses, would result in a loss of foraging habitats for wildfowl and prevent their movement to sites outside the estuary. This has led to the recommendation for less intensive open space zoning or equivalent as noted in the report above. Mitigation measures have also been suggested for some other sites such as in Castletroy, which is particularly important as the River Mulkear, forms the eastern boundary of the zoned area. This is part of the Lower River Shannon SAC site and has Sea Lamprey spawning reeds present along this stretch of river.

Section 8: Monitoring and Mitigation Measures

8.1 Monitoring

It anticipated that the monitoring schemes for ecological aspects of the plan will be tied in with its mid-term review. In many respects, this will involve close cooperation with the Development Management section within the Planning Authority as it is through planning applications that the practical effects of the plan will be felt. It is best to be involved at the earliest possible stage in trying to shape the eventual form of planning applications to minimise their ecological effects, involvement in pre-planning meetings will be important particularly from, a mitigation perspective. It will also mean liaising with the Planning Enforcement Section. The Development Applications Unit / DAU submission placed particular stress on enforcement. Some types of planning application such as those required for Strategic Development Infrastructure are not dealt with by the council but by An Bord Pleanála. These would have to be referred to the Council for comment so it would be possible to keep track of these and their possible ecological effects and inform the applicant and the An Bord Pleanála accordingly.

It will also be necessary to keep in contact with local National Parks and Wildlife Service Personnel as they would be aware of wider happenings, outside of planning, as they relate to designated sites and through their monitoring of any changes would be able to inform the council of any ecological changes.

Table 8.1 Ecological Monitoring Measures for the Plan.

Measure	Information Sources.	Comment
Liaise with Development Management section	Planning applications and individual ecological assessments. Appropriate Assessment register.	Request Development Management planners to pass on details of ecologically sensitive applications.
Engage with pre-planning meetings	Pre-planning register	May be possible to shape development form and layout to minimise ecological effects. This would be an important mitigation measure.
Monitor SID and SHD applications	Referrals by applicants and DM planners.	Dealt with by ABP, but input sought from the Council.
Liaise with Enforcement Section	Planning enforcement files as they relate to ecological issues and designated areas.	Emphasised by DAU NPWS submission.
Liaise with local National Parks and Wildlife Service personnel.	NPWS monitoring	Could assist in monitoring of ecological locations through their Article 17 reports
Liaise with Local Inland Fisheries Ireland Personnel	IFI studies and inspections	Useful in relation to Lower River Shannon SAC site and other designated water courses.
Liaise with Infrastructure providers such as RDO, TII and Iarnrod Eireann.	NIS EIAR EclA material from their projects.	Will inform our own policy review and help identify Environmental/Ecological trends.

8.1.1 Monitoring Actions for the Plan

Action 1: Identify ecological and environmental trends through enforcement and Article 17 reports, as they relate to Nature 2000 sites in particular.

Response: Modify policy content in the plan where deficiencies occur.

Action 2: Ensure that information and resources on climate change as received from the heritage council working group and CARO are fed into planning decisions and possible material for updates of the plan as they relate to designated sites and ecological issues generally.

Response: Update plan content during mid-term review. It will take at least this long to estimate trends.

Action 3: Identify trends and appropriate responses through monitoring the nature and amount of planning applications. As indicated in both this report and the Environmental report, renewable energy technology applications have changed almost entirely to solar applications over the last while. Monitoring planning application trends will indicate any future changes like this, which can be taken into account into ecological policy updates.

Response: Update plan content during mid-term review, if necessary. It will take at least this long to estimate trends.

Action 4: Keep track of new Appropriate Assessment and Section 28 guidance as it emerges and update policy content.

Response: Update plan content during mid-term review, or before depending on the significance of the new guidance.

8.2 Mitigation Measures

Mitigation measures should be properly informed and what follows is firstly a brief account of surveys that were carried out to inform mitigation. The assistance of the National Biodiversity Action Plan Funding and the Heritage Council Heritage funding schemes are gratefully acknowledged. Included are measures that have been carried out and also some that are planned:

A joint initiative with Clare County Council in 2018 identified a methodology for controlling Giant Hogweed. The project with Clare County Council was along a tributary of the River Shannon, which was part of the Lower River Shannon SAC site. The intention of the joint initiative was to arrive at a methodology that could be used to control this species within Natura 2000 sites. This is reflected in the reference to invasive species in the DAU/NPWS submission.

The initiative has since been employed by the Physical Development Section of Limerick City and County Council on the Loobagh River in south east Limerick.

In 2016 and 2017, in association with Clare County Council a twelve-month survey of the Bird populations of the Shannon Estuary was carried out. This was the first time that such a year round survey was carried out, provides a valuable baseline for bird numbers within the River Shannon and Fergus Special Protection Area, and provides a useful tool in informing planning decisions in relation to the estuary. It can also form a baseline for assessing possible climate change effects on these species. The impact of climate change was raised by the NPWS/DAU submission.

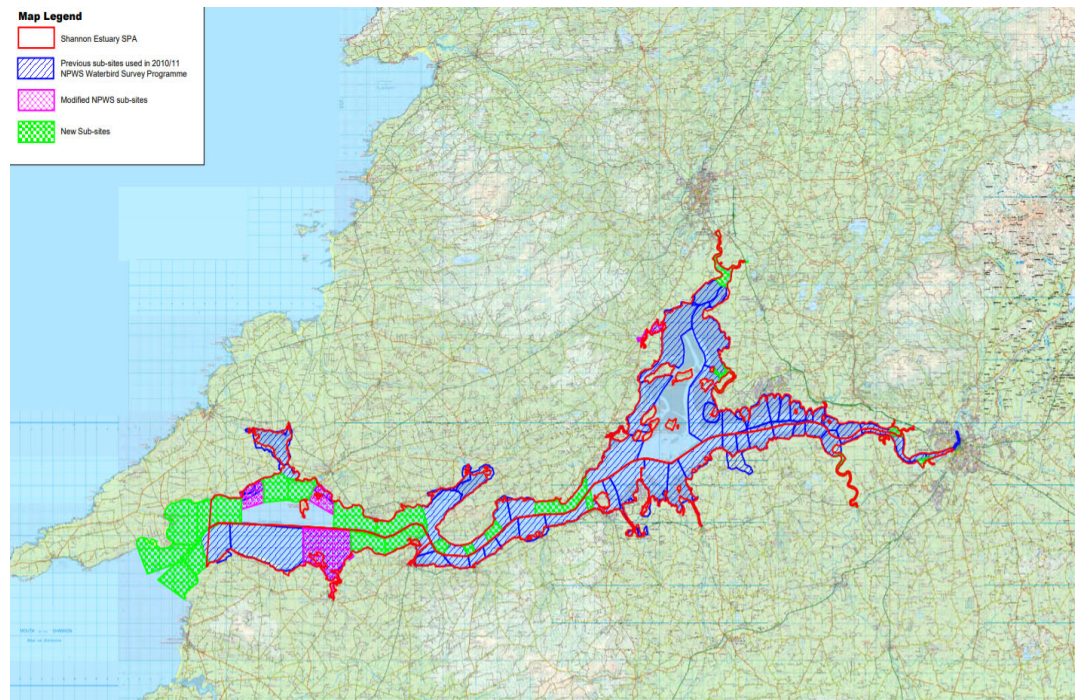


Figure 4.14: Showing the extent of the bird survey within the Lower Shannon Estuary

The Forward Planning section sits on the steering group for the Climate Action Regional Office. This is a very valuable working group to be involved in and allows the planning department to keep informed on climate action activities as they emerge. It is intended to continue with this, as indicated above this group can feed into monitoring of climate issues for the plan.

In terms of mitigation measures for pollinators, it is, over the last three years standard practice to request that landscaping plans take into account the measures of the All Ireland Pollinator Plan (AIPP). Over the last year, in particular, it is encouraging to see that landscaping proposals, particularly for larger developments, including Strategic Housing Development proposals, now submit landscaping proposals guided by the AIPP and concentrate on native species. One useful and long-established publication in this regard is the Heritage Councils Conserving and Enhancing Wildlife in Towns and Villages (2005) which

is recommended as a standard referral document for this purpose as it contains a useful list of native species together with their suitability for differing surroundings, both urban and rural.

In 2020, a joint survey with Cork County Council sought to establish the presence of the Nightjar (an Annex 1 species of the Birds Directive) in the area of the Cork Limerick border. This is a migratory species, which spends its breeding season in Ireland and is one, which has suffered from huge population declines. Unfortunately, none were present. Surveys of migratory birds may also help identify trends in movement of behaviour, which might be caused by climate change.

In 2012 a survey of Grageen bog, within the Slievefelim to Silvermines Mountains SPA (004165) sought to establish the presence both Hen Harriers and grouse on site and also the types and condition of habitats present. Also, present on site was the Grageen Bog and Fen Natural Heritage Area. The presence of both bird species was confirmed. The presence and an increased number of grouse on the site was further confirmed by local NPWS staff in 2021. This emphasises the need to avoid disturbance to this area.

For the last two years or so in conjunction with Development Management Planners, planning conditions have been place on suitable developments for the establishment of swift nesting sites, prior to a survey for these birds being carried out next year. Birdwatch Ireland is working with the Council to provide information to support this initiative.

8.2.2 Future Programme of Survey Works to Inform Future Mitigation Works and Plan Monitoring

8.2.2.1 Swifts and Barn Owl Surveys.

These surveys are intended to complement a project that our Environmental Awareness officer has promoted, by installing swift boxes on existing buildings. The purpose of this survey is to assist in the conservation of swifts by providing a baseline of population locations and numbers with a view to integrating swift nest boxes into new buildings from the outset as a part of the structure rather than add ons. Similarly, the Barn owl survey is informed by the need to help the conservation of this bird by providing similar baseline information so that barn owl conservation can be integrated into planning. These projects were prompted, in part, by the NPWS submission to our Development Plan who stressed the need to integrate ecology into planning matters.

8.2.2.2 Wetland survey

Limerick City and County Council received interesting information from the County Botanical Recorder, which meant that Forward Planning are rethinking the scope and format of this wetland survey. This is likely to be a multi-annual application as there are over 250 sites on an indicative list. Part of the reason the Planning Authority are re-thinking the format is to focus on climate change, flooding and catchments and as such this means there is more preparation to carry out prior to commencement. This would feed into our Development Plan and other council plans in the future. This is likely to commence this year (2022). It will also assist in establishing a monitoring baseline.

8.2.2.3 Geological Survey to Commence in summer 2021

One of the information deficiencies highlighted in the Environmental report, part of the SEA process, was the need to survey the Geological Heritage sites in the county. To this end, funding was obtained from the Heritage Council under their County Heritage Plan funding programme (CHP) and the survey was carried out this year.

These surveys are the first three that will be carried out in on-going programme of surveys to inform planning policy responses to ecological and heritage issues. In this regard, once again Limerick City and County Council are grateful to the Heritage Council and the National Bio-diversity action Plan funding scheme for helping to support this survey programme.

8.2.2.4 Standard Mitigation Measures to be employed

While all of the above inform mitigation measures a number of standard mitigation measures should be employed in the plan and subsidiary plans such as Local Area Plans in order to avoid effects on the Natura 2000 site network.

The Habitats Directive promotes a hierarchy of avoidance/protection, mitigation and compensatory measures. For the purposes of this statement the term “mitigation measures” are considered measures, which aim to minimise, or even offset entirely, the negative impacts on a site that are likely to arise as a result of the implementation of a plan or project. These measures are an integral part of the specifications of a plan or project (Managing Natura 2000 sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC", EU 2019).

The following measures should be adopted, within the Draft Limerick Development Plan area in the development of all individual plans (including Local Area Plans) and projects where there is potential for impacts on the Natura 2000 site network

These measures will apply to all areas of policy and development management including housing, transport, environment and infrastructure, including renewable energy recreation and amenity. Where it cannot be clearly demonstrated that a development, or a group of developments, will not result in an adverse effect on a Natura 2000 site or where there is scientific doubt in relation to a potential impact, the precautionary principal must be applied and mitigation is through avoidance. The precautionary principal is applied: (i) where there is potential for negative effects, and (ii) where due to inconclusive or insufficient data it is not impossible to determine with sufficient certainty the risk in question.

Mitigation measures in the form of specific objectives and policies designed to protect the Natura 2000 sites are often provided by the Development Management section to ensure compliance with the Habitats Directive Article 6. Where proposals might have an effect on a Natura 2000 site, these will require full assessment in line with Article 6 of the Habitats Directive. The Plan identifies a number of individual plans and projects (road schemes, economic and housing development, etc.) for development during the lifetime of the Plan. The Plan should emphasise that these are dependent upon clear demonstration that there will be no impacts on the integrity of a Natura 2000 site in accordance with Article 6 of the Habitats Directive.

In addition, any review or amendment of the plan and proposed projects being prepared by the local authority for the Plan area should be subject to AA screening, at a minimum, to ensure compliance with Article 6 of the Habitats Directive.

The Plan identifies a number of specific transport objectives, such as the M20 road scheme, which will require an appropriate level of environmental and ecological assessment. This should be carried out at the earliest stages in development, beginning at the route selection stage and at subsequent stages of development to determine if significant adverse impacts are likely. Assessments will become more detailed and specific at each level of the assessment as details of the location, extent, construction and operational impacts of the project emerge.

Where the construction or extension of a water supply scheme or waste water treatment plant has potential to impact on a Natura 2000 site it will require Appropriate Assessment, using hydrogeological data, to clearly demonstrate that there will be no adverse impact on the groundwater supply, surface water or other aspects of Natura 2000 sites.

Where the construction, extension, or modification of a renewable energy project has potential to impact on a Natura 2000 site it will require Appropriate Assessment, using all

necessary data, to clearly demonstrate that there will be no adverse impact on the specific Natura 2000 site or other aspects of the Natura 2000 site network.

It will be necessary to ensure that the WWTPs in the plan area are maintained and upgraded as required to meet the requirements of the population and that all works associated with the facility are assessed according to Article 6 of the Habitats Directive and ensure that adequate and appropriate waste water treatment infrastructure is in place prior to further development in the Plan area.

Where one-off housing is sought in unserved areas in the plan, it should be ensured that groundwater quality is maintained through appropriate implementation of the new EPA 2021 Code of Practice for Domestic Waste Water Treatment Systems. In the vicinity of river systems including those within the Natura 2000 site network, and its tributaries the suitability of these lands for individual treatment systems will have to be determined. The need to prevent excessive proliferation of unsewered dwelling units will have to be considered; and the design, capacity and suitability of wastewater treatment systems and the maintenance of such individual wastewater treatment systems will have to be taken into account. This is to ensure that adequate individual wastewater treatment systems are used which have sufficient capacity, safety mechanisms and maintenance to ensure the protection of local surface and groundwater resources.

It is recommended that a buffer zone be established around existing vegetated riparian areas of the Lower River Shannon SAC within undeveloped zoned areas of the Plan area and subsidiary Local Area Plans in order to protect the ecology on which the site depends. Buffer zones are used to protect the hydrological and ecological environment of the site and should be established with reference to hydrological and ecological data for the site, including flooding, and in consultation with the National Parks and Wildlife Service and Inland Fisheries Ireland. This is already an objective in the plan.

In the absence of background data, a minimum buffer zone of 20m is recommended or as determined following consultation with the Inland Fisheries Ireland (IFI). Development proposals beyond this buffer area with potential to negatively impact on the site will be required to clearly demonstrate that there will be no significant adverse impact on the integrity of the Natura site.

Facilities such as new greenways trails and riverside walkways will require appropriate levels of environmental and ecological assessment at project stages in order to proceed. The inclusion of objectives for these facilities should carry the caveat that the facility can only be provided where a positive assessment is received. This has been the case with one

amendment where it has been stated that a greenway proposal should be subject adequate ecological design and assessment from the outset.

It will be necessary to ensure that flood defence works and responses to Flood Risk Assessment and CFRAMS proposals undergo Appropriate Assessment in accordance with Article 6 of the Habitats Directive. - Ensure that any development that has the potential to impact on a Natura 2000 site is subject to Appropriate Assessment in accordance with Article 6 of the Habitats Directive.

Where deficiencies in in terms of wildlife surveys and background ecological reports have been identified in relation to policies in Chapter 6, these should be carried out to adequately inform design and mitigation measures prior to any development taking place.

Section 9: Appropriate Assessment Conclusion Statement.

Stage 2 AA of the amendments to the Draft Limerick Development Plan, which were considered to have the potential for significant effects has been carried out.

The risks to the qualifying interests, special conservation interests and conservation objectives of the Natura 2000 site have been addressed by the inclusion of mitigation measures, through policy measures such as non-encroachment of zoning on Natura 2000 sites in the case of zoning objectives and in relation to implementation of Article 6 elsewhere.

Furthermore, all lower-level plans and projects arising through the implementation of the Draft Plan will themselves be subject to AA and SEA/EIA when further details of design and location are known. This assessment was undertaken with reference to all subsequent stages of the Plan so far. In-combination effects from interactions with other plans and projects was considered in the assessment and the mitigation measures incorporated into the plan are considered to be robust to ensure there will be no significant adverse effects as a result of the implementation of the Draft Plan either alone or in-combination with other plans/projects.

To conclude, taking into account mitigation measures that have already been integrated into the draft plan and the additional mitigation measures mentioned in this report, it is concluded that the proposed material alterations to the Limerick Draft Plan are not foreseen to have any significant effects on the integrity of any European site, alone or in combination with other plans or projects. This evaluation is made in view of the conservation objectives of the habitats or species, for which these sites have been designated.

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