NATURA IMPACT REPORT

IN SUPPORT OF THE

APPROPRIATE ASSESSMENT

OF

VARIATION No. 1

TO THE

NAVAN DEVELOPMENT PLAN 2009-2015

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

for: Meath County Council

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Section 1 Introduction

1.1 Background

This is the Natura Impact Report in support of the Appropriate Assessment of Variation No. 1 to the Navan Development Plan 2009 - 2015 (NDP) in accordance with the requirements of Article 6(3) of the EU Habitats Directive¹. This report is divided into the following four sections:

Section 1 Introduction

Section 2 Stage 1 Screening

Section 3 Stage 2 Appropriate Assessment

Section 4 Mitigation Measures Section 5 Mitigation Measures

1.2 Legislative Context

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as "The Habitats Directive", provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of Sites known as Natura 2000. These are candidate Special Areas of Conservation (cSACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (Directive 2009/147/EC - codified version of Directive 79/409/EEC as amended), hereafter referred to as European sites.

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment (AA):

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

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

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

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¹ Directive 92/43/EEC

These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011. These Regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in judgments of the Court of Justice of the European Union (CJEU)².

1.3 Stages of Appropriate Assessment

This Appropriate Assessment has been prepared in accordance with the following quidance:

- Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, 2010.
- Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission Environment DG, 2002.
- Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission, 2000.

AA comprises up to four successive stages:

Stage One: Screening

The process which identifies the likely impacts upon a European Site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant.

Stage Two: Appropriate Assessment

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.

Stage Three: Assessment of Alternative Solutions

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

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

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

In the case of this Natura Impact Report, it is found that the Variation only requires Stage 1 and Stage 2 assessment.

² Notably cases C-418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.

Section 2 Stage 1 Screening

2.1 Description of the Variation

2.1.1 The Development Plan

Variation No. 1 to the Navan Development Plan 2009-2015 involves:

- 1. introducing a core strategy into the Navan Development Plan;
- 2. incorporating a Local Transport Plan for Navan with associated changes to the infrastructure strategy of the Navan Development Plan to support implementation of the Transport Plan;
- 3. applying the land use zoning objectives contained in the Core Strategy of the Meath County Development Plan 2013 2019 to the land use zoning objectives map associated with the Navan Development Plan; and
- 4. revising the text of the Navan Development Plan to reflect changes in policy and developments that have occurred since the adoption of the Plan.

The Variation is accompanied by both a Strategic Environmental Assessment (SEA) Environmental Report and a Strategic Flood Risk Assessment; the results of which have been incorporated into the Variation. The Plan presents Navan Town Council and Meath County Council's outlook for future development of the Town up to 2015. It also takes account protection and enhancement of its environment through employing the principles of sustainable development in the policies and objectives set out therein.

The Navan Development Plan has been prepared in order to set out an appropriate development strategy for Navan to fulfil its role as the county town for Meath and a designated Large Growth Town in the settlement strategy for the county set out in the Meath County Development Plan 2007 – 2013 which was in place at the time of preparation of the Navan Development Plan 2009-2015.

The Development Plan as adopted comprises a written statement which is divided into 9 sections, namely:

- 1. Policy Context.
- 2. Navan in Context.
- 3. Settlement Strategy and Housing.
- 4. Economic Development Strategy.
- 5. Built and Natural Heritage.
- 6. Social Strategy.
- 7. Infrastructure.
- 8. Development Management Guidelines and Standards.
- 9. Implementation and Monitoring.

The Plan is also accompanied by relevant appendices including land use zoning and objectives maps.

The Plan and Variation build on the strategies, policies and objectives of the Meath County Development Plan 2013 - 2019, taking into account recent key development trends and national, regional and local policy developments. In particular, it also takes account of the increased emphasis on flooding, climate change, renewable energy and the need to support economic development. They also take account of EU requirements including the application of SEA and AA to the Plan.

2.1.1.1 Strategic Planning Approach

The Core Strategy of the Variation to the NDP aims to support the role of Navan as a dynamic urban centre and the focal point for the economic, cultural and social development of County Meath. The priorities for Navan in order to achieve this are as follows:

- To focus on developing Navan as a 'Destination Town' making an exemplar of sustainable transport, improving economic competitiveness through maximizing the efficiency of the transport system, alleviating congestion and infrastructural bottlenecks and by increasing the employment base to sustain resident population;
- To provide for the household and population projection / target for period up to 2015 as an integral part of the Core Strategy for Navan Development Plan;
- To facilitate the consolidation of commercial, employment and residential uses in central areas of the town and identified opportunity sites;
- To support the gradual extension of commercial development towards the town centre expansion area to reinforce position of Navan as the primary comparison retail centre in Meath befitting its level II Town Centre status in the retail hierarchy for the Greater Dublin Area:
- To prioritise employment and residential development near public transport nodes focusing on the R147 public transport corridor which is the spine of the public transport network;
- To support the resident population by improving the quality of life and accessibility to transport for all.

2.1.1.2 Relationship with other relevant Plans and Programmes

The NDP sits within a hierarchy of land use forward planning strategic actions. The Plan must comply with relevant higher level strategic actions and may, in turn, guide lower level strategic actions. The NDP is the statutory and principal planning document for this area. A number of lower level Local Area Plans (LAPs) have been prepared for parcels of land within the Development Plan boundary (Navan Local Area Plan 3 relating to lands between the Commons Road and the Trim Road; adopted 24th July 2006 and Navan Local Area Plan 4 relating to lands in Athlumney, Bailis, Alexander Reid and Ferganstown and Ballymacon; adopted 1st October 2007 and Local Area Plan 1 relating to lands at Johnstown and Athlumney which was adopted 4th July 2011). The Variation outlines the intention to revoke these LAPs. Two of the LAP areas have been re-designated for Framework Plans with the Framework Plans included as part of the Variation (Framework Plans 2 & 3 refer).

2.1.1.2.1 The National Spatial Strategy 2002-2020

The National Spatial Strategy (NSS) is the national planning framework for Ireland to achieve a better balance of social, economic and physical development as well as balanced population growth between the regions. The aim of the Strategy is to utilise urban land sensitively and efficiently, reduce dereliction and encourage refurbishment. Navan is one of the smaller towns identified to cater for local growth and is also regarded in the NSS as a town with an Urban Strengthening Opportunity.

2.1.1.2.2 Regional Planning Guidelines (Dublin Region 2010 – 2022)

Navan town is part of the Dublin regional plan. The RPGs for the Dublin Region 2010-2022 provide a framework for the long term strategic development of the Dublin Region through setting out goals, policies and objectives in relation to population targets, housing, infrastructure, economic development, environment, amenities, social infrastructure and community development, ensuring the successful implementation of the NSS at regional, county and local level.

2.1.1.2.3 Meath County development Plan 2013 – 2019

The Meath County Development Plan provides the overall statutory framework for the development of County Meath and details the spatial development strategy for the county which is organised around a hierarchical structure of urban settlements and the rural area. Navan, in addition to the Drogheda Environs, is designated as a Large Growth Town I, consistent with the RPGs for the Greater Dublin Area. These towns occupy the top tier in the hierarchy. Development is to be primarily directed towards these Large Growth Towns. These centres are also to accommodate significant new investment in transport, economic and commercial activity and in housing. Large Growth Towns I will become, in the longer term, self-sustaining and must grow in a manner which supports this goal without threatening the role of other settlements and regions. In particular, development should

allow for the integration of land use and transport and the holistic and balanced expansion of the towns.

2.1.1.2.4 Meath County Tourism Strategy

Meath County Council in association with Meath Tourism commissioned the preparation of the county tourism strategy entitled 'Ireland's Heritage Capital, Marketing Tourism in Meath, 2005-2010' to ensure that County Meath shared in Ireland's future tourism success with the aim of becoming one of the top ten tourism counties in Ireland.

2.1.1.2.5 Retail Strategy for the Greater Dublin Area 2008-2016

The Retail Strategy for the Greater Dublin Area was made jointly in mid-2008 by the Dublin and Mid-East Regional Authorities and runs to the year 2016. The purpose of the retail strategy is to guide the formulation of local retail planning policy across the seven local authority areas, including Meath. The strategy aims to set out a co-ordinated, sustainable approach to the assessment and provision of retail services within the Greater Dublin Area.

2.1.1.2.6 Meath County Retail Strategy

A Retail Strategy for County Meath was undertaken as part of the preparation of the Meath County Development Plan 2013 – 2019. This included an assessment of Navan and the development of policies for retail development and measures to support town centres on a county wide basis.

2.1.1.2.7 County Meath Housing Strategy

A Housing Strategy was prepared for County Meath as part of the preparation of the Meath County Development Plan 2013 – 2019. This Strategy is also applicable to Navan. It sets out a framework for the supply of land to meet the housing needs arising in the county. It outlines what the anticipated social and affordable housing need for County Meath between 2012 and 2022.

2.1.1.2.8 Navan Integrated Development Plan

The Navan Integrated Development Plan was prepared in December 2002 and updated in 2009 with a time frame up to 2016 which covers the current Navan Development Plan. Central to the overall strategy of the plan is the objective of making Navan a self-sustaining community in both economic and environmental terms and to provide a quality urban environment for its citizens.

2.1.1.2.9 Smarter Travel 2009

"Smarter Travel, A Sustainable Transport Future, A New Transport Policy for Ireland 2009 - 2020" is the Government's action plan to free towns and cities from traffic congestion, substantially cut CO_2 emissions, encourage car based commuters to leave their cars at home, and encourage a shift toward walking, cycling and greater public transport usage.

2.1.2 Environmental Protection Objectives

The Variation of the NDP is subject to a number of high level environmental protection policies and objectives with which it must comply, including those which have been identified as Strategic Environmental Objectives in Section 5 of the NDP.

Examples of Environmental Protection Objectives include the aims of the EU Habitats Directive - which is to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of Member States - and the purpose of the Water Framework Directive - which is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater which, among other things, prevents deterioration in the status of all water bodies and protects, enhances and restores all waters with the aim of achieving good status by 2015.

2.2 European Sites in and within 15 km of the Plan Area

2.2.1 cSACs and SPAs

This section of the screening process describes the European Sites within a 15km zone of impact of the plan area. A distance of 15km is currently recommended in the DoE document *Appropriate Assessment of Plans and Projects - Guidance for Planning Authorities* and as a precautionary measure, to ensure that all potentially affected European Sites are included in the screening process.

In order to determine the potential for impacts from the Variation, information on the qualifying features, known vulnerabilities and threats to Site integrity pertaining to any potentially affected European Sites was reviewed. Background information on threats to individual Sites and vulnerability of habitats and species that was used during this assessment included the following:

- Ireland's Article 17 Report to the European Commission "Status of EU Protected Habitats and Species in Ireland" (NPWS, 2008).
- Site Synopses.
- NATURA 2000 Standard Data Forms.

As the conservation management objectives for the Natura Sites focus on maintaining the favourable conservation status of the qualifying interests of each Site, the Screening process also concentrated on assessing the potential implications of the Variation to the NDP against the qualifying interests of each Site.

Mapping data made available from National Parks and Wildlife Service has been used to ascertain the location of European Sites close to the plan area. Two European Sites were identified within 15 km of the plan area, the River Boyne and River Blackwater cSAC and the River Boyne and River Blackwater SPA (see Figure 1). The qualifying features of each Site are presented in Table 2.1. The River Boyne and River Blackwater cSAC comprises the freshwater element of the River Boyne as far upstream as the Boyne Aqueduct and the Blackwater as far upstream as Lough Ramor. The cSAC also comprises the following Boyne tributaries; the Deel, Stoneyford, and Tremblestown Rivers. The River Boyne enters Navan from the south and flows north-east to Drogheda where the river enters the Irish Sea. The River Blackwater is a tributary of the River Boyne. The River Blackwater flows from its source in south County Cavan to where it joins the River Boyne in Navan.

Table 2.1 Details of European Sites which occur within 15km of the Variation Area

Site Name (Site Code)	Qualifying Features	Site Vulnerability
002299 – River Boyne and River Blackwater cSAC	River lamprey (<i>Lampetra fluviatilis</i>) [1099] Salmon (<i>Salmo salar</i>) [1106] Otter (<i>Lutra lutra</i>) [1355] Alkaline fens [7230] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	Main threats to ecological interest to this site are further drainage schemes and water pollution. Water quality is impaired in parts of the system through agricultural runoff and inputs from domestic and industrial sources.
004232 – River Boyne and River Blackwater SPA	Kingfisher (<i>Alcedo atthis</i>) [A229]	No reported vulnerabilities. Bankside works would threaten breeding sites of Kingfisher.

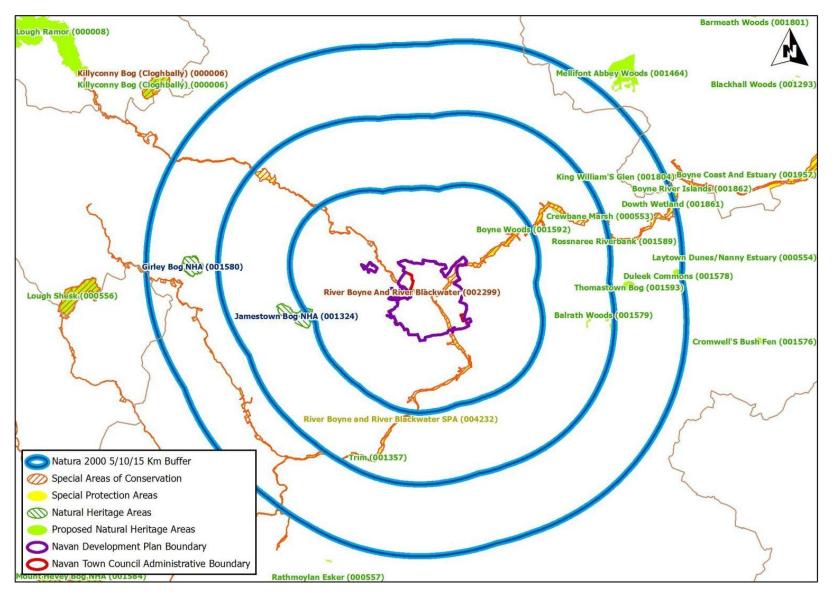


Figure 1: Location of European Sites in Relation to Navan Town

CAAS Ltd. for Meath County Council

2.3 Assessment Criteria

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

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

The Natura Impact Report for the Variation to the Navan Development Plan 2009 - 2015 includes measures that will benefit the protection of European designated Sites however its primary purpose is not the nature conservation management of the Sites, but to provide for development. Therefore, the Variation to the NDP is not considered by the Habitats Directive to be directly connected with or necessary to the management of European designated Sites.

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

2.3.2.1 Navan Development Plan

This screening assessment process identifies whether the changes brought about by the Variation are likely to cause any direct, indirect or secondary impacts (either alone or in combination with other plans or projects) on the Natura 2000 network of Sites. During this assessment a number of factors were taken into account including the Sites' conservation objectives and known threats. The overall aim of the assessment is to attempt to predict the consequences that can be *reasonably* foreseen by implementation of a policy or objective.

In general, any development that may result from implementation of the Variation, such as construction of housing, roads, rail, water and wastewater infrastructure, gas, electricity, provision of tourism facilities and telecommunications infrastructure could lead to significant effects depending on where development is sited, the scale and characteristics of development and types and quantities of emissions. The individual elements of the Variation that may result in impacts on European Sites have been identified as the following:

- Development of Navan as a large growth town.
- Industrial and enterprise development.
- Retail development.
- Facilitation of agricultural diversification.
- Infrastructure development.
- Promotion of forestry.
- Increase in recreational demand and facilities associated with the increased population.
- Provision of walking and cycling routes.
- Upgrade and improvement works on national and non-national roads.
- Water supply services investment programme.
- Waste water services development.
- Replacement of cast iron water mains in Navan.
- Flood risk management strategy.
- Development of social infrastructure.

2.3.3 Identification of Potential Likely Significant Effects

This section documents the final stage of the screening process. It has used the information collected on the sensitivity of each European Site and describes any likely significant effects of implementation of the Plan. This assumes the absence of any controls, conditions or mitigation measures.

In determining the potential for significant effects, a number of factors have been taken into account. Firstly, the sensitivity and reported threats to the European Site. Secondly, the individual elements of the Plan and the potential effect they may cause on the Site were considered.

Sites are screened out based on one or a combination of the following criteria:

- where it can be shown that there are no hydrological links between activities in Navan and the Site to be screened
- where the site is located at such a distance from Navan that impacts are not foreseen
- where it is that known threats or vulnerabilities at a Site cannot be linked to potential impacts that may arise from implementation of the Plan.

The screening of individual European Sites within 15 km of Navan is presented in Table 2.2.

Table 2.2 Screening of European Sites within 15km of the Plan Area

Site Name	Reduction of Habitat Area	Disturbance to Key Species	Habitat or Species Fragmentation	Reduction in Species Density	Changes in Key Indicators of Conservation Value (Water Quality Etc.)	AA Needed
River Boyne and River Blackwater cSAC	No	Yes – Otter	No	Yes – Otter, River Lamprey and Salmon	Yes	Yes
River Boyne and River Blackwater SPA	No	Yes - Kingfisher	No	Yes - Kingfisher	Yes	Yes

2.4 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 combinations with the plan or project, have the potential to adversely impact upon European Sites. Table 2.3 lists the plans or programmes that may interact with the Plan to cause in-combination effects to European Sites. The plans or programmes are listed according to a four tier spatial hierarchy: International; National; Regional; and Local.

Given the uncertainties that exist with regard to the scale and location of developments facilitated by the Variation, it is recognised that the identification of cumulative impacts is limited and that the assessment of in-combination effects will need to be undertaken in a more comprehensive manner at the project-level.

Table 2.3 Plans & Programmes Likely to Cause In-Combination Effects

Directive	Purpose	Interactions resulting in Cumulative Impacts			
International	International				
EU Water Framework Directive (2000/60/EC) EU Freshwater Fish Directive	Objectives seek to maintain and enhance the quality of all surface waters in the EU. Objectives seek to protect those	No risk of likely significant in-combination effects will result as the primary purpose of the Directive is to improve environmental quality. No risk of likely significant in-combination effects will result to the primary purpose.			
(78/659/EEC)	fresh water bodies identified by Member States as waters suitable for sustaining fish populations. For those waters it sets physical and chemical water quality objectives for salmonid waters and cyprinid waters.	effects will result as the primary purpose of the Directive is to improve environmental quality.			

Directive	Purpose	Interactions resulting in Cumulative Impacts
EU Groundwater Directive (2006/118/EC)	This directive establishes a regime, which sets underground water quality standards and introduces measures to prevent or limit inputs of pollutants into groundwater.	No risk of likely significant in-combination effects will result as the primary purpose of the Directive is to improve environmental quality.
EU Floods Directive (2007/60/EC)	The Floods Directive applies to river basins and coastal areas at risk of flooding. With trends such as climate change and increased domestic and economic development in flood risk zones, this poses a threat of flooding in coastal and river basin areas.	Potential in-combination impacts may arise where there is a requirement to provide for new infrastructure such as flood walls or flood defences. Avoidance on, or near protected areas should be implemented or where this is not possible, favouring infrastructure that carries a lower risk of damage to protected areas should be emphasised in the plan.
Nitrates Directive (91/676/EEC)	This Directive has the objective of reducing water pollution caused or induced by nitrates from agricultural sources and preventing further pollution.	No risk of likely significant in-combination effects will result as the primary purpose of the Directive is to improve environmental quality.
The Urban Wastewater Treatment Directive (91/271/EEC)	The primary objective is to protect the environment from the adverse effects of discharges of urban wastewater, by the provision of urban wastewater collecting systems (sewerage) and treatment plants for urban centres. The Directive also provides general rules for the sustainable disposal of sludge arising from wastewater treatment.	No risk of likely significant in-combination effects will result as the primary purpose of the Directive is to improve environmental quality.
Sewage Sludge Directive (86/278/EEC)	Objective is to encourage the appropriate use of sewage sludge in agriculture and to regulate its use in such a way as to prevent harmful effects on soil, vegetation, animals and man. To this end, it prohibits the use of untreated sludge on agricultural land unless it is injected or incorporated into the soil.	No risk of likely significant in-combination effects will result as the primary purpose of the Directive is to improve environmental quality.
The Integrated Pollution Prevention Control Directive (96/61/EC)	Objective is to achieve a high level of protection of the environment through measures to prevent or, where that is not practicable, to reduce emissions to air, water and land from industrial sources.	No risk of likely significant in-combination effects will result as the primary purpose of the Directive is to improve environmental quality.

Directive	Purpose	Interactions resulting in Cumulative Impacts		
National				
National Spatial Strategy 2002- 2020	Objectives of the NSS are to achieve a better balance of social, economic and physical development across Ireland, supported by more effective planning.	Potential in-combination impacts may arise where there is a requirement to provide for new infrastructure. Provision of infrastructure may result in: Habitat loss Alteration of hydrology Deterioration in water quality Disturbance during construction / operation		
Regional				
Regional Planning Guidelines For The Dublin Region 2010 – 2022.	Policy document which aims to direct the future growth of the Dublin Area over the medium to long term and works to implement the strategic planning framework set out in the National Spatial Strategy (NSS)	Potential in-combination impacts may arise where there is a requirement to provide for new infrastructure. Provision of infrastructure may result in: Habitat loss Alteration of hydrology Deterioration in water quality Disturbance during construction / operation		
Local				
Meath County Development Plan 2013 - 2019	Overall strategies for the proper planning and sustainable development of the administrative area of the relevant Local Authorities.	Provision of infrastructure may result in: Habitat loss Alteration of hydrology Deterioration in water quality Disturbance during construction / operation		

2.5 Conclusions

The likely impacts that will arise from the implementation of Variation No. 1 to the Navan Development Plan have been examined in the context of a number of factors that could potentially affect the integrity of the Natura 2000 network. On the basis of the findings of this Screening for Appropriate Assessment, it is concluded that the Variation to the NDP:

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

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

Section 3 Stage 2 Appropriate Assessment

3.1 Introduction

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

The Stage 1 Screening has created a list of Sites with potential to be affected by the draft Plan. Therefore, a Stage 2 Appropriate Assessment is required. The potential adverse effects considered will either be effects occurring as a result of the application of the Variation alone or in-combination with other plans, programmes and/or projects.

Two Sites have been identified that may be adversely affected through the implementation of the Variation to the Navan Development Plan.

3.2 Potential Significant Effects

As outlined in the European Commission Environment DG document "Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC", impacts that could potentially occur through the implementation of the Variation can be categorised under a number of headings:

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

The NDP provides a framework for sustainable development within Navan. It also prescribes particular locations (site specific) for developments of infrastructure. Overall, the NDP underpins the development of housing, communities and urban centres with supporting transport, water, waste, energy, and communication infrastructure within the town.

3.2.1 Reduction of Habitat Area

The lands that are located within the designated sites within the Plan Area are all zoned as H1 with the objective being 'to protect and improve areas of high amenity'. It is therefore considered unlikely that the Variation will result in any direct habitat loss within the designated sites. However, habitat loss can also occur through the reduction of habitat quality and a loss of important habitat functions. It can arise from the introduction of invasive species, toxic contamination or physical alteration.

3.2.2 Fragmentation

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

Installation of linear infrastructure e.g. roads and other transportation links, water and wastewater pipelines, electricity supply lines, can have a negative impact over a wide distance where such infrastructure crosses designated sites. Impacts can include habitat or species fragmentation where,

for example, electricity supply lines or wind turbines may interrupt the flight paths of birds or newly installed bridges disturb the migration of salmon. Disturbance impacts to birds, as outlined in Section 3.2.3 below may also lead to fragmentation of bird populations. Considering the elements of the Variation that could give rise to significant effects, together with the sensitivity of the European Sites it is concluded that fragmentation impacts are not foreseen.

3.2.3 Disturbance to Key Species

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

The European Sites potentially affected include the River Boyne and River Blackwater cSAC and SPA. The cSAC is designated for River Lamprey (*Lampetra fluiviatilis*), Otter (*Lutra lutra*) and Atlantic Salmon (*Salmo salar*) (see Table 2.1 above). Of these species, Otter would be most vulnerable to disturbance impacts particularly during breeding.

All SPAs designated for bird species that can be vulnerable to disturbance, particularly during the nesting season could also be impacted due to disturbance.

The River Boyne and River Blackwater SPA is designated for Kingfisher (*Alcedo atthis*). Kingfisher would be vulnerable to disturbance impacts throughout the breeding season. Such disturbance could originate from any increased human activity in proximity to the river corridor.

The Variation supports the development of infrastructural development and the promotion of tourism and recreation. Such developments have the potential to cause disturbance impacts to key species when located in proximity to relevant European Sites.

3.2.4 Changes in Key Indicators of Conservation Value

The key indicators of conservation value for the European Sites within 15km of Navan are surface water and groundwater quality and quantity. Impacts on European Sites may occur where there are hydrological connections between the sites and development areas. Implementation of the Variation to the NDP may result in alterations to the hydrological regime or physical environment of sites through water abstraction, drainage, and discharges to watercourses or ground water resources. Of particular importance will be the provision of water supplies and the disposal of wastewater. Lands zoned for development within the Variation area are hydologically linked to the River Boyne and River Blackwater cSAC and SPA. It is possible that release of sediment or other construction contaminants may cause negative impacts on the water quality of the cSAC and SPA.

The European Sites potentially affected include the River Boyne and River Blackwater cSAC and SPA. Cumulative impacts through waste water discharges from surrounding counties may also affect these sites. The abstraction of water for public and group schemes supply has the potential to affect European Sites where hydrological pressures arise.

3.3 Conservation Objectives

The Habitats Directive requires the focus of the assessment at this stage to be on the integrity of the site as indicated by its Conservation Objectives. It is an aim of NPWS to draw up conservation management plans for all areas designated for nature conservation. These plans will, among other things, set clear objectives for the conservation of the features of interest within a site. Where no management plan is yet available, NPWS have provided generic Conservation Objectives for European Sites.

The generic Conservation Objective for the River Boyne and River Blackwater SPA has is³:

- Objective: To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:
 - o Kingfisher (Alcedo atthis) breeding

The Generic Conservation Objectives for the River Boyne and River Blackwater cSAC has been provided as follows⁴:

- To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the cSAC has been selected:
 - o [1099] Lampetra fluviatilis
 - o [1106] Salmo salar(only in fresh water)
 - o [1355] Lutra lutra
 - o [7230] Alkaline fens
 - o [91E0] *Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno- Padion, Alnion incanae, Salicion albae)

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.' ⁵

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'. ⁶

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³ NPWS (2011) Conservation objectives for River Boyne and River Blackwater SPA [004232]. Generic Version 4.0. Department of Arts, Heritage & the Gaeltacht

⁴ NPWS (2011) Conservation objectives for River Boyne and River Blackwater SAC [002299]. Generic Version 3.0. Department of Arts, Heritage & the Gaeltacht.

⁵ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

⁶ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

Section 4 Mitigation Measures

4.1 Introduction

Where it cannot be demonstrated that there will be no adverse effects from the implementation of Variation No. 1 to the NDP, mitigation measures have been devised. The measures that have been incorporated are compatible with those proposed by the SEA Environmental Report and with other relevant plans and programmes.

4.2 Measures to Protect Habitats and Species

As outlined in Section 3.2 of this assessment a number of significant effects that could impact on habitats and species have been identified.

Measures have been included in the policies and objectives of the Variation to the Navan Development Plan that will ensure these impacts are avoided.

These policies will ensure that appropriate assessments are carried out where development projects are likely to have significant effects on European Designated Sites. This will ensure that project level effects, which cannot be predicted at the Development Plan level, will be mitigated and encroachment on protected Sites through inappropriate development will be avoided.

Objectives and policies within the Navan Development Plan that will act to protect the Natura 2000 network include the following:

Chapter 3 – Settlement Strategy and Housing

Section 3.1 Vision

Settlement Strategy OBJ 12

To ensure the protection of flora, fauna, quality landscapes and the promotion of biodiversity.

Section 3.3 Land Use Zoning

Land Use Zoning OBJ 1

Any application for planning permission for new development, extension to existing development or intensification or change of use shall be assessed in terms of its potential impact on existing adjacent developments, existing land uses and/or the surrounding landscape. Where such development would have a significant adverse effect on the amenities of the area through pollution by noise, fumes, dust, grit or vibration, or cause pollution of air, water and/or soil, planning permission will not be forthcoming, prior to the proposal and introduction of mitigation measures agreed with the planning authority to eliminate negative environmental impacts or reduce them to an acceptable operating level.

Section 3.12 Rural Settlement Strategy

RD POL 17

To ensure that new development is guided towards sites where acceptable waste water treatment and disposal facilities can be provided, avoiding sites where it is inherently difficult to provide and maintain such facilities - sites prone to extremely high water tables and flooding and where groundwater is particularly vulnerable to contamination.

Chapter 4 – Economic Development Strategy

Section 4.2 Rural Enterprise and Industry

RURAL ENT POL 2

To normally permit development proposals for the expansion of existing industrial or business enterprises in the countryside where the resultant development is of a size and scale which remains appropriate and which does not negatively impact on the character and amenity of the surrounding area; and the proposal demonstrates that it has taken into account traffic, public health, environmental and amenity considerations and is in accordance with the policies, requirements and guidance contained in this plan. In all instances, it should be demonstrated that the proposal would not generate traffic of a type and amount inappropriate for the character of the access roads or would require improvements which would affect the character of these road.

RURAL ENT POL 9

To ensure that development for aggregates / mineral extraction, processing and associated concrete production does not significantly impact on the following areas:

- 1. Existing and Proposed Special Areas of Conservation (SACs);
- 2. Special Protection Areas (SPAs);
- 3. Existing and Proposed Natural Heritage Areas (pNHAs);
- 4. Other areas of importance for the conservation of flora and fauna;
- 5. Areas of significant archaeological potential;
- 6. In the vicinity of a recorded monument
- 7. Sensitive landscapes

RURAL ENT POL 10

To ensure that extractive industries do not adversely affect the environment or adjoining existing land uses and are carried out in such a manner so as to minimise detraction from the visual quality of the landscape.

RURAL ENT POL 11

To promote forestry development of an appropriate scale and character whilst ensuring that the development does not have a negative visual impact on the countryside or cause pollution or degradation to wildlife habitats, natural waters or areas of ecological significance.

Section 4.3 Agriculture

AGRI POL 2

To facilitate the development of agriculture while ensuring that natural waters, wildlife habitats and conservation areas are protected from pollution.

AGRI POL 5

To resist proposals to remove woodland, boundary trees or hedgerow planting, where such planting is of benefit to the visual and ecological amenity of an area.

Section 4.8 Prevention of Major Accidents

SEVESO POL 3

To ensure that land use policies must take into account of the need to maintain appropriate distances between future major accident hazard establishments and residential areas, areas of substantial public use and areas of particular natural sensitivity or interest.

Chapter 5 - Architectural and Natural Heritage

Section 5.3 Natural Heritage

HER POL 11

To protect, conserve and enhance the biodiversity and natural heritage of Navan including wildlife (flora & fauna), and particularly all Annex II species, habitats, geology, landscapes and / or landscape features of importance to wildlife or which play a key role in the conservation and management of natural resources such as rivers, streams, canals, lakes and associated wetlands including reed beds and swamps, ponds, springs, bogs, fens, trees, woodland and scrub, hedgerows and other boundary types such as stone walls and ditches which occur outside of designated areas providing a network of habitats and corridors essential for wildlife to flourish.

HER POL 12

To use native species wherever possible in Navan Town Council's and Meath County Council's own landscaping work and on Council property.

HER POL 14

To protect rivers and stream corridors and valleys by reserving land along their banks for ecological corridors and maintain them free from inappropriate development and discourage culverting or realignment, unless done for environmental reasons, including flood prevention or flood abatement. The Planning Authority shall consult with Inland Fisheries Ireland and other statutory bodies as required by the planning regulations in respect of this and shall have regard to their comments in the making of any planning decision.

HER POL 15

To require that runoff from a developed area will not result in the deterioration of the quality of downstream watercourses or habitats.

HER OBJ 6

To encourage and promote the appropriate management and enhancement of Navan's biodiversity.

HER OBJ 7

To promote an awareness and appreciation of the natural heritage of Navan in conjunction with the County Meath Heritage Forum and through the implementation of the County Meath Heritage Plan 2007 – 2011 and County Meath Biodiversity Action Plan 2008 – 2012.

HER OBJ 8

Subject to the provisions of the Habitats and Birds Directives, to promote the sustainable usage of the River Boyne for amenity / recreational and education purposes.

Section 5.3.1 Heritage Designations

HER POL 16

To protect the River Boyne and River Blackwater cSAC and SPA in Navan and any additional sites that may be proposed for designation during the lifetime of this Plan and to ensure that development within the Navan Development Plan boundary will not give rise to negative impacts on the River Boyne and River Blackwater cSAC and SPA outside of the Plan area.

HER POL 17

To have regard to the views and guidance of the National Parks and Wildlfe Service of the Department of Arts, Heritage and the Gaeltacht in respect of proposed development where there is a possibility that such development may have an impact on the River Boyne and River Blackwater candidate Special Area of Conservation or Special Protection Area.

HER POL 18

It is the policy of the Council to protect sites designated in National and European legislation, and in other relevant International Conventions, Agreements and Processes. This includes sites proposed to be designated or designated as:

- Special Areas of Conservation under the Habitats Directive1 (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora)
- Special Protection Areas under the Birds Directive (Council Directive 79/409/EEC on the conservation of wild birds)

Both the Birds and Habitats Directives have been transposed in Irish law by Ministerial Regulation. The European Communities (Birds and Natural Habitats) Regulations 2011 are the most important of these because they provide for the protection measures and management regime that apply to SPAs and SACs.

No projects giving rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or in combination with other plans or projects (Except as provided for in Section 6(4) of the Habitats Directive, viz. there must be:

- a. no alternative solution available,
- b. imperative reasons of overriding public interest for the plan to proceed; and
- c. adequate compensatory measures in place.)
- Natural Heritage Areas (NHAs), Nature Reserves, and Refuges for Flora or Fauna under the Wildlife Act, 1976 as amended by Wildlife (Amendment) Act, 2000.

HER POL 19

To prohibit any development that would be harmful or that would result in a significant deterioration of habitats and/or disturbance of species.

HER POL 20

To ensure that development does not have a significant adverse impact, incapable of satisfactory mitigation, on plant, animal or bird species protected by law.

HER POL 21

No projects giving rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites arising from their scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or in combination with other plans or projects).

HER POL 21A

To ensure compliance with the Wildlife Acts 1976-2010 with regard to the protection of species listed on Schedule 5 of the principal act.

HER POL 21B

To encourage and facilitate the development of green infrastructure that recognises the synergies that can be achieved with regard to the following:

- Provision of open space amenities
- Sustainable management of water
- Protection and management of biodiversity
- Protection of cultural heritage
- Protection of protected landscape sensitivities.

Section 5.3.2 Habitats and Species Outside Designated Sites

HER POL 22

To ensure that where possible, proposals for development protect and enhance biodiversity by minimising adverse impacts on existing habitats, (whether designated or not,) and by including mitigation and/or compensation measures.

HER POL 23

To establish ecological corridors within new development which permit the potential movement of wildlife and which include indigenous vegetation and which will link with existing biodiversity features and ecological networks.

HER POL 24

To encourage the use of native trees and hedgerow species in the landscaping of new developments.

HER POL 25

To restrict the cutting of hedges during the bird-nesting season (1st March until August 31st), except in certain legally defined circumstances, in accordance with the provision of the Wildlife (Amendment) Act 2000.

HER POL 26

To promote the environmentally sensitive management of hedgerows in the town in accordance with best practice guidelines.

Section 5.3.4 Landscape

HER POL 30

To retain trees and hedgerows of value as illustrated on the relevant map forming part of this development plan.

HER POL 31

To have a presumption in favour of the retention of existing trees and their incorporation into any new development unless this can be shown to be impractical, and to protect, preserve and ensure effective management of trees and groups of trees considered to be of special amenity value and to prepare Tree Preservation Orders where considered appropriate.

Chapter 6 - Social Strategy

Section 6.7 Public Open Space Standards

SOC POL 23

To develop an integrated green structure for the town, linking open spaces along the riverbanks of the Boyne & Blackwater with the town centre and its environs and historical features, in such a manner so as not to significantly negatively impact on the cSAC or SPA either alone or in combination with other objectives in this or other plans.

SOC OBJ 7

To develop a system of linear parks and waterfront amenity areas with walkways and cycleways, subject to the availability of resources, along the banks of the Boyne and Blackwater Rivers, in such a manner so as not to significantly negatively impact on the cSAC or SPA either alone or in combination with other objectives in this or other plans.

SOC OBJ 8

To promote the provision of pedestrian and cycle links across rivers to ensure full accessibility, integration and usage of public open space in such a manner so as not to significantly impact on the cSAC or SPA either alone or in combination with other objectives in this or other plans.

4.3 Water Protection Measures

Section 3.2 of this assessment identified that impacts on water quality within the River Boyne and River Blackwater cSAC and SPA have potential to arise through abstraction of drinking water, discharges of wastewater, and possible discharges of sediment and other pollutants from future development.

In addition, any newly proposed or upgraded wastewater treatment plants should fully comply with all Urban Waste Water Regulations requirements 2001 - 2004, and should furthermore comply with all wastewater discharge authorisation requirements as per 2007 Regulations and Urban Wastewater Regulations 2001.

The following objectives and policies within the Variation to the Navan Development Plan relating to the protection of surface and ground water resources within the town will act to protect the Natura 2000 network:

Chapter 7: Infrastructure

Section 7.10 Water Supply and Sewage Treatment and Disposal

INF POL 36

To continue the development and upgrading of the water supply system so as to ensure that an adequate, sustainable and economic supply of piped water of suitable quality is available for domestic, commercial, industrial, fire safety and other uses for the sustainable development of the town in accordance with the settlement structure identified in this Plan and as finances permit. All proposals for the development of an upgrade to the water supply will be screened for Appropriate Assessment in accordance with Article 6(3) of the Habitats Directive and where significant impacts are identified, a Natura Impact Statement will be prepared.

INF POL 41

To protect groundwater resources having regard to County Meath Groundwater Protection Scheme.

INF POL 42

To develop groundwater protection schemes in conjunction with Irish Water in line with the recommendations contained within the DoEHLG/GSI/EPA publication Groundwater Protection Schemes, 1999 or any revised or replacement publication.

INF POL 43

To maintain, improve and enhance the status of waters by implementing the measures set out in the Eastern River Basin Management Plans and associated Programmes of Measures in co-operation with Irish Water and major stakeholders for the protection of ground and surface water as part of the implementation of the EU Water Framework Directive.

INF POL 43A

Implement water protection measures to restore substandard waters to 'good status', subject to available resources.

INF POL 43B

Support, as appropriate, the relevant agencies and statutory bodies in the control and elimination of invasive species in water bodies.

INF POL 44

To protect surface water and groundwater resources and their associated habitats and species including fisheries and in particular Annex II listed species.

INF POL 46

To ensure that septic tanks and proprietary treatment systems, or other waste water treatment and storage systems, and associated percolation areas where required as part of a development, comply with the recommendations of the Environmental Protection Agency and that they are employed only where site conditions are appropriate.

INF OBJ 41

To assist Irish Water in implementing the in effect Water Services Investment Programme. All developments included in the Water Services Investment Programme will be subject to Appropriate Assessment in accordance with Article 6(3) and 6(4) of the Habitats Directive, where this has not previously been carried out. Where significant impacts are identified, a Natura Impact Statement will be prepared.

INF OBJ 45

To prepare plans for increasing the capacity of the Navan Waste Water Treatment Plant to cater for the growth in demand from the residential, commercial and industrial sectors over the lifetime of the plan in conjunction with Irish Water. All proposals for the development of an upgrade of the Navan Waste Water Treatment Plant will be subject to Appropriate Assessment in accordance with Articles 6(3) and 6(4) of the EU Habitats Directive and, where significant impacts are identified, a Natura Impact Statement will be prepared.

INF OBJ 46

The Councils in conjunction with Irish Water shall implement the relevant recommendations set out in the EPA publication (and any subsequent update) Focus on Urban waste Water Discharges in Ireland (EPA Office of Environment Enforcement, 2012).

Section 7.11 Flooding

INF OBJ 56

To ensure that existing wetland habitats are adequately protected, managed and where appropriate enhanced where flood protection/management measures are necessary.

INF POL 56

Where relevant, the Councils shall adopt appropriate buffer zones to protect features of European, national, county and local importance, including rivers and streams, from the development proposals both in terms of visual and ecological impacts.

INF POL 62

To ensure that all new developments have satisfactory drainage systems in the interest of public health and to avoid the pollution of ground and surface waters.

Section 5 Conclusion

Stage 1 Screening and Stage 2 Appropriate Assessment of the Variation to the Navan Development Plan 2009 - 2015 has been carried out. Implementation of the Variation has the potential to result in impacts to the integrity of the Natura 2000 network, if unmitigated.

The risks to the safeguarding and integrity of the qualifying interests and conservation objectives of the Natura 2000 network have been addressed by the inclusion of mitigation measures that will prioritise the avoidance of impacts in the first place and mitigate impacts where these cannot be avoided. In addition, all lower level plans and projects arising through the implementation of the Variation No. 1 to the NDP will themselves be subject to Appropriate Assessment when further details of design and location are known.

Having incorporated mitigation measures, it is considered that the Variation will not have a significant adverse effect on the integrity of the Natura 2000 network.