



Strategic Environmental Assessment Statement

| April 2018

As part of the preparation of the Variation No. 6
Limerick County Development Plan 2010-2016 (As Extended)



Limerick County Development Plan 2010 – 2016 (As Extended)

Variation No. 6

SEA Statement

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1. INTRODUCTION

This is the Strategic Environmental Assessment (SEA) Statement prepared as part of SEA process of Variation No. 6 of the Limerick County Development Plan 2010-2016 (as extended) referred to here after as The Variation.

Variation No. 6 relates primarily to the inclusion of the text provisions relating to future road development(s) in the County. The Variation requires the insertion of additional text under Chapter 8: Transport and Infrastructure, of the Limerick County Development Plan 2010-2016 (as extended) detailed in Section 3 of this Report.

In accordance with the SEA Directive and transposing regulations an SEA Statement is required to be prepared as soon as practicable after the adoption of a plan or programme. An SEA Statement is required to provide information on the decision-making process and concisely document the following:

- a) The Variation as adopted;
- b) A Statement summarising how environmental considerations have been integrated into the Variation as part of the Limerick County Development Plan 2010-2016 (as extended) to include a summary of:
 - How the SEA Environmental Report (SEA ER) has integrated environmental considerations during the preparation of the Variation; (Section two)
 - How the opinions expressed during consultations have been taken into account (Section three);
 - The reasons for choosing the Variation in light of other reasonable alternatives (Section four); and
 - The measures decided upon to monitor the significant environmental effects of implementing the Variation (Section five).

1.1 Legislative Context

The Strategic Environmental Assessment (SEA) Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment introduced the requirement that SEA be carried out on plans and programmes, including those of land use planning. The SEA of Variation No. 6 has been undertaken in accordance with the requirements of the SEA Directive and transposing Regulations and has sought to meet the requirements of associated best practice guidance. SEA is a formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme, before a decision is made to adopt the plan or programme.

Article 1 of the SEA Directive states: “*The objective of this directive is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment*”.

The requirements for SEA in Ireland are set out in the national Regulations:

- S.I. No. 435 of 2004 (European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004); and

- S.I. No. 436 of 2004 (Planning and Development (Strategic Environmental Assessment) Regulations 2004) as amended by S.I. No. 200 of 2011 (European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011); and S.I. No. 201 of 2011 (Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011) respectively.

The SEA Statement is required under article 9(1) (b) of the SEA Directive and Section 13Q of S.I No. 436/2004 and Section 16 of S.I No. 435/2004 (as amended). Section 13Q of SI 436/ 2004 specifically refers to where a planning authority makes a variation in a development plan. It states, the planning authority shall publish a notice of the making of the variation in at least one newspaper circulating in its area and shall state that a SEA Statement is also available for inspection.

The main purpose of the SEA Statement is to provide information on the decision-making process for Variation No. 6, summarising how the SEA process has influenced the preparation of the final Variation. The SEA Statement also provides information on the arrangements put in place for monitoring and mitigation. The SEA Statement is available to the public, along with the SEA Environmental Report, the Natura Impact Report, Strategic Flood Risk Assessment and the adopted Variation.

1.2 Summary of SEA process and Influence on Plan Making Process

The SEA process is a systematic, on-going process for evaluating, at the earliest possible stage, the environmental quality and consequences of implementing certain plans and programmes on the environment. The SEA process is comprised of the following steps which influenced the Variation process.

- **Screening:** The requirement to carry out an SEA of the proposed Variation was determined to be required as it was deemed likely to have significant effects on the environment. This was undertaken taking into account the relevant criteria set out in Schedule 2A of the Planning and Development Act 2000 (Amended).
- **Scoping:** An SEA Scoping Report was issued in January 2017 to the relevant designated environmental authorities for comment on the scope and level of detail to be considered in the assessment. The Scoping Report included draft Variation text and the Strategic Environmental Objectives (SEOs) which would be used in the evaluation of the environmental effects. Submissions regarding the proposed Variation were received from the designated environmental authorities and all comments have been taken fully into account during the environmental assessment to be contained in the SEA Environmental Report (SEA ER).
- **Preparation of an Environmental Report:** The SEA process is informed by the environmental baseline (i.e. the current state of the environment and identification of existing environmental issues on that aspect of the environment). The environmental aspects include; biodiversity, population and human health, soil and geology, water resources and flooding, air and climate, material assets, cultural heritage and landscape. This stage of the SEA involved the identification and evaluation of the likely significant environmental effects of implementing the Variation and to identify any mitigation required to offset identified adverse effects. The environmental assessment and evaluation stage also considered cumulative and in-combination effects as well as alternatives. A proposed monitoring framework was also established. The Natura Impact Assessment (NIR) and the Strategic Flood Risk Assessment (SFRA) were also prepared alongside the development of the Variation and the

SEA. The version of the Variation that went on public display along with the SEA ER, NIR and SFRA had incorporated the recommended amendments, additions and deletions applied as a result of the SEA, NIR and SFRA processes.

- **Consultation:** The Variation along with the SEA ER, NIR and SFRA were put on public display for a public consultation period of not less than four weeks, from 6th January to 5th February 2018 inclusive. A total of 9 submissions were received, some of which related to environmental considerations. Evaluation of the submissions and observations made on the proposed Variation and SEA ER, NIR and SFRA was undertaken including implications on the SEA. This process found that there were no additional environmental issues identified. The Chief Executive's Report to members on Submissions, (February 2018) summarises the main points raised by the submissions and provides a response.
- On 10th April 2018 the Elected Members voted to 'make' or adopt the Variation without modifications.
- The **SEA Statement** is issued summarising how environmental considerations were integrated into the Variation process, how consultations were taken into account, alternatives considered and monitoring measures included. The reasons for choosing the Variation in light of other reasonable alternatives is also explained. The document also summarises the measures decided upon to monitor the significant environmental effects of implementing the Variation.

In summary, the SEA process has run in tandem with the Variation process and has informed and influenced the preparation of the Variation, to the Limerick County Development Plan (LCDP) 2010-2016 (as extended). The SEA process influenced the Variation put on public display which was then adopted by elected members.

1.2.1 Influence of Habitats Directive Assessment on the Plan Making Process

In accordance with the provisions of Article 6(3) of the Habitats Directive, Part 5 of the Habitats Regulations and Part XAB of the Planning and Development Acts, 2000-2015, the Variation was subject to a Stage 1 and 2 Appropriate Assessment, including the preparation of a Natura Impact Report (NIR), providing Limerick City and County Council, as the competent authority, with the information upon which it will base its Appropriate Assessment. The findings of the SEA ER and NIR informed each other to ensure no adverse impacts on the environment would occur, specifically, on Natura 2000 sites.

On the basis of the Appropriate Assessment Screening (Stage 1) and in applying the Precautionary Principle, indicators of significance showed that there was the potential for localised short-term or long-term interference with the Lower River Shannon SAC, the Curraghchase Woods SAC, the Askeaton Fens Complex SAC and the River Shannon and River Fergus Estuaries SPA in view of their Conservation Objectives, as a result of the implementation of the Variation. Significant effects are likely to arise as a result of the changes in land use and associated construction works within and in close proximity to the designated sites and direct impacts could not be objectively ruled out at that stage. The Appropriate Assessment Screening concluded that the proposed Variation could not be "screened out" in terms of the likelihood of significant effects.

On the basis of the Appropriate Assessment Stage 2 (NIR – a separate document to the SEA) it determined that, in the absence of appropriate mitigation measures, the Variation No. 6 to the LCDP has the potential to have significant adverse effects on

the Lower River Shannon SAC, the Curraghchase Woods SAC, the Askeaton Fens Complex SAC and the River Shannon and River Fergus Estuaries SPA in view of their Conservation Objectives. In order for Limerick City & County Council to exclude the possibility of these effects occurring or being significant with regard to the integrity of these sites, mitigation measures are required and detailed in the NIR.

Where adverse impacts were identified in the NIR, amendments to the text of the proposed Variation were made by Limerick City and County Council to eliminate the risk of significant impacts on Natura 2000 sites. Subsequently, in view of best scientific knowledge and in view of the Conservation Objectives of the relevant Natura 2000 sites, the NIR for the proposed Variation has determined that, given the full and proper implementation of the mitigating measures prescribed therein, there will be no adverse effect on the integrity of Natura 2000 sites arising from the proposed Variation, either individually or in combination with other plans or projects.

1.2.2 Influence of Strategic Flood Risk Assessment on the Plan Making Process

The integration with Strategic Flood Risk Assessment (SFRA) is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DEHLG, 2009). The current LCDP 2010-2016 (as extended) identifies the need for the Council to prepare a SFRA for relevant areas of Limerick County. Issues in relation to Flood risk are examined in greater detail in the separate Strategic Flood Risk Assessment (January 2018) that informed the SEA ER and the Variation.

The findings from the SFRA identified that the flood risk associated with the proposed Foynes to Limerick Road Improvement Scheme can be adequately and feasibly managed and the use or development of the lands to construct the Foynes to Limerick Road Improvement Scheme will not cause unacceptable adverse impacts, either to the infrastructure proposed or elsewhere. The flood risk assessment concludes that a road within the proposed Variation area can be constructed which can be designed not to exacerbate flood risk and will have a low residual flood risk. This can be achieved through suitable mitigation by appropriate sizing and configuration of bridge and culvert crossings of rivers, floodplains and streams intercepted by the road, together with suitable design of road drainage in accordance with the requirements of Sustainable Drainage Systems (SuDS) and flood compensation areas.

It was found that flood risk can be adequately managed with the application of the mitigation measures contained in Section 8.1 of the SFRA (available as part of a separate document accompanying the Variation). The SFRA found that the construction and operation of the proposed road can be engineered not to cause unacceptable adverse flood impacts elsewhere. The SFRA involved recommending additional text as part of the Variation text which was considered and incorporated as appropriate into the Variation put on public display.

2. INTEGRATION OF ENVIRONMENTAL CONSIDERATIONS DURING THE PREPARATION OF THE VARIATION

This section presents a summary of how environmental considerations have been integrated into the Variation to the Plan. Legislation and guidance relating to SEA recommends that the process of plan preparation, SEA, Appropriate Assessment (AA) through the NIR and SFRA should be integrated and prepared in an iterative process to facilitate ongoing assessment and evaluation of environmental considerations during the preparation of the Variation to the Plan. In this regard, a multi-disciplinary team worked on the SEA, NIR and SFRA which informed the Variation process.

The SEA process involved a number of key stages (outlined in section 1.2 above). Environmental considerations are integrated from the outset including gathering baseline data, development of strategic environmental objectives (SEOs), identification and assessment of alternatives to the Variation and ongoing consultation with environmental authorities and the public. These various aspects are summarised below.

2.1 Baseline Environmental Data

The baseline data gathered was essential to establish the current state of the environment in order to assist with the identification, evaluation and monitoring of the likely significant effects of the proposed Variation on the environment. The baseline information forms the platform to identify existing environmental problems. From this, the highlighted environmental issues and sensitivities can then be used to establish the Strategic Environmental Objectives (SEOs). The environmental baseline is described in line with the legislative requirements outlined in Schedule 2B of the SEA Regulations 2004-2011, encompassing the following environmental receptors/ topics: biodiversity, population and human health, soils and geology, water, air and climate, material assets, cultural heritage, landscape and the interrelationship between these components.

2.1.1 Strategic Environmental Objectives

The Strategic Environmental Objectives (SEOs) developed for the Variation are methodological measures which are originally developed from international, national, regional and county policies which generally govern Environmental Protection Objectives (EPOs), against which the likely environmental effects of the proposed Variation can be tested. The SEOs can also be influenced by the comments from the statutory environmental authorities at SEA Scoping stage. The SEOs are used as standards against which the provisions of the proposed Variation can be evaluated in order to help identify areas in which likely significant adverse impacts are likely to occur on that SEO, if unmitigated.

A range of Strategic Environmental Objectives (SEOs) have been established by the former Limerick County Council as part of the SEA process of the 'Limerick County Development Plan 2010-2016' (LCDP). These were used as a building block in developing the SEOs for the Variation. The SEOs can also be influenced by the comments from the statutory environmental authorities at SEA Scoping stage whilst the SEOs identified for the Variation are generally consistent with the LCDP, the SEOs from the LCDP have been broadened to include additional objectives relevant to the specifics of the Variation and are listed in Table 2.1.

Table 2.1 Strategic Environmental Objectives for the Variation

Environmental Topic/ Receptor	Strategic Environmental Objectives (SEOs)
Biodiversity	B1 Maintain and enhance bio-diversity. B2 Protect, conserve and enhance habitats, species and areas of European, national and local importance.
Population and Human Health	P1 Promote compact settlement patterns and high quality residential development in appropriate locations.
Water & Flood Risk	W1 Prevent deterioration in surface and ground water quality, achieve improvement in water quality. W2 Promote good practice in flood risk management
Soils and Geology	S1 Conserve and sensitively exploit geological resources. Preserve sensitive geological sites.
Air & Climate	AC1 Reduce air pollution, implement climate change aspects of plan.
Material Assets	MA1 Sensitively manage natural and manmade material assets to meet the needs of existing and future populations in a sustainable manner.
Cultural Heritage	C1 Protect and conserve cultural heritage including architecture, archaeology and heritage items.
Landscape	L1 Protect historic and natural features of note in landscapes. Sensitively manage landscape change.

2.1.2 Methodology of the Assessment

The environmental baseline together with the SEOs are used in order to identify, describe and evaluate the likely significant environmental effects of implementing the proposed Variation in order to determine what if any mitigation and monitoring measures are required. Where the likely significant effects are identified as part of the Variation, initially the existing LCDP was checked for the existence of environmental protection measures (policies or objectives) which could potentially mitigate these effects. Where it is found that the Plan lacks in these, additional mitigation measures were recommended where necessary. The objectives are outlined in Table 2.1 above. A list of indicators and targets that will be used to monitor each objective is outlined in Table 5.1 below. The SEOs were also used in the SEA ER to assess the potential environmental effects for each element of the Variation and also the alternative options.

2.1.3 Identification of Alternatives to the Variation

Identification of alternatives other than the proposed Variation was carried out by Limerick City and County Council as part of the planning and design of the Foynes to Limerick Road Improvement Scheme. The Alternatives considered include:

- a) Do-Nothing Scenario
- b) Do-Minimum Scenario – Upgrade of existing Roads
- c) N21 Adare Bypass (2010) – (Adare South Bypass)
- d) The proposed Variation - ‘preferred Option’ (Foynes to Limerick Road Improvement Scheme)

In relation to the Alternatives above, the purpose of the Route Selection Report was to outline the process undertaken to identify a suitable Study Area, to identify key constraints within that Study Area, to develop feasible route options and to carry out

a systematic assessment of these options leading to the selection of a Preferred Route Corridor. A detailed Route Selection Report (RSR) was published in April 2016.

The assessment of the Alternative options against the Strategic Environmental Objectives in the SEA ER determined which option would be most suitable i.e. which would have the least significant negative and most significant positive impacts on the environment that meet the objectives of the Plan.

Further detail on the alternatives considered and the assessment of same is provided in Section 4 of this SEA Statement as well as Section 7 of the SEA ER.

2.1.4 Consultation

Consultation was undertaken throughout the process integrating environmental considerations into the plan making process. Additionally, the previous Variation process No. 5 (a) informed the integration of environmental considerations from the outset into the development of the Variation No. 6 process. The SEA Scoping consultation with the designated environmental authorities further informed the scope and level of detail in the SEA ER and key environmental issues that were required to be considered as part of the process. All submissions were considered and assessed as part of the SEA process and detailed in the responses to submissions detailed in the Chief Executives Report. The provisions of the Variation were deemed to be considered appropriate. Therefore no changes to the Variation or the SEA was deemed necessary.

2.2 Development of the Variation as a result of the SEA Process

During the assessment processes and as part of the iterative nature of the assessments potential significant adverse effects were identified. Consideration was given by the policy makers and multidisciplinary team in the first instance to preventing such impacts or where this was not possible, to reduce or offset those effects. Where the likely significant effects were identified as part of the process initially the LCDP 2010-2016 (as extended) was checked for the existence of environmental protection measures (policies/ objectives) which could potentially mitigate these effects. If it was found that the Plan lacked in these, additional mitigation measures were recommended where necessary. Mitigation measures included recommending changes to the Variation text and the application of measures contained in the supporting assessment documents namely the SEA ER, NIR and SFRA (See Table 2.2).

2.2.1 Interaction with the SEA, AA and SFRA process

The Variation evolved and was influenced by the SEA, AA & SFRA processes throughout its development. The main influence is where existing policies and objectives were found not to address the likely significant effects through recommending additional mitigation measures. These mitigation measures are identified in green underlined text i.e. green underlined were considered by the policy making team and incorporated as part of the Variation text in order to address the likely significant negative effects on the environment.

The SEA was undertaken in parallel with the Appropriate Assessment and Strategic Flood Risk Assessment, all of which have informed the Variation process. On the basis of the AA process it was determined that, in the absence of appropriate mitigation, adverse effects on the Conservation Objectives of the Natura 2000 sites would likely arise from the proposed Variation. Mitigation measures to counteract the

adverse effects were established as part of the NIR (Section 6.3) and are incorporated in the Variation wording by the insertion of additional text in green as set out in Table 10.1 below.

As a result of undertaking a Strategic Flood Risk Assessment, it is proposed to include mitigation measures to address the likely significant effects relating to Flood Risk in the area at project level. These mitigation measures are included Section 8.1 of the SFRA and were also recommended to be incorporated into the Variation wording below by the insertion of additional text in green underlined outlined in the following sections.

Avoidance of conflict with SEOs and the environment is dependent upon compliance with the existing policies and objectives of the Plan, together with the mitigation and monitoring measures which have emerged through the SEA, Habitats Directive Assessment process and the Strategic Flood Risk Assessment process which have been integrated into the Variation process. Due to the nature of the Variation, which involves introducing a preferred route corridor within which a road will be located, there still remains a considerable amount of uncertainty as to the exact scale, type and construction methodology of the road development and river crossings in particular. It is considered that these are better assessed at the appropriate project level assessments i.e. EIA, AA and site specific flood risk assessment which is contained as part of the Variation wording.

10.1.1 National Primary and National Secondary Roads

The following table sets out the proposed improvement works having regard to the objectives in the National Development Plan.

Table 10.1 Proposed National Road Improvements

N18 Galway Road	Southern Ring Road – Phase 2: Complete land acquisition and continue construction of the Limerick Southern Ring Road, Phase 2 scheme in County Limerick
M7 Dublin Road	N7 Route Improvements Nenagh to Limerick: Complete land acquisition and continue construction of the M7 Nenagh to Limerick scheme in County Limerick
M8 Mitchelstown - Cahir	Complete land acquisition and continue construction of the M8 Route Improvements from Mitchelstown to Cahir in County Limerick.
N20 Cork Road	Design, reserve land and commence construction of the N20 upgrade to Motorway standard, which forms part of the strategic Atlantic Corridor and is included in “Transport 21” from Patrickswell to Charleville in County Limerick.
N21 Tralee Road (and Killarney Road)	Design, reserve land for and commence construction of a bypass of Adare and N21 Route Improvements from Adare to the County boundary, as resources become available, having regard to the requirements of the Habitats, Water Framework, Floods, and EIA Directives, <u>and in accordance with the mitigation measures identified in the Appropriate Assessment, Strategic Flood Risk Assessment and Strategic Environmental Assessment of Variation No. 6 at project level.</u>
N21 to N69	Design, reserve land for and commence construction of a new road between the N21 at Rathkeale and the N69 at Foynes as resources become available, having regard to the requirements of the Habitats, Water Framework, Floods and EIA Directives, <u>and in accordance with the mitigation measures identified in the Appropriate Assessment, Strategic Flood Risk Assessment and Strategic Environmental Assessment of Variation No. 6 at project level.</u>

N24 Road	Tipperary	<p>Ballysimon to County Boundary: Design, reserve land and commence construction of N24 Route Improvements from Ballysimon to County Boundary, as resources become available.</p> <p>Western Corridor Improvements (Pallasgreen – Bansha): Design, reserve land for and commence construction of so much of N24 Western Corridor Improvements, as will lie in County Limerick as resources become available.</p>
N69 (Foynes) Road	Tarbert	<p>Design, reserve land for and commence construction of N69 Route Improvements from Limerick to Glin as resources become available.</p>

Section 10.1.2 Harbours and Airports

Objective IN O24 Enhancing Connectivity with the Estuary

It is an objective of the Council, as resources become available and in consultation with TII, to design, reserve land for and commence construction of a new road from the N69 and the strategically important port of Foynes to the national primary road network and Limerick Gateway to provide for improved vehicular connectivity, having regard to the requirements of the Habitats, Water Framework, Floods, and EIA Directives, and in accordance with the mitigation measures identified in the Appropriate Assessment, Strategic Flood Risk Assessment and Strategic Environmental Assessment of Variation No. 6 at project level.

In summary, by undertaking the SEA, AA and SFRA and assessing the in-combination effects, the most significant effects have been identified, eliminated through avoidance, removal and/ or specifying certain mitigation measures. Further mitigation, as outlined in the NIR and the SFRA have also been included as part of the Variation text to ensure these are addressed at project level. Table 2.2 summarises the principle mitigation policies and/ or objectives contained in the existing Limerick County Development Plan 2010-2016 (as extended) and the mitigation from the NIR and SFRA and how they relate to the SEOs. These mitigation measures will be relied upon as mitigation for addressing the likely significant adverse effects as a result of the Variation.

Table 2.2 Summary of Likely Significant Adverse Effects and existing Mitigation Measures

Environmental Topic SEO	Summary of likely significant adverse effects	Existing Mitigation Measures (LCDP)	Additional Mitigation Y/N
<p>B1 Maintain and enhance local bio-diversity.</p>	<ul style="list-style-type: none"> • Likely significant adverse effects on the Natura 2000 sites as identified in the separate AA • Likely significant adverse effects during construction phase including disturbance of species, habitat loss and fragmentation of habitat and/ or ecological/ wildlife corridors that may affect biodiversity e.g. bats, barn owls, badgers, otters, etc; • Potential adverse effects due to construction and operation activities (e.g. pollution events, wastewater and drainage) and effects on water quality which may affect the achievement of good status of the River Basin Management Plan in accordance with the Water Framework Directive; • Potential spread or poor management of invasive species during construction activities; • Likely significant adverse effects on rare plants that are protected by flora protection orders including; Hairy violet, Triangular Clubrush, woodclub rush, Meadow Barley, translocation licence will be required from NPWS; • Potential effects on biodiversity during operation phase due to disturbance particularly sensitive species due to introduction of noise and lighting along the proposed route e.g. effects on protected species such as bats flight paths, otter and badger commuting routes; and • Potential indirect impacts on Lough Selleher, a Turlough located approximately 500m south of the proposed alignment in the townland of Craggs 	<p>The current text of the Variation “<i>having regard to the requirements of the Habitats, Water Framework, Floods and EIA Directives.</i>”</p> <p>Objectives: EH 01, EH 02, EH03, EH04, IN025. SE O15, SE O16, COM O32, Water Quality interactions: Policy IN P11, IN P12 Objectives: IN 024, IN 035, IN 036</p> <p>Policies: CP 10, SE01, ED P7.</p>	<p>No</p>

Environmental Topic SEO	Summary of likely significant adverse effects	Existing Mitigation Measures (LCDP)	Additional Mitigation Y/N
<p>B2 Protect, conserve and enhance habitats, species and areas of European and national importance.</p>	<p>Likely Significant adverse effects identified in NIR (Section 6) to include effects on:</p> <p>Lower River Shannon SAC</p> <ul style="list-style-type: none"> • Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)* priority habitat) • Floating River Vegetation [3260] • River Lamprey (<i>Lampetra fluviatilis</i>) [1099] • Atlantic Salmon (<i>Salmo salar</i>) [1106] • European Otter (<i>Lutra lutra</i>) [1355] <p>Curraghchase Woods SAC</p> <ul style="list-style-type: none"> • Lesser Horseshoe Bat (<i>Rhinolophus hipposideros</i>) [1303] • Askeaton Fens Complex SAC • Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davalliana</i> [7210] • Alkaline fens [7230] <p>River Shannon and River Fergus Estuaries SPA</p> <ul style="list-style-type: none"> • Whooper Swan (<i>Cygnus cygnus</i>) [A038] 	<p>Mitigation measures proposed in Section 6 of the NIR and Variation text (Table 8.3 of the LCDP 2010-2016 (As Extended) i.e. <i>“having regard to the requirements of the Habitats, Water Framework, Floods and EIA Directives.”</i></p> <p>Objectives: EH 01, EH 02, SE O15, SEO16</p> <p>Policy: CP 10, SE 01, ED P7, EH 01, EH 02, EH 03, EH 04, CP 10, SE 01, Objectives: SE O15, SE O16, Policy.</p>	<p>Yes – See Section 6 of the NIR - Mitigation measures</p>
<p>P1 Promote compact settlement patterns and high quality residential development in appropriate locations.</p>	<ul style="list-style-type: none"> • Major significant beneficial impacts identified on this SEO. The Variation will promote compact settlement patterns and no likely significant effects on P1 SEO identified. 	<p>The current text of the Variation.</p> <p>Policies: Policy SS P8: IN P1, IN P3, IN P4, IN P5, IN P6, IN P7.</p> <p>Objectives: IN O1, IN O2, EH O23 (Noise).</p>	<p>No</p>

Environmental Topic SEO	Summary of likely significant adverse effects	Existing Mitigation Measures (LCDP)	Additional Mitigation Y/N
<p>W1 prevent deterioration in surface and ground water quality, achieve improvement in water quality.</p>	<ul style="list-style-type: none"> • Potential impacts on ecological status of water bodies in the area. Increased pressure on the improvement of river water quality and ensuring the compliance with the requirements of the Water Framework Directive at project level; • Potential impacts on the transitional water body status of the Lower River Shannon; • Activities associated with the construction and operation of road developments have the potential to affect groundwater resources and also to impact on hydrogeological features. • The construction phase of the road development increases the vulnerability of the underlying aquifers to contamination by stripping away protective vegetation and subsoil cover. • There is likely to be effects on surface waters due to the construction of bridge structures; • Potential effects on groundwater dependent terrestrial ecosystems required to be considered as part of the separate AA and EIA process. • During the operational phase, potential effects include increased run-off, sedimentation, risks of accidents, spills to the watercourses, contamination of surface water and groundwater supplies. 	<p>The current text of the Variation i.e. <i>“having regard to the requirements of the Habitats, Water Framework, Floods and EIA Directives.”</i></p> <p>Policy: IN P11</p> <p>Objective EH O19: River Basin Management Plans. Policy IN P12: Catchment Management, Objective IN O24: Protection of Surface water bodies, Objective IN O35: Minimise threat and consequences of flooding, Objective IN O37 Manage river catchments and surface water run-off, Objective EH O20: Ground Water and Surface Water Protection and River Basin Management Plans, Objective SE O16: Water Quality.</p> <p>Other interactions identified with material assets, population and human health, biodiversity, flora and fauna.</p>	<p>Yes – See Section 6 of the NIR - Mitigation measures.</p>

Environmental Topic SEO	Summary of likely significant adverse effects	Existing Mitigation Measures (LCDP)	Additional Mitigation Y/N
W2 Promote good practice in flood risk management	<ul style="list-style-type: none"> Likely effects due to changes to the flood regime. A number of locations have been identified as being at risk of fluvial and coastal flooding; see separate SFRA for significant effects. Interactions due to likely changes to the flood regime which will subject to site specific flood risk assessment at project level; The Foynes to Limerick Road Improvement Scheme will have to comply with Section 50 of the Arterial Drainage Act 1945 at project level. 	<p>Mitigation measures proposed as part of the Separate SFRA prepared as part of the Variation process.</p> <p>The current text of the Variation <i>“having regard to the requirements of the Habitats, Water Framework, Floods and EIA Directives.”</i></p> <p>Objective IN O36: Minimise threat and consequences of flooding, Manage river catchments and surface water run-off, Objective IN O 38: Flood risk management and development, Objective IN O39: Flood Risk Management and Development. Objective IN O40: To minimise the impact of structures and earthworks on flood plains and river flow. Objective IN O41: Sustainable Urban Drainage systems, Objective SE O15: Protected Areas, Objective SE O16: Water Quality, Objective SE O17: Flooding and Development, Objective SE O18: Development not Sensitive to Flooding, Objective: SE O17, SE O18, SE O19</p>	Yes – SFRA mitigation measures Section 8.1.
S1 Conserve and sensitively exploit geological resources. Preserve sensitive geological sites.	<ul style="list-style-type: none"> There are no sensitive geological sites identified in the proposed Variation area therefore there will be no likely significant impacts to this SEO. 	<p>The current text of the Variation <i>“having regard to the requirements of the Habitats, Water Framework, Floods and EIA Directives.”</i></p> <p>Policy: EH P1</p> <p>It is the policy of the Council to ensure the sustainable management and conservation of areas of natural environmental and geological value within the County.</p>	No

Environmental Topic SEO	Summary of likely significant adverse effects	Existing Mitigation Measures (LCDP)	Additional Mitigation Y/N
AC1 Reduce air pollution, implement climate change aspects of plan.	<ul style="list-style-type: none"> The assessment found that the Variation will have a neutral impact on ambient air quality and no likely significant adverse effects identified at this stage of the assessment. 	<p>The current text of the Variation “<i>having regard to the requirements of the Habitats, Water Framework, Floods and EIA Directives.</i>”</p> <p>Objective EH O22: Air Quality & Objective EH O24 Renewable Energy Strategy.</p>	No
MA1 Sensitively manage natural and manmade material assets to meet the needs of existing and future populations in a sustainable manner.	<ul style="list-style-type: none"> Overall likely significant positive effects on this SEO including improvements in journey time reliability, safety, enhanced regional connectivity, reduction in traffic congestion, etc. Likely positive effects on tourism value of the region due to improved connectivity and journey time reliability. Potential impact on groundwater water quality and/ or quantity to be addressed as part of project level EIA. Potential for the proposed Variation to affect groundwater resources which may affect water supply. There is likely significant impacts on the Craggs/ Barrigone Group water Scheme which is likely to be mitigated at project level stage. 	<p>The current text of the Variation “<i>having regard to the requirements of the Habitats, Water Framework, Floods and EIA Directives.</i>”</p> <p>Objective: IN O12: IN O13, EH O19: Objective IN O25, Objective IN O26, Objective IN O27, Objective IN O29, Objective IN O30, Objective IN O31, Objective IN O32, Objective IN O 33: Water Supply, Objective IN O34, Objective IN O35,</p> <p>Policy IN P10 Protection of Corridors and Route Alignments, Policy ED P8: Infrastructural capacity</p>	No

Environmental Topic SEO	Summary of likely significant adverse effects	Existing Mitigation Measures (LCDP)	Additional Mitigation Y/N
<p>C1 Protect and conserve cultural heritage including architecture, archaeology and heritage items.</p>	<ul style="list-style-type: none"> • Potential significant effects on the recorded monuments, designed landscapes, areas of archaeological potential and / or setting of the existing known or unknown archaeological remains, arising from the construction of road infrastructure; • During construction, potential effects to built heritage including demolition, disturbance or impacts on ACAs; • Effects on previously unrecorded archaeological and cultural heritage features in the vicinity of the area of interest; • Potential for disturbance of previously undiscovered archaeological remains near or within watercourse during construction phase; and • During operation, it is expected that there will be environmental improvements and reduction in air pollution on ACAs and the architectural heritage of those areas. 	<p>The current text of the Variation “<i>having regard to the requirements of the Habitats, Water Framework, Floods and EIA Directives.</i>”</p> <p>LCDP Policies and Objectives:</p> <p>Objective EH O25: EH O26, EH O27, EH027A, EH O29, EH O31, EH O32, EH O36, EH: O38, EH O29</p>	<p>No</p>
<p>L1 Protect historic and natural features of note in landscapes. Sensitively manage landscape change.</p>	<p>Landscape changes will be sensitively managed through the EIA project level assessment which supports the landscape SEO.</p> <ul style="list-style-type: none"> • Potential for significant effects on the setting of historic and natural features including designed landscapes, demesne, rivers, hedgerow and other features associated with natural and built heritage. 	<p>The current text of the Variation “<i>having regard to the requirements of the Habitats, Water Framework, Floods and EIA Directives.</i>”</p> <p>Policy CP 10, EH P2.</p> <p>Objective EH O5 Enhancing Tree Cover, Objective EH 035, EH O6, Objective EH O12: Shannon Coastal Zone Landscape Character Area, EH017, EH 018, SE O7: Integrating Developments.</p>	<p>No</p>

2.2.2 Summary of How Environmental Measures were integrated into the Variation

This SEA process was informed by the assessment of the environmental baseline (i.e. the current state of the environment – biodiversity, water, cultural heritage etc.). This baseline assessment was used to facilitate the identification and evaluation of the likely significant environmental effects of implementing the Variation and the subsequent monitoring of the effects of the Variation as made to the LCDP 2010-2016 (As E xtended).

Reasonable alternatives were identified and assessed as part of the SEA ER. As a result of this assessment the preferred option was determined. The preferred option was further refined to address the requirements of the scheme objectives. The SEA process facilitated the identification of potential likely significant effects as part of the Variation process. Initially, the LCDP 2010-2016 (as extended) was checked for the existence of environmental protection measures which could potentially mitigate these effects. Where it is found that the Plan lacked these, additional mitigation measures were recommended where necessary.

On the basis of this Appropriate Assessment process (NIR) it was determined that, in the absence of appropriate mitigation measures, the Proposed Variation was likely to adversely affect the Lower River Shannon SAC, the Curraghchase Woods SAC, the Askeaton Fens Complex SAC and the River Shannon and River Fergus Estuaries SPA in view of their Conservation Objectives. By undertaking the AA and assessing the in-combination effects, the likely significant effects have been eliminated through avoidance, removal or specifying certain mitigation measures. Mitigation measures to counteract these likely significant negative impacts were established as part of the NIR and incorporated as part of the Variation wording.

As a result of undertaking an SFRA mitigation measures to address the flood risk as a result of the Variation was devised. These mitigation measures are outlined in Section 8.1 of the SFRA and are incorporated as part of the Variation wording as part of the policy making process.

Monitoring of the Plan throughout its lifetime will ensure that any potential adverse environmental impacts, unforeseen at this stage, will be identified early so as to prevent any deterioration of the environment in the future.

2.3 Inter-relationships between Environmental Topics

The interactions and inter-relationships between the SEA environmental baseline topics is an important consideration for the environmental assessment and a requirement of the SEA Directive. The assessment recognises that all environmental topics interact with each other to some extent. Table 2.4 summarises the various environmental topic interrelationships by way of a matrix. The matrix indicates the likely strategic and significant inter-relationships between environmental topics that have been taken into account as part of the assessment process.

Table 2.4 Environmental Interactions

INTERACTIONS	Biodiversity	Population and Human Health	Landscape	Water Resources	Soils & geology	Material assets	Air & Climate	Cultural heritage
Biodiversity			√	√	√	√		
Population and Human Health	√		√	√	√	√	√	
Landscape		√				√		√
Water Resources	√	√			√	√		
Soils & Geology	√	√				√		
Material Assets	√	√	√	√	√		√	√
Air & Climate		√				√		
Cultural Heritage			√			√		

2.4 Adopted Variation

The Variation was adopted on 10th April 2018 at the Limerick City and County Council meeting. Changes were included as part of Section 8.2.6.2 National Primary and National Secondary roads. The wording of the resolution making the Variation is as follows:

Table 8.3 Proposed National Road Improvements

N18 Galway Road	Southern Ring Road – Phase 2: Complete land acquisition and continue construction of the Limerick Southern Ring Road, Phase 2 scheme in County Limerick
M7 Dublin Road	N7 Route Improvements Nenagh to Limerick: Complete land acquisition and continue construction of the M7 Nenagh to Limerick scheme in County Limerick
M8 Mitchelstown - Cahir	Complete land acquisition and continue construction of the M8 Route Improvements from Mitchelstown to Cahir in County Limerick.
N20 Cork Road	Design, reserve land and commence construction of the N20 upgrade to Motorway standard, which forms part of the strategic Atlantic Corridor and is included in “Transport 21” from Patrickswell to Charleville in County Limerick.

<p>N21 Tralee Road (and Killarney Road)</p>	<p>Design, reserve land for and commence construction of a bypass of Adare and N21 Route Improvements from Adare to the County boundary, as resources become available, having regard to the requirements of the Habitats, Water Framework, Floods, and EIA Directives and in accordance with the mitigation measures identified in the Appropriate Assessment, Strategic Flood Risk Assessment and Strategic Environmental Assessment of Variation No. 6 at project level.</p>
<p>N21 to N69</p>	<p>Design, reserve land for and commence construction of a new road between the N21 at Rathkeale and the N69 at Foynes as resources become available, having regard to the requirements of the Habitats, Water Framework, Floods and EIA Directives and in accordance with the mitigation measures identified in the Appropriate Assessment, Strategic Flood Risk Assessment and Strategic Environmental Assessment of Variation No. 6 at project level.</p>
<p>N24 Tipperary Road</p>	<p>Ballysimon to County Boundary: Design, reserve land and commence construction of N24 Route Improvements from Ballysimon to County Boundary, as resources become available. Western Corridor Improvements (Pallasgreen – Bansha): Design, reserve land for and commence construction of so much of N24 Western Corridor Improvements, as will lie in County Limerick as resources become available.</p>
<p>N69 Tarbert (Foynes) Road</p>	<p>Design, reserve land for and commence construction of N69 Route Improvements from Limerick to Glin as resources become available.</p>

Section 10.1.2 Harbours and Airports

Objective IN O24 Enhancing Connectivity with the Estuary

It is an objective of the Council, as resources become available and in consultation with TII, to design, reserve land for and commence construction of a new road from the N69 and the strategically important port of Foynes to the national primary road network and Limerick Gateway to provide for improved vehicular connectivity, having regard to the requirements of the Habitats, Water Framework, Floods, and EIA Directives and in accordance with the mitigation measures identified in the Appropriate Assessment, Strategic Flood Risk Assessment and Strategic Environmental Assessment of Variation No. 6 at project level.

3. INTEGRATION OF CONSULTATION INTO THE PLAN MAKING PROCESS

All the constraints and route options for the Foynes to Limerick Road Improvement Scheme are discussed in the Route Corridor Selection Report May 2016. These route corridor options subsequently underwent environmental assessment and public consultation. As a result of these processes, a preferred route corridor emerged and was subsequently mapped as part of the Variation for the purposes of the environmental assessment.

Extensive public consultation has been undertaken as part of the development of the preferred corridor which has led to the Variation No. 6. Consultation has been an important component throughout the development of the Variation. It has been important to meet statutory requirements for consultation with relevant parties and to ensure that the knowledge, experience and views of stakeholders and the general public were taken into account throughout the process and assessments.

3.1 SEA Consultation

In accordance with the SEA Regulations (SI 436 of 2004 as amended) and Planning and Development Act (as amended), the following consultation activity was required:

- (i) Scoping stage: consultation with the SEA Statutory Authorities;
- (ii) Draft plan and SEA Environmental Report stage: consultation with the SEA environmental authorities and the wider public. The draft plan and SEA Environmental Report was put on public display and notice published.
- (iii) Final Variation and SEA Statement stage: The final adopted variation and SEA Statement must go on public display and a notice must be published.

These stages are summarised below.

3.1.1 Scoping Stage

Under the SEA Regulations, designated environmental authorities must be consulted in relation to the scope and level of detail to be included in the Environmental Report. In the case of this Variation, the following authorities were identified as statutory consultees and were consulted for a minimum of 3 weeks, in accordance with Regulation 13M(2)(d) of the SEA Regulations:

- (i) The Environmental Protection Agency (EPA);
- (ii) Minister for Housing, Planning, Community and Local Government;
- (iii) Minister for Communications, Climate Action and Environment;
- (iv) Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs;
- (v) Development Applications Unit, Department of Arts, Heritage Regional, Rural and Gaeltacht Affairs;
- (vi) Minister for Agriculture, Food and the Marine;

The adjoining planning authority whose area is contiguous to the area of a planning authority which prepared a draft plan, proposed variation or local area plan;

- (vii) Clare County Council;
- (viii) Kerry County Council;
- (ix) Cork County Council; and
- (x) Tipperary County Council.

Summary of Scoping Submission	Response/ Action Taken
Recommend consultation with the Southern Regional Assembly, who are currently commencing preparation of the Regional Spatial and Economic Strategy for the Southern Region (RSES) and associated SEA.	Noted and consulted as appropriate throughout the SEA process.
Environmental Baseline	
Provide habitat mapping where available.	Included in Biodiversity Section on SEA ER – detailed in Appendix C of the SEA ER.
Water quality and use of digital resources in assessing water quality	Noted and considered as part of SEA ER.
Climate Adaptation and Climate Mitigation – the Variation should consider the National Mitigation Plan (DCCA),	Noted and is considered as part of the SEA ER detailed in Appendix A.
Waste Water Treatment Services: Foynes WWTP is listed on the more recent EPA Urban Waste Water Report for 2016 (EPA, 2017) as a priority urban area where improvements are required to resolve environmental priorities.	Noted and included in SEA ER as part of baseline environmental information.
Failte Ireland has commenced work in preparing their 5-year tourism strategy, which is undergoing SEA.	Noted and detailed in the SEA ER - Appendix A.
Strategic Environmental Objectives	
Consider amending the Biodiversity Objective to include a reference to protected habitats/species of European importance also (relevant to habitats and species covered under Birds and Habitats Directives) that may be present within/adjacent to the area.	Noted and included revised SEO detailed in Table 6.1 of the SEA ER.
Population and Human Health Objective could be amended as follows “Promote compact settlement patterns and high quality residential development in appropriate locations”	Noted and included revised SEO detailed in Table 6.1 of the SEA ER.
The Water SEOs could be updated to refer to both ‘groundwater and surface waters’	Noted and included revised SEO detailed in Table 6.1 of the SEA ER
Clare County Council received 8th December 2017	
Advises that Clare County Development Plan 2017-2023 can be consulted in relation to in-combination effects assessment.	Included in Assessment of Interaction of Relevant Plans, in Appendix A of SEA ER.
Comments on SEA Screening Report:	
Consideration should be given to including a point in relation to achieving the objectives of the SIFP in relation to transportation as part of the reasons for the proposed Variation.	Noted and included in reasons for proposed Variation - Section 3.1 of SEA ER.

Summary of Scoping Submission	Response/ Action Taken
Consideration of Clare County Council should be included in relation to transboundary effects.	Noted and included as part of SEA and AA in relation to cumulative effects as appropriate.
Clare County Council agrees with Screening decision.	Noted.
Comments on SEA Scoping Report	
Welcomes and supports the content and findings Scoping Report and likely significant effects on all SEA aspects. Effects will require more consideration at SEA ER stage. No further comments at this time.	Noted and included in SEA ER.
Requests to be kept informed as the Variation continues and preparation of SEA ER.	Noted, will be given notice of publication of the proposed Variation and SEA ER as required.

The submissions received were incorporated into the next phase of the SEA process, namely the SEA ER. The SEA ER outlines the findings of the assessment on the likely significant effects on the environment of the implementation of the Variation. The comments and issues raised through the Scoping process informed the SEA ER and AA and ultimately the development of the Variation

3.1.2 Consultation on the Proposed Variation and SEA ER

The Proposed Variation, the SEA ER and SEA Non-Technical Summary, NIR and SFRA were put on public display from Saturday 6th January 2018 to Monday 5th February 2017 inclusive. Submissions and/ or observations with respect to the Proposed Variation to the Plan and the accompanying documents were invited to be made in writing, to the Forward/Strategic Planning Section, Economic Development, Merchants Quay, Limerick City and County Council, Limerick or emailed to forwardplanning@limerick.ie and received by close of business on Monday 5th February 2018.

A total of 9 submissions were received, within the statutory timeframe there were from:

1. Department of Housing, Planning and Local Government, Custom House, Dublin 1
2. Environmental Protection Agency, Inniscarra, Co. Cork
3. Transport Infrastructure Ireland, Parkgate Street, Dublin 8
4. Irish Water, Talbot Street, Dublin 1
5. Southern Regional Assembly, O'Connell Street, Waterford
6. Shannon Foynes Port Company, Foynes, Co. Limerick
7. Aeneas O'Connor, Croagh, Co. Limerick
8. Paul & Eileen Madden, Rathkeale, Co. Limerick
9. Joan Kennedy, Croagh, Co. Limerick

The submissions were considered and evaluated by policy makers and considered by the SEA, AA and SFRA teams as appropriate which informed the Chief

Executive's Report. The Chief Executives Report was submitted to the elected members for their consideration before the decision to vary the Plan was made.

A briefing workshop was held on the 12th March 2018 with all Elected Members on the Chief Executive's Report on proposed Variation No. 6.

3.1.3 Chief Executive's Response to Submissions

A Chief Executive's Report to Elected Members on the submissions received in relation to the Variation was prepared in accordance with Section 13(4) of the Planning and Development Act 2000 (Amended).

In summary, a number of submissions were received indicating their support for the proposed Variation. Many submissions referred to the importance of this piece of infrastructure in achieving the provision of high quality road infrastructure between Foynes and Limerick City, and its contribution to the completion of the TEN-T Network in Ireland. Submissions also referenced the opportunities that the Variation would bring, permitting continued development of the Port and wider Shannon estuary region and the facilitation of improved connectivity across County Limerick and the Mid-West region. The improved transport network was referenced as facilitating in enhancing economic activity and employment generation in the region.

Some submissions raised concerns regarding development of future roads that could impact on family homes, agricultural land and farming activities. Submissions also noted the potential for the effects road transport has on emission to air, noise, water resources and future challenges relating to climate change and the urgent need for climate change adaptation to be developed as part of the transport sector.

The conclusions of the Strategic Environmental Assessment, Natura Impact Report and Strategic Flood Risk Assessment were also acknowledged.

The CE Report summarises the issues raised by observers and provides a response in relation to each issue raised and a recommendation in relation to potential changes required to the Variation. The key environmental issues raised in submissions on the proposed Variation are summarised in Table 3.3 below.

Table 3.3 Summary of How Public Submissions Expressed During Consultation Have Been Taken into Account

Summary of the Main Environmental Issue Raised	How the Issue(s) raised were considered/ Response to Submission	Change that resulted
Biodiversity		
<p>Habitat Mapping as completed in 2016 will be important in minimising (or avoiding) disturbance to key environmental sensitivities, including protected species and designated habitats.</p>	<p>Habitat Mapping was included as part of the SEA ER Environmental Report. The evolving nature of the surveys will ensure that the design at project level will be informed by the most up to date information which will assist in avoiding or minimising disturbance to the ecological sensitive areas including protected species and designated habitats along the route. Cross reference with the Natura Impact Report outlines mitigation measures to be taken at project level. Further habitat surveys and mapping will be undertaken as part of the project level assessments as required.</p>	<p>No Change</p>
<p>Habitat Mapping as completed in 2016 will be important in minimising (or avoiding) disturbance to key environmental sensitivities, including protected species and designated habitats.</p>	<p>Habitat Mapping was included as part of the SEA ER Environmental Report. The evolving nature of the surveys will ensure that the design at project level will be informed by the most up to date information which will assist in avoiding or minimising disturbance to the ecological sensitive areas including protected species and designated habitats along the route. Cross reference with the Natura Impact Report outlines mitigation measures to be taken at project level. Further habitat surveys and mapping will be undertaken as part of the project level assessments as required.</p>	<p>No Change</p>
Population and Human Health		
<p>The route will result in segregation of family homes currently adjacent to each other. The proposed route will make a farm and full-time farming livelihood unviable.</p>	<p>The selected corridor has been identified as the one which on balance causes the least disruption to properties as well as having the least environmental impact.</p>	<p>No Change</p>

Summary of the Main Environmental Issue Raised	How the Issue(s) raised were considered/ Response to Submission	Change that resulted
The relevant aspects of the Draft National Planning Framework, regarding the further population and economic growth projections of Limerick City may also be useful to refer to.	The Variation supports the growth of Limerick City and region outlined in the National Planning Framework. Reference to the Draft NPF is contained in Appendix A of the SEA ER.	No Change
Noise pollution is a significant health concern. Noise action plans should be considered and preventative mitigation and the use of alternative vehicles implemented.	Joint Noise Action Plan 2013 has been carried out as part of the SEA (detailed in Appendix A of the SEA ER) which has been used to inform the Variation process. Noise maps are included for the N21 and N69 in the SEA ER. Furthermore, noise pollution has been considered as part of the route selection and the Variation process. Road design guidelines set standards for noise abatement and pollution control which will be considered in the Environmental Impact Assessment and adhered to.	No Change
The relevant aspects of the Draft National Planning Framework, regarding the further population and economic growth projections of Limerick City may also be useful to refer to.	The Variation supports the growth of Limerick City and region outlined in the NPF. The Draft National Planning Framework is currently undergoing review, in light of this, reference was made to current Framework in Appendix A. Once the National Planning Framework is finalised, all future plans and variations will take account of the future population and economic growth projections.	No Change
Water & Flood Risk		
The potential for significant effects on rivers within the Variation area will be required to be considered in more detail as part of the project level EIA. Construction and environmental management plans (CEMPs) should be required, where appropriate, and the necessary measures to protect environmental sensitivities including water quality should be established, implemented and monitored.	A Construction and Environmental Management Plan (CEMP) will be required to be produced as part of the planning application. The CEMP will set out the necessary measures to protect environmental sensitivities including measure to protect water quality and any monitoring of same.	No Change

Summary of the Main Environmental Issue Raised	How the Issue(s) raised were considered/ Response to Submission	Change that resulted
<p>It should also be ensured that the Draft National River Basin Management for Ireland (DHPLG) and associated programme of measures, is fully integrated as appropriate.</p>	<p>The Variation has included the Draft River Basin Management Plan for Ireland and the Shannon River Basin Management Plan and programme of measures as part of the SEA ER in Appendix A – both of which are similar in terms of implementation measures required at project stage. Once the Draft National Plan is finalised and measures finalised this will be included as part of the project level assessments.</p>	<p>No Change</p>
<p>The recommendations of the flood risk management plans for the relevant Units of Management should be integrated as appropriate.</p> <p>A commitment to ensure that any additional zoning or development arising out of the implementation of the Variation, fully complies with the Flood Risk Management Guidelines (2009), should also be considered.</p>	<p>The proposed Variation complies with the Flood Risk Management Guidelines. An SFRA has been prepared to support the Variation. The Strategic Flood Risk Assessment concludes that the Foynes to Limerick Road Improvement scheme, passes the justification test (in accordance with the 'The Planning System and Flood Risk Management Guidelines for Planning Authorities'. Having regard to the strategic nature of the proposed route, the sequential approach involved in the route corridor selection process and the findings of the flood risk assessment, any potential impact, can be managed and mitigated, without any unacceptable adverse flood impact elsewhere.</p>	<p>No Change</p>
Soils and Geology		
<p>No issues raised</p>	<p>Soil and geological considerations will be considered at the project level EIA at design stage.</p>	<p>No Change</p>
Air & Climate		
<p>Concerns regarding the significant emissions of greenhouse gases and air pollutants from the transport sector.</p>	<p>Limerick City & County Council are committed to promotion of sustainable travel as set out in the County Development Plan 2010 – 2016 (As Extended).</p>	<p>No Change</p>

Summary of the Main Environmental Issue Raised	How the Issue(s) raised were considered/ Response to Submission	Change that resulted
The need to reduce transport related pollution needs to be recognised in the Variation.	The Variation and Route Selection Report has considered issues in relation to air quality and the transport sector. Further assessments will be undertaken as part of the project level assessment EIA process.	No Change
The Variation should consider better ways to promote urban and spatial planning with an aim of reducing Carbon Dioxide levels.	The Variation will promote the improvement in the urban and spatial planning by removing HGVs and congestion from existing towns and villages and facilitating settlements capacity to expand and grow.	No Change
Urgent need for the transport sector to adapt to the effect of climate change, the Variation should consider the impacts on local and regional exposure and vulnerability to weather and climate events and projected changes to these due to climate change.	Consideration of the Draft National Adaptation Framework as part of the proposed Variation was undertaken as part of the SEA ER in Appendix A. The Variation is also supported by a separate SFRA which included likely implications relating to flood risk and climate change. The EIA process and further including site specific flood risk assessment will inform project level assessment.	No Change
Material Assets		
The Draft Bio Energy Plan commitment to the continuation of the Bio Fuels Obligation Scheme is relevant to the Variation and remains key to meeting the target of 10% renewable transport target.	The Variation supports both the national Smarter Travel policy and Limerick Smarter Travel. These issues and the implications relating to Biofuels are more appropriately assessed and implemented at project level stage.	No Change
The proposed route will affect the livelihood of full time farmers and development lands adjacent to the route. Quality of land affected, alternations to the route, deviation off the original orange corridor and responses to submissions a concern.	The selected corridor has been identified as the one which on balance causes the least disruption to properties and agricultural activity as well as having the least environmental impact.	No Change
Cultural Heritage		
No issues raised.	Cultural heritage considerations will be considered at the project level EIA at design stage.	No Change

Summary of the Main Environmental Issue Raised	How the Issue(s) raised were considered/ Response to Submission	Change that resulted
Landscape		
No issues raised	Landscape considerations will be considered at the project level EIA at design stage.	No Change
Inter-Relationships and Other Issues Raised		
Consider including an additional 'interaction tick' between Biodiversity and Population – Human Health	Noted, consideration has been given to these issues in the preparation of the reports which were placed on consultation and public display. The inter-relationship table will updated as suggested as part of the SEA Statement.	Change to SEA Interactions Table completed in Table 2.4 above.
There is merit in including a specific reference for the need for developments/projects to “comply with the relevant environmental policies and objectives in the County Development Plan”. This would place a stronger emphasis on the need to implement the mitigation and monitoring measures necessary to protect and manage environmental sensitivities and vulnerabilities.	Noted, all projects at planning application stage are required to comply with the policies and objectives in the County Development Plan.	No Change
Integration between Strategic Environmental Assessment, Appropriate Assessment and Strategic Flood Risk Assessment, could include a broad summary of the key findings of the Appropriate Assessment and Strategic Flood Risk Assessments carried out and how they have been integrated into the SEA and Variation.	Both the Non Technical Summary (NTS) and the Strategic Environmental Assessment Environmental Report (SEA ER) include the results of the Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) processes as part of the assessment of the Variation in Section 8 of both documents. Furthermore, the integrated approach has ensured the incorporation of additional text recommended as part of the Variation process. The summary results are also included in this SEA Statement.	No Change

Summary of the Main Environmental Issue Raised	How the Issue(s) raised were considered/ Response to Submission	Change that resulted
<p>Summary of Likely Significant Adverse Effects and Mitigation Measures indicates the existing mitigation measures contained within the Limerick County Development Plan relevant to each Strategic Environmental Objective. There is merit in including this Table in the Variation document as a separate appendix, to highlight the context in which the variation will be implemented, from an environmental protection perspective. It would also highlight the level of integration between the assessment and Variation-making processes.</p>	<p>The Variation is to the Plan, the mitigation measures outlined in Table 8.3 of the SEA ER are a cross reference between the existing policies and objectives already contained in the Plan and the Strategic Environmental Objectives which are relevant to all development occurring in the County. The SEA supports the Variation therefore an additional appendix is not deemed to be required in this instance.</p>	<p>No Change</p>
<p>There is also merit in reviewing the relevant mitigation measures associated with the Shannon Integrated Framework Plan (SIFP) in the context of minimising potential for adverse environmental effects between the SIFP and the Variation.</p>	<p>Consideration of the Shannon Integrated Framework Plan, including mitigation measures was undertaken as part of the Variation preparation process and is detailed in Appendix A. The Shannon Integrated Framework Plan was previously incorporated into the County Development Plan 2010 - 2016 (As Extended) as a separate variation.</p>	<p>No Change</p>
<p>It is worth noting that the Draft National Planning Framework includes an intention for regional transport strategies / metropolitan area spatial plans to be prepared. Where relevant to the Limerick City area, and when prepared, these should be integrated into the County Development Plan.</p>	<p>The Wild Atlantic Way runs west from Foynes towards Glin. It is expected that improvements in the road network will have positive effects on tourism assets including the Wild Atlantic Way.</p>	<p>No Change</p>
<p>The monitoring programme for the Strategic Environmental Assessment Environmental Report should be robust enough to assist in determining whether implementation of the required mitigation measures (and compliance with the County Development Plan environmental objectives and policies) is being achieved over the lifetime of the Variation.</p>	<p>The monitoring programme is outlined in Table 9.1 and includes indicators as well as the method of implementation through 'source' much of the implementation will be contingent on the project level assessments required as part of the EIA, AA and Site specific flood risk assessment and monitoring of same at project level.</p>	<p>No Change</p>

Summary of the Main Environmental Issue Raised	How the Issue(s) raised were considered/ Response to Submission	Change that resulted
<p>The Monitoring Programme should include information on how the monitoring proposed will allow unforeseen adverse effects to be identified and responded to as appropriate.</p>	<p>Further monitoring will be determined as part of the project level assessments and which will include details of monitoring frequencies, cumulative effects and addressing unforeseen adverse effects and departments responsible as appropriate.</p>	<p>No Change</p>
<p>Shannon Foynes Port Company wholeheartedly support the proposed variation. However, contend that the description of the road scheme should be reworded as per the description provided by Transport Infrastructure Ireland, as follows:</p> <p>“To provide a high quality road to connect the Port of Foynes (designated as a Core Port on the Trans-European Network) with the M20 at Limerick. The scheme will provide a bypass of Adare in addition to a link to the Shannon-Foynes Port from the new N21”.</p>	<p>Limerick’s County Development Plan 2010 - 2016 (As Extended) recognises the importance of the developing a high quality road network in County Limerick and supports the development of a number of routes in Policy IN 024. However, it references the construction of a bypass to the south of Adare. The Adare bypass has been the subject of different iterations in the past. It is now indicated as running to the north of the village associated with the Foynes to Limerick route corridor. In light of these changes and the association of the bypass with previous schemes, it is considered prudent to emphasise the separate nature of the bypass as the need for the bypass of Adare has long predated the Foynes to Limerick scheme.</p>	<p>No Change</p>
<p>In summary, the SEA and AA team assessed each submission. It was considered that no additions or deletions were required as a result of the submissions and that existing mitigation measures proposed adequately addressed the issues raised at this level of the decision making process.</p>		

Based on the above, the next stage in the process was the writing and distribution of the Chief Executive’s Report to the Members on the Submissions. Following receipt of the Chief Executive’s Report, the Members of the Council had up to 6 weeks in which to consider the contents of the Report and the proposed Variation. Members could then decide to make the Variation with or without the proposed amendments or with modifications to the proposed amendments, as they consider appropriate and subject to the provisions of the Planning and Development Act, 2000 (Amended). The formal making of the Variation was made by Resolution of the Council on 10th April 2018.

4. THE REASONS FOR CHOOSING THE VARIATION IN LIGHT OF OTHER REASONABLE ALTERNATIVES

The SEA process examined reasonable alternatives available to Limerick City and County Council other than the proposed Variation. This section summarises the reasons for choosing the Variation in light of other reasonable alternatives dealt with. The alternatives considered include:

- a) Do-Nothing Scenario
- b) Do-Minimum Scenario – Upgrade of existing Roads
- c) N21 Adare Bypass (2010) – (Adare South Bypass)
- d) The proposed Variation - 'preferred Option' (Foynes to Limerick Road Improvement Scheme)

A large number of alternatives have been considered throughout the proposed Foynes to Limerick Road Improvement Scheme process which has led to the proposed Variation. These are documented in the Route Selection Report (May 2016). The proposed Variation and the SEA process has been informed by these assessments.

As a mechanism of measuring the effects of each alternative on the environment, the alternatives were tested against the Strategic Environmental Objectives (SEOs) developed, taking into account the objectives of the Plan and the geographical scope of the Variation. The general basis of the alternatives assessment consists of a comparison of the environmental effects that each alternative option may have. An assessment rating of 'Major Significant Beneficial Impact' (√√) to 'Major Significant Adverse Impact' (XX) on the status of the SEO and associated explanatory text has been provided for each alternative against each of the individual Strategic Environmental Objectives (SEOs). The results of the assessment are detailed in the SEA ER Section 7.

4.1 Option A Do-Nothing

The 'Do-Nothing' scenario is informed by the RSR (2016) and investigated the existing road infrastructure and its ability to meet future demands for traffic and safety without any upgrade works, other than routine maintenance. The RSR found that the 10km length of the M20 and the N21 dual carriageway between Adare and Rossbrien met the objectives of the TEN-T Core Network for a motorway or express road, however the existing N69 between Foynes and Limerick and the existing N21 single carriageway between Rathkeale and Adare do not meet the required TEN-T standards for a number of reasons. It concluded that a 'Do-Nothing' scenario for the existing road network will not meet the TEN-T requirements for the required connection between Foynes and the core road network and does not meet the objectives of the proposed Variation. Furthermore, in terms of environmental, social and economic considerations the existing road network without improvement, will result in unacceptable deterioration to the level of service, exacerbate the poor safety record along the existing N69 and N21 and exacerbate congestion in existing urban environments.

4.2 Assessment of Options

The assessment of remaining three alternatives was undertaken against the SEOs (the results from the assessment are detailed in Table 7.3 of the SEA ER).

The alternatives were assessed for interactions which may cause effects on specific components of the environment and were given an assessment rating. The alternatives assessment found that the Proposed Variation or 'Preferred Option' relating to the proposed Foynes to Limerick Road Improvement Scheme is the preferred alternative when assessed against the SEOs taking into account the objectives and the geographical scope of the Plan. It was found the Variation has the greatest beneficial impact on the SEOs over the other alternatives considered.

The 'proposed Variation' rated more favourably than the other alternatives considered as this alternative rated better in terms of supporting the sustainable compact, development of existing key settlements in County Limerick both along the N21 and the N69 supporting the P1 SEO. The proposed Variation will facilitate the development of high quality connectivity between the existing settlements including Foynes, Askeaton and Rathkeale and Adare supporting these settlements continued development. The proposed Variation will reduce through traffic in a number of settlements which will lead to improvements in the environmental quality of these settlements thereby maintaining and attracting development and populations, supporting the Population and Human Health, Air & Climate and Material Assets SEOs. The proposed Variation scenario is the only option that satisfies the need for the scheme through the provision of a high quality route corridor meeting the TEN-T requirements, linking the Port of Foynes to the national primary road network and Limerick City. The assessment found that the provisions of the proposed Variation would meet the need for sustainable road infrastructure for existing and future populations and is the most reasonable, achievable and realistic alternative over the others considered.

It was found that the Preferred Option may have the potential for negative effects due to the presence of known Flood Zones and it was identified that there may be potential for negative and /or unknown impacts at this strategic level. The nature of these impacts however, have been assessed as part of an SFRA and it is considered at this strategic stage in the process that the alternative developed at project level would likely be required to 'promote good practice in flood risk management' through the application of appropriate mitigation measures, as required by the existing policies and objectives of the Plan.

Overall, Option D the proposed Variation is considered to be the most reasonable, practical, feasible and capable of delivering the scheme objectives while also resulting in improvements in some of the SEOs which is supported by National, Regional and Local policy. A detailed assessment of the various elements of the proposed Variation is included in Section 7.4 of the SEA ER.

4.3 Reasons for Choosing the Variation over other alternatives

The reasons for choosing the Variation in light of other reasonable alternatives considered are summarised below:

- The Variation is consistent with scheme objectives and higher level policies at National and Regional and at Local level.
- The proposed Variation will reduce through traffic in a number of settlements which will lead to improvements in the environmental quality of these settlements thereby maintaining and attracting development and populations.
- The proposed Variation will facilitate the development of high quality connectivity between the existing settlements including Foynes, Askeaton, Rathkeale and Adare supporting these settlements continued development.

- It will support the sustainable compact, development of existing key settlements in County Limerick both along the N21 and the N69.
- The need for the scheme will be satisfied through the provision of a high quality route corridor meeting the TEN-T requirements, linking the Port of Foynes to the national primary road network and Limerick City.
- This Variation is considered to improve the status of the strategic environmental objectives such as population and human health, air and climate and material assets over the other alternatives considered.

5. MEASURES TO MONITOR SIGNIFICANT ENVIRONMENTAL EFFECTS OF IMPLEMENTATION OF THE VARIATION

Article 10 of the SEA Directive requires that monitoring be carried out in order to identify, at an early stage, any unforeseen adverse effects due to implementation of a plan or programme, and to be able to take remedial action. In response to this requirement, a monitoring framework has been proposed for the Variation, based on the SEOs and their associated framework of indicators and targets, utilising the data obtained as part of the SEA process.

In accordance with article 13R, the planning authority shall monitor the significant environmental effects of implementation of the Variation of a development plan in order, inter alia, to identify at an early stage unforeseen adverse effects and to be able to undertake appropriate remedial action. For this purpose, existing monitoring arrangements may be used, if appropriate, with a view to avoiding duplication of monitoring.

The purpose of the monitoring is twofold: to monitor the predicted significant negative effects of the Variation; and to monitor the baseline environmental conditions for all SEA objectives and inform the six yearly update of the LCDP. Regular monitoring will also help to identify any unforeseen effects of the plan and ensure that where these effects are adverse, action can be taken to avoid, reduce or offset them.

The proposed monitoring framework has been updated in the SEA Statement and the SEA ER to fully reflect the adopted Variation text with regard to monitoring significant effects on the conservation objectives of the Lower River Shannon SAC and flood risk in the area as proposed by the mitigation measures contained in the SFRA. The monitoring framework will commence immediately upon adoption of the Variation and will be revised periodically to take into account new monitoring methods and increased understanding of the environmental baseline. The monitoring framework is outlined in Table 5.1 overleaf.

Table 5.1 Monitoring Framework

Environmental Topic	Potential Impact	Indicators	Source and Comments
Biodiversity	Fragmentation, loss of habitats, species.	Known losses, reports, surveys by relevant bodies, NPWS, Fisheries.	Requires cooperation and liaison with other bodies. EIAR and AA submitted at project stage.
	Habitat removal, fragmentation, disturbance, pollution events and sedimentation.	Finding of no significant adverse effects on the Conservation Objectives of the Natura 2000 network through application of Habitats Directive Assessment process at project level (See separate mitigation measures contained in NIR for the proposed Variation No. 6 (ROD-AECOM, January 2018).	Cooperation with the NPWS, IFI and other bodies. EIAR and AA submitted and determination from Competent Authority required at project stage.
Population and Human Health	Traffic volumes on national roads Traffic accidents. Noise monitoring Air quality. Ground and/ or surface water pollution.	Reduction/ Increase in Traffic volumes Reduction/ Increase in road accidents Noise levels exceeding TII goals. Decline in air quality Pollution incidents	Data from TII permanent Traffic Monitoring Units (TMU) TII - Road Safety Authority – Personal Injury Accident (PIA) database Noise monitoring (Transport Infrastructure Ireland) Environmental Protection Agency reports real-time air quality. Irish Water/ Local Authority water quality reports.
	Impacts at project level on aspects of population and human health including interactions with other environmental aspects.	Changes to landuse, impacts on water quality, water supply, changes to flood regime, transport impacts, landtake, severance, landscape and visual, etc.	Project level EIA, AA and Site Specific Flood Risk Assessments and subsequent monitoring of project level mitigation measures

Environmental Topic	Potential Impact	Indicators	Source and Comments
Water & Flood Risk	Pollution of ground and surface waters, estuary waters. Excessive abstraction.	Water pollution surveys, incidents as brought to light as a result of complaints, sampling.	Cooperation with other bodies such as Office of Public Works, Inland Fisheries Ireland Fisheries, NPWS and Health Board required.
	Risk of Flooding.	Flooding and Increased Risk of Flood. Application of the mitigation contained in the separate SFRA for the proposed Variation No. 6 (ROD-AECOM, January 2018).	Application of CFRAMS Co-operation with Limerick City and County Council and The Office of Public Works. EIA submitted at project level.
Air & Climate	Local air pollution. Green house gas emissions.	Traffic volumes. Comments in individual EIS/EIA's submitted.	EIA submitted at project level. EPA Air Quality Monitoring IPPC Licences
Soil & Geology	Loss of soil resources Soil contamination.	Reports/Surveys.	EIA submitted at project level. Local contamination may occur as a result of pollution.
Material Assets	Impacts on Materials Assets due to development of road infrastructure: <ul style="list-style-type: none"> • Traffic congestion, • Water Supply. 	Planning applications.	Liaison with various statutory and non-statutory stakeholders required as part of project level assessments. EIA submitted at project level.
Cultural Heritage	Development in or close to protected sites, habitats or structures	Known loss of sites or structures.	EIA submitted at project level. Increased liaison with other bodies required.
Landscape	Protect historic and natural features of note in landscapes. Sensitively manage landscape change.	Number of developments permitted and their impacts on cultural/historic landscapes.	EIA submitted at project level.

6. CONCLUSIONS

This SEA Statement summarises how environmental considerations have been integrated into the plan making process. This includes how consultations including stakeholder engagement and public participation, including formal consultation in relation to the SEA Scoping Report, the proposed Variation, SEA ER, NIR and SFRA have been undertaken and provided opportunities for all parties to influence the development of the Variation.

The SEA process, informed by the NIR and SFRA processes has arrived at the appropriate mitigation and monitoring measures to mitigate the likely significant effects identified and these have been adopted as part of this Variation process into the Limerick County Development Plan 2010-2016 (as extended) detailed in the Variation wording and outlined in Section 2.4 above.

A monitoring framework is outlined with the purpose of monitoring the predicted significant effects of implementation of the Variation and monitoring the baseline environmental conditions of the SEOs. The framework will be reviewed and revised during the six-yearly review of the Plan. Monitoring will commence as soon as the plan is implemented. Regular monitoring will also help to identify any unforeseen effects of the Variation and ensure that where these effects are adverse, action can be taken to avoid, reduce or offset them.

The SEA, AA and SFRA processes took place in conjunction with the preparation of the Variation. The proposed Variation was thoroughly assessed by the SEA, AA and SFRA teams. Where impacts were unavoidable the proposed Variation, refers to the recommended mitigation measures which have been adopted into the Variation to the LDCP 2010-2016 (as extended). Amendments, additions and/ or deletions were made to the Variation text in order to address any potential significant adverse effects. No further changes were made to the Variation following its adoption on the 10th April 2018.



Prepared by
Roughan & O'Donovan
Arena House, Arena Road, Sandyford, Dublin 18
Tel: +353 1 2940800 Fax: +353 1 2940820
Email: info@rod.ie www.rod.ie