

Offaly County Council

Noise Action Plan 2018 - 2023

Relating to Major Roads within County Offaly carrying more than 3,000,000 vehicle passages per year



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1. Introduction

1.1 Purpose and Scope of Environmental Noise Directive (END)

Directive 2002/49/EC of the European Communities relates to the assessment and management of environmental noise and is commonly referred to as the Environmental Noise Directive (END).

The primary intention of the Directive is to implement a common arrangement for which member states shall identify sources of environmental noise pollution, inform the public about relevant noise data, and take the necessary steps to avoid, prevent or reduce noise exposure.

"Environmental noise" is defined in the Directive as unwanted or harmful outdoor sound created by human activities including noise emitted by means of transport, road traffic, rail traffic, air traffic, and from sites of industrial activity such as those concerning integrated pollution prevention and control.

All member states are required to prepare strategic noise maps to identify populations exposed to environmental noise emanating from transport (road, rail and air traffic) and industrial activities. These maps will be the basis for illustrating to the public such information and as a tool to prepare Noise Action Plans by the responsible authorities.

1.2 Purpose and Scope of Environmental Noise Regulations, 2006

Statutory Instrument No. 140 of 2006, also known as The Environmental Noise Regulations, was transposed into Irish Law by The Minister for the Environment, Heritage and Local Government, for the purpose of giving effect to END.

The regulations provide for the implementation in Ireland of a common approach within the European community intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise.

The Regulations do not apply to noise arising from domestic activities, created by neighbours, in workplaces, inside modes of transport or by military activities in military areas.

1.2.1 Noise Action Plan Policy Statement

It is the Council's policy to consider development which reduce the harmful impacts of noise pollution within the vicinity of sensitive areas, especially residential properties.

Potential development will be assessed for noise risk. Planning permission will not normally be granted for new developments or extensions of existing industrial, commercial, leisure, or other uses that produce significant and unacceptable levels of noise and/or vibration at site boundaries or within adjacent noise sensitive areas, especially residential areas. Reference will be made to the Offaly Noise Action Plan.

1.3 Roles and Responsibilities of Designated Bodies

1.3.1 National Authority

The Environmental Protection Agency (EPA) is the national authority responsible for overseeing the implementation of the Regulations. The EPA is required by the regulations to provide advice and guidance to the relevant noise mapping bodies and action planning authorities.

The EPA is responsible for reporting to the European Commission information relating to strategic noise mapping and action planning in accordance with Article 10(2) of the Directive.

1.3.2 Noise Mapping Bodies

The Regulations assign responsibility for preparing the strategic noise maps to the following authorities, refer to **Table 1.1** below:

| Category | Noise Mapping Bodies | | |
|----------------------|---|--|--|
| Major Railways | larnród Éireann and TII (previously Railway | | |
| | Procurement Agency) | | |
| Major Airport | Dublin Airport Authority | | |
| National Roads | Transport Infrastructure Ireland (previously | | |
| | National Roads Authority) | | |
| Non-National Roads | Local Authority | | |
| Cork Agglomeration | Cork City & County Council | | |
| Dublin Agglomeration | Dublin city, Dun Laoghaire - Rathdown, Fingal & | | |
| | South Dublin County Councils | | |

Table 1.1 Bodies Responsible for Strategic Noise Mapping

1.3.4 Action Planning Authorities

The Regulations assign responsibility to the Local Authorities for preparing and drafting Noise Action Plans based on the strategic noise maps.

Strategic Environmental Assessment (SEA) pre-screening and an Appropriate Assessment (AA) screening were carried out and screened out the requirement for a full SEA and AA. These reports have been appended to this document.

The areas considered in this plan are outlined in Table 1.2 as follows:

| Road | Area of Concern |
|------|---|
| M6 | Transverse Section of Offaly County |
| M7 | Transverse Section of Offaly County |
| N52 | From County Boundary at Ballybrought to Tullamore By-Pass |
| N52 | (Birr) From Kennedy's Crossroads to Riverstown via Junction with N62 |
| N52 | Tullamore By-Pass |
| N52 | Mucklagh to Blueball |
| N52 | Blueball to Kilcormac |
| N80 | Tullamore to Killeigh |
| В | Arden area of Tullamore |
| R402 | Edenderry (Kishawanny Bridge to Dublin Road) |

Table 1.2 Noise Action Planning Areas

1.4 Key Phases

A timetable for each phase of noise management for National Authority, Noise Mapping Bodies, and Action Planning Authorities is set out in the Environmental Noise Regulations and is outlined in Table 1.3 below. Relevant Round 3 dates for Noise Action Planning Tasks are outlined in this table.

Table 1.3 Noise Action Planning Areas

| Time frame | Phase | Responsibility |
|--------------------|--|---------------------------|
| 30/06/2015 | Submission of Details to Commission | EPA |
| 30/06/2016 | Strategic Mapping of | Noise Mapping Bodies |
| | Agglomerations <u>></u> 100,000 | |
| | Major Roads <u>></u> 3,000,000 vehicles journeys/year | |
| | Major Railway ≥30,000 train journeys/year | |
| | Based on Figures for Calendar year 2011 | |
| March 2018 | Draft Noise Action Plans to be submitted to EPA for review | Action Planning Authority |
| April to June 2018 | Public Consultation on Draft Noise Action Plan | Action Planning Authority |
| 18 July 2018 | Draft Noise Action Plans (including comments) to be "drawn up" prior to this date | Action Planning Authority |
| September 2018 | Action Plans including short Summary Noise Action Plan to be submitted to the EPA | Action Planning Authority |
| 18 January 2019 | Details of noise control programs and measures to be reported to the EC by the EPA for 3 rd round | EPA |
| 18 January 2019 | Summary Noise Action Plans to be reported to the EC by the EPA for 3 rd round. | EPA |

2 Noise Legislation and Guidance

2.1 National Noise Legislation

2.1.1 Environmental Protection Act, 1992

The Environmental Protection Agency (EPA) Act 1992 contains provisions for dealing with noise which is a nuisance or would endanger human health or damage property or harm the environment. The following Sections of the Act are relevant to noise pollution:

Section 106: The Minister for the Environment has power, after consultation with other concerned Ministers and the EPA, to make regulations for the purpose of the preventing or limiting of any noise, which may give rise to a nuisance or constitute a danger to health or damage property. To date no such regulations have been introduced.

Section 107: Gives power to Local Authorities to serve a Notice on any person in charge of premises, processes or works, other than an activity which is licensable under IPPC, when they consider that it is necessary to do so in order to prevent or limit noise. The EPA has the same power in relation to licensable activities.

Section 108: This allows for an individual affected by noise nuisance to seek an order from the District Court directing an alleged polluter to take appropriate measures to reduce or control noise emissions from their property or business. This Section may be used by a local authority when the alleged polluter has ignored the terms of the Section 107 Notice mentioned above. This Section is executed by The Environmental Protection Act (Noise) Regulations 1994 (S.I. 179 of 1994).

2.2 National, Regional & Local Planning Guidelines

2.2.1 Spatial Planning and National Roads Guidelines for Planning Authorities published January 2012

These guidelines set out planning policy considerations relating to development affecting national primary and secondary roads, including motorways and junctions, outside the 50-60 km/h speed limit zones for cities, towns and villages.

The guidelines replace the document, policy and planning Framework for Roads, published by the Department, 1985, supplement other policy guidance on roads related matters in other Ministerial

guidelines in relation to retail planning and sustainable rural housing and replace the National Roads Authority policy statement on national roads published in May 2006.

The guidelines, which have been prepared in consultation with representatives from local authorities, the Department of Transport, Tourism and Sport, and the National Roads Authority, will assist road and planning authorities, the National Roads Authority (TII), National Transport Authority and providers of public transport in relation to their involvement in the overall planning process.

2.2.2 Regional Planning Guidelines for the Midlands

The Regional Planning Guidelines for the Midlands 2004 – 2016 outlined strategic goals for the region in particular Goal 7, *To develop and market a distinct and unique image and identify for the region that will attract investment and economic activity to the region.*

The guiding principal was to develop the image of the region as the heart of Ireland, an area with high quality of life in a relatively unspoilt environment, which relies on the continued protection and enhancement of valuable natural resources – agricultural land, lakes, rivers, canals, bogs and uplands; and the built heritage of the region.

The preservation of the environmental integrity, water and air quality and the visual environment play an important role in maintaining this image which is vital for the attraction of investment and population growth.

The Regional Spatial and Economic Strategy (RSES) which will replace the above Regional Planning Guidelines, in its draft format, has identified the Eastern and Midland region's key strategic assets, opportunities and challenges and sets out policy responses to ensure that people's needs, such as access to housing, jobs, ease of travel and overall well-being are met, up to 2030 and beyond. It will include a spatial strategy for the future location of employment, housing and retail development along with supporting infrastructure and services, in a way that enhances the potential of our cities and towns and best protects our environment and our people from the impacts of climate change. The regional policy objective is to support measures to avoid, mitigate and minimise noise in cases where it is likely to have a significant impact on health. By strategically planning where to create, maintain and expand green Infrastructure, which consists of a network of interconnected natural, semi-natural and managed areas, different problems can be addressed and deliver multiple benefits to communities. The RSES is currently in the second phase of consultation and is due to be published in 2019.

Common examples of the multiple issues that green infrastructure can address are habitat provision, amenity space, cycling infrastructure, recreation areas, tourism attractions and flood control through the development of greenways, blueways and peatways. However, a green infrastructure network is more than a collection of greenways, blueways and peatways, as it also would include other spaces never used by the public (e.g. private gardens, green roofs, railway lines, motorway verges and embankments). These others spaces could be also managed to provide multiple benefits to the region, including acting as wildlife corridors, pollinator-friendly areas, air, water and noise pollution barriers, and contribute to climate change mitigation and adaptation.

2.2.3 Wind Energy Planning Guidelines

The previous Department of Environment Heritage and Local Government (DEHLG) planning guidelines for wind energy address the issue of noise generated from this type of development. They are currently being reviewed by the now Department of Housing, Planning, Community and Local Government (DHPCLG) and the Department of Communications, Climate Action and Environment (DCCAE). Once finalised these guidelines will be issued to planning authorities under Section 28 of the Planning and Development Act 2000, as amended. Currently the DEHLG document suggests a "lower fixed limit of 45dB(A) or a maximum increase of 5dB(A) above background noise at nearby noise sensitive locations". The latter requirement may be relaxed in areas with low background levels. A fixed limit of 43dB(A) at night-time is deemed appropriate when the main requirement is to prevent sleep disturbance rather than protect external amenity.

2.2.4 Quarries and Ancillary Activities

Section 261 of the Planning and Development Act 2000, introduced a new system of one-off registration for all quarries. Only those quarries for which planning permission was obtained in the 5-year period before S261 became operational were excluded.

The Department of the Environment published guidelines for Planning Authorities for quarries and ancillary activities in April 2004, including recommended noise conditions for inclusion as part of registration or where a full planning permission was required. Depending on the complexity of the quarrying operation, noise conditions were included as part of the registration process and as part of the planning process for quarry extension applications.

2.2.5 Building Regulations – Technical Document E

The current Irish Building Regulations call for certain constructions to offer "reasonable resistance" to both airborne and impact sound. In the absence of any form of objective criterion, reference is often made

to the guidance values put forward in the "Similar Construction" method described in the *Technical Guidance Document E* which was updated in 2014 and now sets mandatory standards to be met for sound insulation between dwellings.

The Regulations apply to the transmission of sound between adjoining residential dwellings, such as within apartment blocks, or semi-detached properties, they do not relate to the transmission of sound from the outside environment into the living accommodation.

Future amendments to this document should include noise insulations guidelines and standards for all developments to protect or limit the occupants from exposure to significant transport noise sources.

2.2.6 Offaly County Development Plan 2014 - 2020

The National Planning Framework 2040 includes policy objective 65 to promote the pro-active management of noise where it is likely to have significant adverse impacts on health and quality of life and support the aims if the Environmental Noise Regulations through national planning guidance and Noise Action Plans.

In the above County Development plan, the Council's policy is outlined that potential development will be assessed for noise risk. Planning permission will not normally be granted for new developments or extensions of existing industrial, commercial, leisure, or other uses that produce significant and unacceptable levels of noise and/or vibration at site boundaries or within adjacent noise sensitive areas, especially residential areas. It is the Council policy to consider development which reduce the harmful impacts of noise pollution within the vicinity of sensitive areas, especially residential properties.

2.2.7 Rural Development Policy

It is Council policy to favourably consider proposals for the expansion of existing industrial or new business enterprise in the countryside where the proposal is;

a) an appropriate size and scale;

b) does not negatively impact on the character and amenity of the surrounding area; and

c) has regard to and complies with other guidelines/standards including traffic, noise and environmental considerations.

This policy will generally relate to enterprises which are rural resource based and which have the potential to strengthen rural areas.

2.3 Guidelines in relation to Road Scheme Planning

In 20014 the National Roads Authority had published the initial draft *Guidelines for the Treatment of Noise and Vibration in National Road Schemes,* The National Roads Authority committed to itself to review the guidelines within the first six months of implementation. The review was based on the experiences acquired from the implementation of the original draft guidelines and on a validation study that was undertaken to assess the applicability of the specified design criteria and the functionality of the various Transport Research Laboratory (TRL) conversion methodologies for Irish road conditions. This review provides guidance on the revised design criteria and the application of validated approaches to deriving the L_{den} values, as well as an overview of the baseline monitoring and model validation procedure.

The Guidelines set out a "design goal" for noise to ensure that the current roads programme proceeds on a path of sustainable development. The current design goal is that all national road schemes should be designed, where feasible, to meet a day-evening-night sound level of 60 dB L_{den} (free-field residential façade criterion), to be met both in the year of opening and in the design year.

The Authority accepts that it may not always be sustainable to provide adequate mitigation in order to achieve the design goal. Therefore, a structured approach should be taken in order to ameliorate, as far as is practicable within the particular circumstances of a given scheme, road traffic noise through the consideration of measures such as horizontal and vertical alignment, barriers, low noise road surfaces, etc.

In 2014 the National Roads Authority published the 'Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes'. The Good Practice Guidance aims to expand and supplement the advice provided in the Guidelines for the Treatment of Noise and Vibration in National Road Schemes.

It is intention of Transport Infrastructure Ireland (TII) to publish standards documents relating to noise and vibration in the context of planning and construction of (proposed) national roads in 2019.

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2.4 Environmental Noise Guidelines:

2.4.1 Integrated Pollution Prevention Control & Waste Licensing

Noise conditions are routinely imposed by the EPA regime as part of the IPPC and waste licensing activities.

The relevant guidance is set out in the EPA publication 2016 Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4). This document contains suggested noise limits of 55 dB(A) LAr, $_{T}$ for daytime and 45dB(A) LA_{eq},T for night time; with said limits to be applied to "noise sensitive locations".

The guidance note also states that the noise from the licensed facility should not be so loud, so continuous, so repeated of such a duration or pitch and it should not occur at such times as to give reasonable grounds for annoyance.

These limits have a very specific application; they have appeared in many different contexts and often form the basis for conditions in planning permissions. Similar noise conditions are also imposed on wastelicensed facilities.

2.4.2 Waste Permit Facilities

Offaly County Council impose noise conditions on waste permitted facilities where noise is considered to be a potential issue. These conditions are similar to the EPA waste licence conditions.

3.Description of Action Plan area

3.1. Description of County Offaly

Offaly is an inland county in the Province of Leinster. It borders with the counties of Westmeath, Meath, Kildare, Laois, Tipperary, Galway, and Roscommon. Offaly covers approximately 493,985 acres, one fifth of the county comprises of peatland and the majority of the land is used for agriculture and forestry purposes.

3.2 Population Data

Offaly's population is 78,003 based on 2016 Census figures, this is an increase of 10% since 2006 Census. The population growth recorded within the county is illustrated in the table 3.1 below. 40% of the population resides within the larger urban areas such as Tullamore, Portarlington, Edenderry, Clara and Birr, 30% of the population reside within rural towns and villages with population densities of less than 2,000, while the remaining 30% of the people reside in open countryside.

| Town – | Population | % Change |
|-----------------------|-------------|-------------|
| Urban Area | 2016 Census | 2011 - 2016 |
| Tullamore | 14,607 | 2.0 |
| Edenderry | 7,359 | 5.0 |
| Birr | 4,370 | 25.0 |
| Clara | 3,336 | 2.9 |
| Portarlington (North) | 2405 | 24.0 |
| Banagher | 1,760 | 6.5 |
| Ferbane | 1,191 | 2.2 |
| Daingean | 1,077 | 3.9 |

Table 3.1 Population Densities per each Offaly Town

3.3 Description of topography/geographical area

Offaly consists of relatively flat undulating lands, one fifth of which is peatland. The Slieve Bloom Mountains are located in the south west, and in centre running to the north west of the county there is a comprehensive organisation of eskers. Other significant landscape features are the River Shannon which is located in the western boundary, and the Grand Canal which transverses the county.

3.4 Description of the Action Planning Area

Offaly County Council is responsible for Noise Action Planning relating to Major Roads carrying greater than 3 million vehicles per annum through the county. The major roads identified in Offaly are shown in Figures 1 and 2. Vehicle count data was provided by the local authority and correlated by Transport Infrastructure Ireland.

This Action plan is not concerned with the possible sources of environmental noise listed below; such circumstances are not applicable to County Offaly:

- Agglomerations of 100,000 or more inhabitants
- Major railways with 30,000 or more rail passages per year
- Major airports with 50,000 or more movements per year

3.5 Area of Concern within Offaly County

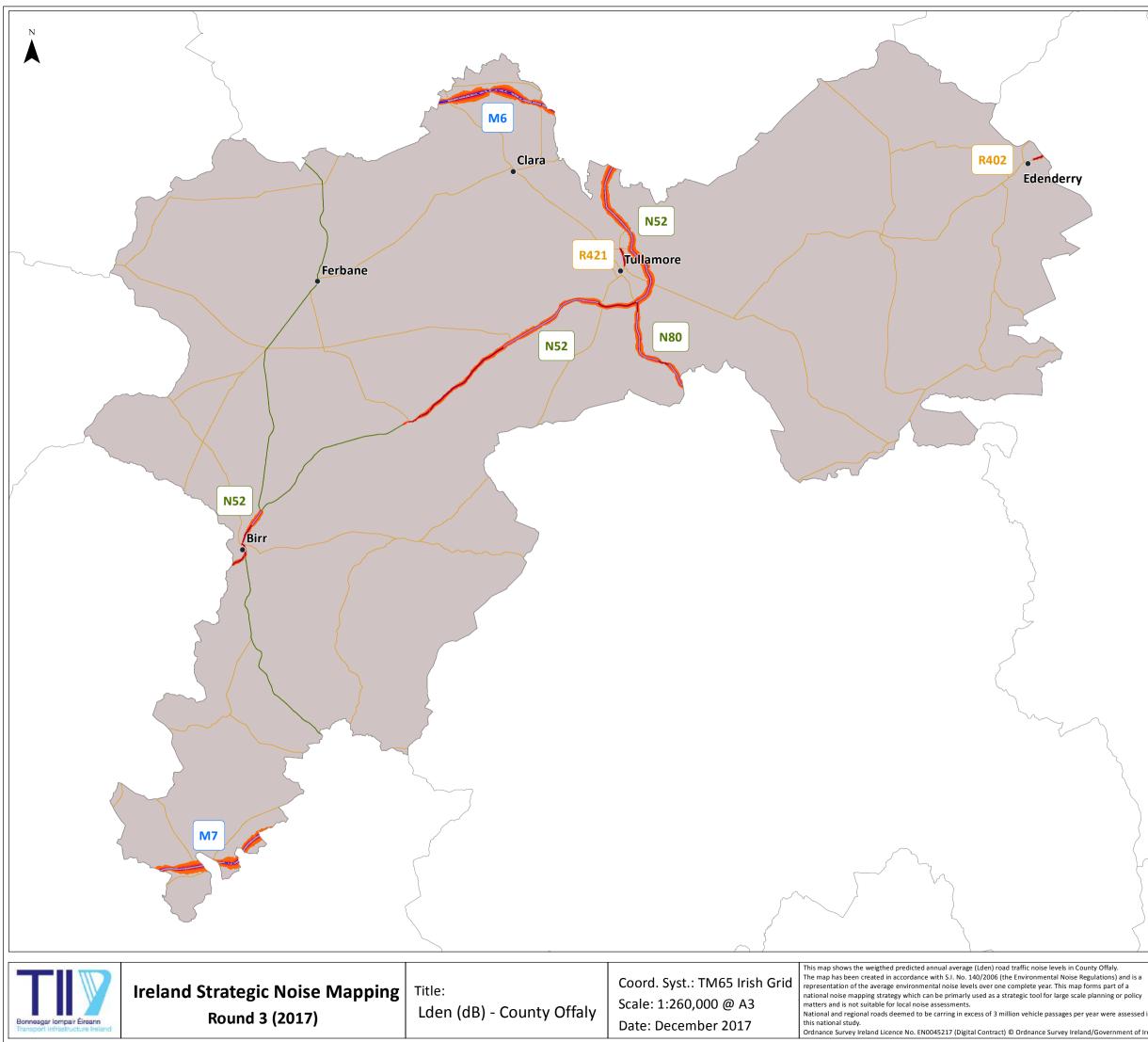
The Regulations outlined in Article 10 of the Environmental Noise Regulations set out the areas of concerns for each Noise Action Plan. The 1st cycle of the Noise Action Plan was concerned with Agglomerations for Dublin City, Major Roads with 6 million vehicles per year, major railway with 60,000 train passengers per year, and a major airport. These Plans were adopted in 2008 by the relevant Action Planning Authorities; none of the situations listed in Article 10 were relevant to County Offaly.

The criteria for the second phase of Action Planning had reduced thresholds resulting in strategic mapping of Agglomerations for Cork City, Major Roads with 3 million vehicles passages per year, and major railway with 30,000 train passages per annum.

TII deveoped startegic noise maps from all major roads outside agglomorations encompassing both national and non national roads and as a result a number of roads were identified by the strategic Noise Mapping within Offaly's jurisdiction as illustrated in Figures 1 and 2 Non-national roads were mapped by TII on behalf of the relevant Local Authority provided that authority participated in the centralised approach and provided 'model-ready' data to the central body for calculations.

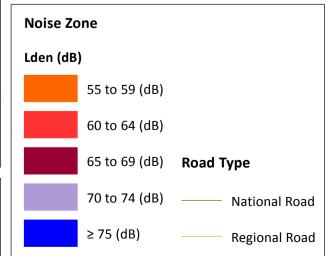
Noise mapping results show that the average distance at which noise levels drop to below 55dB is approximately 500metres from the centre of the carriage way. Accordingly, a band of 1Km centred on the carriage way is designated as being "Near" the road. Properties within this band will be included in the assessment stage of the noise action plan.

The boundary area will not be maintained where sections of the roads pass through developed or densely populated urban areas, this will result in reducing the exposure distance, therefore only buildings in the immediate vicinity of the road may be designated as being near the source. Areas of Concern are illustrated in the strategic noise maps included in Appendix C of the document.

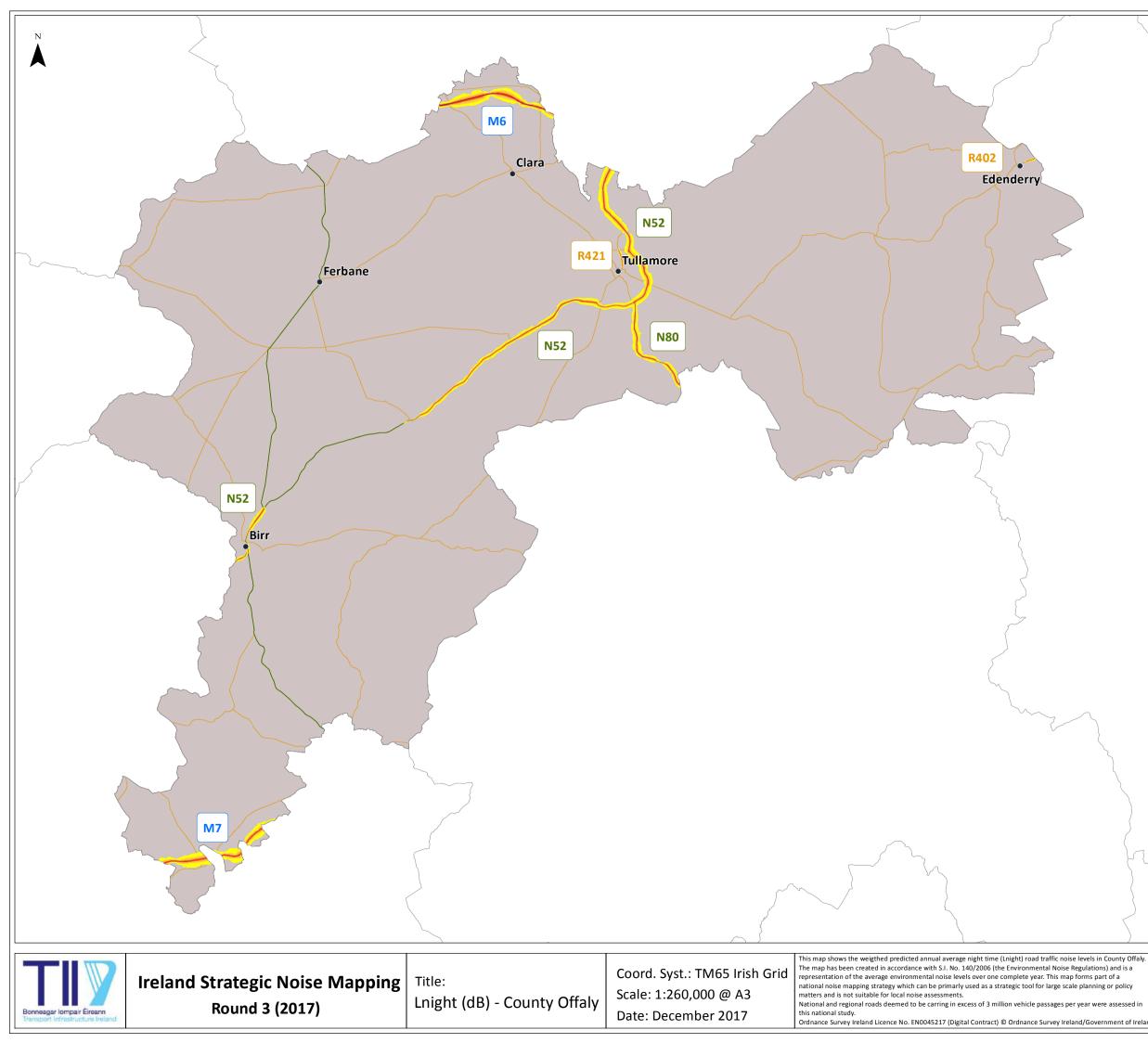




| OFFALY POPULATION EXPOSURE | | | | |
|----------------------------|------------------------------------|--|--|--|
| L _{den} | Approximate Number of People | | | |
| 55 - 59 | 777 | | | |
| 60 - 64 | 637 | | | |
| 65 - 69 | 527 | | | |
| 70 - 74 | 32 | | | |
| > 75 | 0 | | | |
| L _{den} | Approximate Area (km²) | | | |
| > 55 | 24 | | | |
| > 65 | 5 | | | |
| > 75 | 0 | | | |
| L _{den} | Approximate Number of Dwellings | | | |
| > 55 | 788 | | | |
| > 65 | 240 | | | |
| > 75 | 0 | | | |
| L _{den} | Approximate Number of People | | | |
| > 55 | 1,973 | | | |
| > 65 | 559 | | | |
| > 75 | 0 | | | |

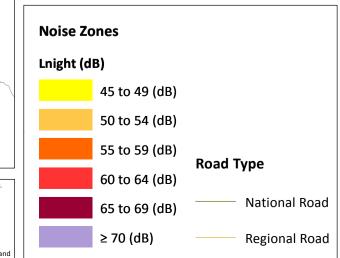








| OFFALY POPULATION EXPOSURE | | | | |
|----------------------------|--|--|--|--|
| L _{night} | Approximate Number of People | | | |
| 50 - 54 | 616 | | | |
| 55 - 59 | 588 | | | |
| 60 - 64 | 83 | | | |
| 65 - 69 | 0 | | | |
| > 70 | 0 | | | |
| L _{night} | Approximate Area (km ²) | | | |
| > 50 | 13 | | | |
| > 60 | 2 | | | |
| > 70 | 0 | | | |
| L _{night} | Approximate Number of Dwellings | | | |
| > 50 | 521 | | | |
| > 60 | 38 | | | |
| > 70 | 0 | | | |
| L _{night} | Approximate Number of People | | | |
| > 50 | 1,287 | | | |
| > 60 | 83 | | | |
| > 70 0 | | | | |



3.5.1 General population exposed to traffic noise within Offaly county

There are 2 main population clusters within Offaly County which may be exposed to environmental noise from major roads, specifically Tullamore and Birr towns, located along the N52 route.

There are some rural settlements along the M6 and M7 which experience environmental noise from traffic, however mitigating measures have been incorporated during the construction of the motorways, as outlined in the Environmental Impact Assessment and Route Selection stages of the motorway planning process, such as earthen embankments, landscaping, timber barriers, and low noise road surfaces.

3.5.2 Location of Noise Sensitive Buildings

Certain locations and building types are considered to be more sensitive to noise pollution than others. The main priority of the END is to reduce noise exposure in residential areas, but it is also recommended that educational and health care facilities be designated as noise sensitive buildings.

In accordance with this guidance and in line with the action plan coverage area the following buildings are designated as being noise sensitive locations and are assessed in the overall strategy for long term management of noise pollution.

- St. Colmcille's Church, Durrow (N52 County Boundary-ByPass),
- St Coleman's Church, Mucklagh (N52 Mucklagh Blueball),
- St. Brendan's Church of Ireland, Birr, Co. Offaly (N52, Birr),
- St.Brendan's Roman Catholic Church, Birr (N52 Birr),
- ♦ Birr Methodist Church, Birr (N52 Birr),
- Killeigh Community Preschool (Maria Montesorri) Killeigh (N80),
- ♦ Tullamore Hospital and Health Centres, Arden, Co. Offaly (R421)
- ♦ Residential properties N52, N80, R421 and R402, M6 and M7.

3.6 Description of transport infrastructure within Offaly

3.6.1 Road Network

County Offaly currently comprises of approximately 2,000km of road network which are categorised as follows;

- ♦ 18 km of National Primary Roads M6 and M7
- ♦ 123 km of National Secondary Roads comprising of
 - i) N52 (Nenagh to Dundalk)
 - ii) N62 (Horse and Jockey to Athlone)
 - iii) N80 (Enniscorthy to Moate)
- ♦ 344 km of Regional Roads
- ♦ 1524 Km of County Roads

3.6.2 Rail Network

County Offaly is centrally located along the National Interconnecting Rail Corridors for Galway, Mayo and Midlands. The future plan for larnród Eireann is to increase the frequency of services on the main line by providing a second line between Portarlington and Galway, strengthening the public transport links in the Midlands Gateway, and providing rail links between Clara and Mullingar, and Enfield to Edenderry.

3.6.3 Bus Transport

Public bus services in the county are operated by Bus Éireann and private operators. It is divided into the following categories:

- Sus Éireann Expressway Services
- School bus services operated by both Bus Éireann and Private Operators on behalf of the Department of Department of Education and Science
- Private Bus Services
- Rural Transport servicing West Offaly and Offaly/Kildare Region operated by private operators.

4 Responsible Authority for Action Planning

Offaly County Council is responsible for the adoption and implementation of this Noise Action Plan.

For Clarification or further details please contact the following:

Director for Environment & Water Services Áras an Chontae, Charleville Road Tullamore Co. Offaly Telephone: 057 9346800 Fax: 057 9346868 Website: www.offaly.ie Email: webmaster@offalycoco.ie

4.1 Description of other bodies of relevance

The Environmental Protection Agency (EPA) has responsibility for submitting summaries of the actions plans to the European Commission. Transport Infrastructure Ireland will be involved in the implementation of any mitigation measures on the national routes.

4.2 Description of any noise-reduction measures already in force within the action planning area

Transport Infrastructure Ireland has incorporated noise reduction measures on the M6 and M7 motorway projects. The noise reduction measures are considered physical mitigation measures and comprise of low noise road surfacing, noise barriers, earthen embankments and landscape planting.

4.3 Description of any noise-reduction measures considered for future projects

The N52 route between Arden in Tullamore, and the connection with M6 Motorway at Kilbeggan; will be upgraded to a dual carriageway. The Environmental Impact Assessment (EIA) is complete, the route selection approved, and appropriate planning granted. It is Offaly County Council's intention to comply with EIA mitigation measures. It is expected the noise level experienced by the sensitive receptors from the new route will be lower. This scheme is delayed due to funding constraints.

N52 route through Birr and Kilcormac towns is recognised by the Offaly County Council as problematic in terms of traffic management, road safety and road maintenance. The future plan is

to redirect HGVs and through-traffic onto relief roads around the outskirts of the towns subject to funding. During the planning and construction phases of these relief routes the appropriate noise mitigation measures will be considered and installed to reduce the noise impact on any noise sensitive buildings.

5. Summary of the Results of the Noise Mapping Process

5.1 Preparation of Strategic Noise Maps

For the 2017 phase of noise mapping, strategic noise maps were developed for over 3000 km of national roads. Additional strategic noise maps were also developed by TII for major non-national roads. However, major non-national roads mapped by TII remain under the jurisdiction of the relevant local authority.

The model used was the UK national computation method "Calculation of Road Traffic Noise (CRTN), Department of Transport-Welsh Office, HMSO, London, 1998", adapted as set out in paragraph 2.1 of Annex II to the Directive. The model took account of information such as traffic flow data, vehicle type data, traffic speed, road width, road incline, road barriers and features which affect the spread of noise such as buildings and the shape of the ground (e.g. earth mounds), and whether the ground is acoustically absorbent (e.g. fields) or reflective (e.g. concrete or water).

The TII generated GIS grids of noise levels as an output of the noise modelling process. GIS polygons were generated from the grids. The polygons are maps showing the noise contour bands in 5dB contours from 55dB to >75dB for Lden and from 45dB to >70dB Lnight.

5.2 Presentation of Results

5.2.1 Noise Contour Maps

The strategic noise maps are attached in the Appendices of the document. Each map includes colour coded grids for each noise band, illustrating areas of relatively loud to quiet. The noise contours reflect an annual average 24-hour period. The L_{den} contours range between 55dB and 75 dB, in 5dB bandwidths. The L_{night} contours range from 50 dB to 70 dB in 5 dB bandwidths. The L_{den} and L_{night} are defined as follows:

- ♦ L_{day} The A weighted average sound level over the 12 hour day period of 07.00 19.00
- ♦ Levening The A weighted average sound level over 4 hour evening period of 19.00 23.00
- ♦ L_{night} The A weighted average sound level over the 8 hour night period of 23.00 07.00

- L_{den} The day, evening, night sound level. L_{den} is a logarithmic composite of the L_{day}, L_{evening}, and L_{night} levels, with 5 dB(A) weighting added to the L_{evening} value and 10 dB (A) weighting added to L_{night} value.
- ♦ Areas with noise levels of less than 55 dB L_{den} and less than 45 dB L_{night} are not mapped; these levels are below the threshold for inclusion in accordance with the legislation.

5.2.2 Summary Exposure Statistics for Action Planning Area

The number of people, exposed to traffic noise pollution, at each 5db band; were estimated by TII within the county using the methods outlined in Section 5.1 and illustrated in Table 5.1 below.

The results show that the number of people exposed to noise levels of >55 dB and 65 dB Lden respectively has increased, however the number exposed to the higher level of >75 dB Lden has now reduced to 0. The numbers exposed to Lnight levels of >50 dB and 60 dB have also increased however the number exposed to the higher Lnight level of >70 has remained at 0.

| Table 5.1. | Numbers of people i | n Offaly exposed to | noise pollution |
|------------|---------------------|---------------------|-----------------|
|------------|---------------------|---------------------|-----------------|

| L _{den} | APPROX NO. OF PEOPLE EXPOSED | L _{NIGHT} | APPROX NO OF PEOPLE EXPOSED |
|------------------|-------------------------------------|--------------------|-------------------------------------|
| 55-59 | 777 | 50-54 | 616 |
| 60-64 | 637 | 55-59 | 588 |
| 65-69 | 527 | 60-64 | 83 |
| 70-74 | 32 | 65-69 | 0 |
| >75 | 0 | >70 | 0 |
| | | | |
| L _{den} | Approximate area (km ²) | LNIGHT | Approximate area (km ²) |
| >55 | 24 | >50 | 13 |
| >65 | 5 | >60 | 2 |

| >75 | 0 | >70 | 0 |
|------------------|---------------------------------|--------|---------------------------------|
| | | | |
| L _{den} | Approximate Number of Dwellings | LNIGHT | Approximate Number of Dwellings |
| >55 | 788 | >50 | 521 |
| >65 | 240 | >60 | 38 |
| >75 | 0 | >70 | 0 |
| | | | |
| L _{DEN} | Approximate Number of People | LNIGHT | Approximate Number of People |
| >55 | 1973 | >50 | 1287 |
| >65 | 559 | >60 | 83 |
| >75 | 0 | >70 | 0 |

5.3 Limitations of the Noise Maps and Results

Computer modelling generated the noise results that were used to produce these maps, rather than field survey monitoring of noise within the vicinity of the major roads. This modelling approach conforms to the Environmental Noise Regulations, 2006.

The strategic maps are based on parameters which are averaged data-sets, providing estimated noise levels within a specific environment. They are based on a single predominant source of noise: traffic on major roads; the maps are not representative of other circumstances influencing environmental noise, such as traffic on minor roads, industrial activities within the area, and wind profiles. The maps are not relevant to the assessment of quiet areas in open country. By definition these areas are undisturbed by noise from traffic, industry or recreational activity. In relation to the quiet areas inside agglomerations, the mapping will identify the major roads as the singular noise source to the area. The maps do not represent the noise levels attributed from lesser used carriageways that may transverse the quiet areas and which may contribute significantly to the overall noise levels.

6. Identification of Noise Management Areas

6.1 Assessing and Prioritising Actions

There are no statutory limits in relation to environmental noise exposures at EU or national level. The EPA recommends (Guidance Note for Noise Action Planning, EPA, 2009) that the proposed onset levels for assessment of noise mitigation and preservation measures due to road traffic should be as follows:

Mitigation 70 dB Lden and 57 dB Lnight

Preservation 55 dB L_{den} and 45 dB L_{night}

In order to identify areas in most need for noise action measures, a noise scoring decision matrix was developed by Dublin City Council; the final matrix score is determined on three variables. The variables are:

- 1. The calculated environment noise level based on TII strategic maps
- 2. The type of Location e.g. town centre, commercial or residential
- 3. The noise source i.e. industrial, road, and rail etc.

If the sum total for each assessment equals to 17 or greater, it indicates that the threshold levels may be exceeded and that the location must be shortlisted for further assessment.

a) The Calculated Environmental Noise Level

The score assigned under this variable is based on the calculated L_{den} and L_{night} levels for each noise sensitive receptors. For noise levels at 45 dB L_{den} and L_{night} and 80 dB L_{den} and L_{night} they are scored the highest between 5 – 7; and for the noise levels of 50dB – 64 dB L_{den} and L_{night} are scored from 1 – 3

b) The Type of Location

The scores assigned are based on the type of land use in the area and the receptor type. The highest scores are assigned to noise sensitive locations e.g. Church or School, and to open countryside on the basis that the residences require or expect lower ambient noise levels. The lowest score is assigned to large urban areas, where it is expected to have high ambient noise levels.

c) The Noise Source

The noise source for Offaly is the same for each assessment and is noise from road traffic at Noise Sensitive buildings such as Churches and Schools. It is also relevant to note that those at risk at Noise Sensitive locations can experience differing levels of nuisance due to times that the building is in use, what rooms are used most frequently etc.

6.2 Protection Thresholds for Quiet Areas within Agglomerations.

The Regulations require the Planning Authority to delimit quiet areas within agglomerations. In Offaly County functional area there are no qualifying agglomerations.

6.3 Quiet Areas in Open Country

A quiet area is defined "an area, delimited by the action planning authority following consultation with the Agency and approval by the Minister, that is undisturbed by noise from traffic, industry or recreational activities"

The areas listed in Table 6.1 below, are classified as **high sensitivity and high amenity** in Offaly's County Development Plan 2014 - 2020. These areas are described in the plan as "Identified features or areas of natural beauty or interest which have extremely low capacity to absorb new development. Areas included within this class are designated Areas of High Amenity."

It is Offaly's intention to take cognisance of these areas when considering locations for approval to designate locations as quiet areas in open country side, to preserve them from the effects of environmental noise.

| Waterways, Wetlands | River Shannon, Grand Canal, Lough Boora Parklands, Pallas Lake. |
|-------------------------------|---|
| Upland Areas | Slieve Bloom Mountains, Croghan Hill |
| Peatlands | Clara Bog, Raheenmore Bog |
| Eskers | Eiscir Riada, Clara Eskers, Other Eskers |
| Archaeological and Historical | Clonmacnoise, Durrow Monastic Site and Demesne |

Table 6.1. County Development Plan high sensitivity and high amenity areas

6.4 Results of Decision Selection Matrix

Listed below are the results of the Decision Selection Matrix for each section of road identified in the Strategic Maps and the noise sensitive buildings along them. The Total Matrix Score of 17 or greater indicates that such locations require further assessment.

| Noise Sensitive Buildings | L _{den} contour Band | L _{night} Contour band | Total Matix Score | Action to be considered |
|---|----------------------------------|---------------------------------------|-------------------------|-----------------------------|
| Residential Properties (N52 County Boundary- ByPass) | 70-74 | 60-64 | 19 | Further Assessment Required |
| St. Colmcille's Church (N52 County Boundary- ByPass) | 55 - 59 | 45-49 | 20 | Further Assessment Required |
| Residential Properties N52 Mucklagh to Blueball | 60 - 64 | 55 - 59 | 16 | No Further Assessment |
| Residential Properties N52 Blueball - Kilcormac | 60- 64 | 55 - 59 | 16 | No Further Assessment |
| Residential Properties N80 | 70-74 | 55-59 | 18 | Further Assessment Required |
| Maria Montessori School (N80) | 60 -64 | 50-54 | 18 | Further Assessment Required |
| St Brendan's Roman Catholic Church, Birr (N52) | 55-59 | 45-49 | 16 | No Further Assessment |
| St Brendan's Church of Ireland, Birr (N52) | 55-59 | 45-49 | 16 | No Further Assessment |
| Birr Methodist Church (N52) | 55-59 | 45-49 | 16 | No Further Assessment |

| St Brendan's Church Oxmanstown (N52) | 55-59 | 45-49 | 16 | No Further Assessment |
|---|-------|-------|----|-----------------------------|
| Hospital & Health Centres R421 (leading to N52) | 55-59 | 45-49 | 16 | No Further Assessment |
| Residential Properties R421 (Arden) | 65-69 | 55-59 | 13 | No Further Assessment |
| Residential Properties (R402 Edenderry) | 65-69 | 55-59 | 19 | Further Assessment Required |
| Residential Properties M6 | 55-59 | 50-54 | 18 | Further Assessment Required |
| Residential Properties M7 | 55-59 | 50-54 | 18 | Further Assessment Required |

The results in the decision support matrix showing the noise contour bands and total matrix scores identify areas that are above the onset criteria for mitigation for Lden and Lnight on the major roads and require further assessment under the round 3 noise action plan proposals.

As can be seen, noise sensitive locations such as churches, schools and hospitals do not fall into the category of requiring mitigation measures but do require further assessment given the results shown in the table above.

Assessment of the noise maps also identified areas as quiet and requiring preservation by cross referencing the areas of the noise maps below 55 dB L_{den} and 45 dB L_{night} with a dataset of public open spaces.

7. Mitigation and Protection Measures

7.1 General Principle of Action Plan

The aim of Offaly County Council's Noise Action Plan is to avoid, prevent and reduce the harmful effects of environmental noise from traffic on a prioritised basis.

Offaly will adopt a strategic approach to managing environmental noise by following an approach which promotes:

- Noise reduction at source
- Land use planning adapted to noise targets
- Procedures to reduce noise impact

This Noise Action Plan will have regard to the principles of sustainable development and integrate with other strategic policy objectives of Offaly County Council.

7.2 Processing areas above onset of assessment criteria

Areas near the relevant roads which are identified as being above the onset of assessment in the strategic mapping will be investigated to confirm actual noise levels at these locations.

Once the noise impact is confirmed at the prioritised locations, the appropriate mitigation measures will be considered based on a cost benefit analysis for each area. Any work undertaken will be cost effective, delivering true benefit to the residents concerned, and undertaking in a prioritised approach.

7.3 Preservation of Areas within protection threshold

Areas within the threshold for preservation will be considered as the background for establishing quiet areas in either urban settings or open country. The planning process will be used to preserve the integrity of sites with cultural or amenity interests.

7.4 Management of Areas between thresholds

With the focus on mitigation of noise for the exposed residents, and preservation of designated quiet areas, there is a possibility that a number of residents, located between the thresholds may not be taken into account with the action planning process.

It is envisaged to protect this element of the population within the areas of concern. The planning process will play a key role in the prevention and control of future exposure to detrimental levels of noise, without placing unreasonable restrictions on development.

7.5 Overview of possible mitigation measures

The decision support matrix analysis is used to identify locations for which noise mitigation measures will be considered. It is the opinion of Offaly County Council that a fair approach must be taken to sustainably manage the interests of the residents, while achieving the aims and objectives of the Noise Action Plan.

There is a wide range of potential noise mitigation measures available to the local authority, examples of which are listed in Table 7.1 below.

| Authority | Potential Measure |
|--|--|
| European Commission | Vehicle Noise Emission Directive Tyre Noise Directive |
| Department of Environment Local Government | National Planning Guidance for Environmental Noise Mitigation & Preservation. Noise Regulations to include threshold limits |
| Department of Transport | Improve public transport with a view of reducing reliance on car travel, by increasing and improving bus and rail corridors. |
| TII and Roads Departments | Traffic Management – Routes, HGVs, and Speed Management New roads Constructions – By Pass |

Table 7.1 Noise Mitigation Measures available to Offaly County Council

| | Maintenance of Road surfaces; ensure smoothness of surfaces and include low noise surfaces. Noise Screening measures |
|----------------------|---|
| Planning Authorities | Require Façade Insulation – secondary and triple glazing. Limit noise emissions within the environs of New Developments by specifying Noise Limits as part of the Planning Conditions |
| | Define Planning Zones by considering the potential risk to residential properties located near or close to potential environmental noise sources. Specify Noise Barriers for new developments |

It is evident from the list above that noise mitigation is not a single solution, but rather a range of measures, each of which provides incremental improvement to the issue. With all Authorities focusing on reducing environmental noise, improved conditions should result.

There are essentially two routes to noise abatement. The first route is to control the noise emission atsource by limiting vehicle noise emissions, requiring vehicles to be fitted with rolling noise tyres, construction of low noise road surfaces and traffic management. The second route, is to reduce environmental noise from the exposed population by means of insulation such as noise barriers and sound proofing buildings and to increase the distance between the source of the noise and the recipients.

7.5.1 Vehicle Noise Emissions Directive – 2007/734/EC

All vehicles bought and sold within the EU must meet specific technical requirements; the EC Directive 1970/157 and its subsequent amendments, the latest is EC 2007/34; specifies maximum

sound levels for each class of vehicle. Unfortunately, these limits have not changed since the 1992 amendment, for example the noise limit for passenger cars is 74 dB, Heavy Goods Vehicles range between 77 dB and 80 dB depending on size.

It is expected that future amendments to Vehicle Noise Emission Directive will focus on reducing the noise limit on all classes of new Vehicles.

7.5.2 Labelling of Tyres with respect to Fuel Efficiency and other Essential Parameters

The purpose of this EC Regulation is for tyres to have performance labels with the aim of encouraging people to purchase tyres with superior environmental and safety performance. It also encourages tyre manufacturers to produce tyres whose performance exceeds the minimum requirements specified in EU Regulations.

The regulation requires tyres manufactured from 1st July 2012 for cars, light commercial vehicles and heavy trucks and placed on sale from 1st November 2012, carry a label showing the tyre's wet grip, fuel efficiency and noise performance. The tyre labels are similar to the labelling already in use for household goods such as washing machines and dishwashers. Each tyre will be given a performance rating from A-G.

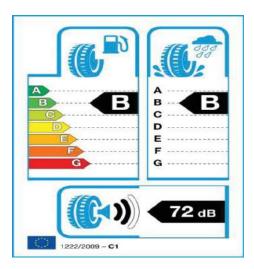


FIGURE 3. LABELLING OF NEW TYRES INDICATING A TYRE'S EXTERIOR ROLLING NOISE RATING

Traffic noise is an environmental concern. The new labels split tyres **into three sound categories**, based on the noise they produce.

- 1 black sound wave = least noise produced, already compliant with the future tighter EU limit
- 2 black sound waves = already compliant with the future EU limit
- 3 black sound waves = compliant with the current EU limit

7.5.3 Low Noise Road Surfaces

Road surface is an important parameter regarding traffic noise production. Numerous studies have concluded that at greater traffic speeds the quietest passage was on 2-layer porous asphalt surface compared to a concrete surface. The variation in noise levels between the different surfaces ranged from 8 dB at low speeds to about 12 dB at high speeds. The porous surfaces showed evidence of acoustic absorption, curbing the effect on tyre noise and propulsion noise, making such surfaces effective for motorways.

7.5.4 Traffic Management

The traffic noise is influenced by speed and flow, limiting traffic speed reduces noise especially between 50 – 80 km/h. Traffic management measures have positive impact on noise emission, air quality and road safety. Reduction in traffic can be achieved by promoting public transport, encouraging cycling and walking, parking management, HGV bans, route designation, road bypasses, while smart tuning of traffic lights reduces the stop and go traffic which produces significant levels of noise in urban areas.

7.5.5 Anti-propagation Measures (Noise barriers, insulation)

On average, noise barriers reduce noise levels by $3 - 6 \, dB(A)$ depending on their design and height. Roadside barriers are only acceptable for motorways or bypass routes; they are often not suitable for urban areas but there are occasions where they may be suitable.

Where noise barriers or at-source measures are inadequate, sound insulation of the building must be considered for instance soundproof windows and insulated walls. Passive or active acoustic ventilation may also be installed which meets Part F of Building Regulations, without the need to open the windows.

Alternatively, the planning process has a potential to be a significant influence on the future exposure to environment noise by separating noise emitting activities such as roads from noise sensitive receptors such as residential buildings, hospitals, places of worship and educational facilities. This may not be applicable in areas of landscape constraints, however with a focus on

acoustical management then clever arrangement of such infrastructure will generate an attractive acoustic climate for everyone.

7.5.6 Noise and Health

According to the World Health Organisation 2011 Environmental noise leads to a disease burden that is second in magnitude only to that from air pollution, among environmental factors in Europe. A 2014 study for DG Environment on the Health implication of road, railway and aircraft noise in the European Union (EU) found that exposure to noise in Europe contributes to a high number of cases of hypertension, premature deaths due to heart disease and stroke and a high number of hospital admissions yearly. The report shows that the health and wellbeing of populations are affected by exposure to substantial noise leading to adverse effects shown in increased stress levels, changes in sleep patterns and insomnia. These in turn can increase risk factors such as blood pressure and cardiovascular disease and potentially lead to premature death.

The above information must be taken into account when moving forward with noise action planning. Details available on health assessments undertaken in relation to noise may need to be referred to in future rounds of noise action plans.

7.6 Protection Measures

Offaly County Council will undertake to protect sensitive areas from environmental noise by utilising the planning process.

- The Council as the Planning Authority, exercise control over pollution and nuisances primarily through the development management process. The Council will refuse planning applications that are likely to give rise to unacceptable levels of pollution or nuisance and will adopt a precautionary approach where scientific knowledge is inconclusive.
- To incorporate the aims of the present and future noise action plans into County, Town and Local Area Development Plans by employing acoustical planning when designing Zones, incorporating traffic management measures with a focus to protecting existing settlements from environmental noise.
- Planning applicants will be encouraged to produce a sound impact assessment and implement noise abatement in the new developments or refurbishing of properties within the vicinity of major roads.

- It is the Councils' policy that planning permission will not normally be granted for new developments or extensions of existing industrial, commercial, leisure, or other uses that produce significant and unacceptable levels of noise and/or vibration at site boundaries or within adjacent sensitive areas, especially residential areas.
- The Council will endeavour to manage exposure to environmental noise where necessary, using the most appropriate measures. These measures will aim to prevent, reduce, relocate noise in order to minimise the number of people affected by traffic noise emissions. The actions taken will be strategic in nature and represent a best practice approach to environmental mitigation and the limitation of exposure to environmental noise.

7.6.1 Measures and Steps undertaken

Among the listed actions in the 2013 - 2018 Noise Action Plan was the incorporation of action planning measures and best practice noise policy into the County Development Plan (2014-2020). The consideration of environmental noise at the planning stage of developments will allow for significant improvement in the acoustic quality of existing and future developments by providing planners with greater tools to assess and control the potential noise impact in sensitive areas. The County Development Plan includes noise considerations based on the 2013-2018 Noise Action Plan. This is considered to be an important step in the ongoing implementation of the Council's Noise Action Plan aimed at protecting the population from the harmful effects of environmental noise.

Due to limited resources a number of actions outlined in the Programme of Works for the Noise Action Plan 2013 -2018 were not completed during its lifetime.

Some measures that have been undertaken which will assist in management of environmental noise:

- The N80 is a new addition to the noise mapping area in Round 3 and has a combination of road surfaces, one of which is stone mastic asphalt which has noise reducing properties.
 Part of the road was resurfaced in 2016 from Tullamore to Scrub Cross, Killeigh. Further plans are to resurface heading east and west of Killeigh. The area consists of rural farm communities.
- The R421 has increased traffic as a result of staff from the HSE being relocated to the Tullamore Hospital itself. It has been a busy route overall. Development in this area is being undertaken for residential apartments and underground parking opposite the GAA grounds which will only add to the traffic estimated. In light of this, two new pedestrian

crossings are proposed to facilitate pedestrians and create traffic calming and reduction in speed. A new junction layout has been proposed also, to assist in traffic speed reduction which will reduce noise levels in the area.

- R402 Dublin Road, Edenderry: Shopping has moved out to this general area. Commuters to Dublin have also increased. The proposal is for the Edenderry Relief Road where the Roads Department of Offaly County Council propose to divert traffic from the R402 to the relief road, resulting in a positive reduction in traffic and noise. The proposal is to incorporate a surfacing material conducive to the creation of a low level noise.
- On the N52 at Riverstown, Birr, resurfacing has taken place with a low noise surface.
 Speed reduction measures assisting lower noise levels have been put in place with traffic lights installed and a pedestrian crossing facility now in place at the bridge in the area.
- A low noise surface roadway is now in place the full way from Woodlands on the N52
 Tullamore side approaching Birr all the way out the Roscrea Road past the turn for Crinkill.
- Turning off the Roscrea Road at Tesco, in the area of Drumbane, road resurfacing has taken place with a low noise surface which will benefit the area which has 2 housing schemes present.

The measures outlined above have resulted in some improvements identified in the current round of noise maps as opposed to the previous round. A number of noise sensitive locations (N52 Birr, Kennedys Cross to Riverstown) identified in the previous round requiring further assessment are now excluded from this category due to being in a lower noise band level and showing improvement as a result of measures undertaken.

While the R421 is a new addition in this round of the noise maps, the noise sensitive locations identified in the area do not require further assessment based on the decision matrix undertaken. Measures put in place in this area have benefited noise levels.

7.7 Assessment of Options – Cost Benefit Analysis

In order to undertake an assessment of feasibility and develop a prioritised list of actions, a cost benefit analysis will be undertaken to maximise value for money and deliver a return on investment.

The cost benefit analysis will address construction and maintenance costs against noise reduction benefit. Assessment of noise benefit involves the use of the strategic noise models to determine estimates of noise reduction from identified design options. Measures to reduce noise at-source are considered more cost effective than those to restrict its propagation, because the benefits achieved will dramatically exceed their costs. KPMG 2005 reported that, tightening the limits to noise emission from tyres and vehicles will cause very little additional cost to the automotive industry. Also costs will be borne by the car user.

Alternatively, a householder may soundproof their property to reduce the penetration of environmental noise into noise sensitive rooms such as the bedroom, the benefit in noise reduction maybe small scale at significant cost to the owner while the source of the noise continues.

The EC working group position paper from 2003 "Working group on Health and Socio-Economic Valuation of Noise" estimates the benefit of noise reduction in monetary terms as &25 per household per decibel per year. The installation of a noise barrier 100m in length, 3 metres high with a 20-year design, at a cost of 200metres per m² to benefit 25 houses with a reduction in noise of 5 dB will cost &60,000 to construct, while benefiting the householders to the value of &62,500.

7.8 Budgetary Provisions

Financial provisions have not been made available at national level to fund staffing, noise assessment measures, mitigation measures or additional noise mapping requirements resulting from implementation of this plan. Due to the lack of such resources, mitigation measures will be strictly prioritised. It is envisaged that mitigation measures taken by Offaly Local Authorities will be found to benefit both the community and the local authority.

8. Public Participation

8.1 Public Consultation

In developing the Noise Action Plan and in accordance with the Regulations Offaly County Council published the Draft Noise Action Plan seeking responses and feedback from public submissions. The draft plan was issued for public consultation in line with Consultation Principles and Guidelines 2016 for public sector bodies in Q1 2019. All responses were reviewed and amendments made as appropriate.

9. Implementation of Noise Action Plan

The proposed approach for the implementation of this Noise Action Plan is set out below.

9.1 Roles and Responsibilities

Offaly County Council is the designated Action Planning Authority for the development, implementation and review of this Noise Action Plan.

Transport Infrastructure Ireland is considered a key stakeholder to Offaly County Council during the implementation of the action plan, they develop and retain the strategic noise mapping and they are the body responsible for the planning and supervision of construction and maintenance of national roads, and motorways.

TII are the noise mapping body for 'Major' national roads. Local Authorities are the noise mapping body for 'Major' non-national roads. For pahse 3 mapping, TII prepared strategic noise maps for County Offaly incorporating both national and non-national 'Major Roads' following implementation of the centralised approach.

Offaly County Council identified R402 and R421 as 'Major Roads' requiring inclusion in the 2017 Offaly County Council startegic noise map.

9.2 Objectives

It is Offaly's goal to adopt a strategic approach to the management of environmental noise with a view of preventing and reducing, where necessary, and in particular, where exposure levels can induce harmful effects on human health, and to promote a high level of environmental protection.

9.3 Programme of works

The Noise Action Plan is to be implemented through a staged process over a period of 5 years; as set out in the Table 9.3.1 below.

| Timeframe | Programme of Works Subject to cost benefit analysis and availability of funding. |
|-----------|---|
| Year 1 | Identify priority areas for possible noise mitigation and preservation, based on the results of the strategic noise maps and decision support matrix and liaise with interested parties and other stakeholders. |
| Year 2 | Evaluate the actual noise impact at sensitive buildings or locations identified in Section 6.4 |
| Year 3 | Commence implementation of appropriate noise management actions, where necessary. Ensure adoption of action planning measures and best practice noise policy outlined County Development Plan. |
| Year 4 | Continue with implementation of appropriate noise management actions. Evaluate effectiveness of any noise reduction measures |
| Year 5 | Review impact and success of action plan Continue to Incorporate action planning measures and best practice noise policy in any new County Development Plans. |

| Undertake traffic counts on Regional Roads |
|--|
| around Offaly to help support the R4 strategic |
| noise mapping in 2022 |
| |

9.4 Evaluation, review and corrective action programme

Offaly County Council will review the effectiveness of noise action planning activities on an ongoing basis. This will be done by annual review of the progress made in relation to the programme of works, outlined in Section 9.3 above. If necessary, adjustments may be made to the schedule and the nature of planned activities to achieve better success of the goals of the action plan.

Offaly will carry out a review of the programme of works implemented, in the final year 2023. Progress and results will be evaluated using information gathered through local assessment of noise exposure. This will include "before and after" evaluations of any noise mitigation or preservation measures.

A review of new noise maps will be carried out, where they may indicate changes in noise levels and the number of people exposed.

10. Summary & Conclusions

This Noise Action Plan is prepared as a requirement of Environmental Noise Regulations, 2006. Its aim is to avoid, prevent and reduce, on a prioritised basis the harmful effects, including annoyance, due to long term exposure to environmental noise. This will be achieved by taking a strategic approach to managing environmental noise in the context of sustainable development.

10.1 Summary of Actions10.1.1 Planning & Development:

Offaly County Council intends to incorporate noise management into the planning process with the view of reducing and preventing possible increases in environmental noise on sensitive locations or buildings from sources such as roads, railways and industrial facilities. The following course of actions will take place:

- a) Review County Development Plan to include noise control and management.
- b) Include Noise Assessment and Control in the County Planning Guidance.
- c) New Developments; below the threshold for EIA requirements, require noise impact assessment.
- d) New Developments of Noise Sensitive Buildings within the vicinity of a significant noise source will be required to include noise insulation and control measures.

10.1.2 Noise Reduction of Existing Sources

Noise reduction of long term environmental noise from existing sources, where necessary, will be considered within the area of concern, as illustrated by strategic noise mapping undertaken by NRA in 2012.

10.1.3 Preservation of Quiet Areas

The preservation of relatively quiet areas in the vicinity of major noise sources, and quiet areas in the open countryside, will be considered and reviewed as part of the implementation of the Noise Action Plan.

Appendix

APPENDIX A: GLOSSARY OF ACOUSTIC AND TECHNICAL TERMS

| Term | Definition |
|--------------------------|--|
| Agglomeration | Major Continuous Urban Area as set out within the Regulations |
| CRTN | The Calculation of Road Traffic Noise 1988. |
| | The road traffic prediction methodology published by the UK |
| | Department of Transport. |
| Data | Data comprises information required to generate the outputs |
| | specified, and the results specified |
| dB | Decibel |
| EC | European Commission |
| END | Environmental Noise Directive (2002/49/EC) |
| ESRI | Environmental Systems Research Institute |
| GIS | Geographic Information System |
| ISO | International Standards Organisation |
| Noise Bands | Areas lying between contours of the following levels (dB): |
| | Lden <55, 55 – 59, 60 – 64, 65 – 69, 70 – 74, ≥75 |
| | Ld <55, 55 – 59, 60 – 64, 65 – 69, 70 – 74, ≥75 |
| | Le <55, 55 – 59, 60 – 64, 65 – 69, 70 – 74, ≥75 |
| | Ln <45, 45-49, 50 − 54, 55 − 59, 60 − 64, 65 − 69, ≥70 |
| | Notes: |
| | 1) It is recommended that class boundaries be at .00, e.g. 55 to 59 is |
| | actually 55.00 to 59.99 |
| | 2) The assessment and reporting of the 45 – 49 dB band for Lnight is |
| | optional under the Regulations |
| Noise Levels | Free-field values of Lden Ld, Le, Ln, and LA10,18h at a height of 4m |
| | above local ground level |
| Noise Level - Ld - | Ld (or Lday) = LAeq,12h (07:00 to 19:00 |
| Daytime | |
| Noise Level - Le - | |
| Evening | Le (or Levening) = LAeq,4h (19:00 to 23:00) |
| Noise Level - Ln - Night | Ln (or Lnight) = LAeq,8h (23:00 to 07:00) |
| Noise Level - Lden – | |
| Day/Evening/Night | A combination of Ld. Le and Ln as follows: |
| | Lden = 10 * log 1/24 {12 * 10^((Lday)/10) + 4 * |
| | 10^((Levening+5)/10) + 8 * 10^((Lnight+10)/10)} |
| Noise Level – LA10,18h | LA10,18h = LA10,18h (06:00 to 24:00) |
| Noise Mapping data | Two broad categories: |
| | (1) Spatial (e.g. road centre lines, building outlines). |
| | (2) Attribute (e.g. vehicle flow, building height – assigned to |
| | specific spatial data) |
| Noise Model | All the input data collated and held within a computer program to |
| | enable noise levels to be calculated. |

APPENDIX B: BIBLIOGRAPHY AND REFERENCES

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APPENDIX C: STRATEGIC NOISE MAPS – LDEN & LNIGHT PUBLISHED BY NRA

Maps

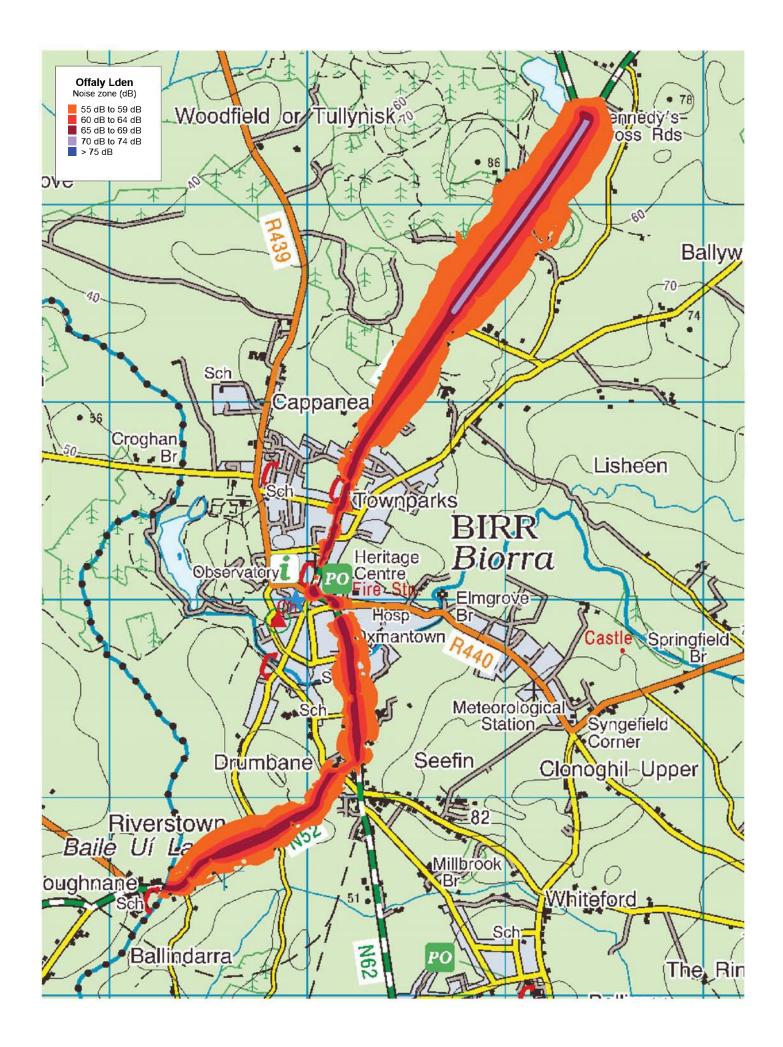
Individual Maps follow in consecutive order:

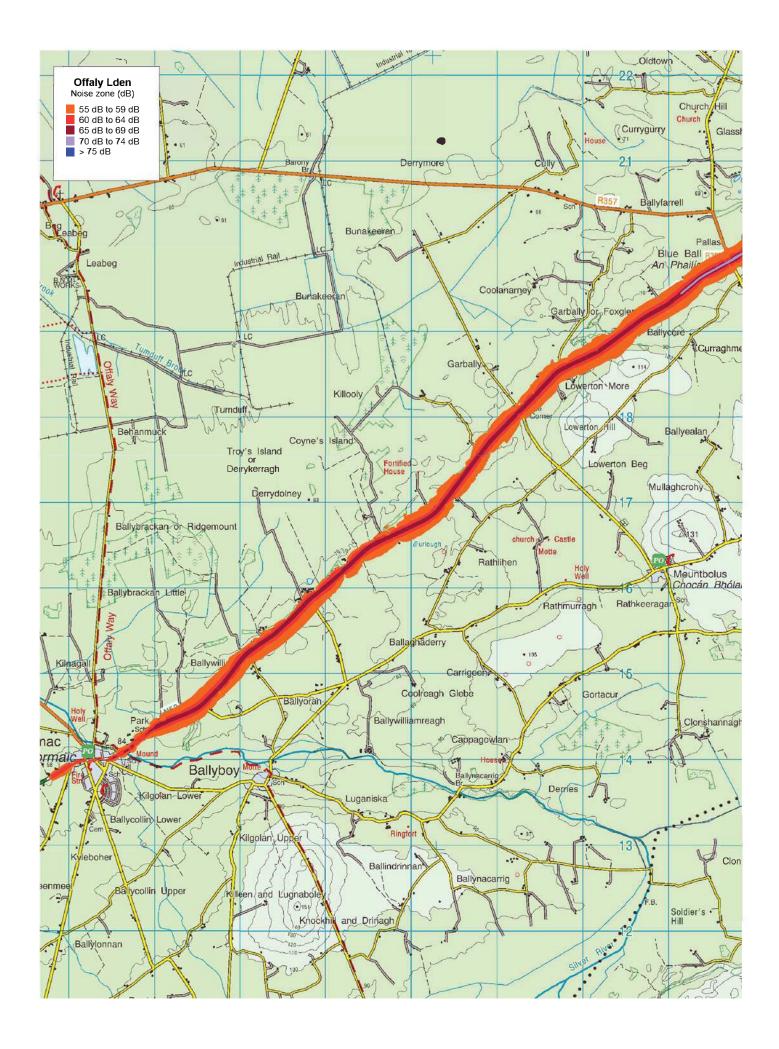
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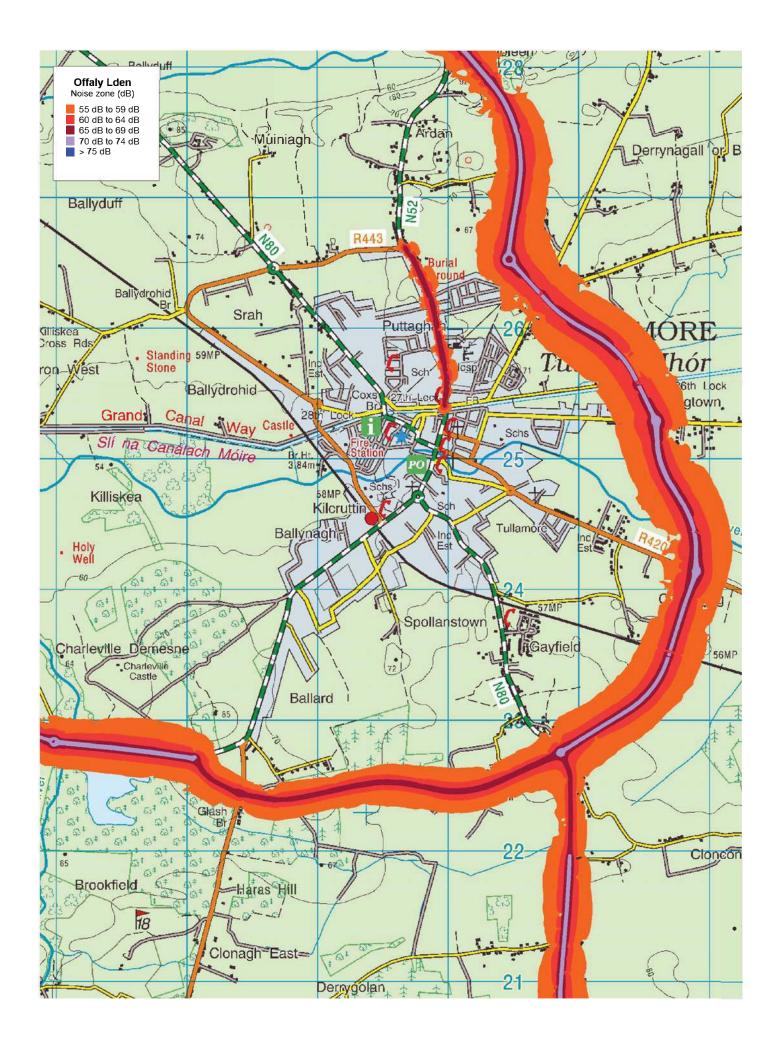
N52 Birr N52 Blueball – Kilcormac Tullamore ByPass – Mucklagh N52 County Boundary – ByPass (Ballybought to Tullamore) M6 M7 N52 Mucklagh – Blueball Tullamore R421 (leading to N52) N80 Edenderry R402

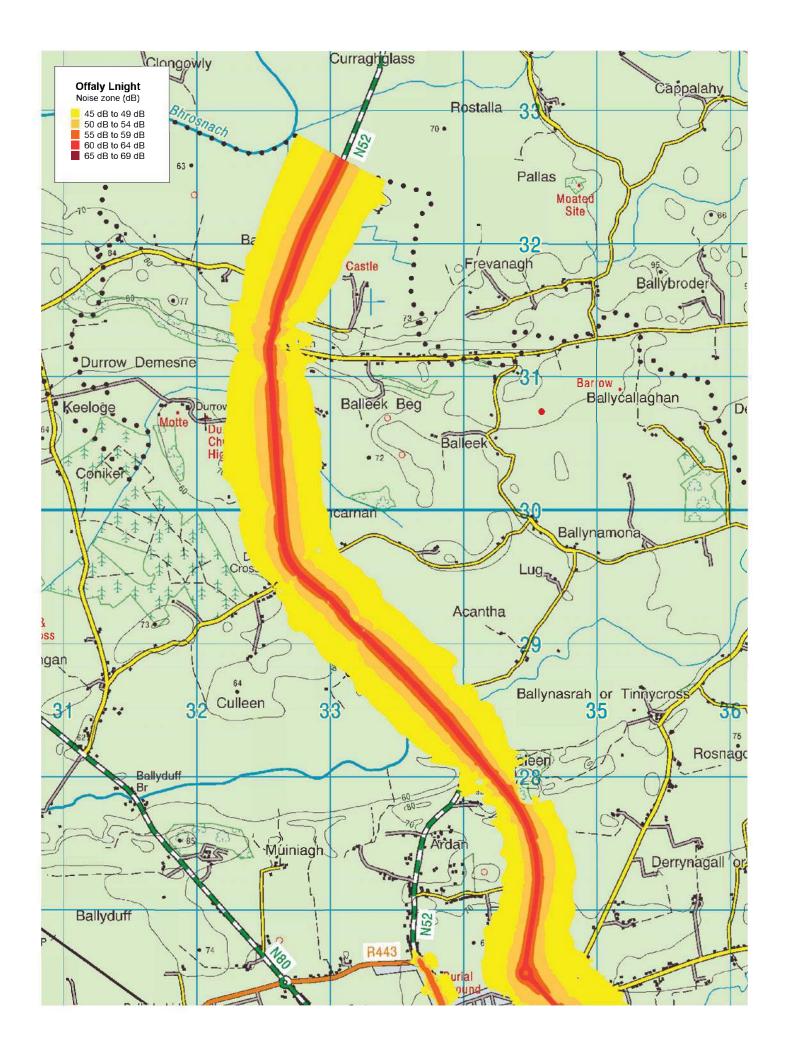
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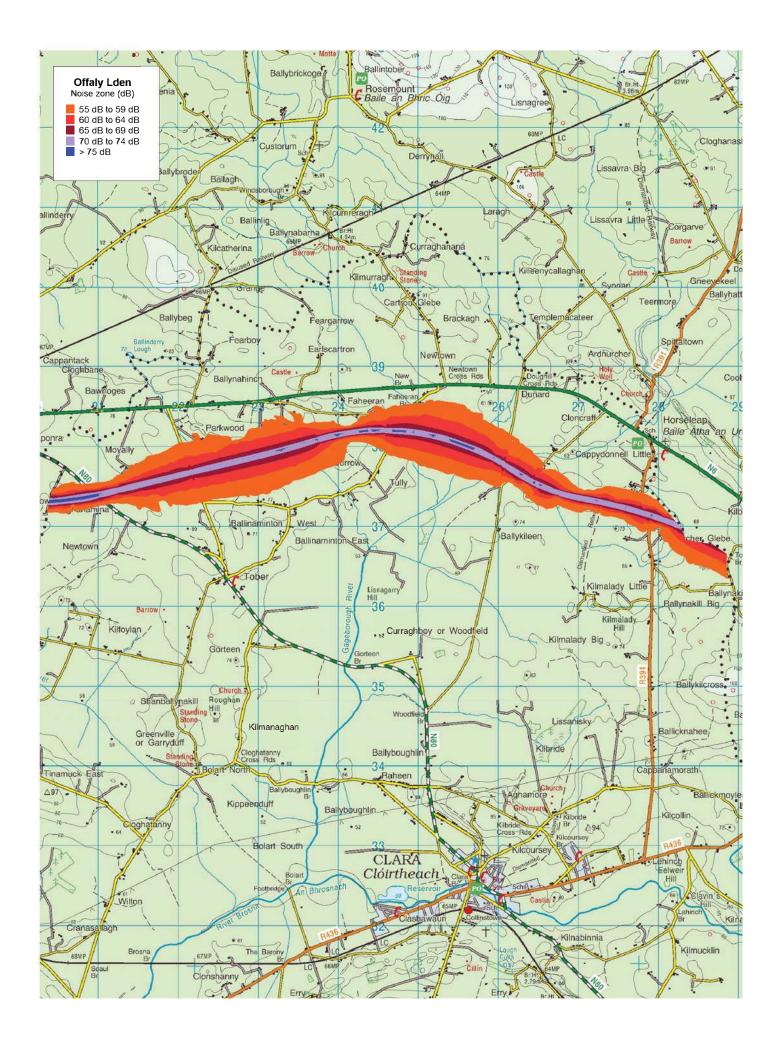
N52 Birr N52 Blueball – Kilcormac Tullamore ByPass – Mucklagh N52 County Boundary – ByPass (Ballybought to Tullamore) M6 M7 N52 Mucklagh – Blueball Tullamore R421 (leading to N52) N80 Edenderry R402

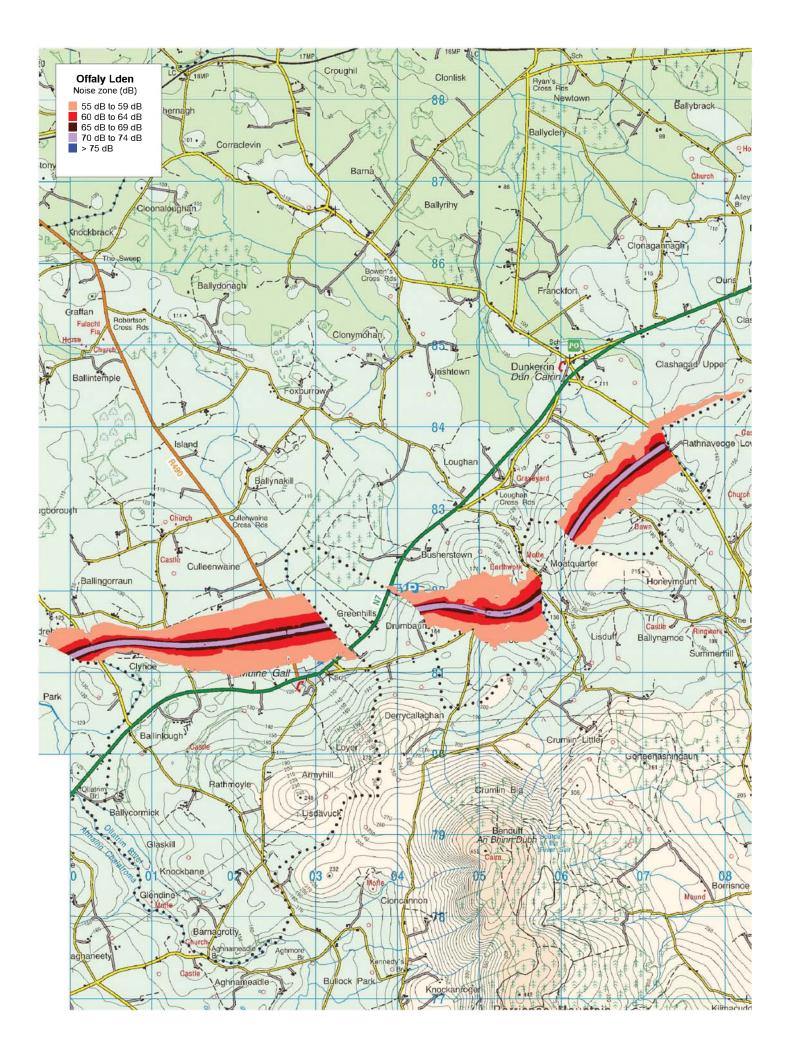


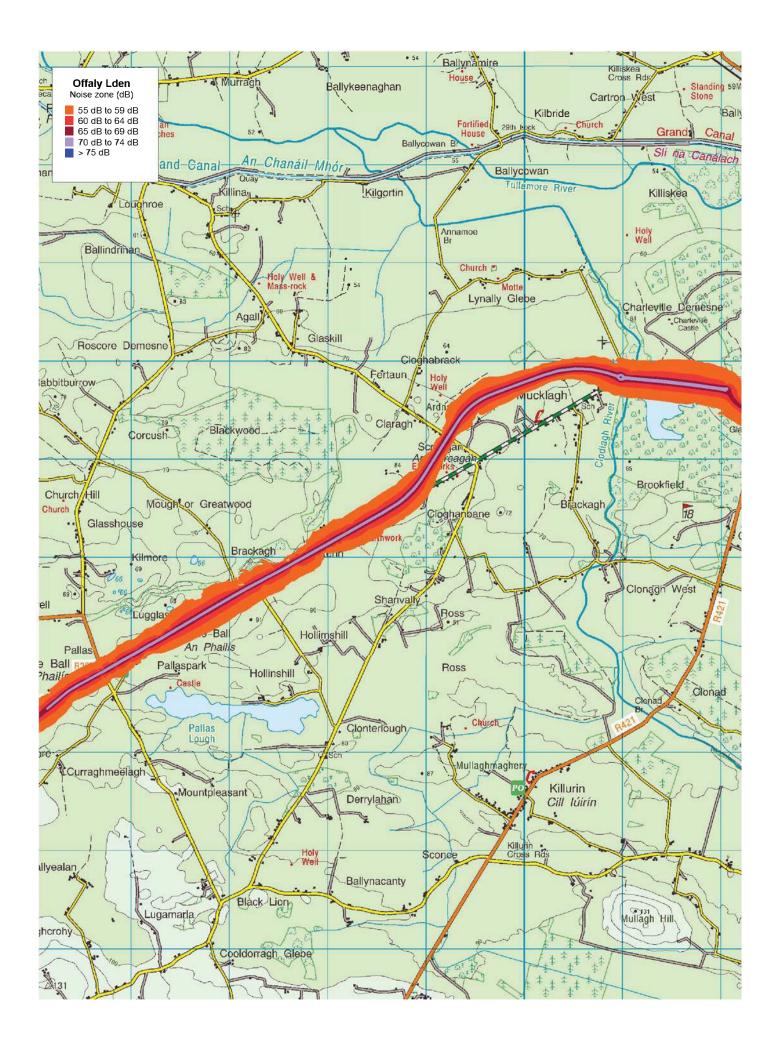


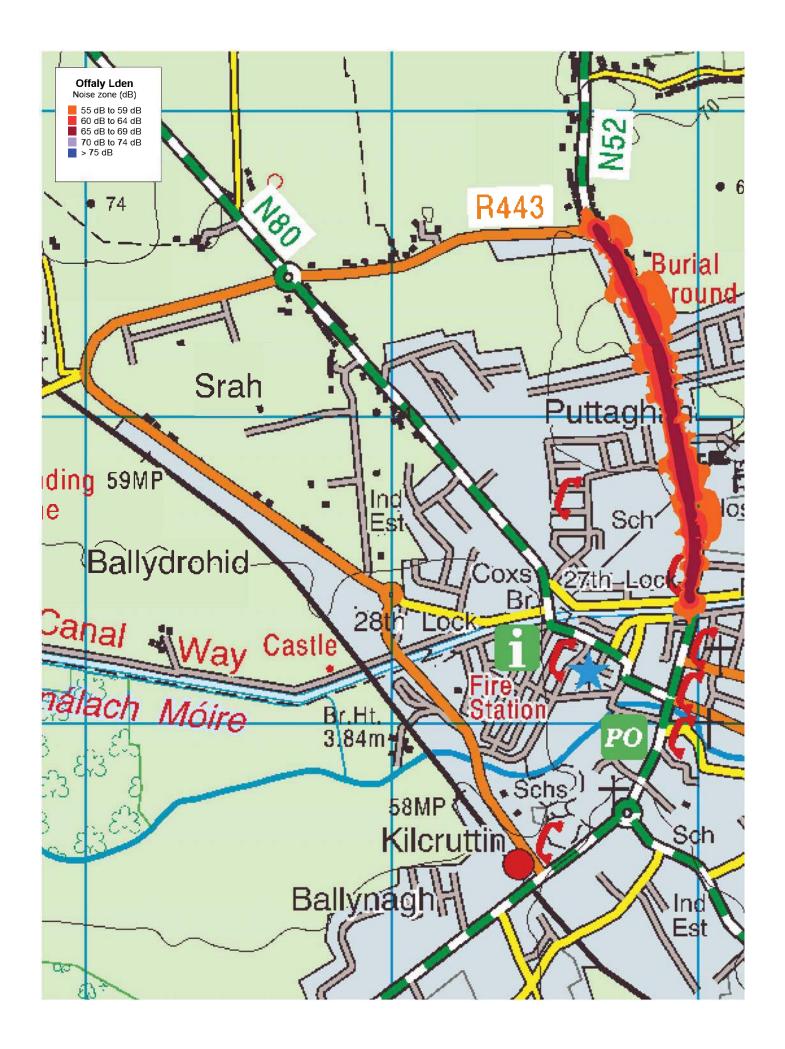


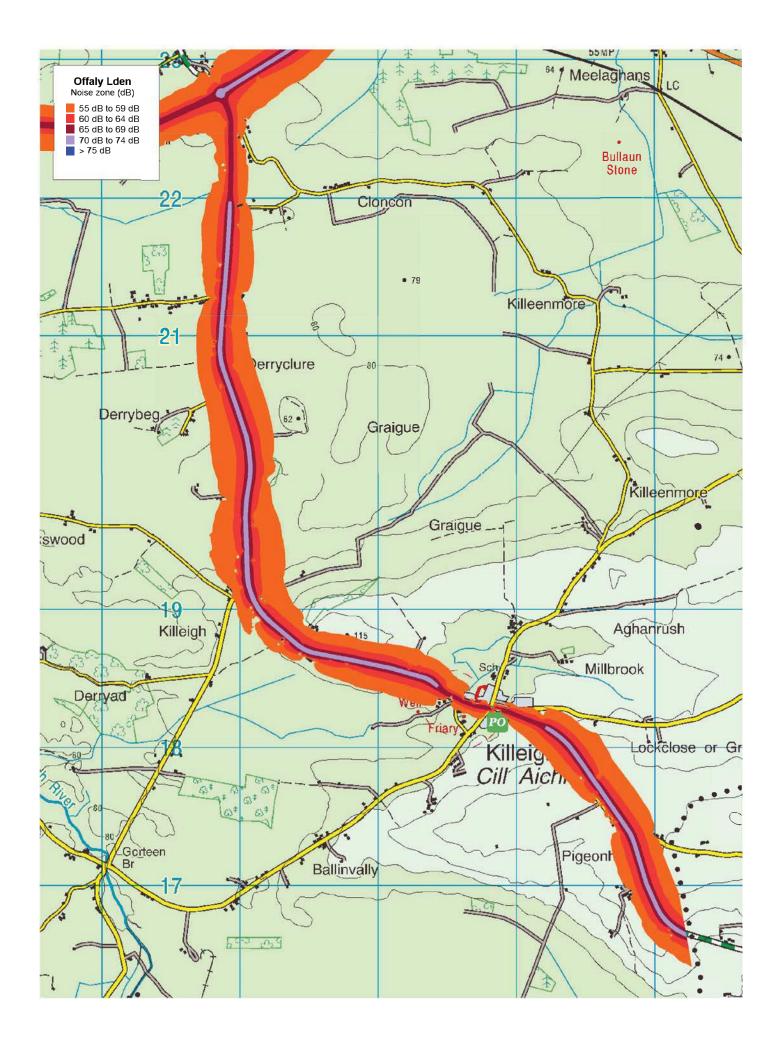


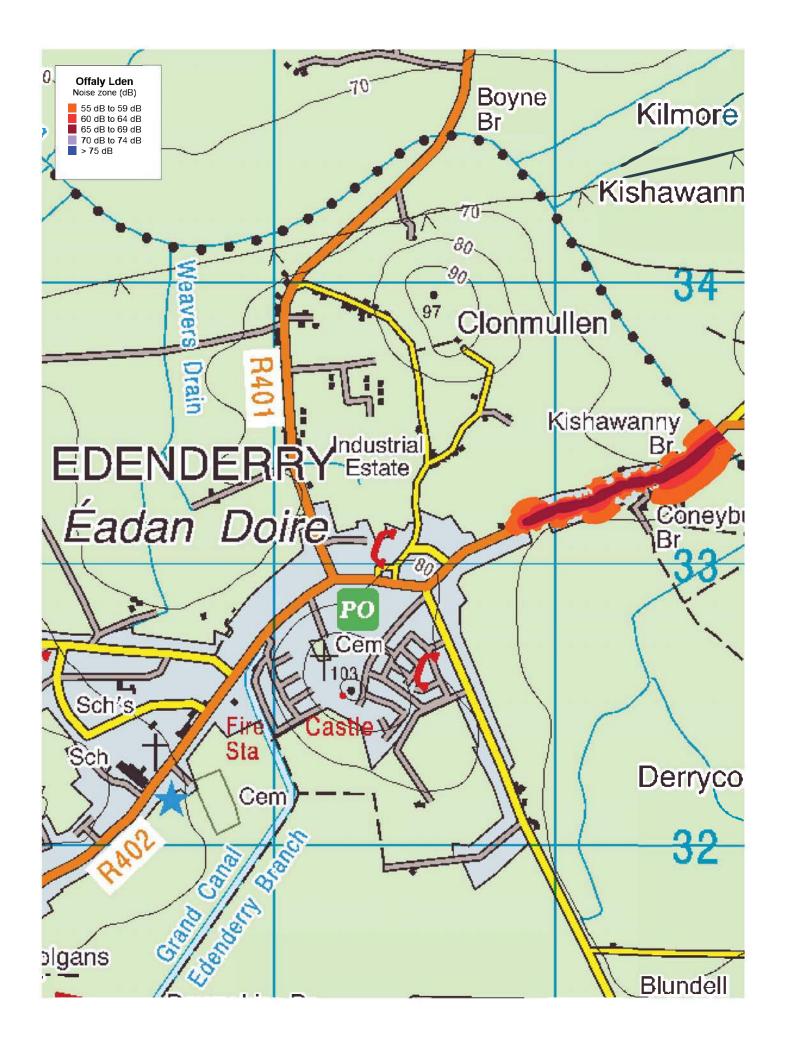


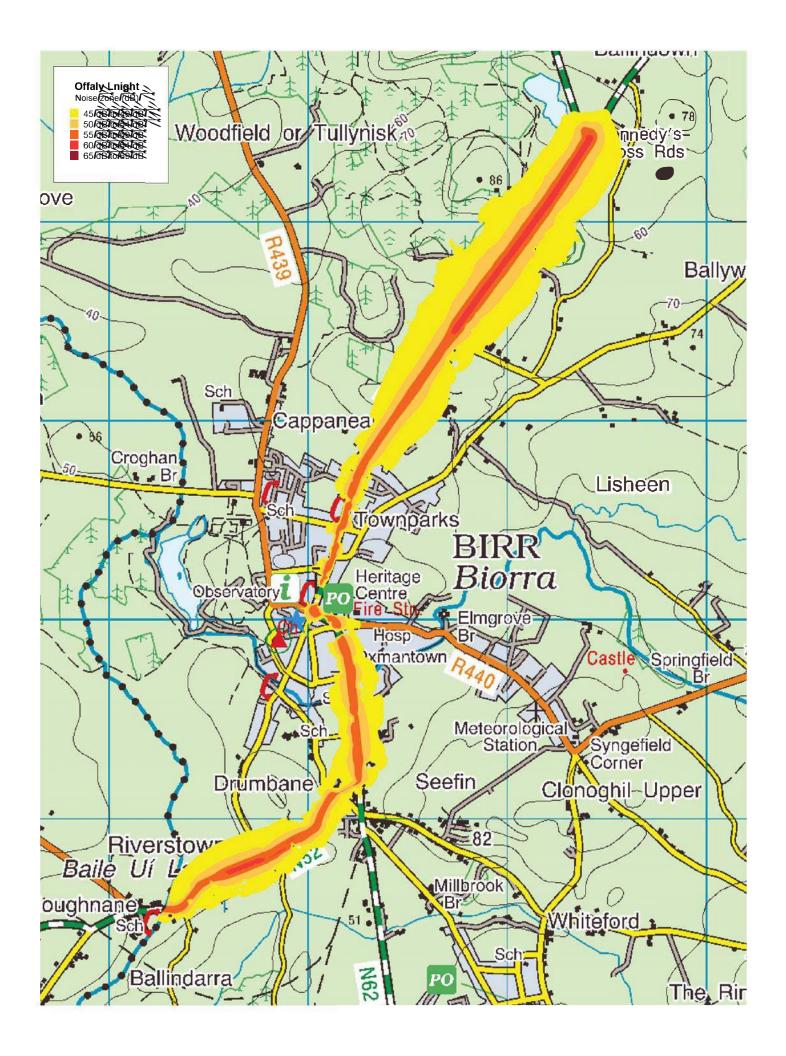


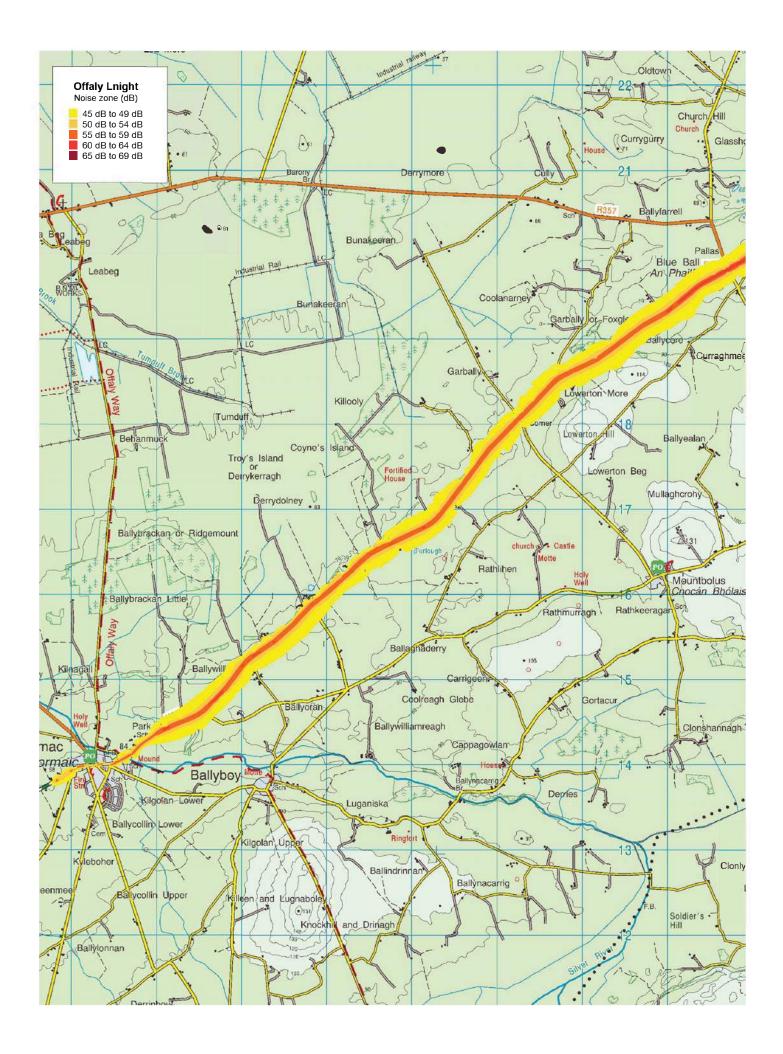


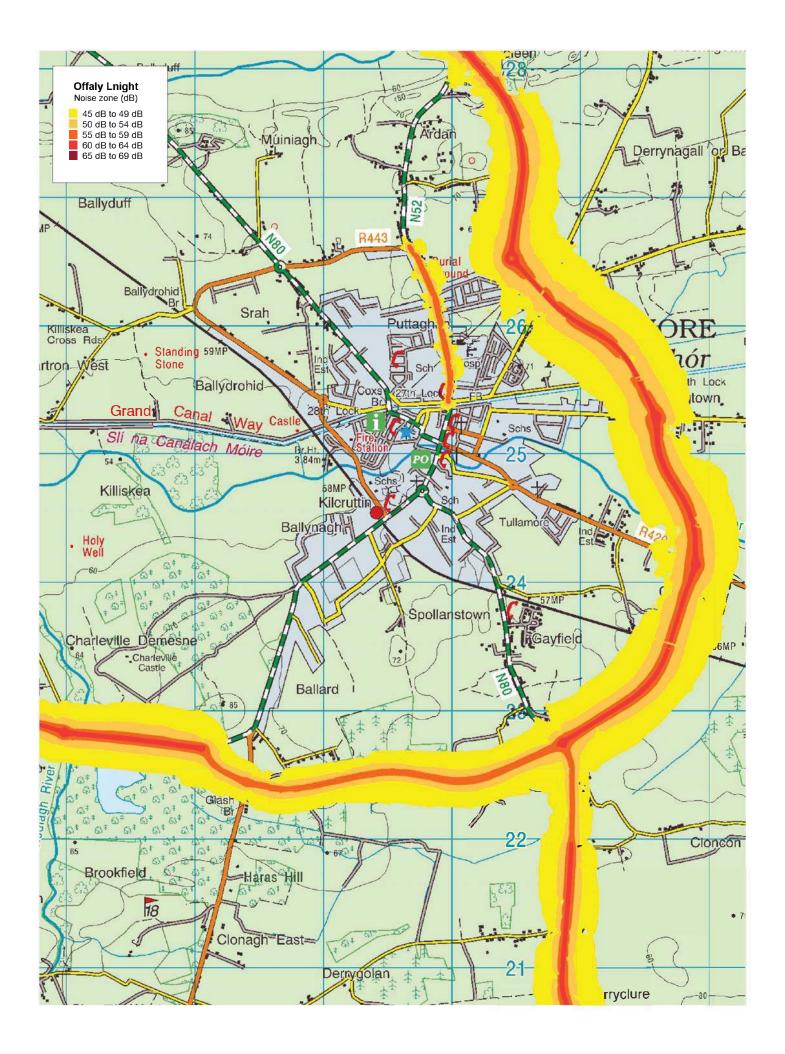


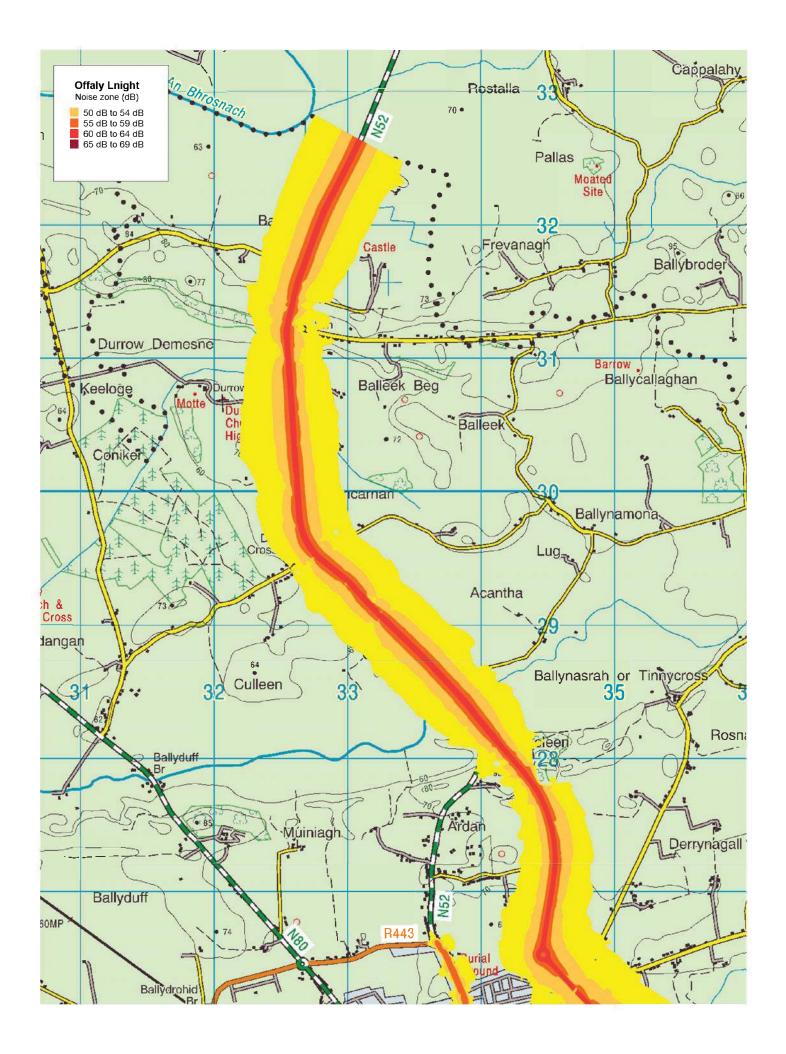


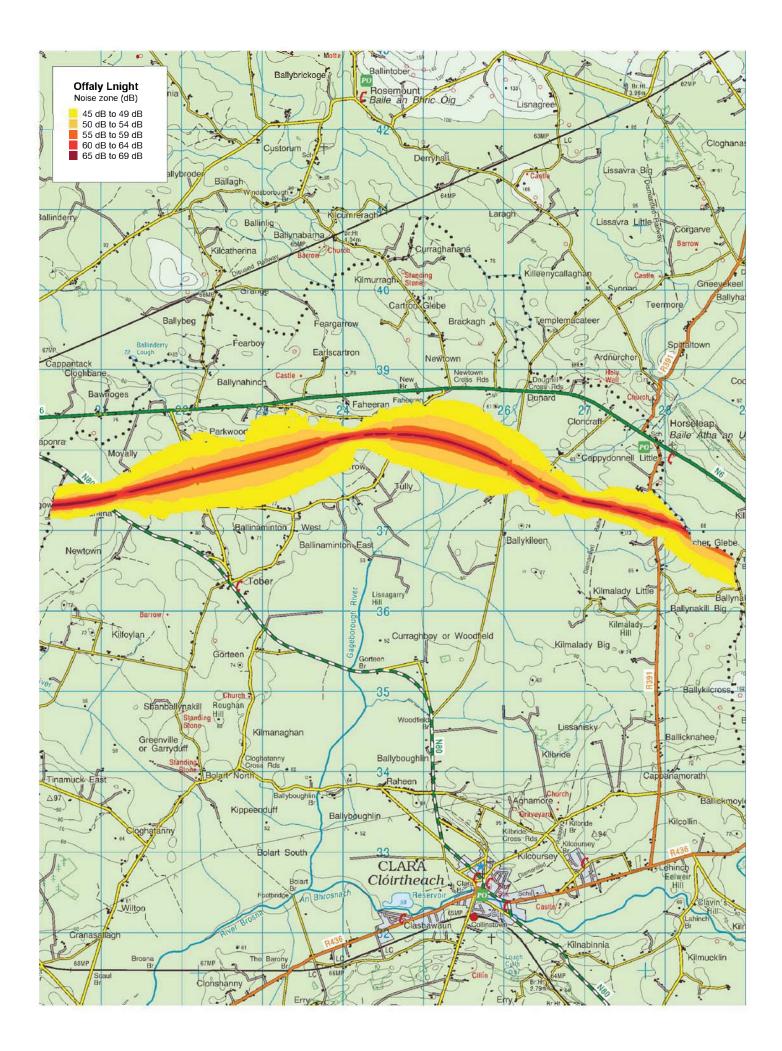


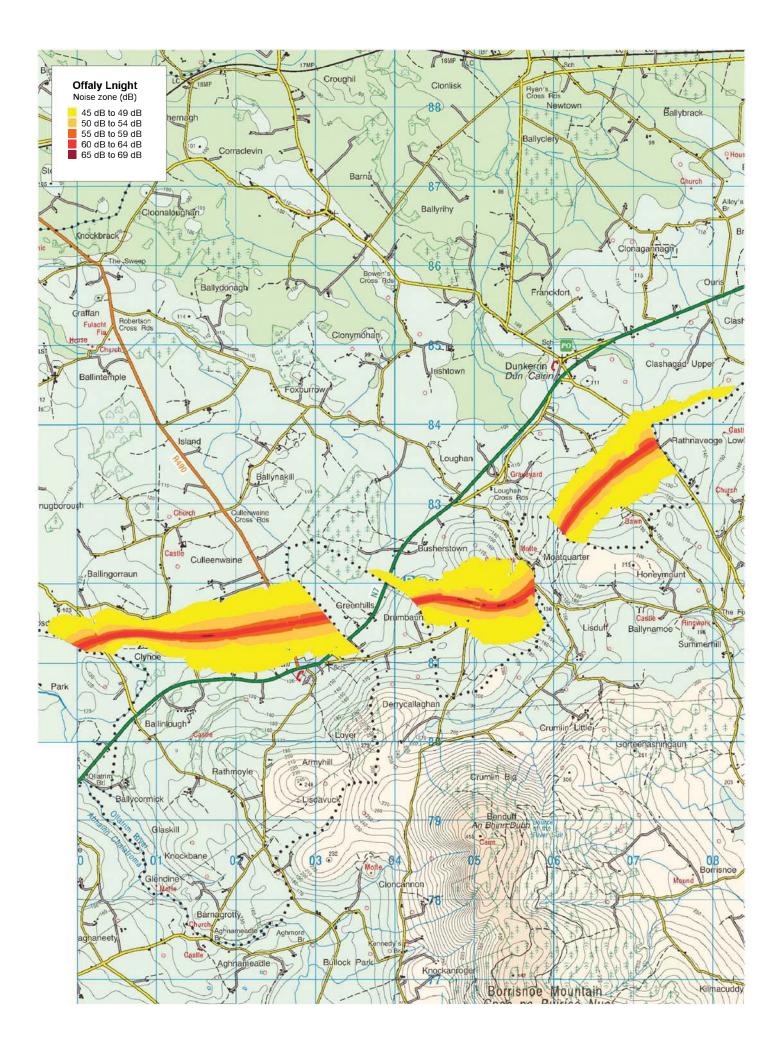


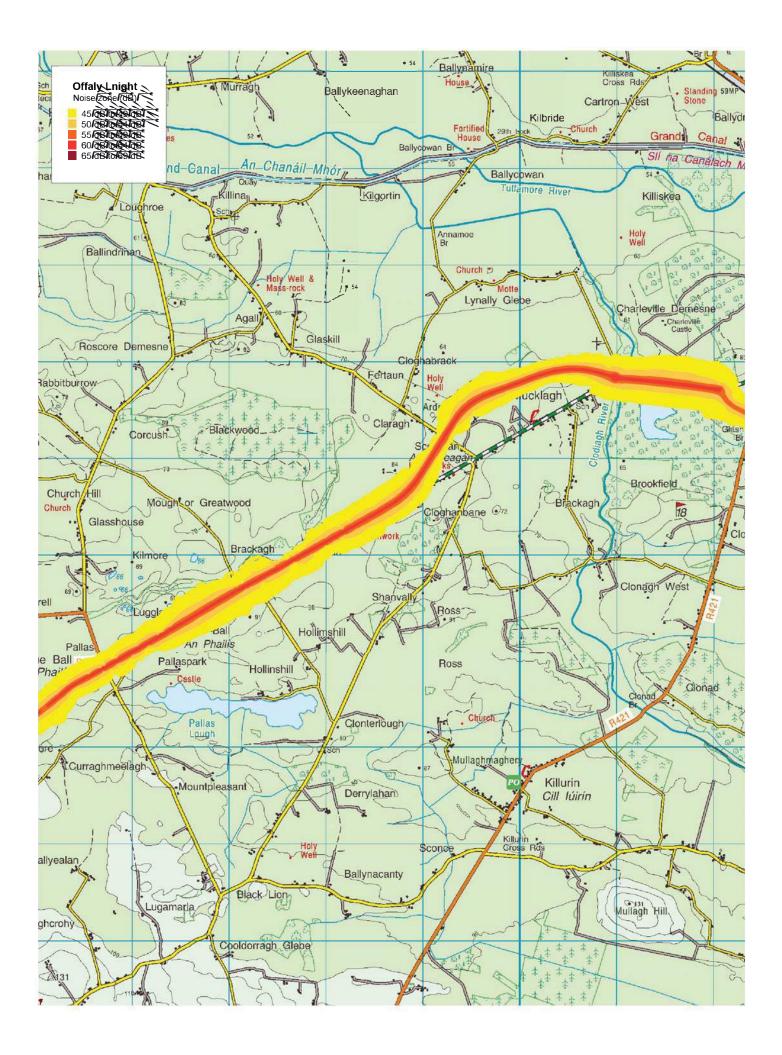


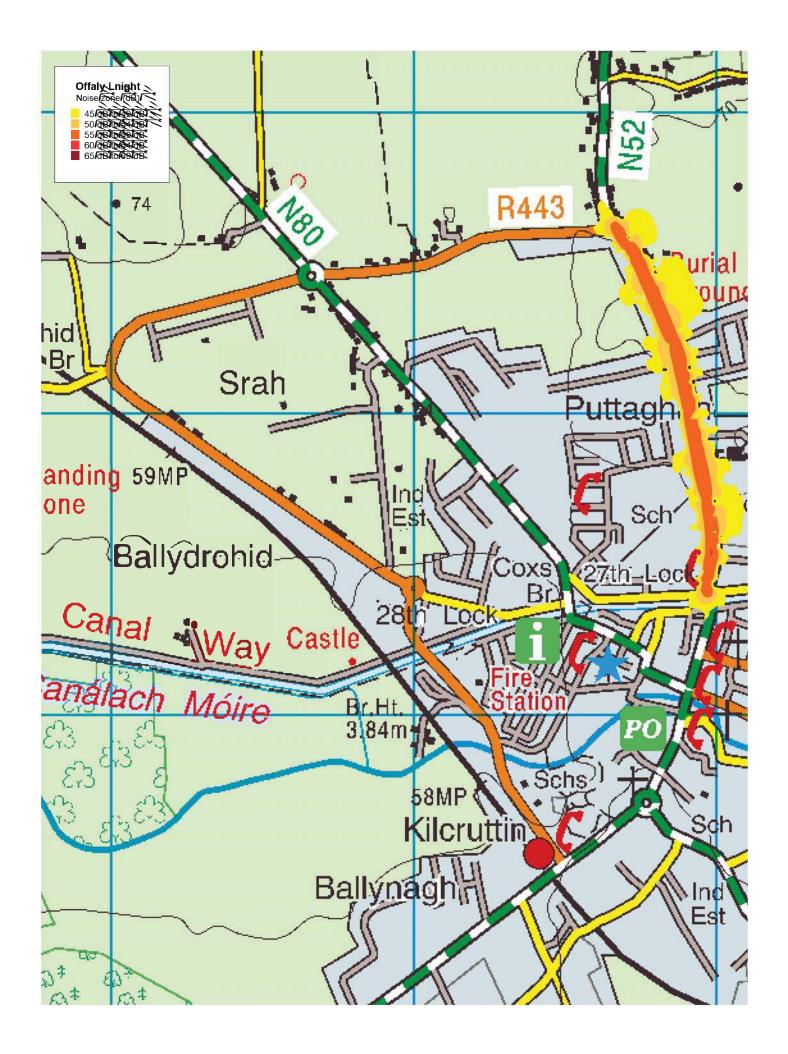


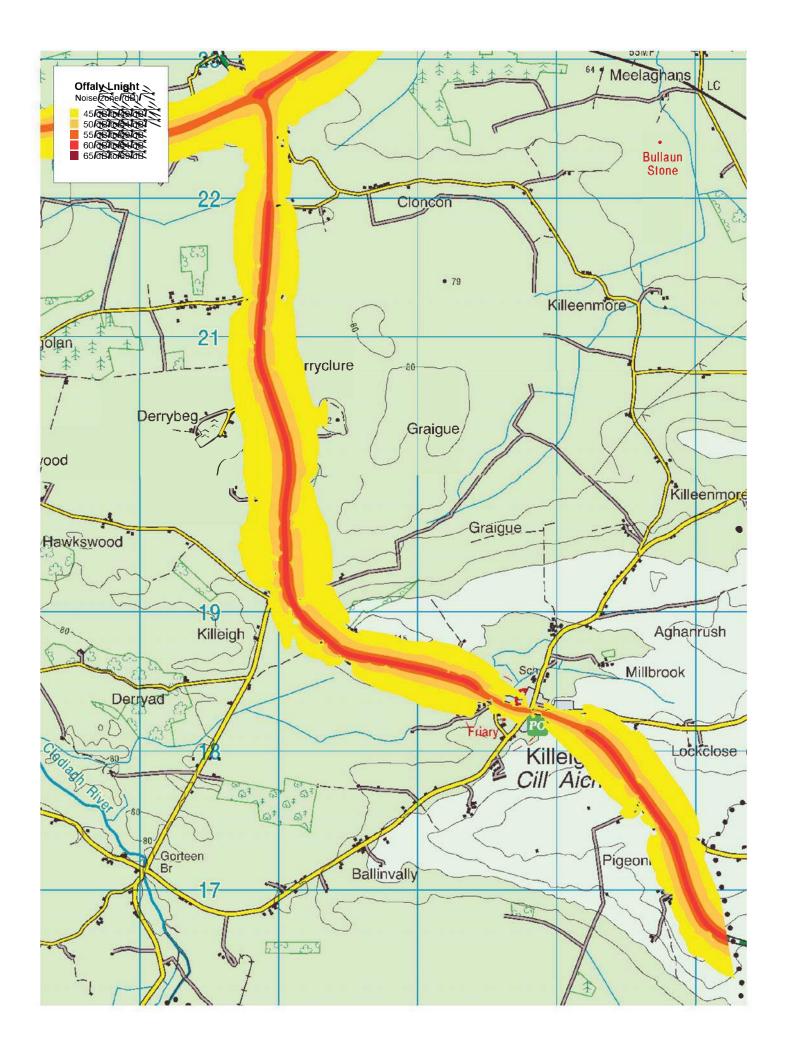


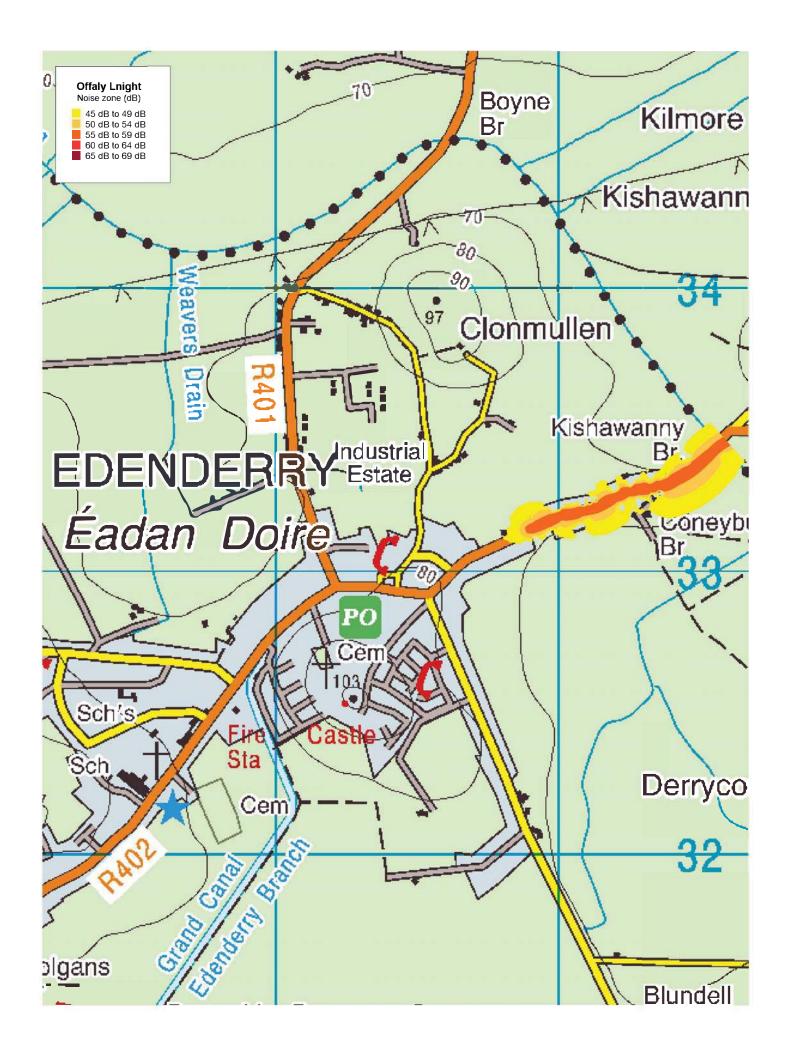






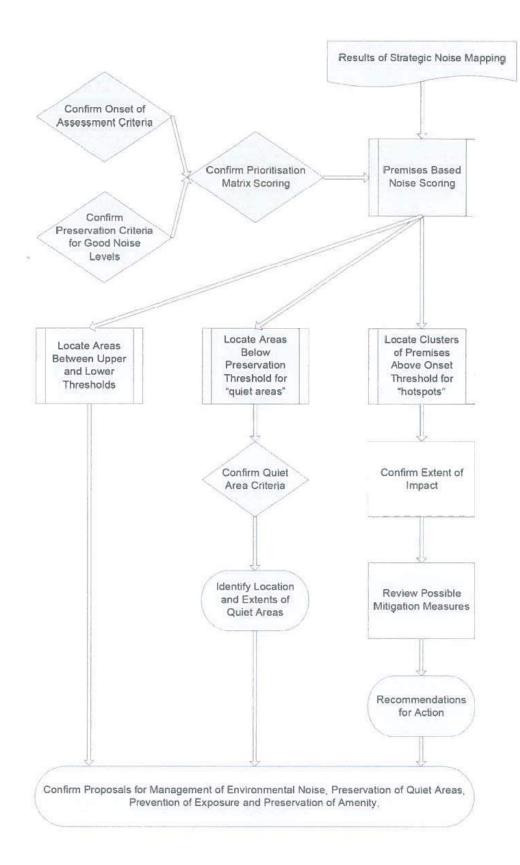






APPENDIX D: OVERVIEW OF RECOMMENDED APPROACH TO DETERMINE ACTIONS TO BE

UNDERTAKEN



APPENDIX E

APPLICATION OF DECISION SELECTION MATRIX

| | Example | | Total Score | |
|---------------------------|--------------------------|------------------|-------------|----------|
| | Priority Matrix | | | |
| Criteria: Selection Crite | eria | Score Range | Score Range | Subtotal |
| | | L _{den} | Lnight | |
| Noise Bands | <45 | 5 | 6 | |
| dB | 45-49 | 4 | 5 | |
| | 50-54 | 3 | 4 | |
| | 55-59 | 2 | 2 | |
| | 60-64 | 1 | 3 | |
| | 65-69 | 2 | 4 | |
| | 70-74 | 3 | 5 | |
| | 75-79 | 4 | 6 | |
| | >=80 | 5 | 7 | |
| Type of | City Centre | 1 | 1 | |
| Location | Commerical | 1 | 2 | |
| | Residential | 2 | 3 | |
| | Nosie Sensitive Location | 3 | 3 | |
| | Quiet Area | 3 | 3 | |
| | Recreational Open Space | 2 | 2 | |
| Noise Source | Air | 3 | 4 | |
| | Industry | 2 | 3 | |
| | Rail | 2 | 3 | |
| | Road | 3 | 4 | |

| Residential pr | operties N52 County Boundary | By-Pass | Total Score | 18 |
|---------------------------|------------------------------|---------------------------------|-----------------------------------|----------|
| | Priority Matrix | | | |
| Criteria: Selection Crite | eria | Score Range L _{den} | Score Range L _{night} | Subtotal |
| Noise Bands | <45 | 5 | 6 | |
| dB | 45-49 | 4 | 5 | |
| | 50-54 | 3 | 4 | |
| | 55-59 | 2 | 2 | |
| | 60-64 | 1 | 3 | |
| | 65-69 | 2 | 4 | |
| | 70-74 | 3 | 5 | 6 |
| | 75-79 | 4 | 6 | |
| | >=80 | 5 | 7 | |
| Type of | City Centre | 1 | 1 | |
| Location | Commerical | 1 | 2 | |
| | Residential | 2 | 3 | 5 |
| | Nosie Sensitive Location | 3 | 3 | |
| | Quiet Area | 3 | 3 | |
| | Recreational Open Space | 2 | 2 | |
| Noise Source | Air | 3 | 4 | |
| | Industry | 2 | 3 | |
| | Rail | 2 | 3 | |
| | Road | 3 | 4 | 7 |

| N52 County Bour | dary By-Pass St Colmcille Chur | ch, Durrow | Total Score | 20 |
|---------------------------|--------------------------------|------------------|-------------|----------|
| | Priority Matrix | | | |
| Criteria: Selection Crite | eria | Score Range | Score Range | Subtotal |
| | | L _{den} | Lnight | |
| Noise Bands | <45 | 5 | 6 | |
| dB | 45-49 | 4 | 5 | |
| | 50-54 | 3 | 4 | |
| | 55-59 | 2 | 2 | 7 |
| | 60-64 | 1 | 3 | |
| | 65-69 | 2 | 4 | |
| | 70-74 | 3 | 5 | |
| | 75-79 | 4 | 6 | |
| | >=80 | 5 | 7 | |
| Type of | City Centre | 1 | 1 | |
| Location | Commerical | 1 | 2 | |
| | Residential | 2 | 3 | |
| | Nosie Sensitive Location | 3 | 3 | 6 |
| | Quiet Area | 3 | 3 | |
| | Recreational Open Space | 2 | 2 | |
| Noise Source | Air | 3 | 4 | |
| | Industry | 2 | 3 | |
| | Rail | 2 | 3 | |
| | Road | 3 | 4 | 7 |

| | N52 Residential Propertie | s Mucklagh - | Blueball | Total Score | 15 |
|--------------------|---------------------------|---------------|------------------|--------------------|----------|
| | Pri | iority Matrix | | | |
| Criteria: Selectio | n Criteria | | Score Range | Score Range | Subtotal |
| | | | L _{den} | Lnight | |
| Noise Bands | <45 | | 5 | 6 | |
| dB | 45-49 | | 4 | 5 | |
| | 50-54 | | 3 | 4 | |
| | 55-59 | | 2 | 2 | |
| | 60-64 | | 1 | 3 | 3 |
| | 65-69 | | 2 | 4 | |
| | 70-74 | | 3 | 5 | |
| | 75-79 | | 4 | 6 | |
| | >=80 | | 5 | 7 | |
| Type of | City Centre | | 1 | 1 | |
| Location | Commerical | | 1 | 2 | |
| | Residential | | 2 | 3 | 5 |
| | Nosie Sensitive Location | | 3 | 3 | |
| | Quiet Area | | 3 | 3 | |
| | Recreational Open Space | | 2 | 2 | |
| Noise Source | Air | | 3 | 4 | |
| | Industry | | 2 | 3 | |
| | Rail | | 2 | 3 | |
| | Road | | 3 | 4 | 7 |

| N52 Reside | ntial Properties Blueball – Kilco | ormac | Total Score | 15 |
|---------------------------|-----------------------------------|---------------------------------|-----------------------------------|----------|
| | Priority Matrix | | | |
| Criteria: Selection Crite | eria | Score Range L _{den} | Score Range L _{night} | Subtotal |
| Noise Bands | <45 | 5 | 6 | |
| dB | 45-49 | 4 | 5 | |
| | 50-54 | 3 | 4 | |
| | 55-59 | 2 | 2 | |
| | 60-64 | 1 | 3 | 3 |
| | 65-69 | 2 | 4 | |
| | 70-74 | 3 | 5 | |
| | 75-79 | 4 | 6 | |
| | >=80 | 5 | 7 | |
| Type of | City Centre | 1 | 1 | |
| Location | Commerical | 1 | 2 | |
| | Residential | 2 | 3 | 5 |
| | Nosie Sensitive Location | 3 | 3 | |
| | Quiet Area | 3 | 3 | |
| | Recreational Open Space | 2 | 2 | |
| Noise Source | Air | 3 | 4 | |
| | Industry | 2 | 3 | |
| | Rail | 2 | 3 | |
| | Road | 3 | 4 | 7 |

| N52 Birr S | t. Brendan's Roman Catholic Ch | urch | Total Score | 16 |
|---------------------------|--------------------------------|------|-----------------------------------|----------|
| | Priority Matrix | | - | |
| Criteria: Selection Crite | Criteria: Selection Criteria | | Score Range L _{night} | Subtotal |
| Noise Bands | <45 | 5 | 6 | |
| dB | 45-49 | 4 | 5 | |
| | 50-54 | 3 | 4 | |
| | 55-59 | 2 | 2 | 7 |
| | 60-64 | 1 | 3 | |
| | 65-69 | 2 | 4 | |
| | 70-74 | 3 | 5 | |
| | 75-79 | 4 | 6 | |
| | >=80 | 5 | 7 | |
| Type of | Town Centre | 1 | 1 | 2 |
| Location | Commerical | 1 | 2 | |
| | Residential | 2 | 3 | |
| | Nosie Sensitive Location | 3 | 3 | |
| | Quiet Area | 3 | 3 | |
| | Recreational Open Space | 2 | 2 | |
| Noise Source | Air | 3 | 4 | |
| | Industry | 2 | 3 | |
| | Rail | 2 | 3 | |
| | Road | 3 | 4 | 7 |

| N | 152 Birr Methodist Church | | Total Score | 16 |
|---------------------------|---------------------------|-------------|-------------|----------|
| | Priority Matrix | | | |
| Criteria: Selection Crite | eria | Score Range | Score Range | Subtotal |
| | | | Lnight | |
| Noise Bands | <45 | 5 | 6 | |
| dB | 45-49 | 4 | 5 | |
| | 50-54 | 3 | 4 | |
| | 55-59 | 2 | 2 | 7 |
| | 60-64 | 1 | 3 | |
| | 65-69 | 2 | 4 | |
| | 70-74 | 3 | 5 | |
| | 75-79 | 4 | 6 | |
| | >=80 | 5 | 7 | |
| Type of | Town Centre | 1 | 1 | 2 |
| Location | Commerical | 1 | 2 | |
| | Residential | 2 | 3 | |
| | Nosie Sensitive Location | 3 | 3 | |
| | Quiet Area | 3 | 3 | |
| | Recreational Open Space | 2 | 2 | |
| Noise Source | Air | 3 | 4 | |
| | Industry | 2 | 3 | |
| | Rail | 2 | 3 | |
| | Road | 3 | 4 | 7 |

| N52 Bii | r St Brendan's Church of Irelan | ıd | Total Score | 16 |
|---------------------------|---------------------------------|------------------|-------------|----------|
| | Priority Matrix | | | |
| Criteria: Selection Crite | eria | Score Range | Score Range | Subtotal |
| | | L _{den} | Lnight | |
| Noise Bands | <45 | 5 | 6 | |
| dB | 45-49 | 4 | 5 | |
| | 50-54 | 3 | 4 | |
| | 55-59 | 2 | 2 | 7 |
| | 60-64 | 1 | 3 | |
| | 65-69 | 2 | 4 | |
| | 70-74 | 3 | 5 | |
| | 75-79 | 4 | 6 | |
| | >=80 | 5 | 7 | |
| Type of | Town Centre | 1 | 1 | 2 |
| Location | Commerical | 1 | 2 | |
| | Residential | 2 | 3 | |
| | Nosie Sensitive Location | 3 | 3 | |
| | Quiet Area | 3 | 3 | |
| | Recreational Open Space | 2 | 2 | |
| Noise Source | Air | 3 | 4 | |
| | Industry | 2 | 3 | |
| | Rail | 2 | 3 | |
| | Road | 3 | 4 | 7 |

| R 421 Hospita | al & Health Centres (Arden, Tul | lamore) | Total Score | 16 |
|---------------------------|---------------------------------|------------------|-------------|----------|
| | Priority Matrix | | | |
| Criteria: Selection Crite | eria | Score Range | Score Range | Subtotal |
| | | L _{den} | Lnight | |
| Noise Bands | <45 | 5 | 6 | |
| dB | 45-49 | 4 | 5 | |
| | 50-54 | 3 | 4 | |
| | 55-59 | 2 | 2 | 7 |
| | 60-64 | 1 | 3 | |
| | 65-69 | 2 | 4 | |
| | 70-74 | 3 | 5 | |
| | 75-79 | 4 | 6 | |
| | >=80 | 5 | 7 | |
| Type of | Town Centre | 1 | 1 | 2 |
| Location | Commerical | 1 | 2 | |
| | Residential | 2 | 3 | |
| | Nosie Sensitive Location | 3 | 3 | |
| | Quiet Area | 3 | 3 | |
| | Recreational Open Space | 2 | 2 | |
| Noise Source | Air | 3 | 4 | |
| | Industry | 2 | 3 | |
| | Rail | 2 | 3 | |
| | Road | 3 | 4 | 7 |

| R 421 Resid | ential Properties (Arden, Tulla | more) | Total Score | 16 |
|---------------------------|---------------------------------|---------------------------------|-----------------------------------|----------|
| | Priority Matrix | | - | |
| Criteria: Selection Crite | eria | Score Range L _{den} | Score Range L _{night} | Subtotal |
| Noise Bands | <45 | 5 | 6 | |
| dB | 45-49 | 4 | 5 | |
| | 50-54 | 3 | 4 | |
| | 55-59 | 2 | 2 | |
| | 60-64 | 1 | 3 | |
| | 65-69 | 2 | 4 | 4 |
| | 70-74 | 3 | 5 | |
| | 75-79 | 4 | 6 | |
| | >=80 | 5 | 7 | |
| Type of | Town Centre | 1 | 1 | |
| Location | Commerical | 1 | 2 | |
| | Residential | 2 | 3 | 5 |
| | Nosie Sensitive Location | 3 | 3 | |
| | Quiet Area | 3 | 3 | |
| | Recreational Open Space | 2 | 2 | |
| Noise Source | Air | 3 | 4 | |
| | Industry | 2 | 3 | |
| | Rail | 2 | 3 | |
| | Road | 3 | 4 | 7 |

| N80 Kil | leigh Maria Montesorri (Crecho | e) | Total Score | 18 |
|---------------------------|--------------------------------|---------------------------------|-----------------------------------|----------|
| | Priority Matrix | | | |
| Criteria: Selection Crite | eria | Score Range L _{den} | Score Range L _{night} | Subtotal |
| Noise Bands | <45 | 5 | 6 | |
| dB | 45-49 | 4 | 5 | |
| | 50-54 | 3 | 4 | |
| | 55-59 | 2 | 2 | |
| | 60-64 | 1 | 3 | 5 |
| | 65-69 | 2 | 4 | |
| | 70-74 | 3 | 5 | |
| | 75-79 | 4 | 6 | |
| | >=80 | 5 | 7 | |
| Type of | City Centre | 1 | 1 | |
| Location | Commerical | 1 | 2 | |
| | Residential | 2 | 3 | |
| | Nosie Sensitive Location | 3 | 3 | 6 |
| | Quiet Area | 3 | 3 | |
| | Recreational Open Space | 2 | 2 | |
| Noise Source | Air | 3 | 4 | |
| | Industry | 2 | 3 | |
| | Rail | 2 | 3 | |
| | Road | 3 | 4 | 7 |

| F | Residential Properties N80 | | Total Score | 17 |
|---------------------------|----------------------------|---------------------------------|-----------------------------------|----------|
| | Priority Matrix | | | |
| Criteria: Selection Crite | eria | Score Range L _{den} | Score Range L _{night} | Subtotal |
| Noise Bands | <45 | 5 | 6 | |
| dB | 45-49 | 4 | 5 | |
| | 50-54 | 3 | 4 | |
| | 55-59 | 2 | 2 | |
| | 60-64 | 1 | 3 | |
| | 65-69 | 2 | 4 | |
| | 70-74 | 3 | 5 | 5 |
| | 75-79 | 4 | 6 | |
| | >=80 | 5 | 7 | |
| Type of | City Centre | 1 | 1 | |
| Location | Commerical | 1 | 2 | |
| | Residential | 2 | 3 | 5 |
| | Nosie Sensitive Location | 3 | 3 | |
| | Quiet Area | 3 | 3 | |
| | Recreational Open Space | 2 | 2 | |
| Noise Source | Air | 3 | 4 | |
| | Industry | 2 | 3 | |
| | Rail | 2 | 3 | |
| | Road | 3 | 4 | 7 |

| R402 Edenderry Residential Properties (Kishawanny Br to Clonmullen) Total Score | | | | 19 |
|--|--|---|---|----------|
| | Priority Matrix | | • | |
| Criteria: Selection Crite | Criteria: Selection Criteria Score Range | | | Subtotal |
| Noise Bands | <45 | 5 | 6 | |
| dB | 45-49 | 4 | 5 | |
| | 50-54 | 3 | 4 | |
| | 55-59 | 2 | 2 | 7 |
| | 60-64 | 1 | 3 | |
| | 65-69 | 2 | 4 | |
| | 70-74 | 3 | 5 | |
| | 75-79 | 4 | 6 | |
| | >=80 | 5 | 7 | |
| Type of | City Centre | 1 | 1 | |
| Location | Commerical | 1 | 2 | |
| | Residential | 2 | 3 | 5 |
| | Nosie Sensitive Location | 3 | 3 | |
| | Quiet Area | 3 | 3 | |
| | Recreational Open Space | 2 | 2 | |
| Noise Source | Air | 3 | 4 | |
| | Industry | 2 | 3 | |
| | Rail | 2 | 3 | |
| | Road | 3 | 4 | 7 |

| Residential Properties M6 Total Score | | | 18 | |
|---------------------------------------|--------------------------|---------------------------------|-----------------------------------|----------|
| | Priority Matrix | | | |
| Criteria: Selection Crite | eria | Score Range L _{den} | Score Range L _{night} | Subtotal |
| Noise Bands | <45 | 5 | 6 | |
| dB | 45-49 | 4 | 5 | |
| | 50-54 | 3 | 4 | |
| | 55-59 | 2 | 2 | 6 |
| | 60-64 | 1 | 3 | |
| | 65-69 | 2 | 4 | |
| | 70-74 | 3 | 5 | |
| | 75-79 | 4 | 6 | |
| | >=80 | 5 | 7 | |
| Type of | City Centre | 1 | 1 | |
| Location | Commerical | 1 | 2 | |
| | Residential | 2 | 3 | 5 |
| | Nosie Sensitive Location | 3 | 3 | |
| | Quiet Area | 3 | 3 | |
| | Recreational Open Space | 2 | 2 | |
| Noise Source | Air | 3 | 4 | |
| | Industry | 2 | 3 | |
| | Rail | 2 | 3 | |
| | Road | 3 | 4 | 7 |

| Residential Properties M7 Total Score | | | 18 | |
|---------------------------------------|--------------------------|------------------|-------------|----------|
| Priority Matrix | | | | |
| Criteria: Selection Crite | eria | Score Range | Score Range | Subtotal |
| | | L _{den} | Lnight | |
| Noise Bands | <45 | 5 | 6 | |
| dB | 45-49 | 4 | 5 | |
| | 50-54 | 3 | 4 | |
| | 55-59 | 2 | 2 | 6 |
| | 60-64 | 1 | 3 | |
| | 65-69 | 2 | 4 | |
| | 70-74 | 3 | 5 | |
| | 75-79 | 4 | 6 | |
| | >=80 | 5 | 7 | |
| Type of | City Centre | 1 | 1 | |
| Location | Commerical | 1 | 2 | |
| | Residential | 2 | 3 | 5 |
| | Nosie Sensitive Location | 3 | 3 | |
| | Quiet Area | 3 | 3 | |
| | Recreational Open Space | 2 | 2 | |
| Noise Source | Air | 3 | 4 | |
| | Industry | 2 | 3 | |
| | Rail | 2 | 3 | |
| | Road | 3 | 4 | 7 |

APPENDIX F

SUBMISSIONS RECEIVED



Arden Vale, Tullamore, **County Offaly**

29 Arden Vale Tullamore County Offaly

ARDEN VALE

18th December 2018

Ms Mary Hussey, Senior Engineer, Environment and Water Services, Offaly County Council, Áras an Chontae, Charleville Road, Tullamore, County Offaly

<u>Re Tullamore By-Pass (N52) – Traffic Noise</u>

Dear Ms Hussey;

I am writing on behalf of the Arden Vale Residents Association in relation to the Tullamore By-Pass. The residents of the estate, particularly those at the Eastern end, which is adjacent to the By-Pass, have raised the issue of traffic noise from the roadway with members of the Committee.

The Committee have written to Offaly County Council, Roads Department and Transport Infrastructure Ireland in relation to this issue. In their recent correspondence to the Association the TII have advised that Offaly County Council are undertaking a review of the Noise Action Plan and are scheduled to commence public consultations on this Plan.

We understand that the Environment Section of Offaly County Council is undertaking this review.

Can our Association register our interest in this Plan and can we seek a copy of the draft Revised Noise Plan if such a document exists? The Association would welcome the opportunity to make a submission on this Plan.





Arden Vale, Tullamore, County Offaly

29 Arden Vale, Tullamore County Offaly

13th March 2019

Director of Services, Environment and Water Services, Offaly County Council, Áras an Chontae, Charleville Road, Tullamore, County Offaly

Re Public Submission – Noise Action Plan

Dear Sir

The Association would like to commend Offaly County Council on the production of this comprehensive document.

The Association note that the Arden Way road, which connects the Tullamore By-Pass with the Arden Road is omitted from the maps included in Appendix C of the Plan. The residents of Arden Vale have reported to the Association that they experience significant traffic noise from this road, particularly at night and in the early morning.

We note that the noise "envelope" to the west of the N52 By-Pass is not as extensive as the "envelope" to the east of the By-Pass, at the Arden Vale / Ballydaly location. Can the Association be provided with an explanation for this variance please?

The Association have also noted that further site clearance has taken place on the proposed Hospital Site, being developed by Flanagan Properties. This site clearance has removed a line of mature evergreen trees (circa 4m high) and the removal of these trees has led to an increase in the traffic noise levels being experienced at the western end of the estate.

Has the Action Plan taken account of the fact that the estate is significantly lower than the carriageway of the By-Pass? Also does the Plan take account of the fact that the By-Pass is carried on an over-pass as it crosses the Tinnycross Road (L 1024)?

The height of the By-Pass at this location allows the traffic noise to spread and effect a larger extent of the estate.



Senior Engineer,

Environment & Water Services, Offaly County Council, Áras an Chontae, Charleville Road, Tullamore, Co. Offaly.

15th February 2019

RE: Offaly County Council - Draft Noise Action Plan 2018 – 2023

Dear Sir/Madam,

I refer to your recent correspondence of 30th January 2019 providing Transport Infrastructure Ireland (TII) with a copy of the Offaly County Council Draft Noise Action Plan 2018 – 2023 for consultation.

Please find our comments below.

Section 2.1.2 Irish Roads Act 1993

It is stated within the Draft Noise Action Plan that "Section 77 of the Roads Act 1993 enables the Minister for the Environment, following consultation with the Environmental Protection Agency, to introduce regulations requiring Road Authorities or Transport Infrastructure Ireland as the case may be, to carry out works to mitigate adverse effects caused by increased road traffic noise following the construction of new roads or the improvement of existing roads. The 2015 amendment created Transport Infrastructure Ireland from The National Roads Authority and the Railway Procurement Agency. To date no regulations have been implemented".

Section 77 of the Roads Act 1993 was repealed by the Public Transport Regulation Act 2009. Therefore, please remove the paragraph above from the draft NAP.

Section 2.3 Guidelines in relation to Road Scheme Planning

i. It is stated that "The National Roads Authority had published Guidelines for the Treatment of Noise and Vibration in National Road Scheme which has been reviewed by Transport Infrastructure Ireland."

Please note that in February 2004 the National Roads Authority published the initial draft *Guidelines for the Treatment of Noise and Vibration in National Road Schemes*. These Guidelines were not reviewed by TII in 2004. The National Roads Authority (not TII) committed to itself to review the guidelines within the first six months of implementation.

- ii. In 2014 National Roads Authority published the 'Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes'. The Good Practice Guidance aims to expand and supplement the advice provided in the Guidelines for the Treatment of Noise and Vibration in National Road Schemes.
- iii. It is intention of TII to publish standards documents relating to noise and vibration in the context of planning and construction of (proposed) national roads in 2019.

Section 3.5 Area of Concern within Offaly County

It is stated that "The Round 3 Noise Maps for 2017 were provided to Local Authorities with the population exposure and dwelling statistics and as a consequence, a number of roads were identified by the Strategic Noise Mapping within Offaly's jurisdiction..."

TII are the noise mapping body for 'Major' national roads. Local authorities are the noise mapping body for 'Major' non-national roads.

Similar to Phase 2 of noise mapping undertaken in 2012, in December 2016, a centralised approach to the noise mapping of major roads outside agglomerations was adopted. Through this centralised approach, one central body, TII, developed strategic noise maps for all major roads outside agglomerations, encompassing both national and non-national roads. Non-national roads were mapped by TII on the behalf of the relevant Local Authority provided that authority participated in the centralised approach and provided 'model-ready' data to the central body for calculations.

Section 7.7 Assessment of Options – Cost Benefit Analysis

In 2017 the Conference of European Directors of Roads (CEDR) published a report entitled "State of the art in managing road traffic noise: cost benefit analysis and cost effective analysis (Technical Report 2017-03)". This report may be useful when undertaking any Cost Benefit Analysis. I have included a copy of this report as Appendix A of this letter.

Section 9 Implementation of Noise Action Plan

i. It is stated that "Transport Infrastructure is considered a key stakeholder of Offaly County Council during the implementation of the action plan, they develop and retain the strategic noise mapping and they are the body responsible for the planning and supervision of construction and maintenance of national roads, and motorways.

Please note that TII are the noise mapping body for 'Major' national roads. Local authorities are the noise mapping body for 'Major' non-national roads. For Phase 3 mapping, TII prepared strategic noise maps for County Offaly incorporating both national and non-national 'Major Roads' following implementation of the centralised approach (please see comment above). The County Offaly strategic noise maps (L_{den} and L_{night}) were supplied to Offaly County Council in December 2017.

ii. It is stated that "All major roads within County Offaly identified as source of environmental noise for the purpose of this Action Plan are classified as National Roads".

This statement is incorrect. Offaly County Council identified R402 and R421 as 'Major Roads' requiring inclusion in the 2017 Offaly County Council strategic noise map.

If you have any queries in relation to our comments above, please do not hesitate to contact me,

Your's faithfully,

Poper S.f.

Stephen Byrne Senior Engineer (Environment) Environmental Policy and Compliance Section Transport Infrastructure Ireland Dublin 8, D08 DK10 Appendix G SEA & AA

Strategic Environmental Assessment Screening Report

For

Noise Action Plan 2018 - 2023 for Offaly County Council

Determination of the need for a Strategic Environmental Assessment for Offaly County Council Noise Action Plan 2018 - 2023 prepared in accordance with Environmental Noise Regulations 2006 (SI 140 of 2006)

October 2019

ON BEHALF OF

Offaly County Council



Prepared by Enviroguide Consulting Dublin 3D Core C, Block 71, The Plaza, Park West, Dublin 12

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DOCUMENT CONTROL SHEET

| Revision | Status | Author(s) | Reviewed | Approved | Issue Date |
|----------|-------------------------------|--|-------------------------|-------------------------|------------|
| 1.0 | Draft for Client Review | Muriel Ennis Principal Consultant | | Jim Dowdall Director | 12/09/2019 |
| 2.0 | Draft | Mairead Foran Environmental Consultant | Jim Dowdall Director | Jim Dowdall Director | 30/10/2019 |



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1 INTRODUCTION

1.1 Background

Offaly's Noise Action Plan has been developed in response to Offaly's County Council role as designated Planning Authority under Article 7 of the Environmental Noise Regulation 2006.

The Noise Action plan looks to identify Environmental noise, such as unwanted or harmful outdoor sound created by human activities including noise emitted by means of transport, road traffic, rail traffic, air traffic, and from sites of industrial activity such as those concerning integrated pollution prevention and control. This Noise Action Plan excludes noise from domestic activities, noise created by neighbours, noise at work place or construction noise as these can be dealt with under existing legislation such as the Environmental Protection Agency Act 1992 and Health & Safety legislation.

The focus of the draft action plan is to set down actions at a strategic level, to manage noise issues and effects, including noise reduction if necessary.

2 LEGISLATIVE CONTEXT

2.1 Strategic Environmental Assessment

A Strategic Environmental Assessment (SEA) is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or program, or variation to a plan or program, before a decision is made to adopt it. The SEA Directive¹ requires, inter alia, that SEA is undertaken for certain plans, programs or variations to these.

The SEA Directive has been transposed into Irish law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004) and The Planning and Development Strategic Environmental Assessment (SEA) Regulations 2004 (S.I. 436 of 2004). These Regulations have since been amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 (SI No. 200 of 2011) and the Planning and Development (SEA) (Amendment) Regulations 2011 (SI No. 201 of 2011). The criteria as set out in Annex II of The SEA Directive (Directive 2001/42/EC) on the assessment of the effects of certain plans and programmes on the environment and as also set out in Schedule 2A of the Planning and Development (SEA) Regulations 2004 (S.I. No. 436 of 2004) need to be considered while drafting of the Noise Action Plan.

This SEA screening report is consistent with the process as recommended by The Department of Environment, Heritage and Local Government guidance document entitled *Implementation of SEA Directive 2001/42/EC Assessment of the Effects of Certain Plans and Programmes on the Environment November 2004*, specifically Chapter 3 (SEA: Screening and Scoping) and furthermore uses the criteria for SEA screening criteria set out in the SEA Directive.

An Appropriate Assessment Screening Report is also being prepared for this Noise Action Plan in line with Article 6(3) of the EU Habitats Directive (92/43/EEC).

¹ Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27th June 2001, on the Assessment of the Effects of Certain Plans and Programmes on the Environment



2.2 Environmental Noise

2.2.1 EU Context

In 2004 the European Community Directive 2002/49/EC, know as the Environmental Noise Directive, relates to the assessment and management of environmental noise.

The aim of the Environmental Noise Directive is to identify a European Union common approach aimed at avoiding, preventing or reducing the negative and harmful effects due to exposure to environmental noise. In the light of the Directive's provisions, environmental noise is defined as '*unwanted or harmful outdoor sound created by human activity, such as noise emitted by means of transport, road traffic, rail traffic, air traffic and industrial activity*'. The Directive indicates a number of actions that need to be progressively implemented by Member States in order to achieve the objectives of the Directive.

All member states are required to prepare strategic noise maps to identify populations exposed to environmental noise emanating from transport (road, rail and air traffic) and industrial activities. These maps will be the basis for illustrating to the public such information and as a tool to prepare Noise Action Plans by the responsible authorities.

2.2.2 National Context

Statutory Instrument No. 140 of 2006, also known as The Environmental Noise Regulations, was transposed into Irish Law by The Minister for the Environment, Heritage and Local Government, for the purpose of giving effect to n 2004 the European Community Directive 2002/49/EC. The regulations provide for the implementation in Ireland of a common approach within the European community intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise.

The Environmental Protection Agency (EPA) is the national authority responsible for overseeing the implementation of the Regulations. The EPA is required by the regulations to provide advice and guidance to the relevant noise mapping bodies and action planning authorities. The EPA is responsible for reporting to the European Commission information relating to strategic noise mapping and action planning in accordance with Article 10(2) of the Directive.

2.3 Offaly's Noise Action Plan Objectives and Actions

The purpose of Offaly's Noise Action Plan is to develop a clear and integrated set of actions providing for the assessment of environmental noise but which notably address priorities based upon noise mapping results with a view to preventing and reducing environmental noise where necessary and particularly where exposure levels can induce harmful effects on human health and to preserving environmental acoustic quality where it is good.

The **objective** of this Noise Action Plan is to adopt a strategic approach to the management of environmental noise with a view of preventing and reducing, where necessary, and in particular, where exposure levels can induce harmful effects on human health, and to promote a high level of environmental protection.

The following **Actions** will be employed to meet the Noise Action Plan Objective:

- Review of the County Development Plan to include noise control and management;
- Include Noise Assessment and Control in the County Planning Guidance;
- New Developments; below the threshold for EIA requirements, will require noise impact assessment; and
- New Developments close to Noise Sensitive Buildings (identified as part of the Noise Action Plan) within the vicinity of a significant noise source will be required to include noise insulation and control measures.



Offaly County Council Noise Action Plan actions have been developed to incorporate noise management into the planning process with the view of reducing and preventing possible increases in environmental noise on the identified sensitive locations and buildings from sources such as roads, railways and industrial facilities.

2.4 Consultation

2.4.1 Environmental Authorities

Article 5 (4) of the SEA Directive specifies that each Member State should designate the relevant Environmental Authorities which, by reason of their specific environmental responsibility, are likely to be concerned with the potential environmental effect of any plan or programme. Article 9(5) and 9(6) of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (as amended) details the need for the competent authority (Offaly County Council) to consult the relevant environmental authorities regarding the development of certain plans and programmes. On an Irish context, as a minimum the following environmental authorities should be contacted when developing county plans and programmes:

- Environmental Protection Agency (EPA);
- The Minister for the Environment (Minister Communications, Climate Action and Environment) where the planning authority considers that a plan might have significant effects in relation to the architectural or archaeological heritage or to nature conservation; and
- The Minister for Communications, Marine and Natural Resources (Minister for Agriculture, Food and the Marine) - where the planning authority considers that a plan might have significant effects on fisheries or the marine environment.

Offaly County Council on the 30th January 2019 sent the Draft Noise Action Plan to the following Environmental Authorities:

- The Heritage Council;
- Transport Infrastructure Ireland (TII);
- Shannon Development;
- An Taisce;
- Office of Public Works (OPW);
- Mid-West Regional Authority;
- Mid-East Regional Authority;
- South-East Regional Authority;
- Midland Regional Authority;
- Border Regional Authority;
- The Minister for Arts, Heritage & the Gaeltacht;
- The Minister for Agriculture, Food & Marine;
- Minister for Defence;
- Minister for Education and Skills;
- Minister for Transport, Tourism & Sport;
- Dublin Airport Authority (DAA);
- Arts Council;
- ESB Head Office;
- Forfas;
- Fáilte Ireland;
- Health & Safety Authority;
- Office of Climate, Licensing and Resource Use;



- Department of Arts, Heritage and the Gaeltacht;
- Minister for Communications, Energy & Natural Resources;
- Eirgrid;
- Department of the Environment, Community & Local Government;
- Galway County Council;
- Roscommon County Council;
- Westmeath County Council;
- Meath County Council;
- Kildare County Council;
- Laois County Council;
- Tipperary County Council;
- Inland Fisheries Ireland;
- An Bord Pleanála;
- Minister for Department of Environment, Community & Local Government (Planning & Housing Section);
- EPA Regional Inspectorate;
- Birr Town Council;
- Ferbane Area Office;
- Tullamore Town Council;
- County Development Board (Offaly county Council); and
- Health Services Executive.

2.4.2 Public Consultation

Offaly County Council also conducted a four-week period from 30th January 2019 to 27th February 2019, where the Draft Noise Action Plan were presented for public consultation. The following outreach methods were used:

- The Draft Noise Action Plan was displayed at the following Council offices:
 - Environment & Water Services, Offaly County Council, Áras an Chontae, Tullamore;
 - o Birr Town Council, Civic Offices & Library, Wilmer Road, Birr;
 - o Tullamore Town Council, Acres Hall, Cormac Street, Tullamore; and
 - Edenderry Town Council, Market Square, Edenderry.
- Draft Noise Action Plan uploaded on Offaly.ie (<u>https://www.offaly.ie/eng/Services/En-vironment/Noise/Offaly-County-Council-Draft-Noise-Action-Plan-2018-2023.html</u>)

A total of two submissions were received during the consultation periods, one from Transport Infrastructure Ireland and one from Arden Vale Residents Associations.

2.4.3 Summary of Consultation Submissions

Table 2 details the summary of responses from each of the organisations and individuals that made a submission to the consultation periods and a summary of the response from Offaly County Council to each of the submissions is detailed.

| Organization / individual | Summary submission | Offaly Co. Co. response |
|-------------------------------|---|-------------------------|
| Transport In- frastructure | • TII refer to Section 2.1.2 of the Draft Noise Action Plan, highlighting that | |
| Ireland | Section 77 of the Roads Act 1993 was repealed by the Public Transport | |

TABLE 1 SUMMARY OF CONSULTATION SUBMISSIONS AND RESPONSES



| | Regulation Act 2009. Suggesting that | |
|---|---|--|
| | this paragraph should be removed | |
| | from the Noise Action Plan. | |
| • | • Refers Section 2.3, where the Draft | |
| | Noise Action Plan refers to the Na- | |
| | tional Roads Authority Guidelines and | |
| | notes that in February 2004 the Na- | |
| | tional Roads Authority published the | |
| | initial draft Guidelines for the Treat- | |
| | ment of Noise and Vibration in Na- | |
| | tional Road Schemes. These Guide- | |
| | lines were not reviewed by TII in | |
| | 2004. The National Roads Authority | |
| | (not TII) committed to itself to review | |
| | the guidelines within the first six | |
| | months of implementation. In 2014 | |
| | National Roads Authority published | |
| | the 'Good Practice Guidance for the | |
| | Treatment of Noise during the Plan- | |
| | ning of National Road Schemes'. The | |
| | Good Practice Guidance aims to ex- pand and supplement the advice pro- | |
| | vided in the <i>Guidelines for the Treat</i> - | |
| | ment of Noise and Vibration in Na- | |
| | tional Road Schemes. It is intention of | |
| | TII to publish standards documents | |
| | relating to noise and vibration in the | |
| | context of planning and construction | |
| | of (proposed) national roads in 2019. | |
| • | • Refers to Section 3.5, Highlights that | |
| | TII are the noise mapping body for | |
| | 'Major' national roads. Local authori- | |
| | ties are the noise mapping body for | |
| | 'Major' non-national roads.Similar to Phase 2 of noise mapping | |
| | undertaken in 2012, in December | |
| | 2016, a centralised approach to the | |
| | noise mapping of major roads outside | |
| | agglomerations was adopted. | |
| | Through this centralised approach, | |
| | one central body, TII, developed stra- | |
| | tegic noise maps for all major roads | |
| | outside agglomerations, encompass- | |
| | ing both national and non-national | |
| | roads. Non-national roads were | |
| | mapped by TII on the behalf of the rel- | |
| | evant Local Authority provided that | |
| | authority participated in the central- | |
| | ised approach and provided 'model- | |
| | ready' data to the central body for cal- | |
| | culations. | |



| | Refers to Section 7.7, Recommends that in 2017 the Conference of European Directors of Roads (CEDR) published a report entitled "State of the art in managing road traffic noise: cost benefit analysis and cost effective analysis (Technical Report 2017-03)", this report may be useful when undertaking any Cost Benefit Analysis. Refers to Section 9, Highlighting that TII are the noise mapping body for 'Major' national roads. Local authorities are the noise mapping body for 'Major' non-national roads. For Phase 3 mapping, TII prepared strategic noise maps for County Offaly incorporating both national and non-national 'Major Roads' following implementation of the centralised approach (please see comment above). The County Offaly strategic noise maps (Lden and Lnight) were supplied to Offaly County Council in December 2017. Recommending an incorrect statement in Section 9 the Draft Noise Action Plan that "All major roads within County Offaly identified as source of environmental noise for the purpose of this Action Plan are classified as National Roads". This statement is incorrect. Offaly County Council in the 2017 Offaly County Council strategic noise maps. | |
|---|--|--|
| Arden Vale Resident As- sociation | Highlights that the Arden Way road, which connects the Tullamore Bypass with Arden Road is omitted from the maps in Appendix C of the Plan. The residents of Arden Vale have experienced significant traffic noise from the Arden Road, particular at night and early morning. Questions the noise 'envelope' to the west of the N52 Bypass is not as extensive as the 'envelope' to the east of the Bypass, and is there an explanation for this? Highlights that site clearance works have taken place in the proposed | The Environmental Noise Directive (EU Directive 2002/49/EC), transposed into Irish law by the European Communities (Environmental Noise) Regulations 2018, calls for the devel- opment of strategic noise maps and action plans for major roads, railways, airports and agglomerations. Under the Regulations, Transport Infrastruc- ture Ireland (TII) (previously the Na- tional Roads Authority) is responsible for the development of noise maps for all national roads carrying in excess of 3 million vehicles a year. Local Author- |



| · · · · · | | |
|-----------|---|--|
| | hospital site being developed. This site clearance work has removed a line of mature tress which has led to increase noise from traffic. Questions has the Action Plan taken account of the fact the Arden Vale estate is lower than the carriageway of the By-pass and that it has an overpass over Tinnycross Road (L1024), suggesting that the height of the By-pass allows traffic noise spread and effect a large extent of the housing estate. | ities are responsible for the develop- ment of noise maps for all non-national roads carrying in excess of 3 million vehicles a year. However, to ensure a consistent ap- proach to mapping, TII, through a cen- tralised contract, developed strategic noise maps on a county basis on be- half of the local authorities, including Offaly County Council. Offaly County Council identified non-national roads within their jurisdiction carrying in ex- cess of 3 million vehicles a year e.g. R421. The Arden Way road (non-na- tional road) was not identified as carry- ing in excess of 3 million vehicles a year. Therefore, this road was not in- cluded within the strategic noise map for County Offaly. |
| | | • The extent of the noise envelope will be influenced by factors such as the presence of obstacles e.g. buildings. The west of the N52 By-Pass has a higher concentration of buildings, which act as obstacles to the noise en- velope, when compared to the east of the By-Pass. Therefore, the envelope to the west is less extensive than the envelope. |
| | | • The computer model build to prepare the strategic noise map requires the in- clusion of a number of data sets includ- ing ground topography and building lo- cations (e.g. Arden Vale homes) and height. Therefore, the strategic noise map produced, which informs the Of- faly County Council Noise Action Plan, did take into account that (i) the estate is significantly lower than the carriage- way of the By-Pass and (ii) the By- Pass is carried on an over-pass as it crosses the Tinnycross Road (L 1024). |

The Chief Executive Report attached with Offaly's Noise Action Plan 2018-2023 provides a detailed response to each of the submissions.



2.5 Appropriate Assessment

An Appropriate Assessment Screening Report has also been prepared for this Noise Action Plan in line with Article 6(3) of the EU Habitats Directive (92/43/EEC). The Report concludes:

In conclusion, further to a screening of Offaly County Council's Noise Action Plan for possible significant effects on Natura 2000 sites no significant effects were identified.

The screening outlined in this report included an assessment of possible in-combination effects. Based on the objective information contained in this report and applying the precautionary principle, it is concluded that the Noise Action Plan will not have a significant effect on Natura 2000 sites.

The AA Screening Report accompanies Offaly's Noise Action Plan.

3 DETERMINING WHETHER AN SEA IS REQUIRED

The objective of the SEA Directive for the assessment of the effects of certain plans and programmes on the Environment 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."²

Post the Environmental Authority and Public Consultation, the updated Noise Action Plan was screened for SEA requirements. The below details the SEA screening process carried out.

3.1 The requirement to carry out SEA – Pre-Screening Checklist

In order to determine if this Strategy is considered a plan/programme under Article 3 of the SEA Directive, a pre-screening check is necessary. Figure 1 below provides details of the pre-screening checklist; this checklist is based on the decision tree published by the EPA in the *Development of SEA methodologies for plans and programmes in Ireland.*³

³ P. Scott & P. Marsden., 2001-EEP/DS-2/5 *Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland* Synthesis Report © Environmental Protection Agency 2003



² Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27th June 2001, on the Assessment of the Effects of Certain Plans and Programmes on the Environment

ENVIROGUIDE CONSULTING Strategic Environmental Assessment Screening Report

Offaly County Council

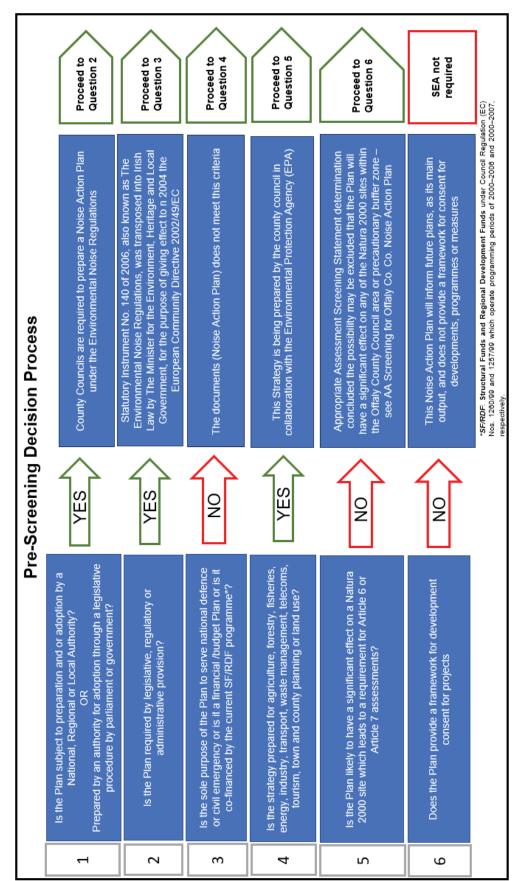


FIGURE 1 PRE-SCREENING DECISION PROCESS



October 2019

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4 SEA SCREENING DETERMINATION

The Noise Action Plan was screened using the criteria contained in Annex II of the SEA Directive. Table 3 and Table 4 below, details the screening assessment using the *criteria for determining the likely significance of effects* as set out in the SEA Directive, Annex II.

TABLE 2 SCREENING DETERMINATION FOR ANNEX II (1.), CRITERIA FOR DETERMINING THE LIKELY SIGNIFICANCE OF EFFECTS

| The Characteristics of the Plan and Programmes having regard, in particula | ar, to, the following |
|--|-----------------------|
| criteria | |

| Criteria | Screening Determination |
|--|---|
| The degree to which the plan or programme sets a framework for projects and other activities, ei- ther with regard to the location, nature, size and operating conditions or by allocating resources. | The purpose of this Noise Action Plan is to iden- tify areas at risk from environmental noise in Offlay County, it also looks to set strategic ob- jectives with an aim to avoid, prevent and re- duce the harmful effects of environmental noise from traffic on a prioritised basis. |
| | Offaly County Council's Noise Action Plan, if adopted, will not set a framework for future de- velopment consent of projects, i.e. projects listed in both Annex I and Annex II of the Environmental Impact Assessment Directive. |
| The degree to which the plan or programme in- fluences other plans and programmes including those in a hierarchy; | This Noise Action Plan will inform other future plans, as its main output, to ensure that Offaly County Councils planning policies and guidelines must be informed and take account of the issues around Environmental Noise, irrespective of the size of the development or plan. |
| | Future individual planning policies, strategies, plans and projects must be considered under the SEA, EIA and/or AA processes, when sufficient detail arises. |
| The relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development; | As the Noise Action Plan is aimed at integrating Environmental Noise considerations into Offaly County Councils planning procedures as, the specific actions will be implemented via future plans and policies. |
| | This Noise Action Plan main output is to ensure all planning decisions are conscious of Environ- mental Noise constraints and potential design mitigation measures. |
| | Individual county development policies, strate- gies, plans and projects must be considered indi- vidually under the SEA, EIA and/or AA process. |
| Environmental problems relevant to the plan or programme; | The Noise Action Plan looks to integrate Environ- mental Noise adaptation into Offaly County |



| | Council as a planning function and/or an im- portant criterion to be considering in forward |
|--|---|
| | planning plans, projects or strategies. Individual county development policies, strate- |
| | gies, plans and projects must be considered indi- vidually under the SEA, EIA and/or AA process. |
| The relevance of the plan or programme for the | As the Noise Action Plan is aimed at integrating |
| implementation of Community legislation on the | Environmental Noise adaptation into identified |
| environment (e.g. plans and programmes linked | Offaly County Councils planning policies, with |
| to waste-management or water protection). | some specific actions to integrate noise impact |
| | assessments into planning requirements under |
| | the EIA threshold. It does not set community leg- |
| | islation as such. |

TABLE 3 SCREENING DETERMINATION FOR ANNEX II (2.), CRITERIA FOR DETERMINING THE LIKELY SIGNIFICANCE OF EFFECTS

| Characteristics of the Effects and of the Area Likely to be Affected, taking account of the follow- | |
|--|--|
| ing criteria | |
| Criteria | Screening Determination |
| The probability, duration, frequency and reversi- bility of the effects | Offaly County Council Noise Action Plan aims at integrating Environmental Noise adaptation into the Local Authorities plans, strategies and plan- |
| The cumulative nature of the effects | ning procedure, this in itself will help ensure En- vironmental Noise nuisance is managed at sus- |
| The transboundary nature of the effects | tainable levels. |
| The risks to human health or the environment (e.g. due to accidents) | The Noise Action Plans specific actions will be implemented via future plans as its main output is to ensure that all policies, strategies, and plan- ning procedures developed and enforced by Of- faly County Council must be informed of the need |
| The magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected) | to assess for noise impact, in particular areas identified as noise sensitive. |
| special natural characteristics or cultural heritage; exceeded environmental quality standards or limit values; and | Individual policies plans and projects must be considered individually under the EIA and/or AA process when sufficient details arises. |
| - intensive land-use. The effects on areas or landscapes which have a | Any and all effects uncovered as part of this pro- cess will be considered in relation to the charac- |
| recognised national, community or international protection status. | teristics of the effects and of the area likely to be affected and the process will have regard, in par- ticular, to the criteria as listed, according to the |
| | legislation. |



5 CONCLUSION

This SEA Screening Report was carried out in order to determine the need for a Strategic Environmental Assessment for Offaly County Council Noise Action Plan prepared as a requirement of the Environmental Noise Regulations 2006. It has been concluded, based on the pre-screening check, and review against the environmental significance criteria as set out in Annex II of the SEA Directive, that a Strategic Environmental Assessment is not required.

This is due to the fact that this Strategy does not provide a framework for development consent for projects listed in the EIA Directive. Furthermore, the purpose of this Noise Action Plan is to inform Local Authority policies, procedures and planning procedures on the need to incorporate noise impact assessment into plans and project and it does not set out a framework for any projects, plans or specific measures.





FOR

NOISE ACTION PLAN FOR OFFALY COUNTY COUNCIL

November 2019

ON BEHALF OF

Offaly County Council



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1 INTRODUCTION

1.1 Background

Member States are required to designate Special Areas of Conservation (SACs) and Special Protected Areas (SPAs) under the EU Habitats and Birds Directives, respectively. SACs and SPAs are collectively known as Natura 2000 sites. An 'Appropriate Assessment' (AA) is a required assessment to determine the likelihood of significant impacts, based on best scientific knowledge, of any plans or projects on Natura 2000 sites. A screening for AA determines whether a plan or project, either alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site, in view of its conservation objectives.

This AA Screening has been undertaken to determine the potential for significant impacts on nearby Sites with European conservation designations (i.e. Natura 2000 Sites). The purpose of this assessment is to determine, the appropriateness, or otherwise, of the proposed development in the context of the conservation objectives of such sites.

1.2 Legislative Context

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats and wild fauna and flora by the designation of SACs and the Birds Directive (79/409/EEC) seeks to protect birds of special importance by the designation of SPAs. It is the responsibility of each member state to designate SPAs and SACs, both of which will form part of Natura 2000, a network of protected sites throughout the European Community.

An Appropriate Assessment is required under Article 6 of the Habitats Directive where a project or plan may give rise to significant effects upon a Natura 2000 Site, and paragraphs 3 and 4 states that:

6(3) Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site, in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

6(4) If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.

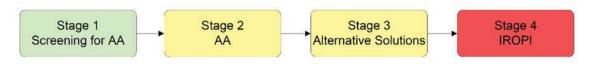


The current assessment was conducted within this legislative framework and the published DEHLG (2009) guidelines. As outlined in these, it is the responsibility of the proponent of the project to provide a comprehensive and objective Screening for Appropriate Assessment, which can then be used by the competent authority in order to conduct the Appropriate Assessment (DEHLG, 2009).

1.3 Stages of AA

This Appropriate Assessment Screening Report (the "**Screening Report**") has been prepared by Enviroguide Consulting which considers whether the Noise Action Plan is likely to have a significant effect on a European Site and whether a Stage 2 Appropriate Assessment is required.

The AA process is a four-stage process, with issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.





The four stages of an AA can be summarised as follows:

- Stage 1: *Screening*. The first stage of the AA process is to determine the likelihood of significant impacts of a proposal.
- Stage 2: Natura Impact Statement (NIS). The second stage of the AA process assesses the impact of the proposal (either alone or in combination with other projects or plans) on the integrity of the Natura 2000 site, with respect to the conservation objectives of the site and its ecological structure and function. A Natura Impact Statement containing a professional, scientific examination of the proposal is required and should include any mitigation measure to avoid, reduce or offset negative impacts.
- Stage 3: Assessment of alternative solutions. If the outcome of Stage 2 is negative i.e. adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned. This stage examines alternative solutions to the proposal.
- Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain. The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a Natura 2000 site, where no less damaging solution exists.

The purpose of Stage 1, the Screening Stage is to determine the necessity or otherwise for a NIS. Screening for AA examines the likely effects of a project or plan alone, and in combination with other projects or plans, upon a Natura 2000 site, and considers whether it can be objectively concluded that these effects will not be significant.



If it is determined during screening stage that the proposal may have a significant effect on a Natura 2000 site, or such a significant effect cannot be ruled out, then a NIS will need to be prepared. The Screening is outlined in Section 2.

1.4 Screening Steps

This Screening for AA, or Stage 1 of AA, has been undertaken in accordance with the European Commission Methodological Guidance on the provision of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (EC, 2001) and the European Commission Guidance 'Managing Natura 2000 sites' (EC, 2000). Screening for AA involves the following:

- Establish whether the Plan is necessary for the management of a Natura 2000 site;
- Description of the Plan;
- Identification of Natura 2000 sites potentially affected;
- Identification and description of individual and cumulative impacts likely to result from the plan;
- Assessment of the significance of the impacts identified above on site-integrity; and
- Exclusion of sites where it can be objectively concluded that there will be no significant effects.

This Stage 1, Screening, examines whether likely effects upon a Natura 2000 site will be significant and determines whether the AA process for the proposed Plan alone and in combination with other developments in the area requires a Stage 2.

1.5 Stage 1 Screening Assessment Methodologies

1.5.1 Desk Study

A desk study was carried out to evaluate all available information on the areas natural environment. This comprised a review of a wide range of available publications, datasets and resources where applicable, including the following sources:

- Noise Action Plan Offaly County Council;
- National Parks and Wildlife Service (NPWS) datasets;
- Geological Survey Ireland (GSI) online datasets and mapping;
- Environmental Protection Agency (EPA) mapping and datasets;
- National Biodiversity Data Centre (NBDC) online mapping and species records;
- OSI aerial imagery and Discovery Series mapping;
- Satellite imagery from various sources and dates (Google, Digital Globe, Bing);
- The Status of EU Protected Habitats in Ireland (NPWS);

For a complete list of the specific documents consulted as part of this assessment, see *Section 4 References*.

1.5.2 Assessment of Impacts

Once the potential impacts that may arise from Offaly County Councils Noise Action Plan are identified, the significance of these is assessed using key indicators:

- Habitat loss or alteration;
- Habitat / species fragmentation;

- Disturbance and / or displacement of species;
- Changes in population density; and
- Changes in water quality and resource.

In line with the EPA Guidelines (EPA, 2017), the following terms are defined when quantifying duration:

| Description of Duration | Corresponding Time Frame |
|--|---|
| Momentary Effects | Effects lasting from seconds to minutes |
| Brief Effects | Effects lasting less than a day |
| Temporary Effects | Effects lasting less than a year |
| Short-term Effects Effects lasting one to seven years. | |
| Medium-term Effects | Effects lasting seven to fifteen years. |
| Long-term Effects | Effects lasting fifteen to sixty years |
| Permanent Effects | Effects lasting over sixty years |
| Reversible Effects | Effects that can be undone, for example through remediation or restoration |
| Frequency of Effects | Describe how often the effect will occur. (once, rarely, occasionally, fre- quently, constantly – or hourly, daily, weekly, monthly, annually) |

TABLE 1. DEFINITION OF DURATIONS (EPA, 2017).

The criterion for confidence levels of the predicted likely impacts are given below in Table 2. The impact significance criteria follow EPA guidance (EPA, 2017).

TABLE 2. IMPACT SIGNIFICANCE CRITERIA (EPA, 2017).

| Significance of Effects | Definition |
|-------------------------|---|
| Imperceptible | An effect capable of measurement but without significant consequences. |
| Not significant | An effect which causes noticeable changes in the character of the envi- ronment but without significant consequences. |
| Slight Effects | An effect which causes noticeable changes in the character of the envi- ronment without affecting its sensitivities. |
| Moderate Effects | An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends. |
| Significant Effects | An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment |



2 STAGE 1 SCREENING

2.1 Management of Natura 2000 Site

Offaly County Council's Noise Action Plan is not directly connected with or necessary for the management of Natura 2000 sites in County Offaly or elsewhere.

2.2 Description of the Plan

2.2.1 Background

Offaly's Noise Action Plan has been developed in response to Offaly's County Council role as designated Planning Authority under Article 7 of the Environmental Noise Regulation 2006.

The Noise Action plan looks to identify Environmental noise, such as unwanted or harmful outdoor sound created by human activities including noise emitted by means of transport, road traffic, rail traffic, air traffic, and from sites of industrial activity such as those concerning integrated pollution prevention and control. This Noise Action Plan excludes noise from domestic activities, noise created by neighbours, noise at work place or construction noise as these can be dealt with under existing legislation such as the Environmental Protection Agency Act 1992 and Health & Safety legislation.

The focus of the draft action plan is to set down actions at a strategic level, to manage noise issues and effects, including noise reduction if necessary.

2.3 Offaly's Noise Action Plan Objectives and Actions

The purpose of Offaly's Noise Action Plan is to develop a clear and integrated set of actions providing for the assessment of environmental noise but which notably address priorities based upon noise mapping results with a view to preventing and reducing environmental noise where necessary and particularly where exposure levels can induce harmful effects on human health and to preserving environmental acoustic quality where it is good.

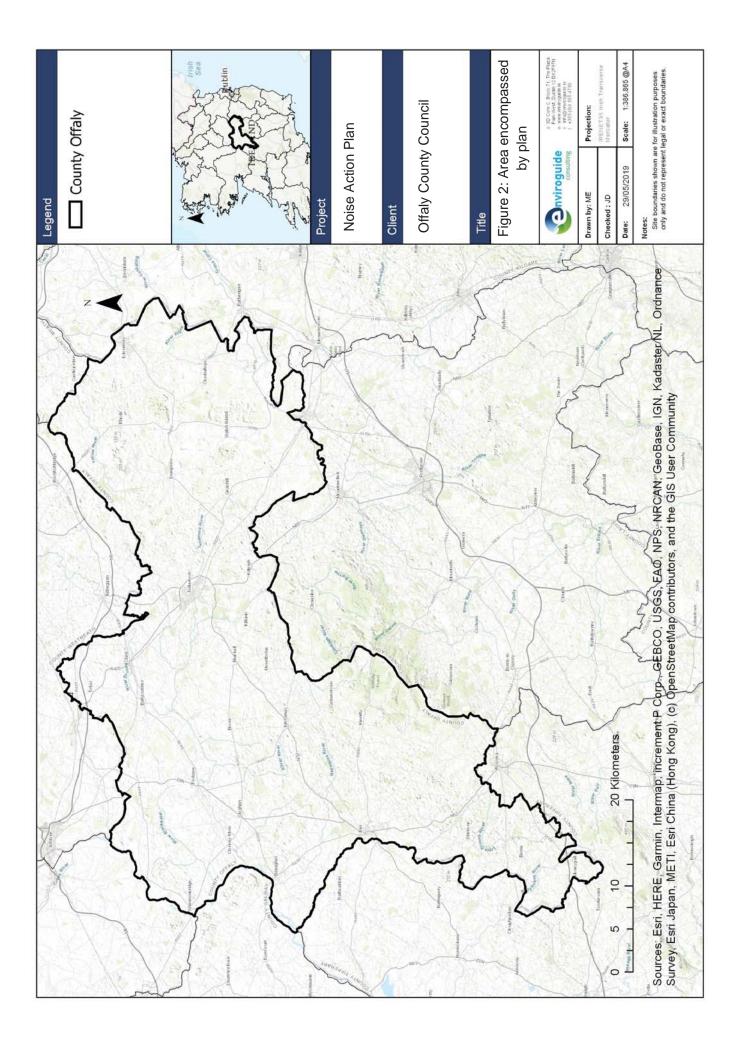
The **objective** of this Noise Action Plan is to adopt a strategic approach to the management of environmental noise with a view of preventing and reducing, where necessary, and in particular, where exposure levels can induce harmful effects on human health, and to promote a high level of environmental protection.

The following **Actions** will be employed to meet the Noise Action Plan Objective:

- Review of the County Development Plan to include noise control and management;
- Include Noise Assessment and Control in the County Planning Guidance;
- New Developments; below the threshold for EIA requirements, will require noise impact assessment; and
- New Developments close to Noise Sensitive Buildings (identified as part of the Noise Action Plan) within the vicinity of a significant noise source will be required to include noise insulation and control measures.

Offaly County Council Noise Action Plan actions have been developed to incorporate noise management into the planning process with the view of reducing and preventing possible increases in environmental noise on the identified sensitive locations and buildings from sources such as roads, railways and industrial facilities.





2.3.1 Identification of Relevant Natura 2000 Sites

In identifying potentially affected Natura 2000 sites, it has been decided to adopt the precautionary principle and includes all SPAs and SACs within the Strategy area, including a surrounding 15km buffer zone. Within this overall area, a total of 47 SACs and 13 SPAs are found, each site name, corresponding code and qualifying interests are detailed in Table 3 below.

TABLE 3. NATURA 2000 SITES WITHIN A 15KM RADIUS OF THE STRATEGY AREA. * = PRIORITY; NUMBERS IN BRACKETS ARE NATURA 2000 CODES

| Site Code | Site Name | Qualifying Interests | Location | | | |
|--------------|-------------------------------------|---|------------------------|--|--|--|
| | Special Areas of Conservation (SAC) | | | | | |
| 000412 | Slieve Bloom Mountains SAC | [4010] Wet Heath [7130] Blanket Bogs (Active)* [91E0] Alluvial Forests* | Within Co. Of- faly | | | |
| 000566 | All Saints Bog And Esker SAC | [6210] Orchid-rich Calcareous Grassland* [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation [91D0] Bog Woodland* | Within Co. Of- faly | | | |
| 000571 | Charleville Wood SAC | [91A0] Old Oak Woodlands [1016] Desmoulin's Whorl Snail (Vertigo mou- linsiana) | Within Co. Of- faly | | | |
| 000572 | Clara Bog SAC | [6210] Orchid-rich Calcareous Grassland* [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation [91D0] Bog Woodland* | Within Co. Of- faly | | | |
| 000575 | Ferbane Bog SAC | [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation | Within Co. Of- faly | | | |
| 000576 | Fin Lough (Offaly) SAC | - [7230] Alkaline Fens - [1013] Geyer's Whorl Snail (<i>Vertigo geyeri</i>) | Within Co. Of- faly | | | |
| 000580 | Mongan Bog SAC | [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation | Within Co. Of- faly | | | |
| 000581 | Moyclare Bog SAC | [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation | Within Co. Of- faly | | | |
| 000582 | Raheenmore Bog SAC | [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation | Within Co. Of- faly | | | |



| 000585 | Sharavogue Bog SAC | [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation | Within Co. Of- faly |
|--------|------------------------------------|---|---------------------------|
| 000919 | Ridge Road, SW of Rapemills SAC | [6210] Orchid-rich Calcareous Grassland* | Within Co. Of- faly |
| 000925 | The Long Derries, Edenderry SAC | [6210] Orchid-rich Calcareous Grassland* | Within Co. Of- faly |
| 001776 | Pilgrim's Road Esker SAC | [6210] Orchid-rich Calcareous Grassland* | Within Co. Of- faly |
| 002147 | Lisduff Fen SAC | [7220] Petrifying Springs* [7230] Alkaline Fens [1013] Geyer's Whorl Snail (<i>Vertigo geyeri</i>) | Within Co. Of- faly |
| 002162 | River Barrow And River Nore SAC | [1130] Estuaries [1140] Tidal Mudflats and Sandflats [1170] Reefs [1310] Salicornia Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [3260] Floating River Vegetation [4030] Dry Heath [6430] Hydrophilous Tall Herb Communities [7220] Petrifying Springs* [91A0] Old Oak Woodlands [91E0] Alluvial Forests* [1016] Desmoulin's Whorl Snail (<i>Vertigo moulinsiana</i>) [1029] Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>) [1092] White-clawed Crayfish (<i>Austropotamobius pallipes</i>) [1095] Sea Lamprey (<i>Petromyzon marinus</i>) [1096] Brook Lamprey (<i>Lampetra planeri</i>) [1099] River Lamprey (<i>Lampetra fluviatilis</i>) [1103] Twaite Shad (<i>Alosa fallax</i>) [1106] Atlantic Salmon (<i>Salmo salar</i>) [1355] Otter (<i>Lutra lutra</i>) [1421] Killarney Fern (<i>Trichomanes speciosum</i>) [1990] Nore Freshwater Pearl Mussel (<i>Margaritifera durrovensis</i>) | Within Co. Of- faly |
| 002236 | Island Fen SAC | [5130] Juniper Scrub [7230] Alkaline Fens | Within Co. Of- faly |
| 000216 | River Shannon Callows SAC | [6410] Molinia Meadows [6510] Lowland Hay Meadows [8240] Limestone Pavement* [91E0] Alluvial Forests* [1355] Otter (<i>Lutra lutra</i>) | Within Co. Of- faly |
| 002213 | Glenloughaun Esker SAC | - [6210] Orchid-rich Calcareous Grassland* | Within the 15km buffer |



| 002356 | Ardgraigue Bog SAC | [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation | Within the 15km buffer |
|--------|---------------------------------------|---|---------------------------|
| 002241 | Lough Derg, North-east Shore SAC | [5130] Juniper Scrub [7210] Cladium Fens* [7230] Alkaline Fens [8240] Limestone Pavement* [91E0] Alluvial Forests* [91J0] Yew Woodlands* | Within the 15km buffer |
| 000391 | Ballynafagh Bog SAC | [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation) | Within the 15km buffer |
| 000396 | Pollardstown Fen SAC | [7210] Cladium Fens* [7220] Petrifying Springs* [7230] Alkaline Fens [1013] Geyer's Whorl Snail (<i>Vertigo geyeri</i>) [1014] Narrow-mouthed Whorl Snail (<i>Vertigo angustior</i>) [1016] Desmoulin's Whorl Snail (<i>Vertigo moulinsiana</i>) | Within the 15km buffer |
| 002331 | Mouds Bog SAC | [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation | Within the 15km buffer |
| 001387 | Ballynafagh Lake SAC | [7230] Alkaline Fens [1016] Desmoulin's Whorl Snail (Vertigo mou- linsiana) [1065] Marsh Fritillary (Euphydryas aurinia) | Within the 15km buffer |
| 000859 | Clonaslee Eskers And Derry Bog SAC | [7230] Alkaline Fens [1013] Geyer's Whorl Snail (<i>Vertigo geyeri</i>) | Within the 15km buffer |
| 002141 | Mountmellick SAC | - [1016] Desmoulin's Whorl Snail (<i>Vertigo mou- linsiana</i>) | Within the 15km buffer |
| 002332 | Coolrain Bog SAC | [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation | Within the 15km buffer |
| 002333 | Knockacoller Bog SAC | [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation | Within the 15km buffer |
| 002342 | Mount Hevey Bog SAC | [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation | Within the 15km buffer |
| 000440 | Lough Ree SAC | [3150] Natural Eutrophic Lakes [6210] Orchid-rich Calcareous Grassland* [7110] Active Raised Bog* [7120] Degraded Raised Bog [7230] Alkaline Fens | Within the 15km buffer |



| | | [8240] Limestone Pavement* [91A0] Old Oak Woodlands [91D0] Bog Woodland* [1355] Otter (<i>Lutra lutra</i>) | |
|--------|---|--|---------------------------|
| 001625 | Castlesampson Esker SAC | [3180] Turloughs* [6210] Orchid-rich Calcareous Grassland* | Within the 15km buffer |
| 002339 | Ballynamona Bog And Corkip Lough SAC | [3180] Turloughs* [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation [91D0] Bog Woodland* | Within the 15km buffer |
| 000641 | Ballyduff/Clonfinane Bog SAC | [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation [91D0] Bog Woodland* | Within the 15km buffer |
| 000647 | Kilcarren-Firville Bog SAC | [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation | Within the 15km buffer |
| 000934 | Kilduff, Devilsbit Moun- tain SAC | [4030] Dry Heath [6230] Species-rich Nardus Grassland* | Within the 15km buffer |
| 001683 | Liskeenan Fen SAC | - [7210] Cladium Fens* | Within the 15km buffer |
| 002137 | Lower River Suir SAC | [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [3260] Floating River Vegetation [6430] Hydrophilous Tall Herb Communities [91A0] Old Oak Woodlands [91E0] Alluvial Forests* [91J0] Yew Woodlands* [1029] Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>) [1092] White-clawed Crayfish (Austropotamobius pallipes) [1095] Sea Lamprey (<i>Petromyzon marinus</i>) [1096] Brook Lamprey (<i>Lampetra planeri</i>) [1099] River Lamprey (<i>Lampetra fluviatilis</i>) [1103] Twaite Shad (<i>Alosa fallax</i>) [1106] Atlantic Salmon (<i>Salmo salar</i>) [1355] Otter (<i>Lutra lutra</i>) | Within the 15km buffer |
| 002206 | Scohaboy (Sopwell) Bog SAC | - [7120] Degraded Raised Bog | Within the 15km buffer |
| 002207 | Arragh More (Der- rybreen) Bog SAC | - [7120] Degraded Raised Bog | Within the 15km buffer |
| 002353 | Redwood Bog SAC | [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation | Within the 15km buffer |

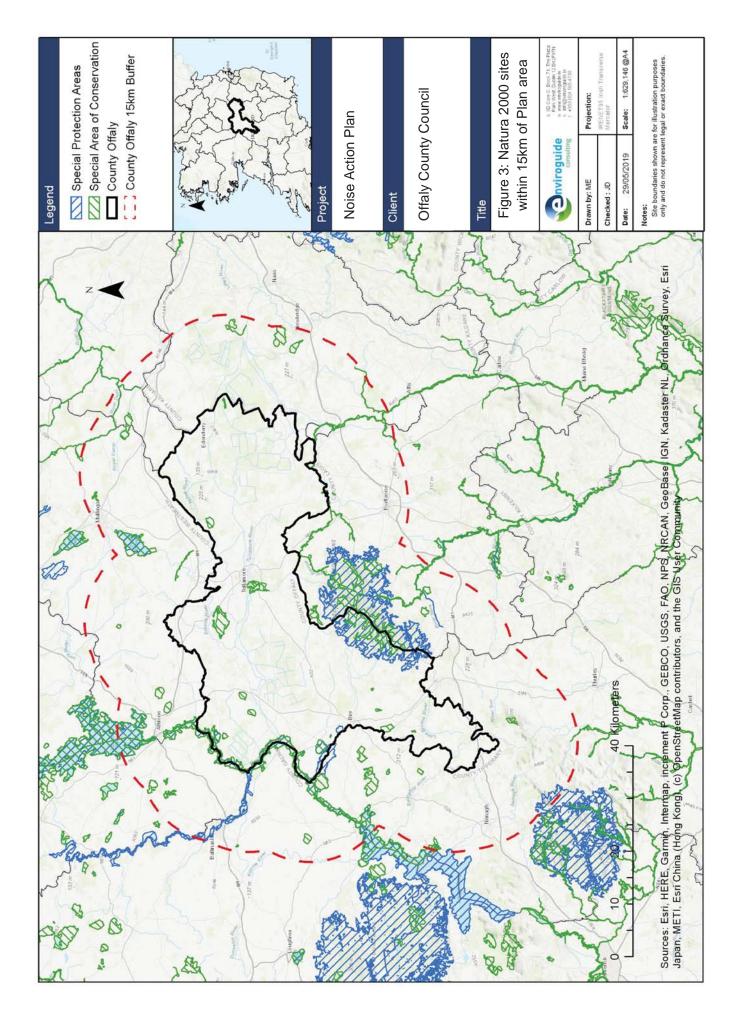


| 000685 | Lough Ennell SAC | - [7230] Alkaline Fens | Within the 15km buffer |
|--------|---|--|---------------------------|
| 001831 | Split Hills And Long Hill Esker SAC | - [6210] Orchid-rich Calcareous Grassland* | Within the 15km buffer |
| 002205 | Wooddown Bog SAC | - [7120] Degraded Raised Bog | Within the 15km buffer |
| 002299 | River Boyne And River Blackwater SAC | [7230] Alkaline Fens [91E0] Alluvial Forests* [1099] River Lamprey (<i>Lampetra fluviatilis</i>) [1106] Atlantic Salmon (<i>Salmo salar</i>) [1355] Otter (<i>Lutra lutra</i>) | Within the 15km buffer |
| 002313 | Ballymore Fen SAC | - [7140] Transition Mires | Within the 15km buffer |
| 002336 | Carn Park Bog SAC | [7110] Raised Bog (Active)* [7120] Degraded Raised Bog | Within the 15km buffer |
| 002337 | Crosswood Bog SAC | [7110] Raised Bog (Active)* [7120] Degraded Raised Bog | Within the 15km buffer |
| | | Special Protection Areas (SPA) | |
| 004017 | Mongan Bog SPA | - [A395] Greenland White-fronted Goose (Anser albifrons flavirostris) | Within Co. Of- faly |
| 004086 | River Little Brosna Cal- lows SPA | [A038] Whooper Swan (<i>Cygnus cygnus</i>) [A050] Wigeon (<i>Anas penelope</i>) [A052] Teal (<i>Anas crecca</i>) [A054] Pintail (<i>Anas acuta</i>) [A056] Shoveler (<i>Anas clypeata</i>) [A140] Golden Plover (<i>Pluvialis apricaria</i>) [A142] Lapwing (<i>Vanellus vanellus</i>) [A156] Black-tailed Godwit (<i>Limosa limosa</i>) [A179] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A395] Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A999] Wetland and Waterbirds | Within Co. Of- faly |
| 004096 | Middle Shannon Cal- lows SPA | [A038] Whooper Swan (Cygnus cygnus) [A050] Wigeon (Anas penelope) [A122] Corncrake (Crex crex) [A140] Golden Plover (Pluvialis apricaria) [A142] Lapwing (Vanellus vanellus) [A156] Black-tailed Godwit (Limosa limosa) [A179] Black-headed Gull (Chroicocephalus ridibundus) [A999] Wetland and Waterbirds | Within Co. Of- faly |
| 004103 | All Saints Bog SPA | - [A395] Greenland White-fronted Goose (Anser albifrons flavirostris) | Within Co. Of- faly |



| 004137 | Dovegrove Callows SPA | - [A395] Greenland White-fronted Goose (Anser albifrons flavirostris) | Within Co. Of- faly |
|--------|---|---|---------------------------|
| 004160 | Slieve Bloom Mountains SPA | - [A082] Hen Harrier (<i>Circus cyaneus</i>) | Within Co. Of- faly |
| 004165 | Slievefelim to Silver- mines Mountains SPA | - [A082] Hen Harrier (<i>Circus cyaneus</i>) | Within the 15km buffer |
| 004044 | Lough Ennell SPA | [A059] Pochard (<i>Aythya ferina</i>) [A061] Tufted Duck (<i>Aythya fuligula</i>) [A125] Coot (<i>Fulica atra</i>) [A999] Wetland and Waterbirds | Within the 15km buffer |
| 004064 | Lough Ree SPA | [A004] Little Grebe (<i>Tachybaptus ruficollis</i>) [A038] Whooper Swan (<i>Cygnus cygnus</i>) [A050] Wigeon (<i>Anas penelope</i>) [A052] Teal (<i>Anas crecca</i>) [A053] Mallard (<i>Anas platyrhynchos</i>) [A056] Shoveler (<i>Anas clypeata</i>) [A061] Tufted Duck (<i>Aythya fuligula</i>) [A065] Common Scoter (<i>Melanitta nigra</i>) [A067] Goldeneye (<i>Bucephala clangula</i>) [A125] Coot (<i>Fulica atra</i>) [A140] Golden Plover (<i>Pluvialis apricaria</i>) [A142] Lapwing (<i>Vanellus vanellus</i>) [A193] Common Tern (<i>Sterna hirundo</i>) | Within the 15km buffer |
| 004232 | River Boyne and River Blackwater SPA | - [A229] Kingfisher (Alcedo atthis) | Within the 15km buffer |
| 004233 | River Nore SPA | - [A229] Kingfisher (Alcedo atthis) | Within the 15km buffer |
| 004097 | River Suck Callows SPA | [A038] Whooper Swan (<i>Cygnus cygnus</i>) [A050] Wigeon (<i>Anas penelope</i>) [A140] Golden Plover (<i>Pluvialis apricaria</i>) [A142] Lapwing (<i>Vanellus vanellus</i>) [A395] Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A999] Wetland and Waterbirds | Within the 15km buffer |
| 004058 | Lough Derg (Shannon) SPA | [A017] Cormorant (<i>Phalacrocorax carbo</i>) A061] Tufted Duck (<i>Aythya fuligula</i>) [A067] Goldeneye (<i>Bucephala clangula</i>) [A193] Common Tern (<i>Sterna hirundo</i>) [A999] Wetland and Waterbirds | Within the 15km buffer |





2.4 Assessment of Significance of Potential Impacts

The potential for significant impacts resulting from the Offaly County Council Noise Action Plan has been assessed in relation to Natura 2000 sites within the precautionary zone of potential impact.

Impacts that require consideration are categorised under the following headings, as outlined in 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, 2001).

- Habitat loss or alteration;
- Habitat / species fragmentation;
- Disturbance and / or displacement of species;
- Changes in population density; and
- Changes in water quality and resource.

Following assessment, it is considered that the Noise Action Plan will not result in any significant effects on any Natura 2000 sites.

Offaly County Council Noise Action Plan is designed to inform responses throughout the local authority to the effects of Environmental Noise and does not identify specific areas for development. Any future projects resulting from the objectives laid out in the Strategy will need to comply with the relative legislation in relation to Appropriate Assessment, where appropriate.

2.4.1 In-combination Effects

The following planning and policy documents were reviewed and considered for possible incombination effects with the proposed Plan:

- Offaly County Development Plan 2014 2020; and
- Offaly's Heritage Plan 2017 2021.



3 CONCLUSION

In conclusion, further to a screening of Offaly County Council's Noise Action Plan for possible significant effects on Natura 2000 sites no significant effects were identified.

The screening outlined in this report included an assessment of possible in-combination effects. Based on the objective information contained in this report and applying the precautionary principle, it is concluded that the Noise Action Plan will not have a significant effect on Natura 2000 sites.

Other Local Authority documents such as Offaly's Development Plan will incorporate the Noise Action Plan specific actions. These, as part of the plan preparation process will be subject to SEA and AA that ensures that objectives and actions that result will be adequately examined for ecological effects.

Furthermore, should specific actions from Offaly's plan arise, they will be subjected to both AA and EIA process when sufficient design details exist. The AA and EIA process will ensure that any possible environmental and ecological effects of any outcomes from resulting actions will be adequately assessed.

3.1 Reason for Conclusion

The reasons for the above conclusion are summarised as follows:

Due to the nature of Offaly's County Council Noise Action Plan, and in particular its main objective of incorporating noise impact assessment into all relevant policies and plans within Offaly County Council, there is no possible effects identified to any Natura 2000 sites as a result of the Noise Action Plan.



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