MWP

EIAR
Chapter 15 Interaction of the Foregoing

An Rínn Rua Hotel and Leisure Park
County Kerry

Rínn Rua Holiday Park LTD
April 2024

Contents

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15. Interaction of the Foregoing

15.1 Introduction

This EIAR supports an application for the proposed Rínn Rua Hotel and Leisure Park development. In accordance with the requirements of the 2014 EIA Directive, the EIAR has presented the environmental assessments of the proposed development under each required environmental factor. Where relevant, the interaction between the factors, which is the interactions between specific environmental aspects and effects, are already addressed within each of the individual assessment topic areas or chapters of this EIAR.

This chapter of the EIAR evaluates the potential interaction of effects, which the proposed development may have on the receiving environment and sensitive receptors.

15.2 Scope

There is potential for interactions between one aspect of the environment and another which can result in direct or indirect effects, and which may be positive or negative. Where relevant, interactions between specific environmental aspects and effects and the measures proposed to mitigate them are already addressed within each of the individual assessment topic areas of this EIAR (i.e. within Chapters 3 to 12). However, there is also the potential for interaction between potential effects. The purpose of this chapter is to draw attention to interactions and interdependencies between one topic and another.

15.3 Identification of Environmental Effects

While all environmental aspects can be inter-related to some extent, the following outlines the key interactions identified between each of the various environmental subject areas considered in this EIAR for both the construction and operational phases of the Proposed Development.

A matrix has been generated to summarise the relevant interactions and interdependencies between specific environmental aspects. The matrix is presented in Error! Reference source not found. below. It contains each of the environmental topics, which were considered as part of this environmental impact assessment, on both axes. These interactions have been identified for both the construction [C] and operation [O] phases of the proposed development. Full details of the significance of the effects and the relevant interactions of the environmental aspects along with any proposed mitigation are discussed within each of the individual preceding Chapters.

A number of interactions have been identified in the EIAR. These are set out below and have been addressed in the relevant chapter.

15.3.1 Population and Human Health

There is potential for further effects on population and human health in relation to traffic and transport, water, air quality, biodiversity, material assets, landscape and visual, noise and vibration. Most of the interactions with water, land and soils, noise, air quality and visual effects are associated with the construction works. The interaction with traffic and transport is associated with the road widening and upgrades to the beach access road during phase 1 of the construction works, as well as the increase in traffic on public roads during the construction and operational phases. The interaction with water effects during the operational phase are associated with the

discharge of treated water to ground. The effects associated with each individual aspect are addressed in Chapter 4 Population and Human Health.

15.3.2 Traffic and Transportation

Traffic associated with the proposed construction works has the potential to have an effect on air quality and climate, water, noise and vibration, population and human health, land and soils and biodiversity. There will also be interactions between traffic and population and human health during the operational phase. The effects associated with each aspect are addressed individually in Chapter 12 Traffic and Transportation.

15.3.3 Biodiversity

Changes associated with biodiversity such as the removal of habitats, planting of new trees and other vegetation and landscaping works has the potential to cause interactions with other aspects of the environment.

The interaction of biodiversity with land and soils is expected to be greatest during the construction phase when the excavation of land and soils will effect on biodiversity. There will also be interaction between biodiversity and water, traffic and transport, noise and vibration during construction activities. These effects have been assessed in the Biodiversity Chapter. Construction scheduling and the recommended mitigation measures set out in the biodiversity and roads and traffic chapters will reduce any effects.

During the operational phase, the projects effects on population, traffic and noise will also have an interactive effects on biodiversity.

The associated effects for each aspect are addressed individually in Chapter 5 Biodiversity.

15.3.4 Water

There is potential for the effects associated with surface water and ground water to interact with population and human health, land and soils and biodiversity. The potential effects associated with surface water and ground water will be associated with excavation activities and potential pollution during the construction phase and due to discharge of treated water to ground during the operational phase. These effects are addressed individually and in detail in Chapter 7 Water.

15.3.5 Land and Soils

Soil and rock will require excavating to accommodate the proposed roads, services and the concrete slabs for the mobile homes and other prefabricated accommodation structures. The excavation, stockpiling and movement of soil during the construction of the proposed development has the potential to effect air quality from increased associated dust emissions. There is also potential for related construction effects on surface and ground water, cultural heritage/archaeology, biodiversity, landscape, noise and vibration and traffic and transportation. The project will be developed in line with the drainage proposals for surface water management detailed in the Chapter 2 of this EIAR and the CEMP as part of the civil works to ensure adequate protection of water courses during the construction phase. The associated effects for each aspect are addressed individually in Chapter 6 Land and Soils.

15.3.6 Air and Climate

There is potential for emissions to air during the construction phases in the forms of temporary fugitive dust and vehicle movements and emissions. The interaction of the dust could effect population and human health, traffic and transportation, biodiversity and land and soils. During the operational phase the emissions to air would be associated with the use of vehicles and energy by visitors and staff and emissions from the heating, kitchen and pool facilities and equipment. The potential and predicted effects of emissions associated with the construction and operational phases of the proposed development are addressed in Chapter 13 Air Quality and Climate.

15.3.7 Noise and Vibration

Noise effects will occur during the construction phase of the project as a result of increased levels of site associated traffic and excavations, with a lesser effect during the operational phase due to occasional maintenance works and visitor traffic. Noise and Vibration has the potential to effect on population and human health, biodiversity and traffic and transportation which are addressed individually and in detail in Chapter 11 Noise and Vibration.

15.3.8 Landscape and Visual

Landscape and visual effects have the potential to interact with other aspects of the environment due to the temporary and permanent physical changes which will occur during construction and operation phases. There is potential for interactions with population and human health and cultural heritage. These are addressed individually and in detail in Chapter 10 Landscape and Visual.

15.3.9 Cultural Heritage and Archaeology

Any excavations needed to assess and preserve archaeology and cultural heritage resources on the site has the potential to effect on land and soils, biodiversity and water resources during and prior to the construction phase.

The cultural heritage effects also have potential to interact with landscape and visual effects. These are addressed individually and in detail in Chapter 9 Cultural Heritage.

15.3.10 Material Assets

The use of services during construction and the increase in population and associated increased load on services during operation has the potential to effect on material assets such as roads, public walk/cycle ways, water, waste water, electrical and communications infrastructure. There is potential for interaction between material assets effects and population and human health and traffic and transport effects from the proposed development. These are addressed individually and in detail in Chapter 8 Material Assets.

15.4 Summary of Interactions

Table 15-1 Matrix of Effects

	Population and Human Health	Traffic and Transport	Biodiversity	Water	Land and Soils	Air and Climate	Noise and Vibration	Landscape and Visual	Cultural Heritage	Material Assets
Population and Human Health		C/O	C/O	C/O	C	C/O	C/O	C/O		O
Traffic and Transport	C/O		C/O		C	C/O	C/O			C
Biodiversity	C/O	C/O		C/O	C		C/O			
Water	C/O		C/O		C					
Land and Soils	C	C	C	C/O		C			C	
Air and Climate	C/O	C/O			C					
Noise and Vibration	C/O	C/O	C/O							
Landscape and Visual	C/O								O	
Cultural Heritage					C			O		
Material Assets	O	C								

	Interaction
	No Interaction

C	Construction Phase Effect
O	Operation Phase Effect