# **Dursey Island Cable Car and Visitor Centre**

## Non-Technical Summary of the Environmental Impact Assessment Report

## Table of Contents

| 1.0  | INTF        | RODUCTION                                     |            |
|------|-------------|---|------------|
|      | 1.1.        | Overview                                      | ii         |
|      | 1.2.        | Requirement for an EIAR                       | iii        |
| 2.0  | NEE         | D FOR THE PROPOSED DEVELOPMENT                | IV         |
| 3.0  | ALT         | ERNATIVES CONSIDERED                          | V          |
|      | 3.1         | Cableway Technology Options                   | v          |
|      | 3.2         | Cableway Alignment Options                    | vi         |
|      | 3.3         | Architectural Design Options                  | vi         |
|      | 3.4         | Multi-Criteria Analysis Applied               | viii       |
| 4.0  | DES         | CRIPTION OF THE PROPOSED DEVELOPMENT          | IX         |
| 5.0  | TRA         | FFIC AND TRANSPORT                            | XI         |
| 6.0  | POP         | ULATION AND HUMAN HEALTH                      | XII        |
| 7.0  | BIO         | DIVERSITY                                     | XIV        |
| 8.0  | SOIL        | _S AND GEOLOGY                                | XVII       |
| 9.0  | HYD         | ROGEOLOGY                                     | XVIII      |
| 10.0 | HYD         | ROLOGY  | XIX        |
| 11.0 | LAN         | DSCAPE AND VISUAL AMENITY                     | XX         |
| 12.0 | NOI         | SE AND VIBRATION                              | XX         |
| 13.0 | AIR         | QUALITY AND CLIMATE                           | XXI        |
| 14.0 | ARC         | HAEOLOGICAL AND CULTURAL HERITAGE             | XXII       |
| 15.0 | ARC         | HITECTURAL HERITAGE                           | XXIII      |
| 16.0 | MAT         | ERIAL ASSETS AND LAND                         | XXIII      |
| 17.0 | MAJ<br>IMP/ | IOR ACCIDENTS, INTERRELATIONSHIPS AND<br>ACTS | CUMULATIVE |
| 18.0 | FUR         | THER INFORMATION & WHAT HAPPENS NEXT          | XXVI       |

## 1.0 INTRODUCTION

This Environmental Impact Assessment Report (EIAR) has been prepared in respect of the construction and operation of the proposed Dursey Island Cable Car and Visitor Centre development, hereafter referred to the 'proposed development'. It has been prepared by Roughan & O'Donovan Consulting Engineers (ROD) and a team of specialist sub-consultants, with the assistance of the Applicant, Cork County Council (CCC).

This EIAR is presented in three volumes: the standalone Non-Technical Summary is Volume 1; Volume 2 contains the main text; and Volume 3 contains the associated Figures.

This EIAR has considered and assessed the likely significant effects of the construction and operation of the proposed development in respect of:

- Traffic and transport;
- Population and human health;
- Biodiversity;
- Soils and geology;
- Hydrogeology;
- Hydrology;
- Landscape and visual amenity;
- Noise and vibration;
- Air quality and climate;
- Archaeology and cultural heritage;
- Architectural heritage;
- Material assets and land; and,
- Interactions, major accidents and cumulative environmental impacts.

It should be noted that the surveys, assessments and information that form the basis of this EIAR are based on the current design of the proposed development, which has been developed to a stage that permits a fully informed Environmental Impact Assessment (EIA). While some refinements of the current design may occur during the detailed design stage, changes will not be made which could give rise to any significant adverse environmental impacts not addressed within this EIAR.

#### 1.1. Overview

The Dursey Island Cable Car is located at the western tip of the Beara Peninsula in west County Cork. It spans the Dursey Sound, linking the eastern coast of Dursey Island with the mainland at Ballaghboy, Lambs Head. Originally constructed in 1969 to transport island inhabitants, farmers and livestock to and from the mainland, the cableway is now predominantly used by tourists, particularly during the summer months. In recent years, limited passenger capacity and turnaround of the cableway have resulted in a supply deficit. During the peak months of July and August, queuing times for the Cable Car in the region of 1 - 2 hours are commonplace on both the island and mainland.

In 2018, CCC, working in partnership with Fáilte Ireland, commissioned ROD to provide multidisciplinary consultancy services including engineering, architectural,

landscape architectural, quantity surveying, cultural heritage, planning, environmental consultancy services and tourism consultancy services for the proposed development. The proposed development involves the replacement of the existing cableway, the construction of two new Cable Car stations, an expanded mainland-side visitor car park, a mainland-side visitor interpretive centre (the 'Visitor Centre') and a mainland-side café. It is also proposed to update the associated infrastructure including telecommunications, drinking water supply and wastewater treatment systems. Localised road improvement works are also proposed for the primary approach road to the site (the R572), on the 12km stretch between its junction with the R575 (at Bealbarnish Gap) and the cable car site, in order to ease existing congestion and support the increase in traffic volumes anticipated during the operation of the proposed development.

The proposed development will allow a greater number of visitors (an annual maximum of 80,000, as decided by CCC) to make the cable car journey to and from Dursey Island, with up to 100,000 persons expected to visit the mainland side of the site.

### **1.2.** Requirement for an EIAR

The proposed development does not meet the thresholds for which the preparation of an EIAR is a mandatory requirement under Schedule 5 of the *Planning and Development Regulations* 2001 - 2015. However, the footprint of the proposed development is in direct proximity to the foreshore and the proposed Cable Car will traverse the foreshore. Therefore, Section 226 of the *Planning and Development Act* 2000 is applicable. As stated in Section 226:

"Where development is proposed to be carried out wholly or partly on the foreshore—

- (a) by a local authority that is a planning authority, whether in its capacity as a planning authority or otherwise, or
- (b) by some other person on behalf of, or jointly or in partnership with, a local authority that is a planning authority, pursuant to an agreement entered into by that local authority whether in its capacity as a planning authority or otherwise [...]

[...] Section 175 shall apply to proposed development belonging to a class of development, identified for the purposes of Section 176"

Further, Section 175 of the *Planning and Development Act* 2000 stipulates that:

"Where development belonging to a class of development, identified for the purposes of Section 176, is proposed to be carried out—

- (a) by a local authority that is a planning authority, whether in its capacity as a planning authority or in any other capacity, or
- (b) by some other person on behalf of, or jointly or in partnership with, such a local authority, pursuant to a contract entered into by that local authority whether in its capacity as a planning authority or in any other capacity, within the functional area of the local authority concerned (hereafter in this section referred to as "proposed development"),

the local authority shall prepare, or cause to be prepared, an environmental impact statement [now referred to as an EIAR] in respect thereof."

Therefore, preparation of an EIAR for submission as part of the planning application to the Competent Authority (An Bord Pleanála) is a mandatory requirement for the proposed development.

## 2.0 NEED FOR THE PROPOSED DEVELOPMENT

The execution of the proposed development is consistent with the objectives of the following European, national, regional and local planning policy documents:

#### **Multilateral Policy**

• United Nations 2030 Agenda for Sustainable Development

#### **European Policy**

• Europe 2020 Strategy

#### National Policy

- Project Ireland 2040: National Planning Framework (2018) and the National Development Plan (2018-2027)
- Rural Development Plan (2014-2020)
- Realising Our Rural Potential Action Plan for Rural Development (2017)
- People, Place and Policy Growing Tourism to 2025 (2015)
- Building on Recovery Infrastructure and Capital Investment (2016 2021)
- The National Spatial Strategy (2002 2020)

#### **Regional Policy**

• Draft Southern Regional and Spatial Economic Strategy (2019-2031)

#### Local Policy

- Cork County Development Plan (2014-2020)
- Kerry County Development Plan (2015-2021)
- Cork Tourism Strategy 2016: Growing Tourism in Cork A Collective Strategy
- West Cork Municipal District Local Area Plan (2017)
- West Cork Islands Integrated Development Strategy (2010)

The proposed development is considered necessary for the following principal reasons:

• The capacity and turnover of the existing Dursey Island Cable Car cannot meet current or future demand for its use, and there is significant untapped tourism potential at the site. Replacement of the cableway with a state-of-the-art equivalent would allow a greater number of annual visitors to the site, and to Dursey Island. As a result, greater revenue would be generated by the attraction. Additionally, indirect economic benefits would likely also accrue to other businesses in the Beara, west Cork and west Kerry regions, and other attractions on the Wild Atlantic Way (WAW). By delivering growth in the local and regional tourism sectors, the proposed development would contribute to achievement of objectives set out in a number of national, regional and local policy documents, including the 'Action Plan for Rural Development 2017', 'People, Place and Policy Growing Tourism to 2025', the 'Draft Southern

Regional, Spatial and Economic Strategy 2019 – 2031', the 'Cork County Development Plan 2014 – 2020', the 'Kerry County Development Plan 2015 – 2021', the 'Cork Tourism Strategy 2016: Growing Tourism in Cork – A Collective Strategy', the 'West Cork Municipal District Local Area Plan 2017' and the 'West Cork Islands Integrated Development Strategy 2010'.

- The existing infrastructure is substantially corroded and non-compliant with European Standards for '*The Safety Requirements for Cableway Installations Designed to Carry Persons*', S.I. No. 470/2003 or S.I. 766/2007. While there are no immediate safety concerns for those using the existing cableway, the infrastructure in its current form will need to be replaced in the short- to medium-term in order to maintain safe and convenient access to the island for island residents/farmers and visitors.
- At present, the Dursey Island Cable Car provides visitors with a suboptimal visitor experience. During the peak months of July and August, waiting times to board the carrier cabin of 2 hours and upwards are commonplace on the island and mainland. In terms of comfort and shelter, facilities are inadequate, with visitors sometimes having to queue outdoors during inclement weather. Furthermore, there are no welfare facilities (i.e. toilets) for visitors on the island. Visitors have also complained about a lack of information on Dursey Island regarding walking trails, history and natural heritage. The proposed development would offer a substantially enhanced visitor proposition without queues, with comfort and shelter, with interpretive information on cultural and natural heritage and activities on the island, and with adequate welfare facilities.
- As is stated in the 'West Cork Islands Integrated Development Strategy 2010', Dursey Island is threatened with permanent depopulation in the short-term and it is an explicit objective of the strategy to "retain and enhance population levels on the [West Cork] islands". At present, there are just two permanent residents living on the island and abandonment of homes and farmland is in evidence. As such, any development which makes permanent residence on the island more feasible is desirable. By improving ease-of-access to-and-from the island (i.e. shorter, more comfortable and safer journeys), the proposed development may contribute to the prevention of depopulation on the island. By increasing the number of annual visitors to the island, it will also create new opportunities for local businesses, which might also increase the viability of life on the island. Similarly, the proposed development may also increase the viability of farming on the island, which in turn would contribute to the maintenance of a sufficient area of suitable foraging habitat for red-billed chough (Pyrrhocorax pyrrhocorax) (for further details, please refer to Chapter 7 of this EIAR -Biodiversity).

## 3.0 ALTERNATIVES CONSIDERED

During the preliminary design stage of the proposed development, the following alternative design options were considered:

- Four no. Cableway Technology Options;
- Three no. Cableway Alignment Options; and
- Nine no. Architectural Design Options.

## 3.1 Cableway Technology Options

The following four cableway technology options were considered:

- 1. Detachable gondola;
- 2. Pulsed ropeway;
- 3. Synchronised reversible ropeway; and,
- 4. Desynchronised reversible ropeway.

The merits of these options were assessed in terms of the following criteria:

- 1. Investment-cost ratio;
- 2. Operating cost ratio;
- 3. Wind resistance;
- 4. Operational flexibility;
- 5. Quality of the experience provided; and,
- 6. Transport capacity range.

Accordingly, it was decided that the most appropriate technological solution for the Dursey Island Cable Car is Technology Option 4 - a de-synchronised reversible ropeway with two cable cars on two independent tracks and an overall maximum capacity of 200 - 300 persons per hour in each direction.

### 3.2 Cableway Alignment Options

The following three options were considered for the alignment of the proposed cableway:

- 1. Existing to existing (offset 14m to the north),
- 2. Slipway to slipway, and
- 3. Slipway to existing.

Each of these three options were considered in the various architectural design options, as set out in the following Section (3.3).

### 3.3 Architectural Design Options

Nine no. architectural design options were considered for the proposed development, as set out below. Options 1 - 3a were developed at Options Stage, and were assessed in a multi-criteria analysis (MCA), as described in the following Section (3.4). Options 3b - 3d were developed subsequently, and may be regarded as refinements of Options 3a.

#### 1. Architectural Design Option 1 – Concourse

In this option, the proposed development is situated in roughly the same location as the existing site. A 184-space terraced visitor car park dominates the mainland side of the site, with the proposed 'conourse' Visitor Centre (including an exhibition hall, shop, large café/restaurant and office space) occupying the undercroft beneath. A glazed façade faces south, offering views over the Dursey Sound from the Visitor Centre, and an external viewing platform is cantilevered over the rocky shore. The mainland station is positioned on the high ground immediately north-east of the existing car park, with the cable cars travelling out and over the proposed Visitor Centre and viewing platform, to a wishbone-shaped pylon, and onwards to Dursey Island. On the island, it is proposed to construct a simple, scaled-back station with seating area, welfare facilities and shelter.

Alignment: Existing to existing

2. Architectural Design Option 1a

> This option may be regarded as a scaled-back version of Option 1, with a 90space car park, and smaller undercroft Visitor Centre.

Alignment: Existing to existing

#### З. Architectural Design Option 2 – Vertical Interchange

In this option, the mainland side of the proposed development is situated at the location of the existing slipway, immediately south-east of the existing Cable Car site. The Visitor Centre is conceived as a 6 - 7 storey tower building with the mainland Cable Car station on the top storey. A largely flat, 177-space car park is located to the rear of the Visitor Centre. On the island too, a multistorey tower structure is proposed - this to be situated at the location of the existing Dursey Island slipway, immediately south-west of the existing island station. The use of towers eliminates the need for pylons.

Alignment: Slipway to slipway

#### 4. Architectural Design Option 2b

This option constitutes an amalgamation of Options 1 and 2, wherein the island station is identical to that of Option 1 (i.e. scaled back and situated at the same location as the existing station) and the mainland station and Visitor Centre design is the same as that in Option 2 (i.e. multi-storey tower block), except that the mainland tower building is rotated 21° clockwise to support the alternative alignment (slipway to existing).

Alignment: Slipway to existing

5. Architectural Design Option 3

> In this option, the mainland side of the proposed development is situated in roughly the same location as the existing infrastructure. A small Visitor Centre building with ticket desk, welfare facilities and exhibition area is positioned to the north-west of a 109-space single level car park. A diving-board like viewing platform projects south-westwards over the Dursey Sound, and the mainland station is positioned immediately north-west of the Visitor Centre building. Similar to Design Option 1, the island station is a scaled-back structure in roughly the same location as the existing infrastructure.

Alignment: Existing to existing

6. Architectural Design Option 3a

> This design is very similar to that of Option 3, except the Visitor Centre building is slightly larger, extending along the western edge of the visitor car park (which is smaller, with 100 spaces and a coach bus bay). Additionally, it is proposed to incorporate an outdoor terrace extending from the southern edge of the car park along the south-west-facing facade of the the Visitor Centre building, and onwards to the north-west, connecting the proposed development with the existing Garinish Loop walking trail.

Alignment: Existing to existing

7. Architectural Design Option 3b

This design is very similar to that of Option 3a, except:

The footprint of the Visitor Centre is extended westward.

- The Visitor Centre is broken into two buildings the interpretive exhibition space ('Visitor Centre') and café. These two structures and the mainland station (which is situated immediately north-east of the café) are connected via ramps.
- Vehicular access and a service yard have been added to the rear of the mainland station, to facilitate access for residents/farmers (who often need to move goods on the cableway) and maintenance personnel.

Alignment: Existing to existing

#### 8. Architectural Design Option 3c

This design differs from 3b principally in that:

- The mainland station has been moved westwards so that it is now positioned immediately north-west of the Visitor Centre; and,
- The Visitor Centre has been reverted to a single structure, containing both Visitor Centre and café.

The purpose of these design changes was to maintain access to an existing right of way on the north-western boundary of the site.

Alignment: Existing to existing

#### 9. Architectural Design Option 3d

In this design, the Visitor Centre is again divided into two separate structures – the Visitor Centre and a café (as in Option 3b) and the mainland station is situated on the same north-south axis as these buildings. The Visitor Centre, café and station are connected via landscaped outdoor areas. There are no underground elements. There were concerns that with Option 3c, the mainland pylon would be situated too near to the water's edge, and the changes made within the design of Option 3d allowed the pylon to be shifted inland away from the high water mark (and out of the Kenmare River Special Area of Conservation (SAC)).

Alignment: Existing to existing

#### 3.4 Multi-Criteria Analysis Applied

At Options Stage, Options 1 – 3a were appraised in a multi-criteria analysis (MCA) based on the following criteria:

- Environmental merit,
- Aesthetic merit,
- Technical merit,
- Buildability and disruption impact during construction,
- Durability and maintenance requirements,
- Capital construction costs,
- Economic viability, and
- Project risk.

As described in the previous section, since Options 3b - 3d were developed prior to the completement of the Options Report, they were not specifically assessed in the MCA. However, since they are refinements of Options 3a, it is considered that they would score very similarly to Option 3a in terms of the criteria. The results of the MCA are presented in Table 3.1, below.

|  |           | Scores      |              |              |             |              |  |  |
|--|-----------|-------------|--------------|--------------|-------------|--------------|--|--|
| Assessment Criteria                                    | Weighting | Option<br>1 | Option<br>2a | Option<br>2b | Option<br>3 | Option<br>3a |  |  |
| Environmental merit                                    | 100%      | 7           | 6            | 8            | 9           | 8            |  |  |
| Aesthetic merit  | 100%      | 8           | 9            | 8            | 7           | 8            |  |  |
| Technical merit  | 100%      | 8           | 6            | 7            | 6           | 7            |  |  |
| Buildability and disruption impact during construction | 75%       | 8           | 4            | 5            | 9           | 9            |  |  |
| Durability and maintenance requirements                | 100%      | 6           | 3            | 4            | 7           | 7            |  |  |
| Capital construction costs                             | 75%       | 4           | 0            | 3            | 7           | 6            |  |  |
| Economic viability                                     | 100%      | 9           | 4            | 8            | 6           | 8            |  |  |
| Project risk   | 100%      | 8           | 3            | 3            | 8           | 8            |  |  |
| Assess   | 58        | 35          | 46           | 59           | 61          |              |  |  |
| Weighted Assess  | 55        | 34          | 44           | 55           | 57          |              |  |  |
|  | 2         | 5           | 4            | 2            | 1           |              |  |  |

# Table 3.1Results of Multi-criteria Analysis of options including all<br/>assessment criteria

While Options 3a, b, c and d would have scored approximately equally in terms of the criteria applied, 3d was considered to be the preferred option by CCC, since it allowed vehicular access to the rear of the Cable Car, *and* allowed the mainland pylon to be situated back from the high water mark (and the Kenmare River Special Area of Conservation), *and* facilitated maintenance of an existing right of way. Thus, the design option being put forward for the proposed development is Option 3d.

## 4.0 DESCRIPTION OF THE PROPOSED DEVELOPMENT

The location of the proposed development is directly adjacent to the existing Dursey Island Cable Car in west County Cork (Plate 4.1). CCC owns and operates the cableway.

The proposed development will involve the decommissioning of the existing Dursey Island Cable Car, demolition of associated structures, and the construction of a new cableway and associated structures. In order to address existing traffic problems and facilitate anticipated increases in traffic volume to the site, it is also proposed to carry out road improvement works on the R572 approach road between the cable car site and the R572 -R575 junction at Bealbarnish Gap. These roadworks will involve construction of 10 no. passing bays and 1 no. visibility splay at Bealbarnish Gap, and completion of a number of other localised improvement works to improve forward visibility. Variable Message Signs (VMS) will also be placed at a number of locations on the approach roads to the site to inform visitors about parking/ticket availability. It is also proposed to upgrade the supporting site utilities infrastructure in order to facilitate the provision of improved welfare facilities and to accommodate the anticipated increase in visitor numbers associated with the proposed development. It has been projected that the proposed development will facilitate an anticipated annual maximum of 100,000 visitors to the mainland side of the site, with a maximum

of 80,000 of these being permitted to make the cable car journey to Dursey Island per year (as decided by CCC).



Plate 4.1 Location of Dursey Island in relation to the Beara Peninsula

The proposed cableway will run parallel to the existing alignment, offset by approximately 14m to the north. The end-to-end length of the proposed cableway will be approximately 375m. The infrastructure will include a two-car desynchronised reversible ropeway with a maximum capacity of 200-300 passengers per hour in each direction (although this volume of visitors will not be permitted to use the cableway) and two pylons – one each on the island and mainland. Some elements of the existing cableway infrastructure (the mainland pylon and the cable car itself) will be retained on-site as relics of the historic cableway.

On the mainland, it is proposed to construct a new 100-space visitor car park, an interpretive exhibition space ('Visitor Centre'), an 84-seater café, a new mainland station, and all associated facilities, utilities, infrastructure and landscaping. On Dursey Island, a new station and associated welfare facilities and waiting area will be constructed alongside the existing platform. A small existing residents' car park (approx. 10 spaces) will be retained on the island.

The majority of the proposed works will be carried out on lands currently owned by CCC, with the exception of the island works and R572 roadworks, which will necessitate the acquisition of some private land by Compulsory Purchase Order (CPO).

An 18-month construction phase is proposed. During construction works, the main site compound will be situated on the mainland, adjacent to the existing cableway in

the widest section of the existing carpark. The compound will be established at the commencement of the contract and remain in place throughout the construction period. Additionally, it is expected that the Contractor will require a smaller storage compound on Dursey Island. Suitable site security measures will be implemented on both sides of the site.

In order to prevent certain environmental impacts, it is proposed to carry out the most disruptive elements of the proposed works (e.g. earthworks) during the off-season months (i.e. October – April). Additionally, efforts will be made to maintain the operation of the existing cableway throughout works, insofar as is possible to ensure safe access.

An Outline Construction Environmental Management Plan (CEMP) has been developed and will be finalised by the successful Contractor prior to the commencement of any works, in order to ensure that commitments of the statutory approvals are adhered to. This Outline CEMP includes an Outline Environmental Operating Plan, an Outline Incident Response Plan, and an Outline Construction and Demolition Waste Management Plan.

## 5.0 TRAFFIC AND TRANSPORT

The site of the proposed development is accessed principally via the R572 Regional Road. Currently, about 22,000 visitors use the cable car in a year (not including residents/farmers), with the peak months of July and August seeing a total of nearly 10,000 journeys (i.e. roughly half of all use). A greater number again travel to the site just to look at the cableway, or with the intention of travelling on the cableway, only to turn away at the prospect of lengthy queues.

During construction, import and export movements of construction materials to the construction site will be via the R572. It is assumed that most of the construction traffic will come from the Castletownbere/Glengarriff direction since this is the main route from Cork City. Temporary traffic management arrangements will be implemented to facilitate ongoing access to the existing cable car and construction access points throughout the works. Marine access will be required for construction works on Dursey Island. Materials required for works on the island will be ferried to the slipway on the island via the slipway immediately south-east of the existing Cable Car or from the pier at Garinish Point. From the slipway on Dursey Island, materials will be transported to the construction site via the most direct route on the existing slipway access track and public road.

A Construction Traffic Management Plan (CTMP) and a CEMP, prepared by the Contractor, will be implemented to reduce associated traffic impacts and restrict the main construction activities and associated traffic to the off-season months, when traffic on the surrounding road network is considerably less than that of the peak season.

During operation, it is anticipated that there will be a greater number of site visitors making the cable car journey to Dursey Island than there are at present. CCC have decided that they will allow no more than 80,000 persons to make the journey each year. Furthermore, according to the mitigation measures set out in Chapter 7 of this EIAR – Biodiversity – visitor numbers on Dursey Island will be limited to a maximum of 12,835 per month. Thus, there are two temporal restrictions on visitor numbers to the island: an annual maximum of 80,000; and a monthly maximum of 12,835. These limits will be enforced using an appropriately designed web-based ticketing

system. The traffic impact assessment has concluded that the improved approach road and proposed visitor car park will be able to accommodate traffic volumes associated with these numbers.

## 6.0 POPULATION AND HUMAN HEALTH

The proposed development is situated in a sparsely populated rural area, dominated by pastoral agriculture. Dursey Island is one of 7 inhabited islands off the coast of west Co. Cork. It currently has just two year-round residents and is at risk of depopulation in the short to medium-term. Principal land use types in the study area are agriculture, transportation, and, tourism/recreation/amenity. Community infrastructure, utilities and services are poorly developed in the study area, particularly on Dursey Island. The Pobal HP Deprivation Index Score for the study area is 'Marginally below average', meaning the area is somewhat disadvantaged in terms of economic development. Since the mid-60s, the Dursey Island Cable Car has served as a critical mode of transportation for island residents and farmers. The existing cableway infrastructure is substantially corroded and is not (and cannot be) compliant with the relevant EU safety standards. Dangerous seafaring conditions in the Dursey Sound have prevented the establishment of a dedicated ferry service, although islanders do occasionally use marine craft to transport livestock to-and-from the island. The existing road network in the study area is narrow and winding, with poor forward visibility and, along some stretches, insufficient space for the passing of oncoming traffic. During the in-season months, congestion and informal parking are known to occur on the R572. The area is popular for tourism and recreation, particularly for walking, birdwatching and whale/dolphin watching. Excluding the main entrance to the site (via the R572), there are two access points entering/exiting the mainland side of the Cable Car site, one of which is a public right of way leading onto the Garinish Loop walking trail.

Key findings of the population and human health impact assessment are as follows:

### Agriculture

By improving ease of access to-and-from Dursey Island, the proposed development may support the repopulation of Dursey Island and prevent agricultural land abandonment.

#### Tourism, Recreation and Amenity Value

Nuisance caused by noise, vibration, dust and adverse visual effects during construction are likely to result in a temporary, insignificant loss of amenity value of recreational activities in the immediate vicinity of the construction site. By substantially improving the overall experience of site visitors (e.g. by providing toilets, shelter and interpretive information) and attracting more visitors to the site and greater Beara region, the operation of the proposed development will result in significant positive effects on tourism, recreation and amenity in the study area.

#### Journey Characteristics, Journey Amenity and Severance

Construction traffic will result in a temporary increase in heavy goods vehicles (HGVs) and plant/machinery on the R572. There will also be less parking available at the Cable Car site throughout the duration of works (as a result of the construction compound). However, it is proposed to carry out the most disruptive elements of works (i.e. earthworks) during the off-season months, and a CTMP, to be prepared by the Contractor, will be implemented for the duration of works. The existing cableway will continue to operate throughout the duration of works (insofar as

possible), and access to slipways on the mainland and island will be maintained. A Stakeholder Management and Communication Plan, setting out a protocol for the communication of information to local residents/workers, shall be developed by the Contractor, and, in the unlikely event of interruptions to the Cable Car service, local residents/farmers shall be provided with prior notice. Access will also be maintained to the two existing access points entering/exiting the mainland side of the site throughout the construction and operation of the proposed development. Completion of road improvement works will improve journey amenity for local residents. Additionally, the operation of the proposed development will increase ease-of-access between Dursey Island and the mainland, reducing severance between the two communities. Furthermore, travelling in the proposed cable car will be much quicker and more comfortable than the equivalent journey in the existing infrastructure. It is considered that the proposed development will have significant, positive effects on journey characteristics (including amenity) and severance in the study area.

#### Economic Activity

The two mobile catering facilities currently operating at the Cable Car site (one on the island and one on the mainland) may need to relocate during the construction works and during the operation of the proposed development. Job opportunities will be created during both the construction and operation of the proposed development. During construction, approx. 20 - 30 persons will be employed on-site at any one time. As stated previously, nuisance noise/vibration/dust and visual impacts associated with the construction phase are likely to have insignificant, adverse effects on tourism, recreation and amenity in the study area. However, the fact that the most disruptive elements of works will be carried out during the off-season months will mitigate to some degree against associated adverse effects on local businesses - the majority of which are seasonal in nature. It has been estimated that approx. 7 – 8 seasonal jobs will be created at the proposed Visitor Centre, with approx. 3 full-time employees retained during the off-season months (when it is proposed to close the Visitor Centre). By increasing the number of visitors at the site and in the greater Beara region, and by promoting other attractions/businesses in the area, the proposed development is expected to have significant, positive effects on regional economic activity.

#### Human Health

A preliminary asbestos survey found no evidence of asbestos-containing materials at the site of the proposed development, but a more detailed survey will be required prior to the commencement of works to rule out potential adverse health effects. A paint sample analysis identified lead-containing paints on a number of structures at the site of the proposed development, and appropriate mitigation measures will need to be incorporated into the CEMP to prevent adverse health effects arising to construction site workers. Mitigation measures to prevent the release of harmful air pollutants have been set out in Chapter 13 - Air Quality and Climate. Chapter 12 -Noise and Vibration – sets out mitigation measures to prevent significant, negative effects related to these aspects of the development. Chapters 9 and 10 -Hydrogeology and Hydrology, respectively - set out mitigation measures to prevent pollution of surface and groundwater which might result in significant negative human health effects. Increased volume of construction traffic at the site of the proposed development and in the vicinity may increase the risk of accidental collisions; however, it is considered that the implementation of the CTMP will prevent such events from occurring. Furthermore, completion of road improvement works on the R572 is likely to reduce the risk of road traffic accidents occurring on this stretch of road. While there may be some minor nuisance as a result of the construction of the proposed development, it is not considered that significant, negative psychosocial

impacts will occur as a result. Commencement of operation of the proposed development will significantly improve the safety and comfort of travelling in the Dursey Island Cable Car.

It is considered that, provided the mitigation measures set out in the Population and Human Health chapter – and those of the other chapters of this EIAR – are implemented, no significant, negative, residual effects on population and human health will occur.

## 7.0 BIODIVERSITY

The biodiversity impact assessment identified the following Key Ecological Receptors (KERs) which, without the implementation of appropriate mitigation measures, may be subject to significant, negative impacts as a result of the construction and/or operation of the proposed development:

#### Bats

Soprano pipistrelle (*Pipistrellus pygmaeus*) and common pipistrelle (*Pipistrellus pipistrellus*) (both of which are protected under Annex IV of the Habitats Directive) have been recorded foraging in the Zone of Influence. While the bat survey concluded that the probability of bats roosting in the buildings associated with the existing Cable Car site was low, roosting at the site of the proposed development cannot be ruled out. Since bats are sensitive to lighting, the lighting design of the proposed development could negatively affect roosting and foraging bats. As such, it is considered that there is a small likelihood of significant negative effects accruing to bat species.

#### Red-billed chough (Pyrrhocorax pyrrhocorax)

This species is a Qualifying Interest (QI) of the Beara Peninsula SPA. The site supports an internationally important breeding population of the species, which forages in terrestrial habitats in the Zone of Influence. The area of potential foraging habitat lost as a result of the construction of the proposed development is considered to be not significant. It is proposed to execute the noisiest elements of the works during the winter months (i.e. outside of the breeding season, when birds are most susceptible to disturbance). Extant primary literature indicates that the species is vulnerable to human disturbance while foraging and, as such, it is considered that potential negative effects may occur as a result of the proposed development.

### European herring gull (Larus argentatus)

The site supports a resident breeding population of the species. Herring gulls tend to nest on sea cliffs but may also nest at more accessible locations (e.g. on sloping ground near sea cliffs). The occurrence of substantial numbers of nesting herring gulls in urban areas would indicate that the species can become well habituated to human disturbance and it is not considered that the species will be negatively affected in this respect. Herring gulls typically forage at sea but may also take eggs of other seabirds and exploit food scraps left by humans. As such, substantial growth in the resident population (as a result of increased availability of food scraps as an indirect result of the proposed development) may potentially result in greater predation of eggs of more sensitive populations of seabird, such as chough. For this reason, potential significant negative effects (not on this species but potentially as a result of the foraging ecology of this species) as a result of the proposed development cannot be ruled out at this stage.

#### Great black-backed gull (Larus marinus)

As L. argentatus.

#### Ground-nesting passerines

All ground-nesting passerines are protected under the Wildlife Acts. A number of such species have been recorded in the Zone of Influence, some of which (Northern wheatear, Eurasian skylark, meadow pipit and stonechat) have been observed breeding in the area during field surveys. Others (yellowhammer and linnet) possibly breed in the Zone of Influence in small numbers, although no evidence was found during field surveys. Others (twite, grasshopper warbler) are not thought to breed in the Zone of Influence but may occasionally forage there. Loss of habitats used by these species as a result of the proposed development will be minimal and any associated effects will be imperceptible. However, since these species all nest on or near to the ground, increased visitor numbers as a result of the proposed development may result in significant negative effects related to disturbance / destruction of nests.

#### Raptors

All species of raptors are protected under the Wildlife Acts and some are also subject to statutory protections under Annex I of the Birds Directive. While certain raptors which have been recorded in the Zone of Influence are likely to use the site for occasional foraging only (e.g. merlin, hen harrier and short-eared owl) and are unlikely to be affected by the proposed development, others may also breed in or near the Zone of Influence (e.g. kestrel and peregrine, the latter of which is known to breed in the Beara Peninsula SPA). While significant negative effects are unlikely, they cannot be ruled out.

#### Common snipe (Gallinago gallingo)

It is possible that this protected species breeds in the Zone of Influence in small numbers. Since this is a ground-nesting species, increased visitor numbers as a result of the proposed development may result in significant negative effects related to disturbance/destruction of nests.

#### Eurasian oystercatcher (*Haematopus ostralegus*)

This protected species has been observed breeding in the Zone of Influence. Since this is a ground-nesting species, increased visitor numbers as a result of the proposed development may result in significant negative effects related to disturbance/destruction of nests.

#### Betony (Betonica officinalis)

The Zone of Influence is a refuge for this rare, *Flora Protection Order* (2015) plant species. Clusters of the plant which may have been destroyed as a result of construction of the proposed development have been translocated and no other plants have been identified in the area. However, it is possible that the plant does or will occur in other sensitive areas in the Zone of Influence and may be damaged or destroyed as a result of the construction or operation of the proposed development.

#### Invasive alien species (IAS)

There are a number of IAS with potentially very high negative ecological impacts in the Zone of Influence, including on Dursey Island, which, as an island, is especially vulnerable to the negative effects of such species. The potential introduction and distribution of IAS cannot be ruled out. As such, there are potential significant negative effects associated with these species. The presence of hottentot-fig is noteworthy, since this species is at a very early stage of invasion in Ireland, and, as such, there is an opportunity to contribute to the eradication/prevent the broader establishment of this relatively novel species in Ireland.

#### Large shallow inlets and bays

This habitat is a QI of the Kenmare River SAC. The entire marine area in the vicinity of the cableway, including the Dursey Sound, corresponds to this habitat classification. As such, potential negative effects as a result of the proposed development cannot be ruled out.

#### Reefs

This habitat is a QI of the Kenmare River SAC. Much of the sea bed in the vicinity of the proposed development, including the Dursey Sound, which the proposed cable car crosses, corresponds to this habitat classification. Owing to the proximity of the proposed development to this habitat type and the sensitivity of the latter to water quality impacts, which may arise during construction, there is considered to be a risk of significant negative effects on this habitat type arising from the proposed development.

#### Vegetated sea cliffs of the Atlantic and Baltic coasts

This habitat is a QI of the Kenmare River SAC. The cliffs in the immediate vicinity of the cableway correspond to this habitat classification. Owing to the proximity of the proposed development to this habitat type and the potential for increased erosion due to walkers and the risk of import of IAS to the area, there is considered to be a risk of significant negative effects on this habitat type arising from the proposed development.

### European dry heaths

This habitat is a QI of the Kenmare River SAC. The heath habitats in the immediate vicinity of the site of the proposed development potentially correspond to this habitat type. As such, there is a potential for negative effects on the habitat as a result of the proposed development.

In order to mitigate against these potential negative impacts, mitigation measures have been prescribed. Key measures are as follows (for full list of measures, please refer to Chapter 7 of this EIAR):

- An IAS Management Plan shall be implemented by the Contractor during construction works and by CCC during the operational phase.
- Landscaping shall use native species and IAS-free soil.
- CCC shall commit to undertaking eradication treatment of hottentot-fig on Dursey Island prior to the commencement of the operation of the proposed development.
- Prior to the operation of the proposed development, three looped, waymarked walking trails of various lengths and difficulty levels (and associated signage) shall be formalised on Dursey Island. Formalisation of these trails will not necessitate the establishment of any new paths, but rather will serve to encourage walkers to stay on the established roads/paths, and present route options for walkers of all abilities. Routes of these trails have been designed to minimize footfall in open habitat and prevent disturbance of chough and ground-nesting birds.

- Prior to the operation of the proposed development, an existing loop walk on Crow Head shall be formalised with waymarkers to discourage footfall in open habitat and prevent disturbance of chough and ground-nesting birds.
- A three-tiered educational campaign shall be implemented during the operation of the proposed development, with the objective of discouraging (i) footfall in open habitats and (ii) disturbance of wildlife, especially chough. It shall involve the following:
  - Exhibition materials in the Visitor Centre,
  - An audiovisual presentation in the cable car itself, and
  - Outdoor signage on Dursey Island.
- In order to prevent harmful levels of human disturbance of chough during the operation of the proposed development, a monthly numerical carrying capacity of 12,835 visitors shall be enforced for Dursey Island. This carrying capacity is based on findings of peer-reviewed research on disturbance of chough by tourists.
- Visitors shall be prohibited from bringing dogs or bicycles to the island via the proposed Cable Car.
- In order to facilitate adaptive management of the island, monitoring programmes shall be implemented by CCC during the operation of the proposed development with respect to the following:
  - Visitor numbers and movements on Dursey Island;
  - The conservation status of the Dursey Island chough population; and
  - The conservation status of habitats on Dursey Island.
- During the construction phase, bat boxes shall be erected, and bat-friendly practices shall be implemented during demolition of structures.
- During the operation phase, bat-friendly lighting shall be employed, and lighting shall be turned off at the closure of the proposed development each night.
- Segregated waste bins shall be put in place on the island and mainland prior to the commencement of operation of the proposed development in order to prevent the accumulation of food waste litter, which might otherwise attract greater numbers of gulls.

It is considered that, provided the mitigation measures set out in Chapter 7 of this EIAR – and all other Chapters of this EIAR – are implemented, that the proposed development will not give rise to significant, negative impacts on any of the identified KERs in the study area.

## 8.0 SOILS AND GEOLOGY

The construction phase of the proposed development will require excavation of approximately 6,500m<sup>2</sup> of overburden and bedrock from the foundation footprint and from a part of the parking area on the mainland side. The rock will be reused on-site as fill to structures. All excavated bedrock will be reused on site and there will be no need for off-site disposal. The design also ensures that the cut and fill requirements are balanced, so that there will be no need for the importation of fill. The bedrock is proven to be of medium strength to very strong and suitable as structures foundation medium. Therefore, no negative impacts are expected on soils/geology as a result of the construction of the proposed development. There are no predicted impacts related to soils/geology during the operation of the proposed development. Provided

the prescribed mitigation measures are adhered to, no significant residual impacts related to soils/geology are anticipated as a result of the proposed development.

## 9.0 HYDROGEOLOGY

Excavation of made ground will take place during construction. The excavation of any localised areas of ground contamination will result in a permanent, slight, positive effect on the soil environment due to the requirement to remove the material off-site and dispose of or treat it in accordance with relevant legislation. Any improvement to the quality of soils will have a corresponding benefit to the underlying groundwater resources due to the removal of a potential source of contamination of percolating water. This positive effect is considered to be slight and permanent in nature.

There is a potential risk of localised contamination from construction materials leeching into the underlying soils by exposure, dewatering or construction-related spillages, resulting in a permanent, negative effect on soils. In the case of soils, the magnitude of this adverse effect is considered to be small, as the requirement of good construction practices will necessitate the immediate excavation/remediation of any such spillage resulting in a very low risk of pollution to the soils and, consequently, the underlying aquifers.

There is a potential risk of localised contamination of the surface water and groundwater bodies due to construction activities (i.e. construction spillages, leaks from construction plant and material, etc.), resulting in permanent, negative effects on waterbodies. The main surface waterbody that might be affected is the Atlantic Ocean (i.e. the Kenmare River SAC) which is immediately adjacent to the site of the proposed development.

Excavation of material on-site will have the effect of locally increasing the vulnerability rating of the underlying aquifer (although the vulnerability rating is already 'X-Extreme'). However, the majority of the areas where the material will be excavated will be covered in hardstanding, which will mitigate the potential for contaminants to enter the underlying aquifer from the surface. As such, the potential effect may be deemed to be slight in magnitude and temporary in duration.

During the operation of the proposed development, there will be new parking facilities and an improved entrance road at the site. It is proposed to allow run-off from the entrance roads to drain to permeable parking bays where it will percolate through porous media and subsequently be collected via a subsurface collector drain. This drain will discharge to the adjacent Ballaghboy Stream via a petrol interceptor. The potential for contaminated road run-off to percolate and enter the underlying aquifer presents a very low risk due to the presence of the collector drain and the pretreatment, which will occur within the permeable porous media. The potential effect is, therefore, considered to be permanent in duration and slight in magnitude.

Domestic wastewater from the proposed development will be treated on-site by means of a proprietary Wastewater Treatment Plant (WWTP) with the final treated effluent being discharged to ground through a sand-polishing filter. The removal of primary treated effluent entering the Kenmare River SAC will, therefore, result in a permanent, positive effect on water quality.

A project-specific Outline Environmental Operating Plan (EOP) and Outline CEMP have been prepared for the proposed development, and will be finalised by the successful Contractor. The finalised EOP will address all potentially polluting

activities and include an emergency response procedure. As a minimum, the EOP for the proposed development will be finalised in consideration of the standard best practice procedures.

It is considered that, provided the prescribed mitigation measures are implemented, the significance of all residual impacts with respect to hydrogeology will be imperceptible (i.e. not significant).

## 10.0 HYDROLOGY

Surface water features located in the vicinity of the proposed development are located entirely within the South Western River Basin District. A minor watercourse (the Ballaghboy Stream) discharges to the sea at the south-eastern end of the mainland side of the site of the proposed development.

During construction, works within and alongside surface waters can contribute to the deterioration of water quality and can physically alter the watercourse bed, bank and coastal morphology with the potential to alter erosion and deposition rates in the vicinity of the development. Activities within or close to the watercourse channels can lead to increased turbidity through re-suspension of bed sediments and release of new sediments from earthworks. The magnitude associated with the potential impact of the proposed development is considered to be moderate to significant in magnitude.

During the operational phase, the risk of pollution to both surface and groundwater resulting from accidental spillage is considered to be negligible. It is not anticipated that any chemicals or hydrocarbons will be transported via the proposed cableway. Therefore, it is not considered that there is a risk of spillage. Increased run-off from hardstanding areas such as roads, car parks, roofs and footpaths will be generated. Unmitigated, this would increase the rate of run-off from the site and as a result, the associated potential effect is deemed to be moderate to significant.

As stated in the previous section, new wastewater treatment systems will be implemented at both the mainland and island facilities, and treated effluent will be discharged to ground. The mainland WWTP will require pumping to a raised infiltration area. Due to the reliance on pumps, there is a potential, moderate to significant effect on the receiving environment, were the pumps to fail.

The use of sustainable drainage systems (SuDS) features will mitigate any potential impacts related to changes in surface water run-off rates and volumes whilst also maintaining the quality of water in the vicinity of Dursey Sound. There will, therefore, be an imperceptible impact as a result of the proposed development during the operational phase.

The potential impact associated with discharging untreated surface water into the Dursey Sound is considered moderate to significant in magnitude, due to the environmental sensitivities of the area. The proposed development also requires the drainage of retaining walls. The retaining wall drainage will discharge to the minor watercourse on the eastern boundary of the site. Due to the potential preferential pathway for contaminates, the unmitigated impact on water quality is predicted to be slight to moderate.

Construction shall be undertaken in accordance with the measures outlined in the EOP. There will be a slight residual impact during the construction of the proposed

development. The recommended mitigation measures in the EIAR will negate potential risk of significant negative impacts on hydrology in the study area.

## 11.0 LANDSCAPE AND VISUAL AMENITY

The site is located in a relatively remote, rugged and highly scenic landscape and seascape, with a strong sense of naturalness. The landscape sensitivity of the area, including both the mainland site, island site, and surrounds, is considered to be High.

The construction phase of the proposed development (demolition, earthworks, rockbreaking, etc.) will result in a short-term, slight to moderate, negative landscape effect on both the mainland and island side of the site of the proposed development. It will also give rise to short term, slight, negative visual effects.

During the operational phase, localised change in landscape character is likely, though over a limited area, including the site of the proposed development, and the eastern end of Dursey Island, where the proposed development introduces a large element of built form into a relatively unchanged, remote and rugged landscape. The significance of the effect on the landscape character of the study area on both sides of Dursey Sound, while relatively localised, is considered to be slight to moderate. Negative effects include a considerable increase in the hard surface footprint through the removal of the open and expansive nature of the existing parking area/viewing area, with emphasis on vehicular circulation, and the removal of areas or rock, and heath and acid grassland habitats.

During the operational phase, the more elevated viewpoints close to the site on the mainland and on Dursey Island will experience pronounced visual effects. The high-quality design, use of materials and the low-level built form and viewing areas are positive elements that correspond well with the topography. However, the considerable horizontal extent of the development and extensive areas of hard surfaces are also evident in some views.

The proposed development is an intervention in a highly scenic and sensitive landscape. A development of this nature is likely to result in a change to the landscape and to the views and there are both beneficial and adverse aspects to the visual effects. The anticipated residual visual effects range from a slight to moderate/significant in magnitude, and the majority are neutral. In general, the residual visual effects are relatively localised, and will not affect a wide area.

## 12.0 NOISE AND VIBRATION

Construction noise has been predicted at the nearest noise sensitive location to the site of the proposed development. A variety of items of plant will be used for the purposes of site clearance and construction. There will be vehicular movements to and from the site, that will make use of existing roads. Due to the nature of these activities, there is potential for the generation of elevated levels of noise.

During the construction phase, excavators will be used to remove existing soil. Standard construction tools and methods will be employed for general construction and landscaping. Approximately 6,500m<sup>3</sup> of overburden and bedrock will be excavated from the foundation footprint and from a part of the parking area on the mainland side. Because of the nature of the bedrock, which is very thinly bedded or laminated and nearly vertically oriented, it is not considered that blasting of rock will be required. Instead, it is anticipated that rock ripping will be sufficient to excavate

bedrock during this stage and, as such, it is not expected that blasting will be required.

The results of the assessment have indicated that at distances of 10m from the works, the construction daytime noise limit of 65dB  $L_{Aeq}$  is likely to be exceeded. This scenario applies only to locations which are in immediate proximity to road works along the R572, which are expected to last for a very short duration. At distances of 50m and greater, noise levels associated with construction plant items are further reduced and are typically within the limits of daytime noise construction criterion. While calculations have demonstrated that works can be conducted within the adopted criteria at certain distances, it is recommended that the various best practice working methods to control noise and vibration are adopted by the Contractor during all works.

The potential for vibration at neighbouring sensitive locations during construction is typically limited to excavation works, road rolling and lorry movements on uneven road surfaces. The more significant of these is the vibration from road rolling, the method for which will be selected and controlled to ensure there is no likelihood of structural or even cosmetic damage to existing neighbouring dwellings.

During the operational phase, considering the distance from the proposed Visitor Centre and associated buildings to the nearest sensitive location is >200m, and provided that new plant is controlled such that noise emissions do not exceed 85dB at 1m, the requirements of BS4142: 2014 *'Methods for Rating and Assessing Industrial and Commercial Sound'* will be met, and the existing noise climate is not expected to change. The relative increase in noise level associated with traffic movements on the existing road network has also been considered. Traffic flow data for the peak hour period during the peak season have been assessed and determined that the proposed development is expected to have a negligible impact on the noise climate at the site of the proposed development. No significant vibration emissions are expected from the operation of the proposed development.

Provided mitigation measures set out in Chapter 12 of this EIAR – Noise and Vibration – are implemented, it is considered that the proposed development will not result in significant, negative effects in terms of noise and vibration.

## 13.0 AIR QUALITY AND CLIMATE

During the construction of the proposed development, the worst-case scenario dust emission magnitude can be classified as 'medium', since the construction will involve pouring of concrete. Therefore, there is an overall low risk of temporary dust soiling and human health impacts as a result of the proposed construction activities. In terms of receptor sensitivity to dust soiling, there are no sensitive receptors within 20m of the proposed works and less than 10 sensitive receptors within 50m of the proposed works. Dust emission magnitude from trackout can be classified as 'small' since there is likely to be less than 10 outward HGV movements per day. As the overall sensitivity of the area to ecological impacts is high, there is an overall 'medium' risk of ecological impacts associated with air quality and climate as a result of the proposed works.

In order to ensure that no dust nuisance occurs during the demolition, earthworks, construction and trackout activities, a range of dust mitigation measures associated with a medium risk of dust impacts have been prescribed. The proactive, preventative control of fugitive dust will ensure the prevention of significant

emissions. The main Contractor will be responsible for the coordination, implementation and ongoing monitoring of the Dust Management Plan. There is the potential for emission of several types of greenhouse gases to the atmosphere during the construction phase. Construction vehicles, generators, machinery, *etc.*, may give rise to  $CO_2$  and  $N_2O$  emissions. However, based on the scale and nature of construction for the proposed development and the short-term nature of the construction phase, the impact on the climate is considered to be short-term and imperceptible.

During operation, the proposed development will not increase traffic volume (AADT or HGVs), speeds or change the road alignment by an amount greater than the criteria outlined in the IAQM guidance. Therefore, no road links impacted by the proposed development satisfy the criteria for quantitative assessment and an assessment of the impact of traffic emissions on ambient air quality and climate is not necessary. It can, therefore, be determined that the impact to air quality from traffic emissions during the operational stage of the development will be long-term and imperceptible.

Provided the mitigation measures set out in Chapter 13 of this EIAR – Air Quality and Climate – are adhered to, it is considered that the proposed development will have an imperceptible (i.e. insignificant) impact on ambient air quality and climate.

## 14.0 ARCHAEOLOGICAL AND CULTURAL HERITAGE

The existing Dursey Island Cable Car was constructed in 1969 and, although a modern feature, is considered to be of cultural heritage value. As the only operational passenger cableway in Ireland, and one of the few cableways in Europe to traverse the Atlantic Ocean, the existing Dursey Island Cable Car and its associated infrastructure are important elements of the cultural landscape, to both the local residents of the island and mainland, and as a tourist attraction.

There are no known archaeological sites or recorded monuments located within the footprint of the proposed development, on the island or mainland. The potential for previously unrecorded archaeological sites to be present is considered low on Dursey Island considering the disturbance already present. Potential is also considered low for the proposed development area on the mainland due to previous disturbance and the topography of the area. The land-take required for the construction of the passing bays along the route of the R572 is limited, however a number of previously undisturbed greenfield areas will be impacted. There is, therefore, some potential for the proposed development to have an impact on previously unknown archaeological sites. Excavation works associated with the construction of the passing bays shall be monitored by a fully qualified archaeologist. Full provision will be made available for the excavation of any archaeological features and/or deposits that may be identified, if that is deemed the most appropriate manner in which to proceed.

There are three cultural heritage assets located within the proposed development area: Dursey Island Cable Car and associated infrastructure (CH 1) and two upstanding vernacular structures (CH 37–38). Of the existing cableway infrastructure, it is proposed to retain the mainland-side pylon and hauling machinery (currently encased in the mainland-side line station) and remove all other structural elements. In order to mitigate the impact of the proposed development on the cable car and associated infrastructure, a full written and photographic record of the cultural heritage asset should be made prior to removal.

The site of the vernacular structures (CH 37–38) are located within the footprint of two of the proposed passing bays. The widening of the roadway in these areas will result in the demolition of these structures. This will result in a direct significant adverse effect on structures. In order to mitigate the impact of the proposed development on these vernacular structures, a full written and photographic record of the cultural heritage assets should be made prior to removal.

Provided the prescribed mitigation measures are adhered to, it is considered that there will be no residual impacts on the archaeological or cultural heritage resources of the study area as a result of the proposed development.

## **15.0 ARCHITECTURAL HERITAGE**

Historically, the land in the vicinity of the proposed development has not been cultivated. No field boundaries are present in the vicinity of either end of the proposed cable car route, nor are they depicted on the first edition Ordnance Survey of Ireland (OSi) map, dating from the early 1840s. At present, excluding the buildings associated with the existing Dursey Island Cable Car, there are no buildings in the immediate vicinity of the site of the proposed development, nor are there records of such on the historical OSi maps. The nearest structure on the mainland, other than those associated with the Cable Car, is the slipway approx. 90m to the south-east. On the island, the nearest structure is a small building associated with the island-side slipway, which is approximately 160m away from the proposed development.

It is proposed to dismantle the majority of the existing Cable Car infrastructure, including the island-side pylon, the landing platforms and the station buildings. The mainland-side pylon and operating machinery will be retained as features of historical interest in the proposed development. Therefore, it is considered that the proposed development will not have any significant adverse effects on any buildings/structures of architectural heritage significance. As has been discussed in the previous section, while the Dursey Island Cable Car is not of significance in comparison with similar projects carried out over a very long period in other parts of the world, it has a significance as the only Cable Car in Ireland. Accordingly, it is recommended that the existing Cable Car and its ancillary facilities be recorded through photographic and written description prior to removal and that an exhibition that includes a history of the Cable Car, together with drawings, photographs, newspaper articles and other mementoes, be included in the proposed Visitor Centre. This mitigation measure will serve to minimise the residual impact associated with the demolition of the existing Cable Car infrastructure, by allowing its memory to be preserved. Provided this measure is implemented, it is considered that the proposed development will not give rise to significant adverse impacts on architectural heritage in the study area.

## 16.0 MATERIAL ASSETS AND LAND

In order to complete the proposed development, it will be necessary to acquire land on the island and mainland side of the site of the proposed development by Compulsory Purchase Order (CPO). Sixteen no. agricultural properties will be directly affected, and total land take will comprise of approx. 2.1187 ha, including approx. 1.3697 ha of agricultural land (from 16 properties) and 0.7490 ha of public road. There are 15 no. farm-holdings affected on the Beara Peninsula, and one commonage on Dursey Island. The agricultural land cover consists mainly of improved grassland on the mainland and upland grazing on the island. The area of agricultural land acquired, which may be significant on some of the individual farms, is not significant at a county level. During the construction phase, works may result in the disturbance of existing land drainage but it is not anticipated that there will be any interruptions to utility services. Additionally, while the operation of the existing cableway will be maintained insofar as is possible throughout the duration of works, temporary interruptions to the service cannot be ruled out, and access to the island may, at times, be temporarily interrupted for farmers. These impacts are generally of a temporary to short-term duration, being limited to the extent of construction works. Among other mitigation measures, the Contractor will be required to inform Dursey Island farmers of any interruptions to the existing cableway service (1 week in advance, wherever possible). In the case of any interruptions to the service, CCC will be obliged to provide alternative access to Dursey for farmers with livestock in the island, if and as required. Any interruptions to land drainage or access will obligate the Contractor to restore drainage/access without reasonable delay.

Provided the prescribed mitigation measures set out in Chapter 16 of this EIAR – Material Assets and Land – are implemented, it is considered that the proposed development will not give rise to any significant adverse impacts on agronomy, material assets or land.

## 17.0 MAJOR ACCIDENTS, INTERRELATIONSHIPS AND CUMULATIVE IMPACTS

#### Major Accidents and Natural Disasters

There are no 'Seveso' sites (as defined in the *Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015*) in close proximity to the proposed development. The closest establishment is approx. 43km from the site of the proposed development. The design of the proposed development has taken account of the potential for flooding and it is considered that there is minimal flood risk as a result of the proposed development. In relation to accidents resulting in a spillage of polluting material, the risk of these occurring will be significantly reduced and if a spillage should occur, the proposed development incorporates drainage to allow the spilled material to be contained and treated prior to discharge.

#### Interrelationships

The interrelationships between the individual environmental disciplines have been considered and assessed. Table 17.1 sets out the interrelationships between these disciplines, insofar as they relate to this EIAR.

| Table 17.1 | Matrix of key interrelationships |
|------------|----------------------------------|
|------------|----------------------------------|

| Receptor                             | Traffic and Transport | Population and Human<br>Health | Biodiversity | Soils and Geology | Hydrogeology | Hydrology    | Landscape and Visual | Noise and Vibration | Air Quality and Climate | Archaeology and Cultural<br>Heritage | Architectural Heritage | Material Assets and Land |
|--------------------------------------|-----------------------|--------------------------------|--------------|-------------------|--------------|--------------|----------------------|---------------------|-------------------------|--------------------------------------|------------------------|--------------------------|
| Traffic and<br>Transport             |                       | $\checkmark$                   | $\checkmark$ |                   |              | ✓            | ✓                    | ✓                   | $\checkmark$            |                                      |                        | ✓                        |
| Population and<br>Human Health       | ~                     |                                | $\checkmark$ |                   |              |              |                      |                     |                         |                                      |                        |                          |
| Biodiversity                         |                       | ✓                              |              | ✓                 |              |              | ✓                    | ✓                   |                         |                                      |                        | ✓                        |
| Soils and<br>Geology                 | ✓                     | $\checkmark$                   | ~            |                   | $\checkmark$ | ✓            | $\checkmark$         | ✓                   | $\checkmark$            | ✓                                    |                        | $\checkmark$             |
| Hydrogeology                         |                       |                                |              |                   |              |              |                      |                     |                         |                                      |                        |                          |
| Hydrology                            |                       | ~                              | ~            |                   |              |              | $\checkmark$         |                     |                         |                                      |                        | $\checkmark$             |
| Landscape and<br>Visual              |                       | $\checkmark$                   | ~            |                   |              |              |                      |                     |                         | ✓                                    |                        | $\checkmark$             |
| Noise and<br>Vibration               |                       | $\checkmark$                   | ~            |                   |              |              | $\checkmark$         |                     |                         |                                      |                        | $\checkmark$             |
| Air Quality and<br>Climate           |                       | $\checkmark$                   | ~            |                   |              |              |                      |                     |                         |                                      |                        | $\checkmark$             |
| Archaeology and<br>Cultural Heritage |                       | $\checkmark$                   |              |                   |              |              |                      |                     |                         |                                      |                        |                          |
| Architectural<br>Heritage            |                       |                                |              |                   |              |              |                      |                     |                         |                                      |                        |                          |
| Material Assets and Land             | $\checkmark$          | ~                              |              |                   | ✓            | $\checkmark$ | ~                    |                     |                         |                                      |                        |                          |

### Cumulative Impacts

The potential for cumulative effects to arise as a result of the combined effects of the proposed development and other existing or proposed developments in the study area has been considered, and it can be objectively concluded, in view of best scientific knowledge, on the basis of objective information and provided effective mitigation is in place, that the proposed development, individually or in combination with other plans and projects, will not have a significant adverse effect on the receiving environment.

## **18.0 FURTHER INFORMATION & WHAT HAPPENS NEXT**

The EIAR will be available for inspection at the following locations, as detailed in the published newspaper notices:

- Cork County Council, County Hall, Carrigrohane Road, Cork (Office Hours 9am 5pm, Monday to Friday);
- Cork County Council Area Office, Foildarrig, Castletownbere, Co. Cork, (Office Hours: 9am 5pm, Monday to Friday, closed 1-2pm each day); and
- Cork County Council Planning Section, Norton House, Skibbereen, Co. Cork (Office Hours 9am 5pm, Monday to Friday).

A copy of the EIAR and/or the Natura Impact Statement (NIS) may be purchased, subject to the following fees:

| Document      | Title                   | Printed | Electronic<br>(DVD) |  |  |
|---------------|-------------------------|---------|---------------------|--|--|
| EIAR Volume 1 | Non-Technical Summary   | €5      |                     |  |  |
| EIAR Volume 2 | EIAR Main Text          | €25     | <u>CE</u>           |  |  |
| EIAR Volume 3 | EIAR Figures            | €50     | £J                  |  |  |
| NIS           | Natura Impact Statement | €25     |                     |  |  |

A copy of the EIAR and NIS may also be accessed free of charge on the Council's website at <u>www.corkcoco.ie</u>

Submissions may be made in writing to:

An Bord Pleanála

Strategic Infrastructure Division

64 Marlborough Street

Dublin 1

D01 V902

Submissions may be made prior to the dates specified in the published newspaper notices, in relation to:

- the likely effects on the environment as a result of the Dursey Island Cable Car and Visitor Centre;
- the implications of the Dursey Island Cable Car and Visitor Centre for proper planning and sustainable development in the area which it is proposed to situate the proposed development; and
- the likely significant effects of the Dursey Island Cable Car and Visitor Centre on a European Site.

An Oral Hearing may be held, should the statutory requirements for one be met. Written submissions, together with any representations made at any oral hearing, will be considered by An Bord Pleanála in making its decision on whether or not to approve the Dursey Island Cable Car and Visitor Centre with or without modifications. An Bord Pleanála's decision will be published in one or more newspapers circulated in the area, including, where appropriate, particulars of any modifications to the proposed development.