

Ref: POL/POL/Project No.23765

Date; 14th August 2025

Re: Planning Ref 24/60025 - Raised Platform Walkway / Cycleway
Subject: Health and Safety & Route Options

The locally named Muckross to Dinis loop trail is a well known and used trail within the wider national park walks in Killarney. This loop trail is closed to public vehicular traffic with the exception of a circa 900m section. This section occurs between the Dinis carpark and the Torc carpark. Walkers and Cyclists must use the N71 public roadway to complete the loop walk. The objective of the Raised Platform Walkway / Cycleway project was to provide a walkway/cycleway that would deliver a safe route for users to complete the Dinis to Torc Loop without the need to user the N71 public roadway. MWP have collaborated closely with the NPWS in selecting the most suitable path route and structural design to achieve the project objectives.

As part of the initial design process, MWP considered the functional requirements, various site constraints, environmental and ecological impacts in developing a walkway/cycleway solution which would ensure for a safe route to traverse from the Dinis carpark to the Torc carpark. In rural areas, where traffic volumes are high and pedestrian pressure exists, offline or separated active travel infrastructure is recommended under TII's NR2040 commitments.

The health and safety considerations and route options are outlined hereunder.

1. **Health and Safety Considerations.**

The requirement for a safe walkway/cycleway between the Dinis carpark and torc carpark has been identified as an infrastructural deficit and safety concern by various stakeholders in the area for many years.

This section of N71 roadway is a narrow and winding road with poor lines of sight. In addition, there has been a number of road accidents inclusive of vehicles having to swerve due to deer wildlife on the road. The roadway does not have a dedicated walking/cycling lane or indeed a hard shoulder margin.

This heightens the risks for head-on collisions and overtaking hazards and is extremely dangerous for pedestrians and cyclists.

The key risks associated with shared narrow roads can be summarised as follows;

- Limited visibility and Line of Sight due blind bends and undulating terrain obscure the view of cyclists and pedestrians. It can be difficult for drivers to see vulnerable road users.
- Insufficient road width to achieve 1.5m safe passing distance. Vehicles (cars, coaches, HGV’s, agricultural vehicles) struggle to pass pedestrians and cyclists without entering oncoming traffic.
- No dedicated footpath, hard shoulder or cycle lane to safely accommodate vulnerable road users. Pedestrians and cyclists travel beside moving traffic. This risk escalates with tourist footfall.
- Speed Differential Hazards. Vehicles travelling at 80–100 km/h. Cyclists typically go 15–30 km/h; walkers 3–6 km/h.
- Roads less than 6 meters wide—insufficient for safe 1.5m passing distance.
- Driver Distraction & Tourist Traffic. Tourists unfamiliar with the road may be distracted by the scenic views, satnav, or signage reading.
- Poor Lighting & Weather Conditions. No public street lighting; thick mist common in valley between Muckross and Molls Gap.

According to the RSA, in 2022, 73% of road fatalities occurred on rural roads with speed limits of 80 km/h or higher. Cyclists and pedestrians accounted for a significant share of fatalities.

Risk Rating Matrix – Shared Roadways

Hazard	Likelihood	Severity	Risk Level
Vehicle–cyclist collision	Likely	Major injury/fatality	High
Vehicle–pedestrian collision	Likely	Major injury/fatality	High
Pedestrian trip/fall due to verge condition	Likely	Minor injury	Medium
Loss-of-control into roadside users	Possible	Major injury/fatality	High

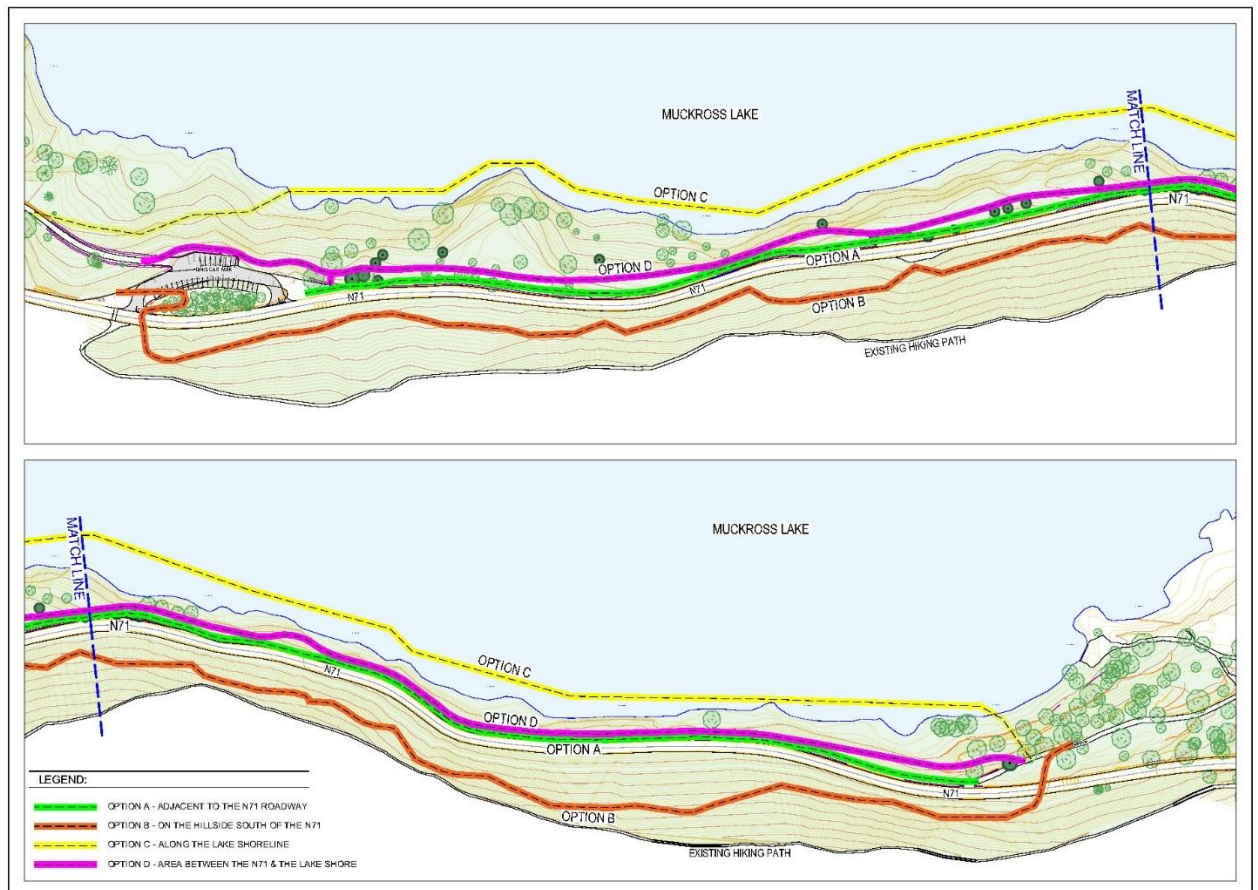
Shared roadway sections will remain high-risk due to geometry and traffic mix. Full segregation is the most effective safety solution to protect vulnerable road users.

2. Route Options

Initially, three route options were identified and assessed to determine the preferred route. The three routes were.

- A. Adjacent to the N71 roadway
- B. On the hillside south of the N71
- C. Lake Shore – Floating Deck
- D. Area between the N71 and the Lake Shore

The layout map hereunder indicates the four routes.



Option A The width of the N71 roadway between the Dinis car park and the Torc Car park is less than 6.0m wide. This is not sufficient to accommodate a shared walkway and cycleway without substantial road widening and realignment. The minimum width of a shared walkway and cycleway is 3.0m. In addition, Transport Infrastructure Ireland (TII) advises that where a greenway or cycleway

runs alongside a road, there should be a 2 m separation between the edge of the trafficked lane and the cycleway.

The overall additional 5.0m width require for this option was considered impractical for reasons such as road widening/land take, substantial cut and fill requirements, excavation through rock, environmental impact, costs etc. For these reasons this option was eliminated.

Option B This option considered a route on the hillside south of the N71. While there is an existing narrow hiking trail at this location, it is elevated some 20m over the N71. The grade changes significantly and is very steep in parts. Therefore, a separate route for the proposed walkway/cycleway was considered which was located at a lower level between the N71 and the existing hiking trail. Walkers and cyclists would need to cross over the N71 to access and egress off the proposed new walkway/cycleway which would require an overbridge or underpass at both locations. The option would require substantial cut and fill. It would not be suitable for universal access. For these reasons this option was considered unviable.

Option C This option considered a route along the lake shore using a floating deck walkway/cycleway which was inspired by the Acres Lake Floating Boardwalk in Co. Leitrim. (part of the Shannon Blueway). MWP and NPWS did a site visit to Acres Lake to assess the feasibility of this option for Muckcross Lake. However, the fluctuation in the water level (up to 4.0m) of the Muckcross lake meant that access and the egress ramp from land would be unworkable. Therefore, this option was eliminated as a viable option.

Option D This option considered a route between the lake shore and the N71. The site is in an area characterised by a mosaic of scrub land, boulders, rock outcrop, some mature trees and saplings. An initial assessment of the area revealed the advantages of this route insofar that pedestrians and cyclists could complete the Dinis to Torc loop without the need to use the N71 roadway. Further investigations revealed that a meandering route could be plotted from the Dinis car park to the Torc car park that would avoid significant trees of interests. A raised platform walkway system, fabricated in elements or sections off site would be suitable construction solution with this route option. This route also allowed for the vertical alignment with a maximum gradient of 4% to be achieved. This ensures that the proposed walkway/cycleway will be accessible to wheelchairs users and people with mobility issues.

Preferred Option

Having objectively reviewed all route options, it was clear that Option D would be the preferred route. In this regard,

- Option D would not require users to cross or use the N71 roadway. This would not be possible with either Option A & B.
- It does not require cut and fill excavation to achieve a suitable grade for the walkway/cycleway. This would not be possible with either Option A & B.

- In terms of vertical alignment, the design developed has a maximum gradient of 4%. This ensures that the proposed loop would be accessible to wheelchairs users and people with mobility issues. This would not be possible with either Option A & B.
- The raised platform design ensures minimal impact on the existing terrain and surrounding environment during both the construction and operational phase. This would not be possible with either Option A & B.
-

The overall benefits of this project:

- A significant benefit of this project is one of Health and Safety. Currently, pedestrians and cyclists must travel along the busy N71 roadway to complete the Dinis to Torc Loop.
- The Dinis to Torc loop along the N71 roadway has been identified in the Killarney Lakes Greenway report as “an infrastructural deficit in the walking/cycling amenities of the Killarney Municipal District. This project would eliminate the infrastructural deficit.
- In terms of the vertical alignment, the design has a maximum gradient of 4%. This ensures that the proposed loop will be accessible to wheelchairs users and people with mobility issues.
- Provide spectacular elevated views across Muckross lake.
- Tourism initiatives such as the proposed walkway can have a significant positive impact on the local economy through increasing visitor numbers and their spend in a location.
- This development encourages outdoor tourism/recreation and would attract people of all age groups.



for MWP