

## Kerry County Council's Response to Edward Fahy Submission

Kerry County Council (KCC) would like to acknowledge the comprehensive presentation prepared by Edward Fahy.

1. 'The short period traffic count is extrapolated based on a localised period count which covers a period of at least 14 days'. (page 3, 5<sup>th</sup> paragraph).

Response: The project appraisal guidelines are developed for National Road Projects.

KCC have undertaken individual traffic counts at all locations as outlined in the EIAR, Volume 3, Appendix 3.1 Design Report. In addition, 14-day traffic counts were undertaken at 7 locations over the June and August 2019 Bank Holiday periods (28<sup>th</sup> May to 10<sup>th</sup> June & 30<sup>th</sup> July to 12<sup>th</sup> August). These additional surveys validated the counts and methodology used. These 14-day counts during the peak traffic season validated the earlier data and methodology.

2. 'The 85<sup>th</sup> percentile traffic speed while being a good tool for calculating the flow and speed of traffic and is an aid in designing junctions it is questionable in its use for the 'y'-distance envelope'. (page 3, 7<sup>th</sup> paragraph)

Response: Traffic speeds were measured, using traffic counters, on the existing public roads to be crossed by the greenway. The use of the 85<sup>th</sup>% speed is referenced in a number of documents, including:

The National Cycle Manual states – in cycle design, is it not the theoretical speed of traffic or the posted traffic speed limit – it is the actual 85<sup>th</sup>% traffic speed that counts.

The actual speed of traffic can be quite different to the signed speed limit for the road geometry, especially off-peak.

The Sustrans Design Manual – handbook for cycle-friendly design, in determining cycle facilities, references a graph. This graph, similar to the graph, Section 1.7.4 of the National Cycle Manual, measures the traffic flow against the 85<sup>th</sup>% speed.

The Traffic Signs Manual (TSM) also references the use of the 85<sup>th</sup>% vehicle speed for determining the appropriate distance, based on actual speed, for visibility on approach to signage. This being, the operating speed, depending on the road layout may be significantly below the posted speed limit of the road.

3. 'Seasonality is a measure of the variability in traffic flow at different time of the year'. (page 3, last paragraph).

Response: Kerry County Council agree that the effects of seasonality are more evident in tourist areas where traffic flows can be significantly higher in the summer months, a pattern not repeated elsewhere. Speeds on uncongested roads are independent from traffic volumes and are related to the geometry of the road.

From the traffic counts undertaken by Kerry County Council in June and August 2019, the 85<sup>th</sup>% speeds were comparable to the original traffic data. KCC did not extrapolate speed from the traffic count data.

4. Visibility Splay, reference to the Y and X distances (page 7)

Response: The Y distance was measured at each location and an extract is attached, please refer to the attached table showing the measurements.

The X distance is at 2.0m, the absolute minimum, and is within the parameters of Table 5.6 of the DN-GEO-03060 Geometric Design of Junctions. A bike is approximately 1.8m in length. In the Sustrans Design Manual – Handbook for cycle-friendly design, referring to visibility at junctions, the recommended X distance is 2.0m. This validates the KCC approach of adopting a 2.0m distance and is compliant with the provisions of DN-GRO-03047 Rural Cycleway Design (Offline).

5. 'DN-GEO-03031 Rural link Design April 2017 clearly sets out how to calculate the design speed of a road. If the design speed is not calculated it sets out the maximum design speed for mandatory speed limits which should be used to calculate the 'y' - distance splay.' (page 8, 1<sup>st</sup> paragraph)

Response: Design speed could not be calculated using the method outlined in the standard, the use of Table 5.5 is not appropriate at this location. The actual speed could be measured and was used.

6. 'Table 4.14: Visibility Splays for Public Junctions: (EIAR design report, see table below) .....as this is a two-way greenway most of the junctions can be traversed both ways that means 2 sets of left and right 'y' – distances for each junction as the sight distance in most cases are not the same from either side of the road.' (page 8, paragraph 4)

Response: The visibility splay for a junction with 2 crossings was measured. The shorter Y distance was recorded in Table 4.14, EIAR, Volume 3, Appendix 3.1 Design Report. Please refer to the attached table.

7. 'A stage 1/2 Audit was performed by Roadplan (South Kerry Greenway road safety audit 1/2 April 2019).' (page 10).

Response: Kerry County Council responded to the problems and the recommendations on the feedback form to the Road Safety Audit Stage 1/2. The following measures have been incorporated into the design for the greenway:

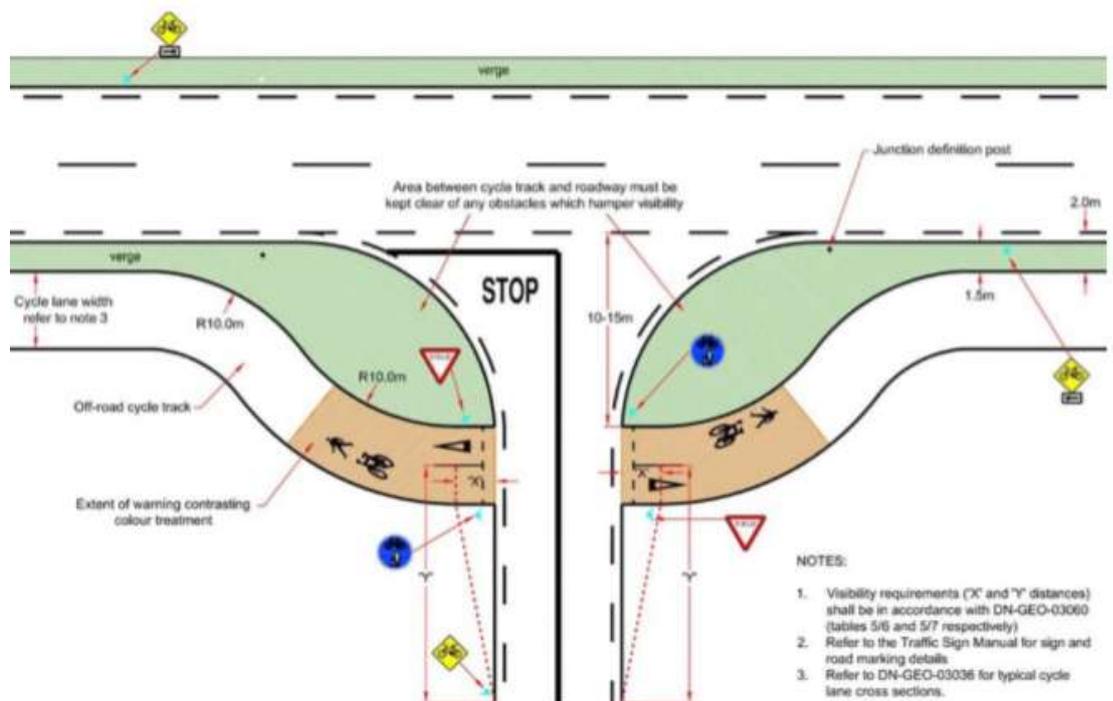
Reference 2.1 - Reenard Point Trail Head Car Park

Response: The existing fence has been relocated behind the visibility splay. Refer to drawings 318-1501 RevA & 318-501RevA.

Reference 2.18 - Local Road L-7521-29 Intersection with the N70

Response: An on-site assessment was undertaken at this location. An additional on-site traffic survey on the local road at the junction recorded the 85<sup>th</sup>% speed as 14km/h and ADT (Average Daily Traffic) is very low at 81. The appropriate visibility envelope is provided to the Local Road L-7521-29 considering its proximity to the N70. The achievable visibility splay is 2.0m x 19.5m, 19.5m to the left (N70) and 100m, 100m to the right (local road L7521-29). A Bend Out Crossings is appropriate as per Figure 5.7 DN-GEO-03060 Geometric Design of Junctions, refer to figure below. The greenway design speed is 10km/h, reduced radii, chicanes and warning signage are provided at the junction. The greenway alignment is designed to slow users on approach to the junction. The greenway crosses a public road and therefore 2 splays are measured. Additional warning signage at the N70 junction is also provided, refer to drawing 318-121 RevA.

**Figure 5.7: Bend Out Crossing (minor road AADT <4,000)**



Reference 2.19 – Kells Car Park and Access Road

Response: The FI (Further Information submitted to An Board Pleanála) amended the visibility splay so that it is tangential to the edge of the pavement, refer to drawing 318-1504 RevA & 318-1300 RevA.

Reference 2.27 – Glenbeigh Trail Head Car Park and Glenbeigh Quarry Car Park

Response: Glenbeigh Quarry car park layout has been amended. Warning signage W 002L & W 002R to be provided, refer to drawing 318-1508 RevA & 318-147 RevA.

8. 'If there are departures in the design, approval should have been sought from TII before they were incorporated into the design' (page 13)

Response: The greenway will be a public road. The Road Authority is Kerry County Council.

As per Section 10.6 Relaxations and Departures, DN-GEO-03031 Geometric Design of Junctions 'In general, the policy with regard to Relaxations and Departures shall be that adopted for National Roads as set out in this Standard'.

'Any variation in that policy (e.g. amending the policy in relation to acceptance of numbers of Relaxations) shall be specifically agreed by the road authority'. In this incidence, Kerry County Council.