Title: STAGE 1&2 ROAD SAFETY AUDIT

For;

**Old Kilcullen Heritage Trail** 

Client: **Dooley Cummins.** 

Date: February 2024

Report reference: 2134R01

**VERSION: FINAL (26-3-2024)** 

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### 1.0 Introduction

This report was prepared in response to a request from Mr. Cormac Dooley, Dooley Cummins Architects & Engineers Ltd. for a Combined Stage 1&2 Road Safety Audit of the proposed Old Kilcullen Heritage Trail scheme.

The Road Safety Audit Team comprised of;

Team Leader: Norman Bruton, BE CEng FIEI, Cert Comp RSA.

TII Auditor Approval no. NB 168446

Team Member: Owen O'Reilly, B.SC. Eng Dip Struct. Eng NCEA Civil Dip Civil. Eng CEng FIEI

TII Auditor Approval no. OO1291756

The Road Safety Audit comprised an examination of the drawings and a site visit by the Audit Team, together on the 7<sup>th</sup> of February 2024.

The weather at the time of the site visit was mainly dry the road surface was wet/damp.

This Stage 1&2 Road Safety Audit has been carried out in accordance with the requirements of TII Publication Number GE-STY-01024, dated December 2017.

The scheme has been examined and this report compiled in respect of the consideration of those matters that have an adverse effect on road safety. It has not been examined or verified for compliance with any other standards or criteria.

The problems identified in this report are considered to require action in order to improve the safety of the scheme for road users.

If any of the recommendations within this safety audit report are not accepted, a written response is required, stating reasons for non-acceptance. Comments made within the report under the heading of Observation are intended to be for information only. Written responses to Observations are not required.

A location map showing where each problem occurs is provided in Appendix A.

A list of the documents provided to the Audit Team is provided in **Appendix B.** 

The feedback form is provided in Appendix C.



## 2.0 Background

The Old Kilcullen Area Community Association (OKACA) wish to develop a heritage walking trail in Old Kilcullen.

The road network in the area consists of narrow local roads with typical widths of 4.0m. The edges of the carriageway consist of grass margins. These margins are well maintained adjacent to residential properties but have grown wild in most other areas. The roads are bounded by mature hedgerows in various conditions along the routes. Traffic generated in the area can be considered to be local traffic. There are no significant trip attractors in the immediate area.

The scheme is to be provided in three phases

- Phase One Halverstown Cross Roads to 1798 Monument
- Phase Two Halverstown Cross Roads to Hacklow Cross Roads
- Phase Three Brennan's Pub to Hacklow Cross Roads via the telecommunications mast.

The design principles are based on the 'Quiet Lanes' scheme developed in Suffock in the UK.

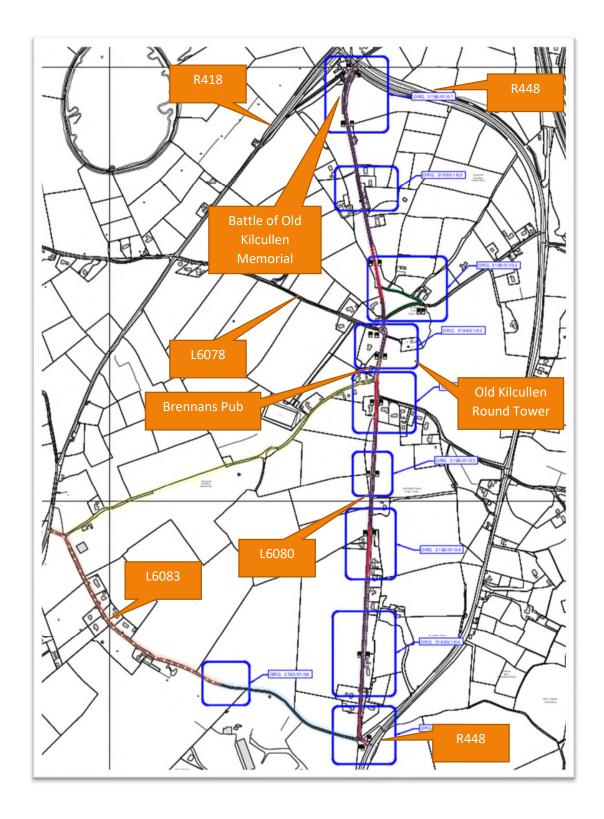
Traffic calming is proposed through the use of gateways, false cattle grids, road markings and signage.

The verges will be levelled to be used as step in areas for pedestrians.

The current operational speed has been determined to be 75km/hr.

The location of the site is shown below.







## 3.0 Issues Identified in this Stage 1&2 Audit

### 3.1 Problem

#### Location

Drawing R448 Northern tie-in.

#### Problem

The R448 is a busy regional road and has a dedicated left turning lane into the L6080. It is also a very wide junction. This will lead to high turning speeds into the L6080 which could lead to collisions with pedestrians on the carriageway adjacent to the memorial. The Audit Team feel that the proposed gateway treatment and signage will reduce speed but from a high starting point and possibly not sufficiently.





#### Recommendation

It is recommended that the left turn lane be removed and that the junction mouth be narrowed.

#### 3.2 Problem

#### Location

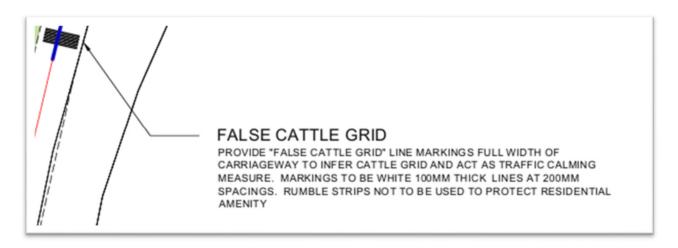
False cattle grids.

#### Problem

The Audit Team are concerned that the false cattle grids will be ineffective at calming traffic after an initial 'bed in' period. The route is used by local traffic only and drivers will be familiar with the area and know



that the grids are false. In addition, the road markings will fade in time and may not be renewed at a regular enough interval to be as effective as when initially installed.



#### Recommendation

It is recommended that alternative measures be proposed to provide traffic calming.

### 3.3 Problem

#### Location

Throughout the scheme, lighting.

#### Problem

The scheme is to promote walking and cycling on the carriageway. There is some public lighting along the route but it is inconsistent. A lack of consistent lighting could lead to dark spots where drivers may not see pedestrians during the hours of darkness if they are wearing dark clothes. Given that the current operation speed is 75km/hr and through a reduction is expected a collision with a pedestrian at 50km/hr has an approximate 60% risk of being fatal. The likelihood of a collision will increase when the road is being promoted as a shared space.

#### Recommendation

It is recommended that continuous consistent lighting be provided.



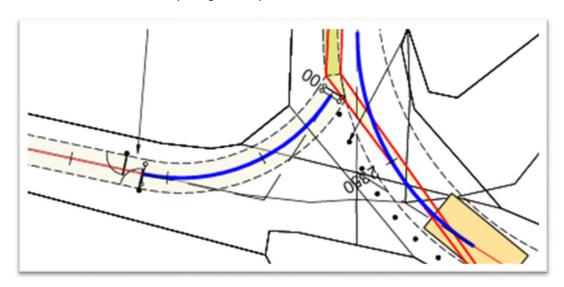
### 3.4 Problem

#### Location

Drawing 01/094 Rev 0, Walking track.

#### Problem

Drivers will need to be advised that they cannot turn into the walking track. The gates may not be obvious from the L6080 due to the layout/geometry of the track.



#### Recommendation

It is recommended that 'no entry' signage or similar be provided at a location easily seen by drivers on the L6080.

### 3.5 Problem

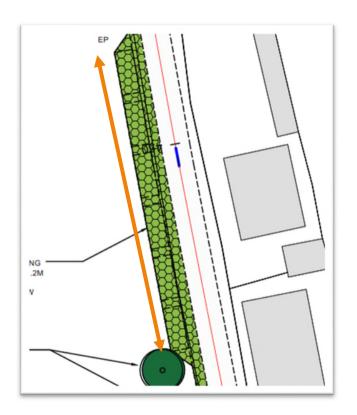
#### Location

Drawing 01/02 Rev 0, Parallel parking spaces.

#### Problem

The parallel parking spaces have a grassed area to the rear. There is a risk that vehicle occupants when they exit their vehicles will slip and fall in wet or icy conditions.





#### Recommendation

It is recommended that the reinforced grassed area be extended to the rear of the spaces and that a connection be provided to the carriageway.

### 3.6 Problem

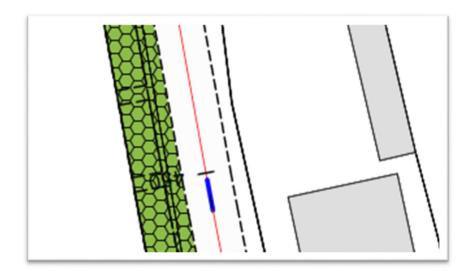
#### Location

Drawing 01/02 Rev 0, Parallel parking spaces.

#### Problem

When drivers are parking or getting out of the parking spaces there is a risk that over that time a vehicle swill approach from either side and there will not be space to pass. This could led to reversing movements and risks of collisions with pedestrians.







### Recommendation

It is recommended that a passing bay be incorporated into the design adjacent to the proposed parking spaces. It is noted that an existing parking area/passing bay exists at this location.

### 3.7 Problem

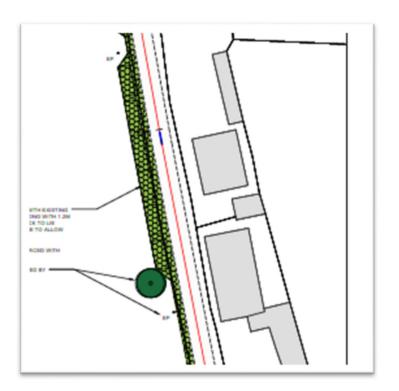
### Location

Drawing 01/02 Rev 0, Parallel parking spaces.

### Problem

There is a risk that parked cars opposite the residences on the opposite side of the L6080 may lead to inaccessibility for larger vehicles. This could lead to material damage of parked vehicles.





#### Recommendation

It is recommended that a swept path analysis be carried out for the largest vehicles using the private accesses to ensure that the movements can be carried out (e.g. fuel delivery, agricultural machinery) when the parking spaces are occupied.

## 4.0 Observations

### 4.1 Observation

The speed limit is 80km/hr. It is not proposed to reduce the speed limit as part of this scheme. This may be something that can be reviewed at the next round of speed limit reviews in the county by the Roads Authority.



## 5.0 Audit Statement

We certify that we have examined the site and the information provided. The examination has been carried out with the sole purpose of identifying any aspects of the design which could be added, removed or modified in order to improve the safety of the scheme.

The problems identified have been noted in this report together with associated safety improvement suggestions which we would recommend should be studied for implementation. The audit has been carried out by the persons named below who have not been involved in any design work on this scheme as a member of the Design Team.

Norman Bruton Signed: Agreen Bruton

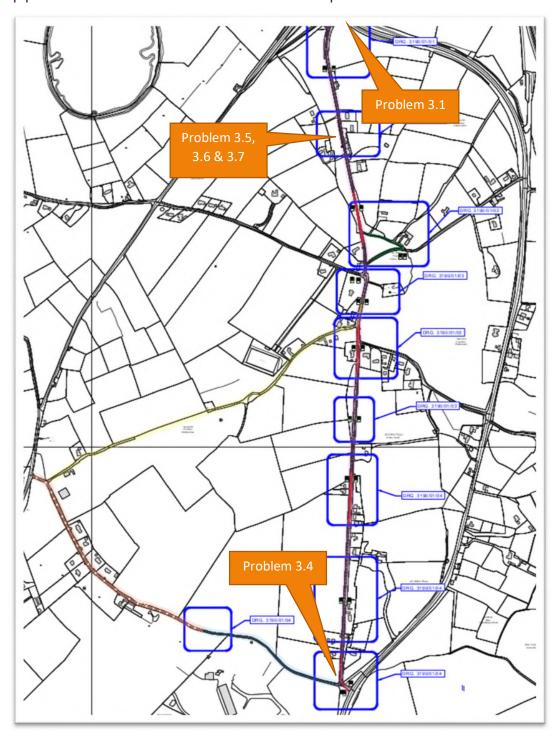
(Audit Team Leader) Dated: <u>26-3-2024</u>

Owen O'Reilly Signed: Signed:

(Audit Team Member) Dated: 26-3-2024\_\_\_\_\_



## Appendix A – Problem Location Map





## Appendix B

### **Information Supplied to the Audit Team**

- Drawing 01/01 Rev 0 Dooley Cummins
- Drawing 01/02 Rev 0 Dooley Cummins
- Drawing 01/03 Rev 0 Dooley Cummins
- Drawing 01/04 Rev 0 Dooley Cummins
- Old Kilcullen Heritage Trail- Engineering Report Doley Cummins 27/11/2023



Appendix C

Feedback Form



### SAFETY AUDIT FORM - FEEDBACK ON AUDIT REPORT

Scheme: Old Kilcullen Heritage Trail

Stage: 1&2 Road Safety Audit

Date Audit (Site Visit) Completed: 7-2-2024

Paragraph No. in Safety Audit Report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measures (describe)	Alternative measures accepted by Auditors (Yes/No)
3.1	Yes	Yes		
3.2	No	No	Baseline Speed Monitoring is to be carried out prior to implementation of scheme. In use speed monitoring to be carried out in 12 months after opening to assess effectiveness of traffic control measures. Maintenance and Management Plan to be prepared to ensure good condition of traffic control measures including road markings.	Yes
3.3	No	No	The scheme is intended to improve the route for day time walking only. Given the rural area continuous consistent street lighting is not appropriate or necessary.	Yes
3.4	Yes	Yes		
3.5	Yes	Yes		
3.6	Yes	Yes		
3.7	Yes	Yes		

Signed. Design	Comme Team Leader	D	9
Signed.	Resman	Bru	tan

Date.....<sup>26-3-2024</sup>

**Audit Team Leader** 

**Date** 19 March 2024

**Date** 19 March 2024