



An Roinn Iompair
Department of Transport

TH20025_N25 CARROLL'S CROSS – HD15

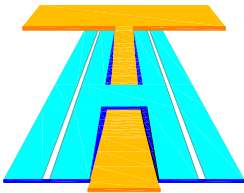
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SECTION 38 REPORT



FEBRUARY 2021



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REGISTRATION OF AMENDMENTS

Rev.	Page No.(s)	Details of Amendment	Date
F2	12 & 13	Amendment of Public Consultaion table and text referring to F2 revision of drawing in last paragraph of Chapter 1	10/02/2021

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1 INTRODUCTION/PROJECT JUSTIFICATION

This is the Report for the N25 Carroll's Cross - Traffic Calming Scheme, prepared pursuant to the requirements of Section 38 of Road Traffic Act, 1994.

Waterford City and County Council proposes to undertake the construction of a rural traffic calming Safety Scheme/Pavement Scheme along the N25 national primary road at the junction known as Carroll's Cross. The scheme is located approximately 27km east of Dungarvan town and approximately 19km west of Waterford City, in the townland of Ballyshunnock, Co. Waterford. The proposed works includes:

- resurfacing of the existing pavement,
- modification of the existing traffic lanes with reduction of carriageway widths,
- construction of revised junction layouts,
- construction of traffic calming islands with chamfered kerbs and road edge kerbs,
- construction of upgraded drainage facilities to allow rapid removal of surface water,
- construction of new shared use one-way cycle facility,
- provision of new lighting designed in line with current standards and
- provision of new road signage and markings and landscaping.

The proposed length of the scheme is approximately 500 meters. The implementation of the rural traffic calming scheme with reduction of carriageway widths, construction of traffic calming islands and new shared use pedestrian/cycle facility, together with new lighting, road signage and markings and landscaping will create a safe environment for all road users.

The main objective is to reduce vehicular speed and improve the facilities for the vulnerable road users. The scheme will also seek to create a safer environment along the existing section of N25 on approach to and through the junction. This will be achieved by the alteration of the existing junction layout, reducing the width of the main road, provision of traffic calming islands with chamfered kerbs and improving pedestrian/cyclist facilities on both northern and the southern side of the existing N25 at this location.

The layout of Section 38 drawing TH20025-P4-GA-001 – General Arrangement at location in front of the Inn has been altered from revision F1 to revision F2 to allow for a left in left out entrance and exit. Refer to Section 38 drawing TH20025-P4-GA-001 – General Arrangement rev. F2 in Appendix A.

2 PRINCIPAL FEATURES OF SCHEME

The scheme is being promoted by Waterford City and County Council to address the primary safety issues identified on the site. The proposed length of the scheme is 500 metres.

2.1 Road Type

The road is a single carriageway national primary road which is approximately 12.5m in width. It is proposed to reduce the width to 10.0m within the site and introduce kerbing on the road edge. On either side of the carriageway there will be shared use one way cycle facility which is to accommodate pedestrians and cyclists. Between the carriageway edge and the shared use one way cycle facility shall be a minimum separation of 1.0m.

2.2 Junctions

There are three junctions with the N25 within this site, L8022, L4022 and L4015. The junction with the L4022 and L4015 have been observed to have large entry and exit radius which can lead to increased speed at these junctions. As a result, these junctions shall have reduced radii applied under this scheme. Adjacent to the scheme the L4022/L8061 junction was also observed to have large entry and exit radius. It was decided to extend the scope of the scheme and reduce the entry and exit radius of this junction also. By modifying these junctions it will have the effect of reducing the speeds at which vehicle negotiate the corner radii.

2.3 Vulnerable Road User Facilities

In the current layout at the location pedestrians can use the hard shoulder. In some areas there is no hard shoulder provide and as a consequence, pedestrians must walk on the adjacent grassed verge. Cyclists can so use the hard shoulder but as the hard shoulder phases out the cyclists must move on to the main through carriageway and share the traffic lane with motorised vehicles.

Under the proposed scheme there is the provision of a shared use one way facility on either side of the carriageway which will accommodate pedestrians who chose to walk on this section of the N25. Cyclists on the N25 will also have the option of using this facility. Alternatively, they can choose to move on to the traffic lane to share the traffic lane with the motorised vehicles.

2.4 Drainage

The existing drainage system will be assessed by CCTV during the detailed design phase and any required upgrading will be carried out in accordance with current TII standards to deal with surface water within the extent of the scheme. A closed drainage system consisting of kerbs and gullies shall be provided using existing outfalls.

2.5 Signs and Markings

Road signage and lining appropriate to the proposed traffic calming layout shall be provided as part of the scheme. These shall comply with requirements of the Traffic Signs Manual, published by the Department of Transport.

2.6 Pavement

The pavement at this location is deteriorating and now requires structural upgrade. This scheme will address pavement defects identified on site to ensure longevity of the scheme.

2.7 Public Lighting

The provision of public lighting is important to the safety of the proposed scheme. The traffic calming measures being introduced such as roadside kerbing and kerbed central islands must be clearly illuminated at nighttime and visible to drivers.

2.8 Traffic Management

Traffic management will be required during the construction phase of the works. The proposed traffic calming scheme will be constructed 'on-line' within the existing road carriageway. Therefore, for much of the construction phase, substantial traffic management will be required.

3 SECTION 38 – ROAD TRAFFIC ACT, 1994 SUBMISSIONS AND RESPONSES

3.1 Public Consultation Process

The public consultation process under Section 38 of the Road Traffic Act 1994, commenced in December 2020. A public notice was placed in the 'Waterford News & Star' and the 'Dungarvan Observer' newspapers on the 23rd of December, 2020.

Plans and particulars could be viewed online during the period of 23rd of December, 2020 to 20th of January, 2021 and submissions could be made up to the 3rd of February, 2021. Submissions were invited by:

- **Post:** Aideen Jacob, Administrative Officer, Roads Department, Menapia Building, The Mall, Waterford.
- **Email:** ajacob@waterfordcouncil.ie

A hard copy could also be requested by contacting Waterford City and County Council by telephone. Due to Covid-19 restrictions the plans and particulars were not available to inspect in the Waterford City and County Council Offices.

Submission No.	Submission on behalf of	Submission received from	Submission	Response
1	Waterford Bicycle Users Group	Waterford Bicycle Users Group	<p>a) This scheme proposes 'the construction of new shared use one way cycle facility'. This is a completely unnecessary, inappropriate, and potentially very dangerous 'facility' to install at this location. There is no pedestrian activity here as it is a busy National route, beside two large businesses/factories, in a rural area, with just one residential unit. Therefore, no footpath (or 'pavement') facility is required. Shared foot/cycle ways are dangerous for all users because of the great speed differential between cyclists and pedestrians, so they serve the needs of neither group. They are actively discouraged by international road and cycle lane design policies.</p> <p>This section of road is used only by fitness or club cyclists who are cycling at speed and often in pelotons. Therefore, it is safer for them to remain on the main carriageway. Forcing them on to a sub-standard (see point 2) cycle lane will cause conflicts with traffic and put lives in danger.</p>	<p>It is a requirement under current standards and guidance to make provision for pedestrians and cyclists through this area. While acknowledging the existing low usage by these vulnerable road user groups, provision must still be made for these users within the proposed scheme.</p> <p>There is an existing hard shoulder on both approaches to this location. The hardshoulders are phased out through Carrol's cross in the existing road layout. When cyclists and pedestrians approach this location along the N25 and the hard shoulder ends, these users are forced to use the main carriageway or walk/cycle in the grass verge as they pass through Carroll's Cross. The location is a high accident location and the proposed schemes primary aim is to slow through traffic with a view to reducing the number of and severity of collisions.</p> <p>Currently cyclists travelling along the N25 have to merge onto the main running lane from the hardshoulder as they pass through Carroll's cross.</p>
2				
3	Quelly Farms	Aileen Behan	<p>a) A filter lane for Dungarvan bound traffic exiting the N25 onto the L8022 would enhance the safety of this scheme. This filter lane could also link the L4015 and L8022 (X-X).</p>	<p>The provision of a filter lane is not in accordance with TII standards, would not enhance the safety of this scheme and would not lead to a reduction in speed as is intended under this scheme.</p>
4			<p>b) A speed limit of 50km/h on this portion of the N25 would greatly enhance the safety of the scheme.</p>	<p>It is anticipated that the proposed engineering measures will lead to a reduction in vehicle speed which is the primary objective of this scheme. Once the scheme is constructed the scheme will be monitored to examine its effectiveness. If necessary, further measures can be reviewed at that stage. Central islands have been shown to reduce vehicle speeds.</p>
5			<p>c) The addition of traffic lights at the junction of the N25 and the L8022 would allow Waterford bound traffic joining the N25 from the L8022 to do so safely, it is a dangerous undertaking with the current layout.</p>	<p>Traffic lights are not suitable at this location.</p>
6			<p>d) A filter lane for Dungarvan bound traffic joining the N25 from the L8022 would enhance the safety of the scheme (Y-Y).</p>	<p>The provision of a filter lane is not in accordance with TII standards, would not enhance the safety of this scheme and would not lead to a reduction in speed as is intended under this scheme.</p>
7	Shane Nolan	Shane Nolan	<p>a) I wish to make a submission/observation regarding the planned works for the N25 at Carroll's Cross.</p> <p>Having viewed the plans I am concerned that a great opportunity is being missed to make the junction safer. In particular I am referring to the addition of a cycle lane through the junction and would argue that a ghost lane for those turning into the junction of the L4022 would be much more beneficial and utilised. A cyclist passing fully through the junction is not going to leave the road to have to stop and cross traffic that maybe entering the junction and then re-join the main N25 again. I can understand that it may be useful to include a cycle lane on the western side of the junction to allow cyclists who may be coming from the L8061 or L4022 join up to the Greenway on the L4015.</p> <p>I strongly feel it would be much more beneficial to include a ghost lane for vehicles turning into the L4022/L8061. I regularly use that road and have observed that there is ample space at the junction for this to be included. In doing so it would allow for a much safer slow down and turn for users</p>	<p>The provision of a "ghost lane" as referenced is not in accordance with TII standards. Under the scheme being proposed the "reckless manoeuvres" mentioned will be</p>

			<p>into the L4022 junction. It has concerned me on many occasions that cars coming behind simply do not slow down enough to allow cars turn in and I have regularly witnessed seen some near misses and very reckless manoeuvres from other road users. The addition of islands further back and a narrowing of the road is not going to stop this.</p> <p>I hope my observations are considered. As I said I think this is a great opportunity to make this junction safer and a ghost lane would be much more beneficial than a cycle lane which is likely to be seriously underutilised.</p>	<p>significantly restricted by the proposed engineering measures. By providing a "ghost lane" the vehicle speeds will remain high.</p> <p>It is anticipated that the proposed engineering measures will lead to a reduction in vehicle speed which is the primary objective of this scheme. Once the scheme is constructed the scheme will be monitored to examine its effectiveness. If necessary, further measures can be reviewed at that stage.</p> <p>Central islands have been shown to reduce vehicle speeds.</p>
8	Emmett Mullally	Emmet Mullally	<p>a) Can you please advise if consideration has been given to the following:</p> <p>Has consideration been given to using radar speed signs to help communicate with drivers?</p>	<p>It is anticipated that the proposed engineering measures will lead to a reduction in vehicle speed which is the primary objective of this scheme. Once the scheme is constructed the scheme will be monitored to examine its effectiveness. If necessary, further measures can be reviewed at that stage. Central islands have been shown to reduce vehicle speeds.</p>
9			<p>a) Speed The stated main aim of the Rural Traffic Calming Scheme at Carroll's Cross is to "reduce vehicular speed and improve the facilities for the vulnerable road users". I don't see in the proposal that it is actually proposed to introduce a new lower speed limit for this section of the road and if it isn't, then that is obviously not a main aim of this proposal. The N25 runs through Dungarvan and Lemybrien where lower speed limits are in place and I cannot see why a lower limit could not be introduced here. The limit should be introduced over a much longer length of road than 700m in the new proposed layout. To the East I'd suggest the lower limit should start in advance of the junctions at Haughtons Pub. To the West possibly at the start of the straight on the downhill approach to Carroll's.</p>	<p>It is anticipated that the proposed engineering measures will lead to a reduction in vehicle speed which is the primary objective of this scheme. Once the scheme is constructed the scheme will be monitored to examine its effectiveness. If necessary, further measures can be reviewed at that stage and the speed limit can potentially be reduced as per Guidelines for Setting and Managing Speed Limits in Ireland. Central islands have been shown to reduce vehicle speeds.</p>
10			<p>b) Within 225m of the N25 there is the conjunction of five busy roads. The volumes of all traffic types traversing this series of junctions and joining and leaving the N25 via the different roads should be monitored and that information should be the basis for some of this elements in the proposal. A lot of heavy good vehicles join and depart the N25 heading to Dawn Meats or heading for Portlaw or Kilmacthomas roads. If possible it should be studied whether it would be possible to link the L4015 and L8022 and reduce the number of junctions by 1 at least.</p>	<p>Various options were reviewed and investigated. The option being proposed is the preferred option from this process.</p>
11	Michael Flynn	Michael Flynn	<p>c) The presence of a large processing facility It has to be noted that a very large volume of the traffic at this junction is accessing Dawn Meats and the other commercial premises at this location. It should be in the interest of Dawn Meats to improve this junction by surrender land to the improvement of the junctions and possible relocate their own entrance to reduce the effect of backed up vehicles.</p>	<p>This is acknowledged. This is not a matter that the WCCC can propose under Planning & Development Regulations.</p>
12			<p>d) The topography at the various junctions The topography at the junction with L4015 in particular is difficult. To the West the land rises above the junction and a large number of signage and other road furniture obstructs the view of approaching traffic. To the East the road bends to the right and approaching traffic is only visible when they appear 140m from around the bend at speed. Vehicles emerging from this junction are travelling up hill and their emerging speed is affected as a result.</p>	<p>This junction is to re-designed and the gradient on approach to this junction from the L4015 is to be improved for road users who wish to use it. The proposed visibility at this junction will be in accordance with current design standards.</p>
13			<p>e) The establishment of a type of car sharing car park facility at the former Carroll's Cross Inn pub. The emergence of a car sharing type system at the former Carroll's Cross Inn is an issue as it is at a number of other locations along the N25.</p>	<p>This car parking facility is on private property and WCCC do not have the authority to remove. This car parking facility will be improved and made safer under the proposed scheme.</p>
14			<p>f) Sightlines from junctions In the County Development plan required new developments to abide by certain standards but the same stringent measures are not applied to this proposal. The proposal should ensure at a minimum that there is a clear line of sight from a point 4.5m from the edge of the road to a point on the nearside edge of the road 215m away. At the L4015 looking East this would involve remove the existing boundary to the road. At the L4015 looking West and at the other junctions this would</p>	<p>This scheme is designed in accordance with current TII publications and not the standards referenced. The visual obstructions reference shall be reviewed and removed if possible at the Detailed Design stage.</p>

			involve removing the plethora of visual obstructions that block the sightlines. See attached appendix A, B & C.	
15			<p>g) The diversion of bicycle traffic off the main road Vehicles at present travelling along the N25 have priority at the various junctions. The proposal to divert bicycles off the main road on to a shared path with pedestrians where their priority is then remove over vehicles at the adjoining roads is ridiculous. Firstly any bicycle traffic traversing this length of the N25 is not travelling at a leisurely pace like it might be in a town or city centre. Bicycles here are likely travelling at between 15 - 30kmph. Bicycles should not be using a shared path and pedestrians should not be force to either. A decent hard shoulder or a properly segregated cycle lane with priority over the adjoin roads is a better solution here.</p>	<p>It is a requirement under current standards and guidance to make provision for pedestrians and cyclists through this area. While acknowledging the existing low usage by these vulnerable road user groups, provision must still be made for these users within the proposed scheme.</p> <p>There is an existing hard shoulder on both approached to the location. The hardshoulders are phased out through Carrols cross in the existing road layout. When cyclists and pedestrians approach the location along the N25 and the hard shoulder ends, these users are forced to use the main carriageway or walk/cycle in the grass verge as they pass through Carroll's Cross. The location is a high accident location and the proposed schemes primary aim is to slow through traffic with a view to reducing the number of and severity of collisions.</p> <p>Currently cyclists travelling along the N25 have to merge onto the main running lane from the hardshoulder as they pass through Carroll's cross.</p> <p>The provision of a hard shoulder will not lead to a reduction in speed as is intended under this scheme.</p>
16			<p>h) The conflict between vehicles and bicycles that is proposed by the new layout. Slightly touched on above. Bicycles are being diverted off the main road on to a shared path where vehicles from adjoining roads can obstruct their passage and have a perceived right of way over bicycles and pedestrians as no advanced stop lines are proposed and there are no pedestrian priority crossings proposed either. These shared paths as they are separated from the main road are likely not going to be maintained like the main road would be in terms of gritting in winter and regular cleaning etc. The prosed shared path will also obstruct the 215m line of sight that should be implemented as all the junctions. Refer to Appendix A & B attached.</p>	<p>It is acknowledged that users of the shared use facility have to yield to turning vehicles at the junctions and inter-visibility between all users at the junctions is prioritised in the scheme design to facilitate safe crossing of the junctions.</p>
17			<p>i) The establishment of a type of car park facility at the former Carroll's Cross Inn pub. An ad hoc car sharing car park has established itself at the former Carroll's Cross Inn and this has not be addressed in the proposal. Will the proposed shared path separate the existing parking from the main road as is indicated by the green areas? The shared path at a point slight further east of here also reaches a particular pinch point in the road where the shared path might as well be part of the main road here for all the small strip of green that's indicated t separate it from the road edge.</p>	<p>This car parking facility is on private property and WCCC do not have the authority to remove. This car parking facility will be improved and made safer under the proposed scheme within location constraints.</p>
18			<p>j) Other Notes</p> <ul style="list-style-type: none"> i. The complicated junction between the L4022 and L8061 is not address at all in the proposed scheme. This has been the cause of other minor collisions in the past separate to the main road junction. ii. The proposed scheme is broadly already in place in terms of filter lanes and invisible islands. Traffic calming islands have been removed on approach to Dungarvan recently are they really necessary and are the proved to posed an additional obstacle and have signage and bollards to be constantly replaced? iii. A flood relief scheme has already been implement here. Details of the new drainage and drain locations is not shown in the proposal. 	<p>This junction will be improved under this scheme. Kerbing will be provided to tighten up the junction which will slow traffic accessing/egressing this junction.</p> <p>Central islands on schemes have been shown to reduce vehicle speeds. Road furniture will be mounted in socketed systems for ease of maintenance.</p> <p>Noted. The existing drainage infrastructure shall be utilised under the proposed scheme.</p>
19	Cllr. Declan Clune	Cllr. Declan Clune	<p>a) As marked on the drawing above A, I am concerned about the practical safety implications of the proposed bicycle lanes which would require cyclists to cross the L4022 and L8061. When cyclists are crossing then it may lead to vehicles having to slow down and possibly stop which could be an issue with traffic coming from the Dungarvan direction and turning left to proceed on the L4022 or L8061.</p> <p>I have the same concern for item B on the drawing. There are frequent HGV movements with large trucks and artics coming in and out of Dawn Meats. I feel that by having cycle lanes breaking through the L8022 at this location that, while it is a good idea, it may not be safe.</p>	<p>It is acknowledged that users of the shared use facility have to yield to turning vehicles at the junctions and inter-visibility between all users at the junctions is prioritised in the scheme design to facilitate safe crossing of the junctions.</p>

20			<p>b) There has been an entrance from the N25 into the Carroll's Cross Inn car park dating back centuries. The proposed works indicate that this entrance is to be closed off and replaced with a cycle lane. I would like to propose that this entrance remain open with the proposed cycle lane modified to reflect same.</p>	<p>This car parking facility will remain open and be improved and made safer under the proposed scheme within location constraints.</p>
21			<p>c) Item D in the above plan is the 3m island in the centre of the N25. I believe that this is the single most important feature of the plan as it prevents vehicles travelling from the Dungarvan direction overtaking and potentially colliding with a vehicle coming from the opposite direction that is in the filter lane to turn right onto the L4022 or L8061.</p> <p>The only observation I would have here is that are they long enough? I am unable to ascertain from the drawing the exact length but I would propose that this island is as long as possible in order to have a physical reminder with signage advising that to slow down that there is a junction just ahead.</p>	<p>Noted. This will be reviewed during the detailed design phase of the scheme development. The length is restricted by the vehicle movements from the adjoining local roads.</p>
22			<p>d) I would like to see the addition of rumble strips 150m before the junction on each side to add another layer of protection in that vehicles will be obliged to slow down further.</p>	<p>Rumble strips are not permitted on National Roads and their provision is not in accordance with TII standards.</p>
23	Cllr. Susan Gallagher	Cllr. Susan Gallagher	<p>a) The scheme includes a shared use one way cycle facility. This is generally discouraged, as it is dangerous to both pedestrians and cyclists. Since this is in a rural location, the number of pedestrians at this junction is minimal. Therefore a footpath should not be required in this area. The cyclists that use this stretch of road are fitness cyclists that usually cycle in groups. They prefer to stay on the main road in a group, since this is safer for them.</p> <p>The design of the crossings in this scheme will not be attractive for this type of cyclist to use, since they force cyclists off the main carriageway onto a "Bend Out" crossing. This gives priority to traffic on the side roads, rather than to the cyclist on the main road. As a result, cyclists are likely to avoid using the cycle lane altogether, which defeats the purpose of building it. Although the bend-out crossings shown in the drawings are in line with the guidance given in Transport Infrastructure Ireland's DN-GEO-03060 document, this document also gives an option of designing a "Bend-In Crossing", where the cycle lane is one-way and the AADT (annual average daily traffic) is less than 4000. I do not know what the traffic count on these side roads is, but perhaps the bend-in option could be explored instead.</p>	<p>There is an existing hard shoulder on both approaches to this location. The hardshoulders are phased out through Carroll's cross in the existing road layout. When cyclists and pedestrians approach this location along the N25 and the hard shoulder ends, these users are forced to use the main carriageway or walk/cycle in the grass verge as they pass through Carroll's Cross. The location is a high accident location and the proposed schemes primary aim is to slow through traffic with a view to reducing the number of and severity of collisions.</p> <p>Currently cyclists travelling along the N25 have to merge onto the main running lane from the hardshoulder as they pass through Carroll's cross.</p> <p>It is acknowledged that users of the shared use facility have to yield to turning vehicles at the junctions and inter-visibility between all users at the junctions is prioritised in the scheme design to facilitate safe crossing of the junctions.</p> <p>It should be noted that many injury collisions with cyclists occur at junctions involving left turning motorised vehicles. If the design is altered to a bend in type design the risk of these collision types is increased and it also allows left turning traffic to encroach onto the cycle lane while making the left turn at junctions. This in addition to the wider cross section this layout provides, is not conducive to the schemes aim of reduced speed of motorised traffic.</p>

4 CONCLUSION

The proposed scheme is consistent with the WCCC and TII objectives to improve safety for road users with a strong emphasis on the reduction of speed through this site.

The N25 Carrol's Cross Rural Traffic Calming Scheme is needed for the following reasons:

- Reduction in the speed of vehicles by the reducing the width of the carriageway and providing road side kerbing and kerbed central islands. These measure have been proven to reduce vehicle speeds.
- To provide a safer environment for vulnerable road users and also providing an alternative option for cyclists who prefer not to share the traffic lane with motorized vehicles.
- Improvement of overall visibility within the site by implementing a vertical re-design of the N25.
- Improving the night time visibility of vulnerable road users within the site by providing a lighting design compliant with current design standards.
- Provide safer junction layouts by reducing the corner radii in accordance with current design standards.
- Improve current road side parking practice at Carroll's Cross Inn which is an ongoing safety concern.
- Significantly restrict observed dangerous overtaking manoeuvres within the site by strategically positioning kerbed central island where these manoeuvres have been observed. I.e. in the vicinity of junctions.

In conclusion, having examined all the submissions, it has been decided that the proposed design, as shown in Appendix A, is the optimum solution available.

5 RECOMMENDATION

It is proposed that the development should proceed as set out in the Section 38 Drawings accompanying this report.

Fergus Galvin,
Director of Services,
Roads, Water and Environment,
10th February, 2021.

APPENDIX 1 – PROPOSED SCHEME PLANS

