



Dublin Cycling Campaign,
% Tailor's Hall,
Back Lane,
Dublin 8

R132 Connectivity Project - Non-Statutory Consultation

<https://consult.fingal.ie/en/consultation/r132-connectivity-project-non-statutory-consultation>

15th December 2020

Deadline- Submissions or observations on the proposed scheme may be made from 17th of November 2020 and must arrive no later than 5pm on 18th of December 2020.

INTRODUCTION

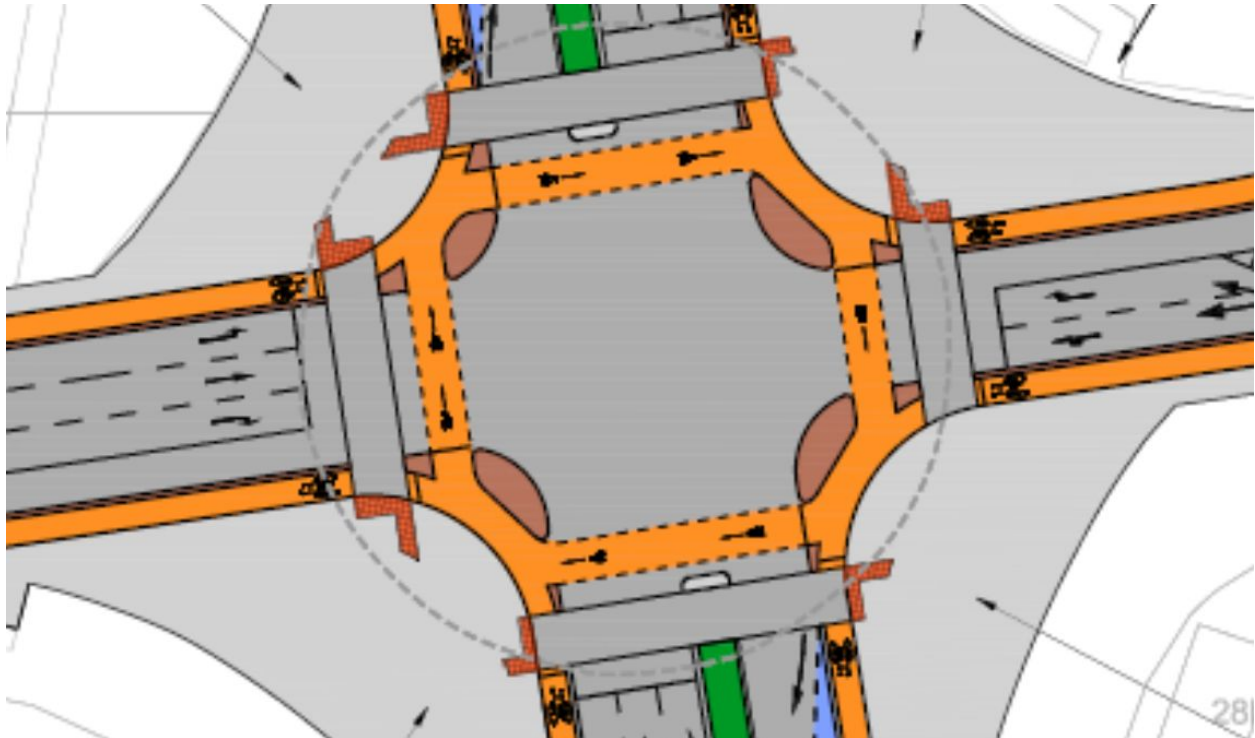
We are writing to you on behalf of the Fingal Cycling Campaign a subgroup of the Dublin Cycling Campaign which has been advocating for improved cycling infrastructure for Dublin for 26 years and a registered charity #20102029. Dublin Cycling Campaign is a member of Cyclist.ie (www.cyclist.ie), the Irish Cycling Advocacy Network, is the network in Ireland of Cycle Campaign, Bike Festival, and Greenway Groups, and is the Irish member of the European Cyclists' Federation (www.ecf.com). Our aim is to make Fingal a safe and friendly place for everyone, of all ages, to cycle and walk. Dublin and Fingal Cycling Campaign welcome Fingal County Council's intent to improve walking and cycling infrastructure on the R132 Connectivity Project but we have some concerns with the road layout.

GENERAL COMMENTS & SUMMARY

Fingal Cycling Campaign is happy that Fingal County Council have produced such an ambitious plan for reallocation of road space on the R132. This project delivers extensive protected cycle lanes, along with new crossings and safer pedestrian facilities on a road which to date is hostile to cycling. We are confident that these additions will enable many more people of all ages and abilities to choose cycling or walking for everyday journeys and we believe these improvements are in line with many of the Council's stated objectives in the 2017-2023 development plan. We have raised some design concerns with the layout of the junction choice being recommended by the NTA as we see this junction as not delivering the key safety benefits of the Dutch junction on which it is based. Overall Fingal Cycling Campaign welcomes many aspects of this design and there are some nice cycling and walking features within the project and we have collated this below as a list of concerns and recommendations made by members of the Dublin Cycling Campaign who have contributed their local knowledge of the fingal area as well as their general points of view on how the scheme can be improved.

Junction Layout

The area of highest concern for all people who cycle is the point at which they are required to interact with motorised traffic. In order to enable people of all ages and abilities to cycle in safety, these conflicts must be designed out to the fullest extent possible. We see that on straight sections this is achieved with simple kerb and bollard solutions but at junctions it becomes more of a concern. In this design we see the possibility of a very safe junction design but with changes required to achieve this. These changes include small adjustments to the layout as indicated and also a full consideration of the traffic light sequence at these junctions. All 3 proposed upgrades follow the same format so we have selected Estuary road as an example of the “Dublin Junction” as currently proposed for a number of 4 way junctions in Dublin (see diagrams provided below of the problems this junction creates in the “less preferred” and “unacceptable” sections)



Our concern with junction design is how it designs in and forces conflict between cyclists and motorists and we have seen this in action at Lombard St in Dublin 2. In the proposed design motorists and cyclists proceed on the same green, save for the provision of a short “advanced green” that benefits only the people cycling who arrive at the junction during a “red phase”. For all other cyclists who are proceeding on green, they must contend with left turning traffic, drivers who are likely to be in slow moving columns and not expecting a cyclist to proceed on their left with right of way.

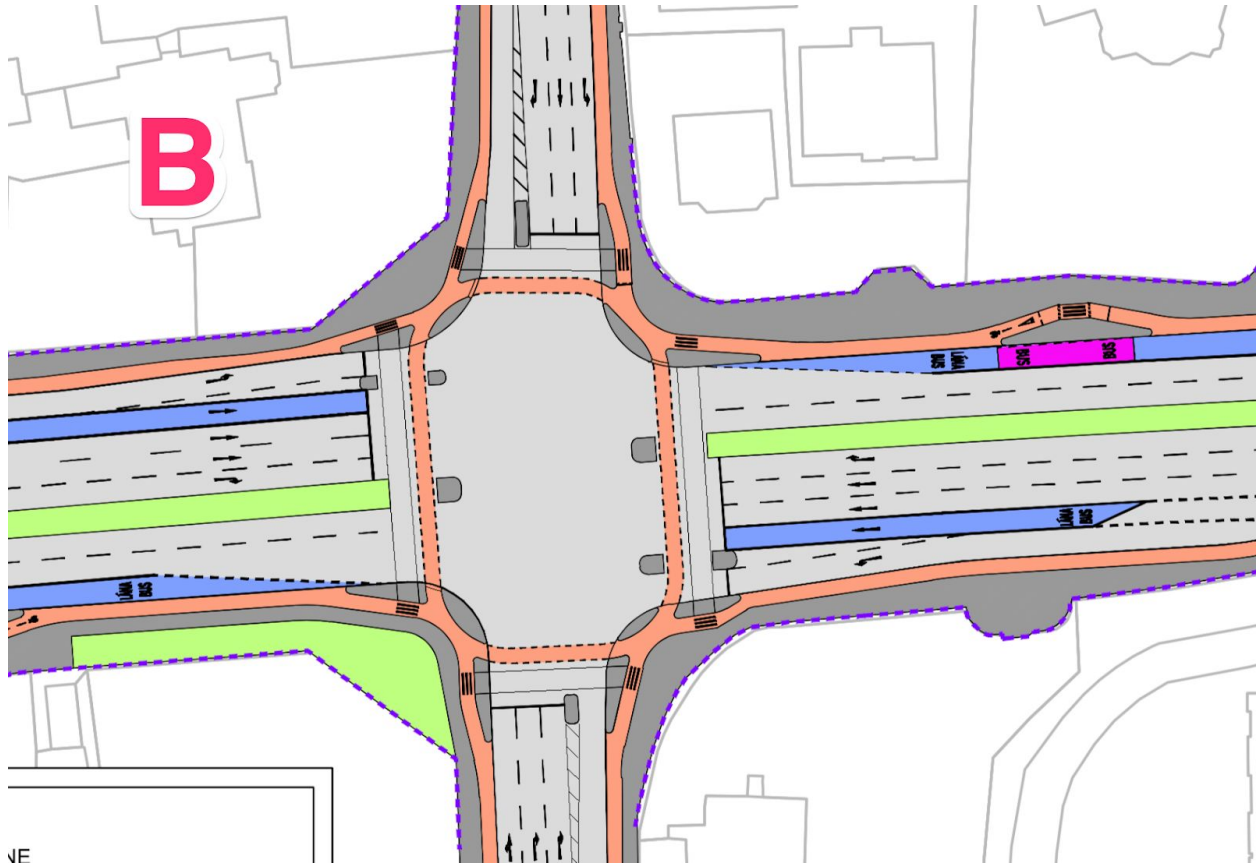
The small island at the junction can place the cyclist in the A-pillar or B-pillar blind spot of motorists leading to a dangerous situation of a driver turning left, physically unable to see the cyclists, not expecting them and believing they have right of way due to the green light phase. So-called “left hook” collisions and near-misses are a common experience of many people cycling in Dublin due to the dangerous design of, currently unsegregated, cycle lanes that filter them into junctions in this position. The proposed design while appearing to improve this through segregating a small part of the corner does not actually address the conflict-by-design issue and actually may increase the risk.

This type of junction, through its appearance of safety, may draw an inexperienced or low confidence cyclist into a false sense of security and, where many left-hooks are avoided by sharp reflexes, lead to an increased rate of collisions

Our proposals for addressing this are to adopt the learnings and practices, and not just visuals, of the Dutch style of design. There are other design options available such as cyclops which also offer more protection for cyclists and equal benefits for pedestrians.

Preferred Option (Dutch Junction)

The Dutch junction style creates a shared pedestrian and cyclist phase, while cyclists are free to turn left at all times, similar to a pedestrian movement at a junction where only crossings are controlled. This requires the cycle lane to move inwards at the junction and create an island for pedestrians to use as part of their crossing - accessed via a tactile zebra crossing - shortening their signalised time / distance to cross.



Less Preferred Option (adapting the Dublin Junction)

The only safe way to signalise a Dublin Junction is with 3 separate phases for pedestrians, motor traffic and cyclists and adds 3.7m (2 x 1.85m cycle lanes) to the pedestrian crossing distance during the green phase, as opposed to the Dutch junction which allows the pedestrian to cross the cycle lane at any time via zebra crossing to the island. This extra crossing time significantly impacts the flow of motor and cycling traffic and adds to waiting time for pedestrians who tend to be held even longer in an attempt to maintain traffic flow as a result of the 3 phases.

Not Acceptable option (the current Dublin junction flow)

The unsafe option, which is often chosen as it facilitates smoother traffic flow, is the approach with 2 light phases (pedestrian then car+bike together) which places the cyclist in competition with motor traffic to move forward. We believe this solution is an unacceptable safety risk.

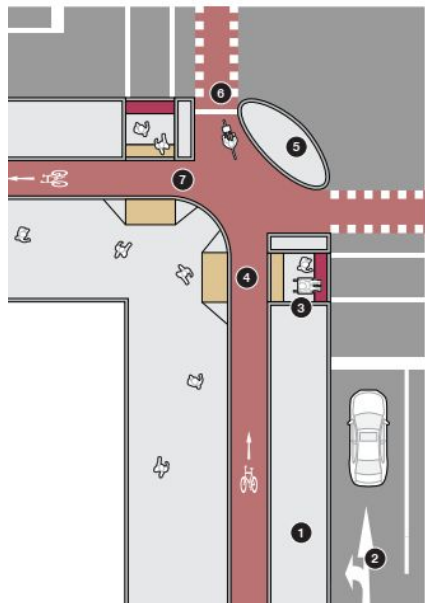


In this design, cyclists and pedestrians cross together, and motor traffic waits / yields for both during crossing phases. At future dates, should the signalised crossings be safe to remove and replace with zebras, this design creates space for “shark teeth” holding zones where turning motorists have full line of sight of crossing pedestrians cyclists with no blind spots to worry about



Fingal Cycling Campaigned recommended option

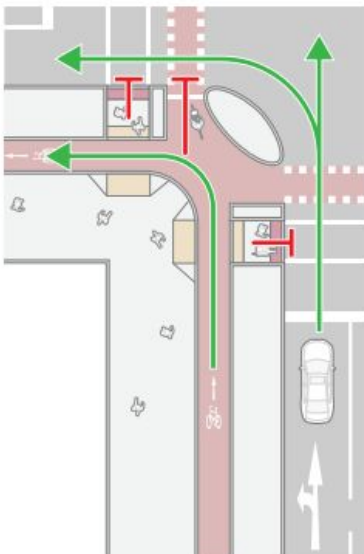
DUTCH JUNCTION



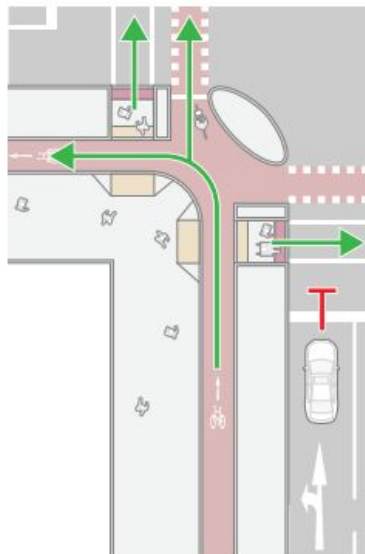
- 1 Horizontal segregation wide enough to provide safe space for pedestrian waiting area
- 2 Left turning and straight ahead motor traffic lane
- 3 Pedestrian crossing waiting area
- 4 Pedestrian crossing over cycle lane
- 5 Protective corner island
- 6 Stop line for straight-ahead and right-turning cyclists (depends on junction signalling)
- 7 Left turning cyclists never encounter signals

DUTCH JUNCTION MOVEMENT SEQUENCE

- 1 All motor traffic proceeds.
Straight ahead cycle & all pedestrian traffic is held.
Left turning cycle traffic proceeds.

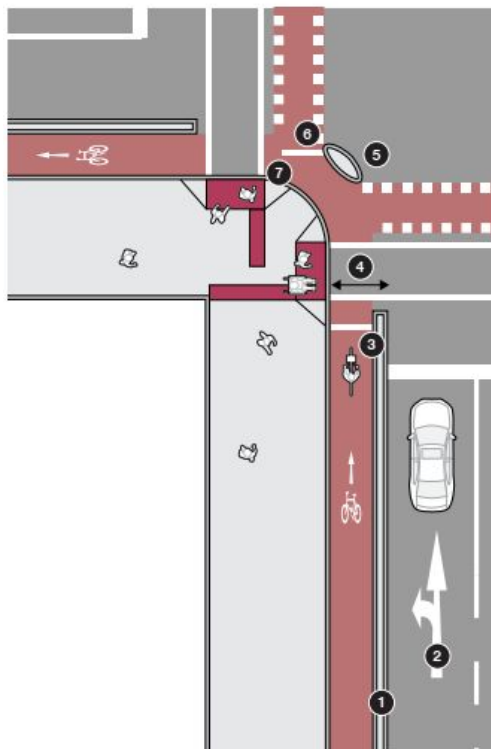


- 2 All motor traffic is held.
All cycle and pedestrian traffic proceeds.



FCC proposal for R132 junctions

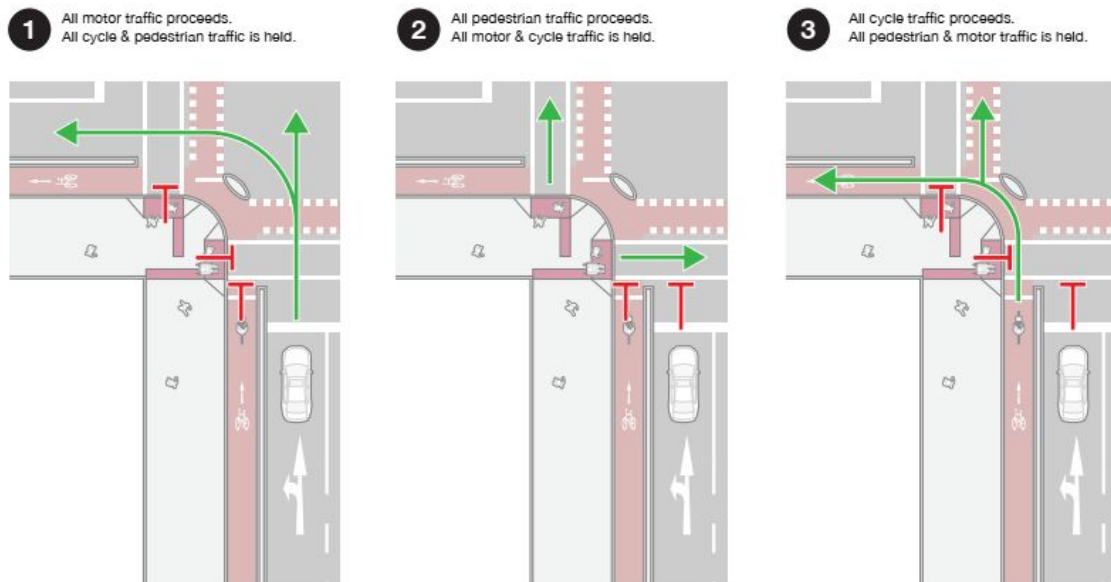
DUBLIN JUNCTION WITH CORNER ISLAND



- 1 Raised kerb segregation
- 2 Left turning and straight ahead motor traffic lane
- 3 Stop line for cyclists
- 4 2.5m approx.
- 5 Corner protection island
- 6 Stop line for right-turning cyclists (depends on junction signalling)
- 7 Left turning cyclist must stop when pedestrian crossing is green.

Fingal Cycling Campaign less preferred option on Dublin Junction

DUBLIN JUNCTION MOVEMENT SEQUENCE (A)

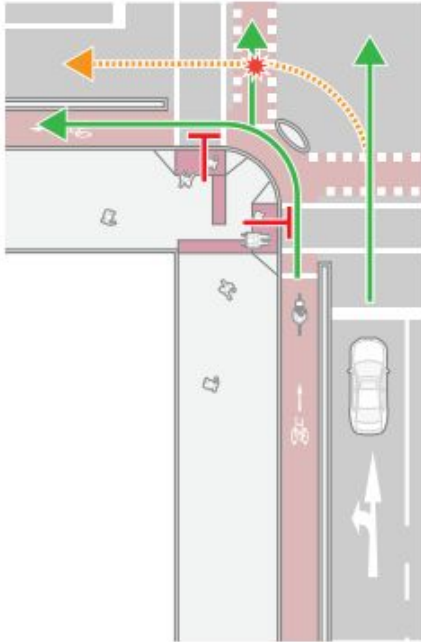


NOTE: Interrupting the cycle lane with the controlled pedestrian crossing will add an extra 5m to the pedestrian crossing span.

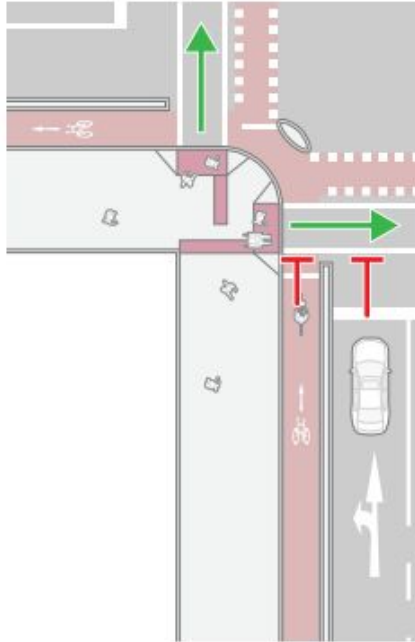
Fingal Cycling Campaign not acceptable option on Dublin Junction

DUBLIN JUNCTION MOVEMENT SEQUENCE (B) (NOT SAFE FOR LARGE OR BUSY JUNCTIONS!)

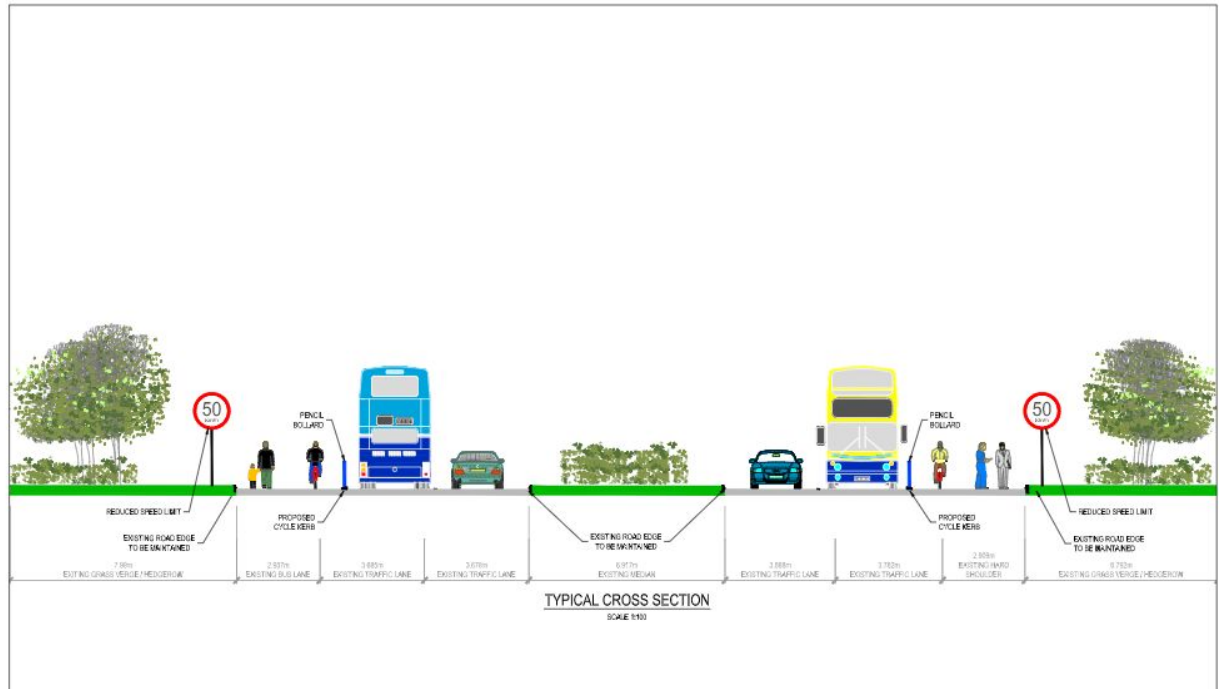
- 1** All motor & cycle traffic proceeds.
All pedestrian traffic is held.
High risk of conflict between cycle and motor traffic.



- 2** All pedestrian traffic proceeds.
All motor & cycle traffic is held.



Segregation of Cycle Lane via pencil bollards



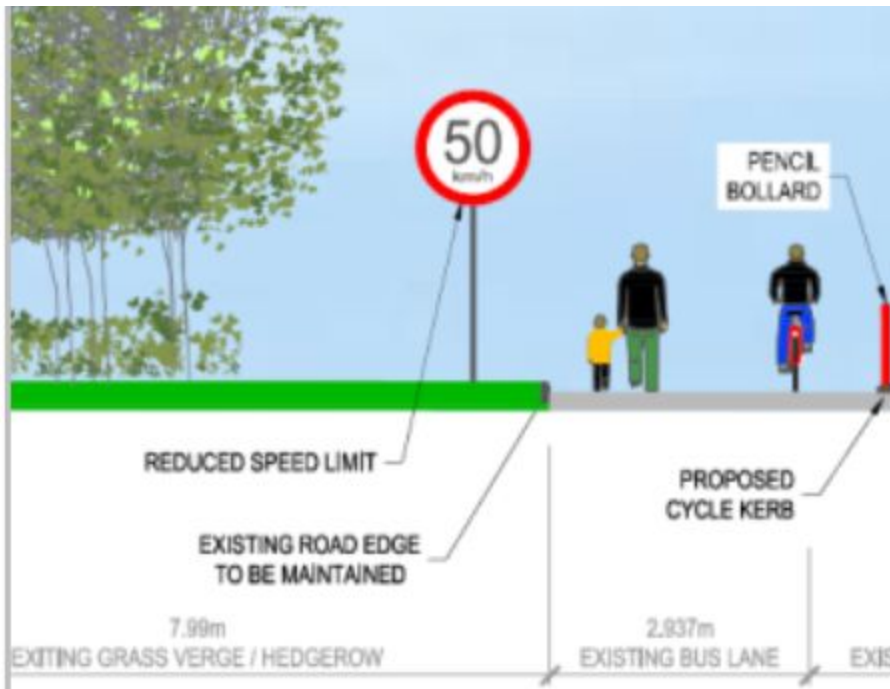
We would recommend that Fingal Co Co apply safer segregation at these sections using a kerb and some green space. There is a wide median in the centre of traffic that is not required for a road with a 50kph limit and could be relocated to the pedestrian / cycling side. Put a distance between the bike lane and Bus Lane. A bus passing at 50kph within 1metre is not pleasant for any cyclist and particularly children. Perhaps space can be taken from the median to allow a gap between bike lanes and traffic lane's, if this is not possible due to engineering requuireiemtns then we would suggest that existing verges be widened to achieve the same effect. This will also have benefits for pedestrians too. Something similar to the configuration on the Donabate Distributor road would be preferable

Separation of walking and cycling facilities

We would recommend similar kerb separation of walking and cycling. It is unclear from the drawings or documents if segregation of walking and cycling on the drawings will be provided



Width of Cycle lanes



B Cycling Regime	
Single File	0.75m
Single File + Overtaking. Partially using next lane	1.25m
Basic Two-Way	1.75m
Single File + Overtaking. Partially using next lane	2.00m
2 Abreast + overtaking (tracks and cycleways)	2.50m

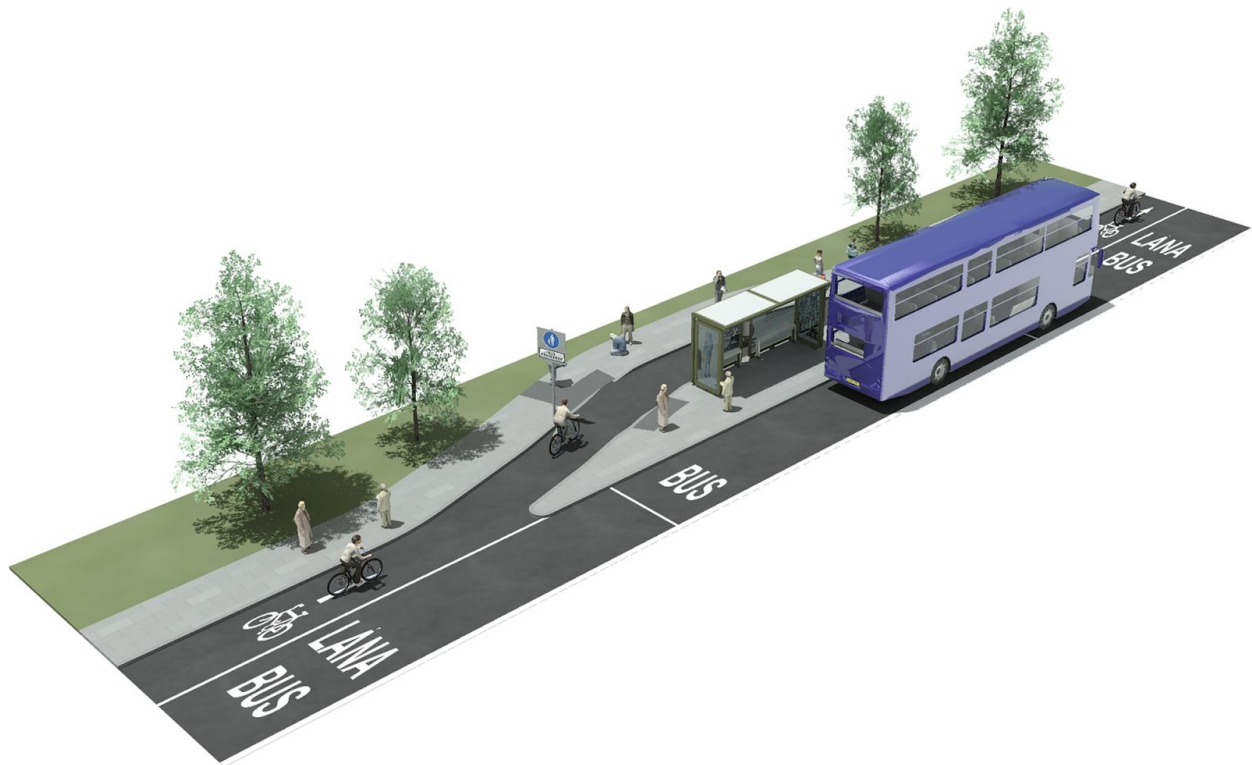
While the drawings are not detailed, they mention a typical layout will be a 1.85m footpath next to a 1.85m cycle lane with a kerb and possibly bollards. The footway and cycle track look flush which is not good for pedestrians - the footway should be higher than the cycle track so that

vulnerable pedestrians do not inadvertently stray onto the cycle track. A kerb on the inside and bollards on the outside of a cycle track will require margins of .25m and .5m respectively leaving a usable cycling space of 1.1m - aka: single file cycling. Cycling next to fast moving buses is not attractive either, especially if the road is wet so it would be good if they increased the horizontal separation as much as possible - and added some hedging - between the bus lane and cycle track.

Dutch Standard of 2.5m wide bike lanes should be considered. Current width of 1.85m will be difficult to overtake a bike, especially for wider bicycles such as handcycles, cargo delivery bikes, trailers etc. also as wheelchair and other mobility devices will generally use the cycle lanes we would really encourage more space to be allocated given the widths available. A particular call out is made to provide space for Cargo bikes given proximity of shopping centres

Bus Stops

We would like to ensure that bus stops are safely designed using the island bus stop model to facilitate safe access to and from the bus stop for all users and to redirect cyclists out of the way of passengers as explained in the national cycle manual



Side Roads

We would suggest that each side road access way to the R132 be considered appropriately per DMURS and the Cycle Design Manual. We are concerned for the safety of cyclists by motorists accessing and exiting side roads too quickly or without appropriate segregation. Cyclists should maintain priority and not be expected to yield to motorists where the motorist does not have the right of way and junctions should be designed in a set back fashion to allow drivers space to stop and have sufficient visibility of approaching cyclists and pedestrians before crossing



2 way usage of cycle track



The above image from the consultation indicates 2 way usage of the cycle tracks. This would be commonly experienced in areas of Dublin where safe infrastructure is not provided for in the desired line and where crossing the road is impossible between junctions. Following the traffic line, in the opposite direction for a, sometimes excessive distance, then making a long trip around a junction, to cycle back in the opposite direction, complete another trip around the junction etc will lead to people choosing the natural desire line as is an unintended consequence of this type of wide road. We would recommend appropriate toucan crossings as needed to prevent this.

Toucan crossing of R132 North of Estuary roundabout.



Can this be aligned with entry into Balheary park at Ennis Lane? Will give access to paths/lanes and Balheary Park. This could also be aligned with a Broadmeadows Greenway route.

Lissenhall roundabout

Continue bike lanes up to Bike Underpass on Lissenhall roundabout. This will complete more of the cycling link to Donabate. Hearse road due to be upgraded in near future to complete cycle link to Donabate.

Active travel Links

It is important to create safe connectivity to the new routes to encourage uptake.

Connectivity from Swords Village, Airside, Holywell North Street area, Glen Ellan road bike lanes should be delivered in parallel or in advance in order to incentivise modal change and reduce car volumes at the R132 junctions.

There are some off road bike lanes around Airside but the link between Ryanair building and Pinnock Hill roundabout does not exist. This should be completed in parallel with the R132 project as this will form part of a complete bike lane link from Holywell/ Kettle lane to Pavillions.

Traffic Volumes

We would recommend a traffic volume study / assessment measured against hourly / throughput of new intersections. This may help alleviate concerns that bus traffic will not be unduly delayed. It should also demonstrate that the road size and layout is more than adequate

for the normal volume of traffic and we would hope to see that the junction will prioritise bus traffic over private motor traffic with appropriate times dedicated to keeping bus traffic moving

Links with Public Transport

We recommend that all current and future developments (e.g. BusConnects, MetroLink) be considered in the design with necessary bike parking and connectivity planned for

Bike Parking

We would encourage adequate bike provisions at suitable points along the route and that these be sheltered and created to accommodate all types of bikes including adapted cycles. This could facilitate Cargo bike rental schemes (e.g. based in Pavillions, Swords Village and Airside in parallel with launch, such rental schemes operate successfully in other countries and in a similar fashion, but for standard bikes, from Drury Street bike park. Resources may also enable Try and buy schemes and Increased bike parking in Pavillions, Airside, Swords Village etc) would create benefits. There is a suggestion to reserve an area for a pop up shop for an existing Swords Bike shop in the Pavillions car park with necessary items for sale such as the “Van Moof” pop up shop in the South William Street area

CONCLUSION

Fingal Cycling Campaign welcomes the opportunity to comment on the r132 Consultation project, We are disappointed that the current junction designs may not fully safely enable cycling for all ages and abilities but welcome the proposals for reallocation of road space along with segregated cycle lanes and general improvements

Regards

Alan Downey

Fingal Cycling Campaign

Email: fingal@dublincycling.com

APPENDIX I

Fingal Development Plan 2017- 2023

Section 3.4 Sustainable Design and Standards

- **Objective PM31**

Promote excellent urban design responses to achieve high quality, sustainable urban and natural environments, which are attractive to residents, workers and visitors Section 7.1 Transportation

- **Objective MT04**

At locations where higher density development is being provided, encourage the development of car-free neighbourhoods, where non-motorised transport is allowed and motorised vehicles have access only for deliveries but must park outside the neighbourhood, creating a much better quality public realm with green infrastructure, public health, economic and community benefits.

- **Objective MT13**

Promote walking and cycling as efficient, healthy, and environmentally-friendly modes of transport by securing the development of a network of direct, comfortable, convenient and safe cycle routes and footpaths, particularly in urban areas.

- **Objective MT14**

The Council will work in cooperation with the NTA and adjoining Local Authorities to implement the Greater Dublin Area Cycle Network Plan subject to detailed engineering design and the mitigation measures presented in the SEA and Natura Impact Statement accompanying the NTA Plan.

- **Objective MT16**

Promote the provision of adequate, secure and dry bicycle parking facilities and a bike rental scheme at appropriate locations, including stations and other public transport interchanges.

- **Objective MT17**

Improve pedestrian and cycle connectivity to schools and third level colleges and identify and minimise barriers to children walking and cycling to primary and secondary schools.

- **Objective MT18**

Review existing cycle infrastructure which was not designed in line with the Principles of Sustainable Safety in a manner consistent with the National Cycle Manual and the Design Manual for Urban Roads and Streets and undertake appropriate remedial works.

- Objective MT19

Design roads and promote the design of roads, including cycle infrastructure, in line with the Principles of Sustainable Safety in a manner consistent with the National Cycle Manual and the Design Manual for Urban Roads and Streets.

- Objective MT20

Investigate the use of demand management measures to improve the attractiveness of urban centres for cyclists (and public transport users).

- Objective MT21

Ensure that as soon as possible, but by the end of the lifetime of the Development Plan the environment in the immediate vicinity of schools is a safe and attractive low speed (30kph) environment, and drop-off by car within a given distance restricted.

- Objective MT22

Improve pedestrian and cycle connectivity to stations and other public transport interchanges. Section 8.3 Green Infrastructure – A Strategy • Objective GI13 Ensure the Green Infrastructure Strategy for Fingal reflects a long-term perspective, including the need to adapt to climate change.

- Objective GI17

Ensure the Green Infrastructure Strategy connects and integrates existing and new communities through appropriate planning, ongoing management and governance. • Objective GI20 Require all new development to contribute to the protection and enhancement of existing green infrastructure and the delivery of new green infrastructure, as appropriate. • Objective GI30 Develop a Cycle/Pedestrian Network Strategy for Fingal that encompasses the Fingal Way and other proposed routes which will be screened for Appropriate Assessment and Strategic Environmental Assessment. Section 12.10 Movement and Infrastructure Sustainable Transport Walking and Cycling Walking and cycling are the most efficient modes of travel in terms of use of road-space, and the most sustainable in terms of environmental impacts.