



Core Bus Corridor 5: Blanchardstown - Preliminary Submission

1.0 Introduction

Dublin Cycling Campaign is a registered charity that advocates for better cycling conditions in Dublin. Dublin Cycling Campaign is the leading member of Cyclist.ie, the Irish Cycling Advocacy Network (ICAN). We want to make Dublin a safe and friendly place for everyone of all ages to cycle.

We have mixed feelings on the proposed Blanchardstown to City Centre as it has the potential to deliver a high-quality cycle route in places but suffers from car-dominations in others. We understand that the NTA is currently at a preliminary concept design. This is reassuring as we have serious concerns about this route in areas. We look forward to future engagement with the NTA to solve the major issues with this route and to refine the details in later stages.

2.0 General Observations

2.1 There are good changes already

Though we are critical of parts of the concept design there are already huge improvements for pedestrians and cyclists within this concept design. These include:

- The removal of through traffic on the Old Cabra Road and Prussia Street
- Removal of the pedestrian and cyclist hostile Ashtown Roundabout
- The two-way cycle track along the Navan Road

2.2 Primary Cycle Route Width

This CBC will deliver Primary Routes 4B and 4D, Secondary Route 4A, and a short section of Primary Route 5 of the GDA Cycle Network Plan (CNP). The target quality of service for primary routes in CNP is A+/A. Below is an extract from section 2.3 of the

Written Report of CNP, which outlines the desired width of primary cycle routes as 2.5m. A minimum target width of 4m should be the aim for primary route two-way cycle tracks, such as those on the Navan road.

Basis for Target Quality of Service

ROUTE TYPE	PRIMARY / NATIONAL	PRIMARY	SECONDARY
Cycle Volume Existing (3 hour peak period)	n/a	200 -1000	100-500
Target QoS - Width Factor	A+ Two abreast + overtaking Width = 2.5m	A+/A Two abreast + overtaking Width = 2.5m	A/B Single file + overtaking Width = 1.75m
Target QoS - Other Factors	A	B	B

We recognise that achieving a 2.5m wide cycle track on all portions of this route may be challenging, however it is possible to achieve this width along large segments of the route.

2.3 Streaming lanes

There are two places along this corridor where streaming lanes are used against the recommendations of the National Cycle Manual.

At junction 2 of the N3, the following streaming lanes are being retained:

- Eastbound approach to the flyover (70m pocket turn, with two slip lanes inside)
- Eastbound side of the flyover (120m pocket turn, with a slip road inside)
- Westbound approach to the flyover (40m pocket turn, with a slip road inside)
- Northbound exit from Navan Road/Blanchardstown Town Centre (35m pocket turn, with a slip road inside)
- Other road (two 40m pocket turns, one of which has a slip road inside)

And on Manor Street northbound, a 190m “orphaned cycle lane” is also proposed.

In section 4.4.4, on junction approaches the NCM states that:

- *Streaming cycle lanes can only be used in low traffic speed environments where there is minimal speed differential between cyclists and adjacent traffic*
- *Streaming is not suitable along HGV routes*
- *Streaming cycle lanes should only be used beside right or left hand pockets (i.e. distinct lanes dedicated to turning movements) and should not exceed 30.0m in length*

The proposed pocket turns are clearly not compliant with the manual, so these junctions must be reconsidered.

For a crossing like J2 on the N3 where traffic volumes and speeds are very high, full segregation is really the only solution which would deliver the safety and priority that cyclists need. If bidirectional tracks are used on Blanchardstown Road South, then this could be achieved more cost effectively.



A demonstration of this junction design from German cycling advocates

At many of these locations greater segregation is needed for cyclists.

2.4 Slip Lanes

There are 12 slip lanes retained within these concept designs. Providing cycle lanes across slips lanes is not recommended by the NTA's National Cycle Manual (section 4.4.4). These slip lanes should be removed (DMURS 4.4.3) or converted into pocket turns where complete slip lane removal isn't possible. Examples on maps 9, 18 and 19.

2.5 Loss of priority at junctions

At many junctions, cyclists lose all priority through the use of shared spaces, and even footpaths where cyclists have to dismount. The NTA's National Cycle Manual states that this loss of priority is "not appropriate for main cycle routes".

Where space is available (e.g. at the Halfway House Pub junction), these designs should be replaced with protected junctions similar those proposed for the North Strand/Fairview cycle routes. There is a good explanation of the principles of this design at www.protectedintersection.com.

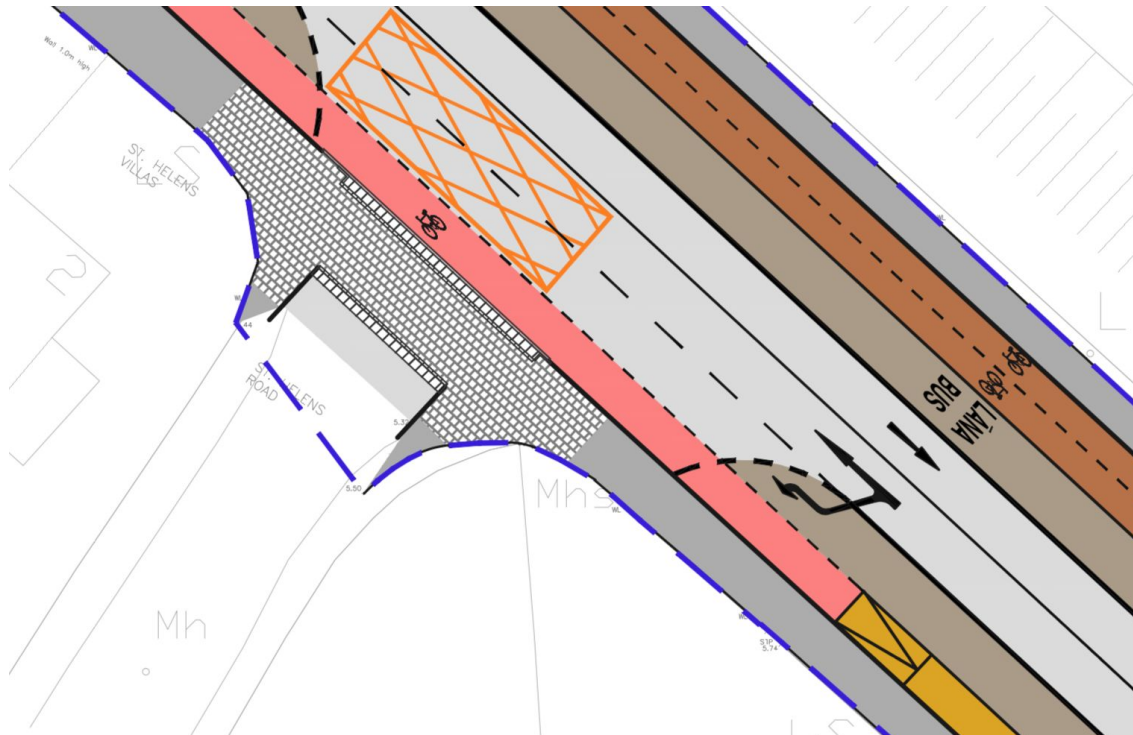
Where space is more constrained, other measures like turning restrictions should be used to ensure cyclists have priority through the junction without compromising on cyclist safety. For example, at the junction between Navan Road and Nephin Road, the cycle tracks are only 1.5m wide, which makes cyclists highly vulnerable to being caught in a blind spot of left-turning motor vehicles. Banning turning movements here would facilitate improved priority for cyclists at this junction without having to worry about vulnerabilities like blind spots. For motor traffic, access to Nephin Road and the surrounding residential area could still be maintained from Blackhorse Avenue, Ratoath Road, and Faussagh Avenue, which are easily accessible from Navan Road.

2.6 Side Roads

At side roads it should be clear that cyclists and pedestrians have priority over traffic turning on and off the main road. Is this feasible? How would it work ... would it be via traffic signals? If it's through point 2.6.1, I think that would be risky. There are schools on those roads near the junction.

2.6.1 Continuous Footpaths/Entry Treatment

Infrastructure like entry treatment or continuous footpaths/cycle tracks encourage and promote priority for pedestrians and cyclists. They also encourage lower speeds. In general this would be exemplified by a raised table exit/entry from all side roads.



A raised continuous footpath over a side road as part of the proposed Merion Gates to Blackrock Scheme - AECOM/ROD for NTA

2.8.2 Buffer Space Design

An alternate method for providing for safer minor road junctions is to bend the cycle track away from the road at the junction. This provides better visibility for cyclists by moving them out of the blind zones of turning vehicles. It can also provide space for turning vehicles to wait for cyclists to pass by. Priority for cyclists over minor roads needs to be reinforced with this design. The cycle track should also be clear to motorists, the use of red surface treatment to mark the conflict area is a must.



With this design the area between the road and the cycle track places the cyclist well outside the blind zone of the truck and clearly visible to the driver without the use of mirrors. The use of difference surface treatment, in this case block paving, helps to highlight the conflict, indicate a change in driving conditions from main road to side

road and acts as a traffic calming measure. This kind of design could be suitable near Blanchardstown where there is more space available.

2.7 Bus Stops

The frequency and locations of bus stops along this corridor needs to be reviewed to ensure they are appropriately spaced out, and located in places where bypasses for cyclists are possible.

For example, between the Halfway House junction and Prussia Street, there is a stop every 250m, and none of these includes a cycling bypass. Reducing the number of stops along this stretch would improve journey times for bus users and reduce the number of conflict points for cyclists.

There are many reasons we'd encourage the design team to include bus stop bypasses wherever possible:

- Bus stop bypasses are recommended by the NTA's National Cycle Manual given the frequency of buses along this route
- Bus stop bypasses also remove conflict between buses and cyclists. There is nothing more terrifying, particularly for a beginner or tentative cyclist than a 30 ton bus pulling into a bus stop on top of you
- Buses will be able to pull into stops faster because bus drivers will not need wait for a slow cyclist to pass the bus stop before pulling in

We'd strongly encourage the design team to look into all possible options for including bus stop bypasses. In many locations there are easy options like on map 21 both bus stops could be relocated slightly to nearby green space in order to provide space for a bypass.

2.8 Integration with the wider GDA Cycle Network Plan

This route intersects with a number of other cycle routes included in the GDA Cycle Network Plan. Where possible, the tail ends of cycle lanes of these routes should be constructed as part of the Core Bus Corridor. That will ensure that these junctions don't need to be re-designed when future cycle projects are progressed.

Routes that intersect are:

- At the Ashtown Roundabout, the Dunsink Observatory to the Phoenix Park cycle route, which is a secondary route in cycle network plan and an objective of Dublin City Council's Ashtown-Pelletstown LAP
- The intersection of Navan Road, Old Cabra Road, Cabra Road and Ratoath Road is also the intersection of the primary route 4 and the secondary routes 4A, 4B and C8. C8 is an important route as it will connect to the planned Cabra heavy rail station. 4B is an important link from the Pelletstown area towards the city.
- North Circular Road, Secondary Route NO1

2.9 Gaps in the corridor

It is unclear if there will be provision for cyclists between Snugborough Road and Auburn Avenue. The options report states that there should be segregated cyclist facilities through Blanchardstown Village, but no details are provided about exactly what these upgrades would look like.

Similarly in Stoneybatter, the options report recommends that the primary cycle route continue through Grangegorman campus and Grangegorman Lower, but there is no information about how this area would be designed. Indeed, the Grangegorman Development Agency says that there are no plans to build any sort of dedicated cycle route through the campus.

Finally, on map 3, outbound cyclists have no way of continuing along the corridor when the bidirectional cycle track terminates. It's also unclear how any pedestrian or cyclist is expected to navigate the roundabout that follows. Given the impermeability of these roads and the high density of housing in the area, there should be a bidirectional cycle track on both sides of Blanchardstown Road South.

2.10 Opportunity for Multimodal Travel

Multi-modal travel between bike and bus could be encouraged as these designs progress. A first step would be to provide covered Sheffield stands with CCTV coverage near bus stops along this route, giving a particular focus to where orbital cycle routes intersect with this Core Bus Corridor. As the CBC will host a super high-frequency bus route it makes it more desirable for people to cycle to the spine.

Providing a high-quality bike parking area beside the new bus station at the shopping centre is another must under objective 7 and objective 8 of the National Cycling Policy Framework.

3.0 Route Observations

3.1 Minor junctions and side roads

Around Blanchardstown Town Centre, there are several car park entrances where cyclists are expected to yield to turning traffic. It is not reasonable for cyclists to yield to traffic turning into a car park/minor road.

Most of the other minor junctions do give cyclists priority, but without a buffer, cyclists are still vulnerable to blind spots and left-turning motor vehicles. This risk is especially pronounced where bidirectional cycle tracks are being proposed because some drivers will not anticipate cyclists coming from both directions. Continuous footpaths should be installed wherever possible to encourage caution from drivers.

At some junctions (e.g. Kempton Avenue), there is space to introduce a buffer for cyclists on the approach to the junction.

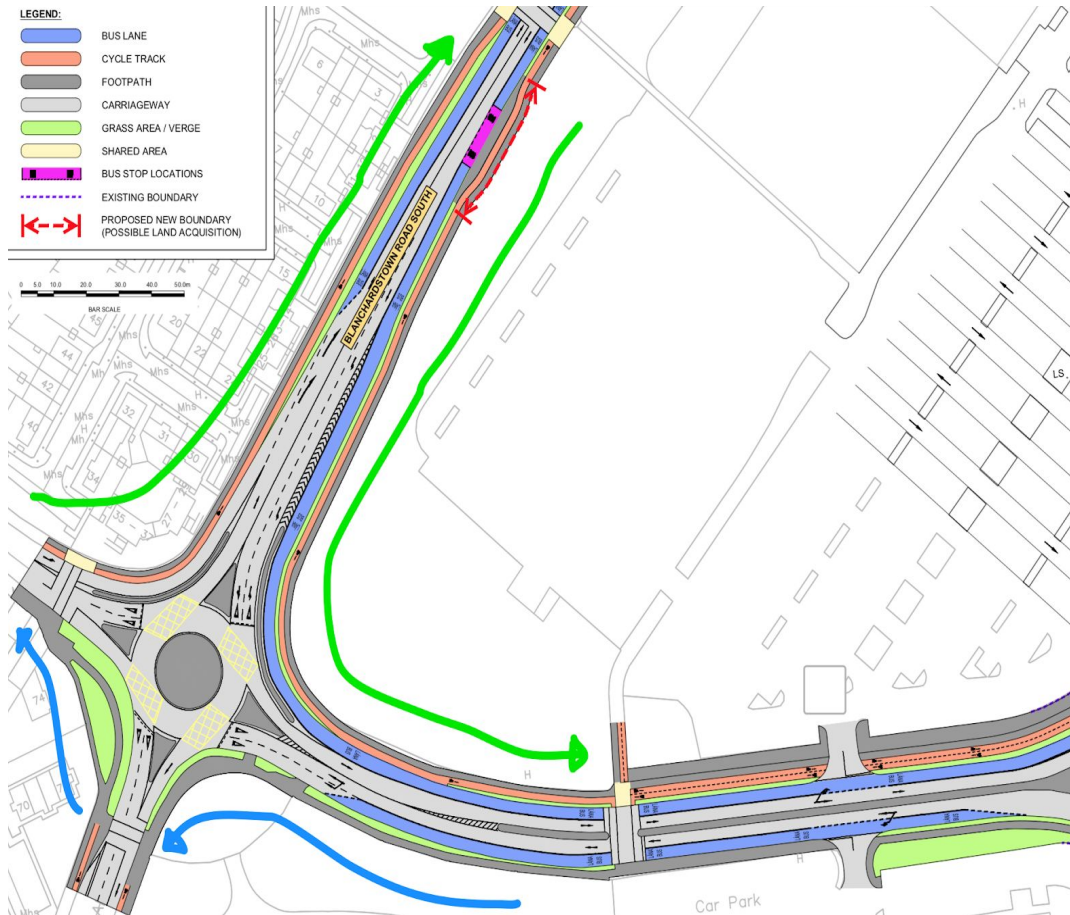
If there is insufficient space for such a buffer, other traffic calming/elimination measures should be considered. For example, Ashtown Grove and Skreen Road could be closed off from Navan Road, requiring motor traffic to access the residential areas from Kinvara Avenue and Nephin Road respectively.

Measures like these have several benefits:

1. They eliminate potential rat running.
2. They reduce the number of junction conflicts for cyclists.
3. They free up space where floating bus stops can be installed.

3.2 Indirect Journeys at Blanchardstown Town Centre

There are so many locations near the Blanchardstown Town Centre where cyclists are forced to make indirect journeys. There are so many junctions where it is practically impossible to go in all directions as a cyclist. Let's take one example near Sheepmore Grove. Here a cyclist is forced to travel 535m to do a journey that it takes motor traffic 180m to complete. There is no route option for cyclists leaving the town centre back towards Sheepmore Grove except walking their bike along the footpath.



Extract of map 3 showing cyclist journey to shopping centre in green and route home in blue by foot because there is no return cycle path.

The fix for this is to move the crossings closer to the roundabout and to provide cycle tracks on all arms of the roundabout. A two-way cycle track along Blanchardstown South should be used to reduce the number of crossings cyclists need to make.

3.3 Castleknock Manor

The Cycle Network Plan indicates that secondary route 4A should travel along Castleknock Manor instead of beside the Navan Road (map 14 and 15). This alternative would provide a more comfortable route for cyclists as they wouldn't be beside heavy traffic. It would also better align cyclists with the M50 underpass on Old Navan Road than the current route. This route should then be extended down Old Navan Road to the M50 underpass.

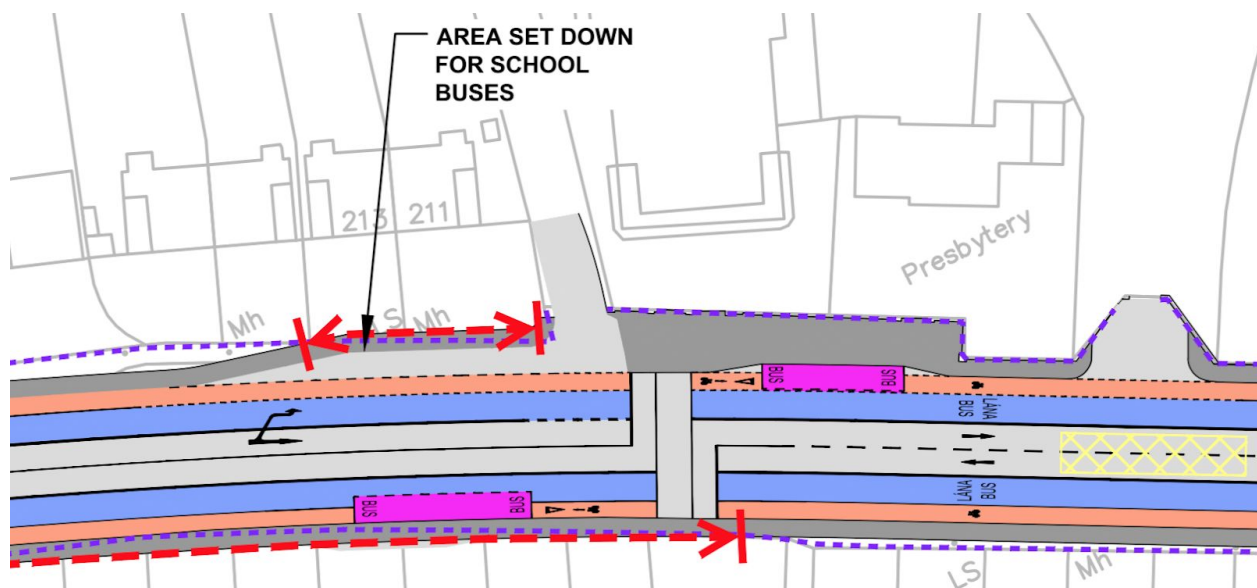
3.4 Cyclist Priority at Phoenix Park Avenue

An alternative arrangement for Phoenix Park Avenue on map 19 should be considered in order to provide better priority for cyclists on the Navan Road. Reducing delays increases the quality-of-service provided. Phoenix Park is a cul-de-sac for apartments. The number of turning movements is probably fairly low as a result. There is space for queueing cars on Phoenix Park Avenue and using the left pocket turn on Navan Road.

This could allow for the cycle and pedestrian lights across Phoenix Park Avenue to be green by default and only change to red when there are vehicles queueing. This would reduce delays for pedestrians and cyclists.

3.5 Set-down and Parking Map 24

We ask the design team to investigate running the cycle track on the inside of the parking and set-down area in front of Our Lady of Hope Church on map 24. This would remove the conflict between cyclists and vehicles using the set-down area. It would also enable the creation of a bus stop bypass at this location. It is worth noting that this area is currently marked by the 'school - keep clear' markings that disallow parking or set down.

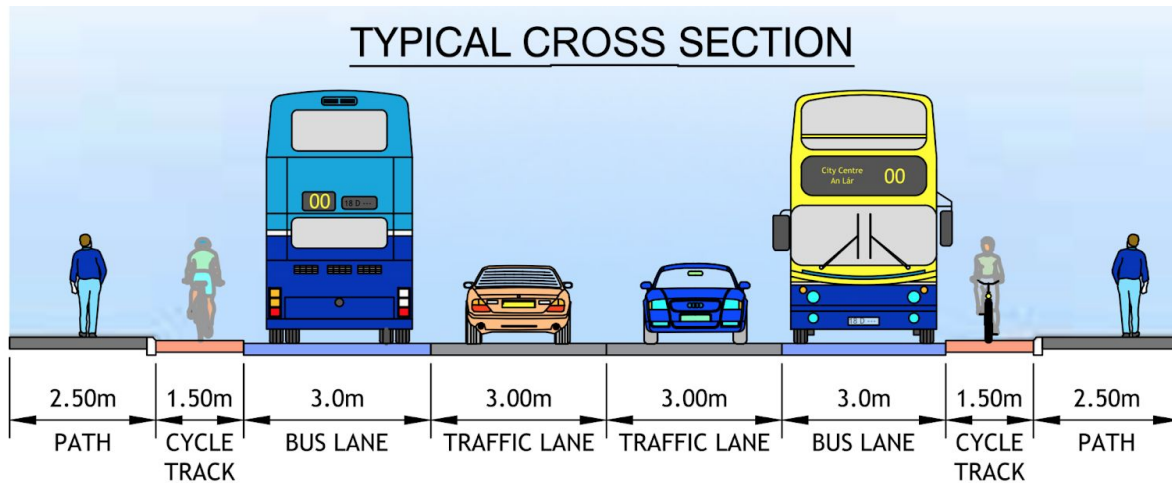


Extract of map 24 showing cycle track converting to cycle lane for a set down area for a school and an inline bus stop.

3.6 Cycle Track Width Map 25

There is a typical cross-section on map 25 that shows cycle tracks with a width of 1.5m beside 2.5m wide footpaths. Navan Road is secondary route 4A so the quality of service guidance requires a cycle track width of 1.75m. Reducing the footpath width to 2.25m allows for a 1.75m width cycle track.

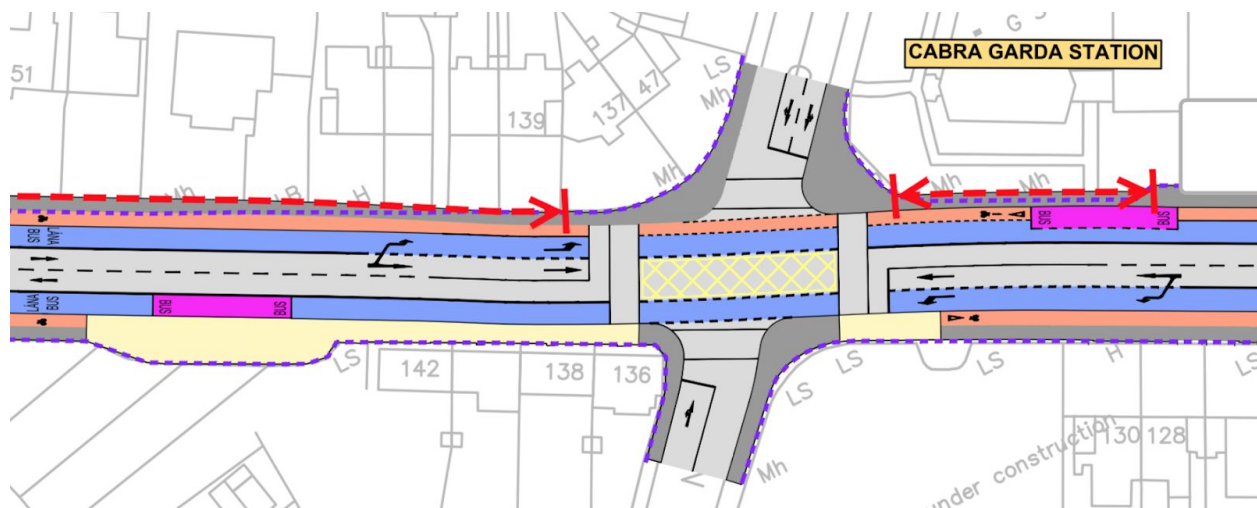
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Cross-section on map 25

3.7 Shared Space on Map 24

There is an area on Map 24 where there is an extended shared space for pedestrians and cyclists. This is unacceptable as it will cause conflict and reduce quality-of-service levels. It also removes an existing cycle lane in order to provide a bus lane.



Extract of Map 25

Alternative 1: Remove a short section of the bus lane in order to provide a cycle track through the junction. This short section is unlikely to provide much bus priority as it is just after a junction and 750m from the next junction. Queueing is unlikely to be this long.

Alternative 2: Increase the land take on the other side of the road in order to fit in both the cycle track and the bus lane.

3.8 Navan Road/Cabra Road Junction

This junction on the route could be dramatically improved. All four arms of this junction are designated cycle routes in the GDA Cycle Network Plan so it should be possible to cycle from each of these roads to every other. Currently that is not possible.



Top is the proposed junction layout. The bottom is our alternate concept design layout.

This alternate concept design allows for cyclists to travel in all directions safely. It also allows for the creation of buffer spaces (marked in green) between the cycle track and the road increasing cyclist comfort and safety.

3.9 Glenbeigh Road

The new bus gate on Old Cabra Road is welcome as it will provide for bus priority and free up space for the two-way cycle track. However, this will encourage outbound traffic from Aughrim Street heading towards the Navan Road to use Glenbeigh Road (map 28), which is a 30km/h residential street. Through-traffic should be discouraged from this route.

3.10 Outbound Cycle Track on Prussia Street

We'd encourage the design team to continue the outbound cycle track on Prussia Street all the way to the junction with North Circular Road. This would provide cyclists taking a left on North Circular a more direct route and reduce delays caused waiting at toucan crossings.

3.11 Brunswick Street

We would like the design team to examine changes to Brunswick Street west of George's Lane that would discourage through-traffic as this will be the cycle link between Stoneybatter Village and the two-way cycle track on Queen Street. Through-traffic should be encouraged to use North King Street instead. Then Brunswick Street only needs to function for local access traffic only, which makes the street far safer for cyclists.

The installation of a continuous footpath at the junction of Stoneybatter and Brunswick Street would help discourage through-traffic. The design team should also consider installing a "no straight ahead except for access sign".

3.12 George's Lane should stay one-way

The southbound traffic lane on George's Lane does not serve any obvious function because traffic can just as easily access Queen Street from King Street North. Installing the southbound lane will necessitate the removal of most of the pedestrian space and cyclists will have to awkwardly cross George's Lane twice in the space of 60m. This is not a reasonable compromise for a lane that does not currently exist and is not necessary.

3.13 Right Turn From Grangegorman Lower

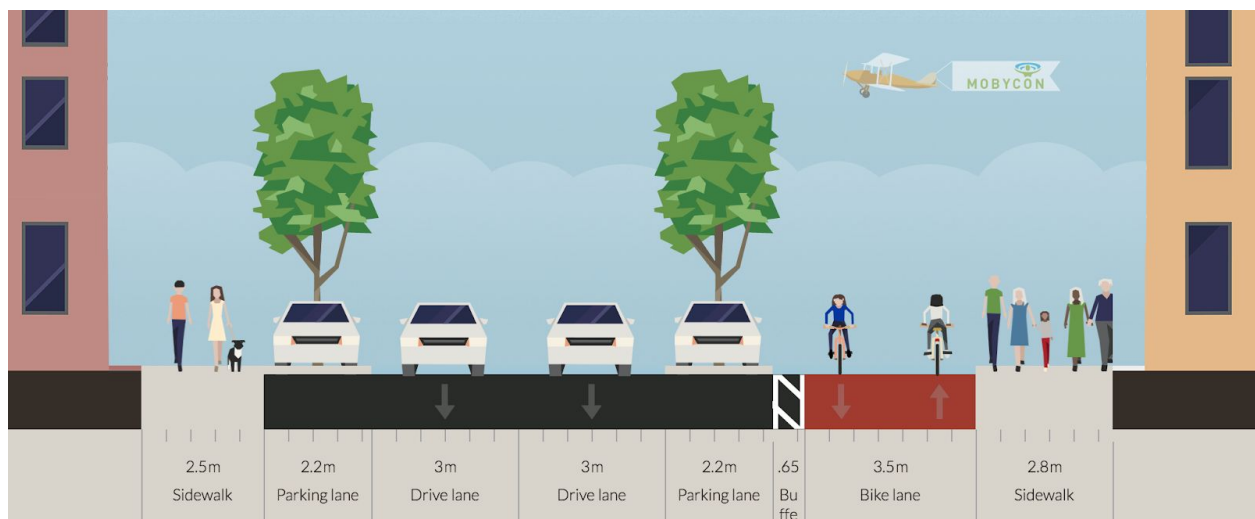
It is currently impossible for a driver exiting the southern end of Grangegorman Lower to make a right turn. It is not clear from the maps if this will be enabled by the new road layout. We'd encourage the design to re-configure the junction here to make it clear that drivers must take a left turn onto Brunswick Street.

3.14 Cycle track on Queen Street

The 2.5m bufferless bidirectional cycle track proposed for Queen Street is too narrow, particularly at junctions. An alternative option would be to reduce the traffic lanes from 3.25m to 2.8-3m each. Queen Street is a 30km/h road with no traffic calming. Reducing the traffic lane width would provide much needed traffic calming. The extra 50-90cm should be used to widen the cycle track and install a buffer.

3.15 Underutilised space on Blackhall Street

There is a 4.8m wide traffic lane proposed on Blackhall Street. This is not at all appropriate for a 30km/h street and is far outside DMURS guidelines. Just reducing this lane to 3m makes space for a parking protected, bidirectional cycle track.



An alternate design for Blackhall Street that uses all available width

4.0 Conclusion

We trust that our observations will be taken into account as the design for this scheme progresses from a concept design to a preliminary design. We look forward to engaging with the NTA as the design progresses.

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