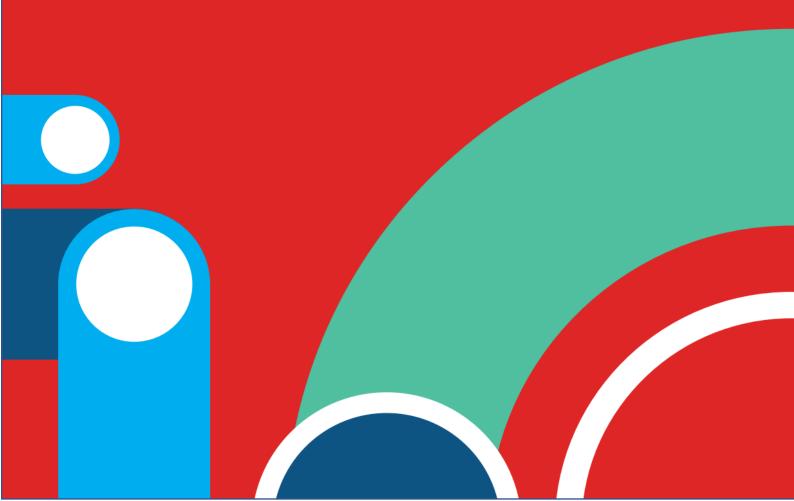


# **Appendix I1** Accessibility Audit -Tallaght to City Centre











# **Accessibility Audit**

CBC 09: Tallaght to City Centre BCIDA -ACM- TRA\_ZZ-0009\_XX\_00-RP-TR-0001

Client – National Transport Authority Stage – Stage 2

BCIDA -ACM- TRA\_ZZ-0009\_XX\_00-RP-TR-0001

23<sup>th</sup> July 2020

## **Executive Summary**

This Disability Audit includes an assessment of the existing accessibility features and potential barriers to disabled people along the Greenhills route as well as a review of the Stage 2 proposals. Each section includes a list of recommendations for consideration when developing the design to enable everyone to use and enjoy the environment on equal terms regardless of age or disability.

In general, the scheme is likely to improve the street environment meeting current Universal Design good practice standards or at least make it no worse than the current situation. However, in a small number of cases where road space is limited, the improvements for cyclists have the potential to make the pedestrian environment more complex for vulnerable pedestrians, including people with vision impairments.

The scheme has the opportunity to address many of the existing barriers to accessibility. For example; although the majority of the footways appear to be in a reasonable state of repair and the majority of crossings have dropped kerbs and tactile paving there is the opportunity to address any gaps in the current provision within the scheme; in general there will be an increase in the number of controlled pedestrian crossings along the route improving the experience for pedestrians; long stretches of cycle/footway with only a painted white line delineating one user group from another will be upgraded; there are only blue-badge parking spaces adjacent to a small number of the amenities along the route and again this could be addressed within the proposals – a network of strategically located blue-badge spaces could be identified along the route within the retained parking spaces.

However, the existing cycle/pedestrian route on Blessington Road from the junction with Belgard Square East to the university entrance has no raised delineating strip and would not be upgraded as part of the proposed scheme. The route only has a tonal and textural change in material delineating one user group from the other and has shared pedestrian/cyclist areas at junctions. The delineation on this route is likely to have met the design standards at the date of construction but does not meet current Universal Design good practice, since it would be undetectable to many people with vision impairments.

The proposed scheme includes a small number of bus stops with shared pedestrian/cycle areas on the approach to the bus boarding area which could be problematic for vulnerable pedestrians. These bus stops are in the minority and are only proposed where the available space is limited, the majority of the bus stops are provided on by-pass islands segregated from cyclists and vehicles by a kerb or conventional stops where there are no cycle lanes and cyclists are expected to pass stationary buses using the bus lane. Therefore, although this bus stop design meets the BusConnects (BC) guidelines there is a recommendation to explore every opportunity to design out shared spaces and to carry out testing with disabled people on this bus stop type before adoption across the whole network. The cycle facilities shown at a small number of Dutch/Cyclops junctions on the route have the potential to add complexity/potential conflict between pedestrians and cyclists at the junctions. Therefore, it is recommended that the Dutch/Cyclops junction described in the revised BC guidelines should be tested with a range of disabled people before being adopted across the network.

Parked cars obstruct the footways in many locations along the route and there is a recommendation to implement an effective enforcement regime, since obstructing the footway can be a barrier to many disabled and older pedestrians.

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## Introduction

This Disability Audit Report was compiled by People Friendly Ltd Accessibility and Inclusion Consultants as part of the AECOM led design team for Route 9 Tallaght. The report considers the needs of a wide range of disabled people - people with sensory and cognitive impairments as well as those with mobility impairments, including wheelchair users. The report was produced in response to the Tender and Schedule requirement to produce "a report listing existing shortcomings and proposed recommendations for ensuring the Scheme is designed in line with the requirements of the Disability Act 2005"

The Disability Act 2005 places a statutory obligation on public service providers to consider the needs of disabled people. On this basis the report includes an assessment of the existing environment along the scheme route with a description of the key accessibility features and potential barriers to disabled people based on the Universal Design standards of good practice listed below. The report also includes a review of the Stage 2 proposals for each section of the scheme based on these standards, with a commentary on the Universal Design features of the scheme within the context of the existing environment. Each section of the Audit ends with a list of recommendations on how the scheme should be developed to enable everyone to use and enjoy the environment on equal terms regardless of age or disability.

## **Universal Design Standards**

- Building for Everyone: A Universal Design Approach NDA CEUD
- How Walkable is Your Town, 2015 NDA CEUD
- Shared Space, Shared Surfaces and Home Zones from a Universal Design Approach for the Urban Environment in Ireland NDA CEUD
- Best Practice Guidelines, Designing Accessible Environments. Irish Wheelchair Association
- UK DfT Inclusive Mobility
- UK DfT Guidance on the use of tactile paving surfaces
- BS8300:2018 Volume 1 Design of an accessible and inclusive built environment. External Environment - code of practice

## **Universal Design**

Universal Design is the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people, regardless of their age, size or disability. This includes public places in the built environment such as buildings, streets or spaces that the public have access to; products and services provided in those places; and systems that are available including information and communications technology (ICT).

The seven Principles of Universal Design were developed in 1997 by a working group of architects, product designers, engineers and environmental design researchers, led by the late Ronald Mace in the North Carolina State University. The Principles "may be applied to evaluate existing designs, guide the design process and educate both designers and

consumers about the characteristics of more usable products and environments." These principles are as follows:

1: Equitable Use The design is useful and marketable to people with diverse abilities. Guidelines: a. Provide the same means of use for all users: identical whenever possible; equivalent when not. b. Avoid segregating or stigmatizing any users. c. Provisions for privacy, security, and safety should be equally available to all users. d. Make the design appealing to all users.

**2:** Flexibility in Use The design accommodates a wide range of individual preferences and abilities. Guidelines: a. Provide choice in methods of use. b. Accommodate right- or left-handed access and use. c. Facilitate the user's accuracy and precision. d. Provide adaptability to the user's pace.

**3:** Simple and Intuitive Use Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level. Guidelines: a. Eliminate unnecessary complexity. b. Be consistent with user expectations and intuition. Accommodate a wide range of literacy and language skills. c. Arrange information consistent with its importance. d. Provide effective prompting and feedback during and after task completion.

**4: Perceptible Information** The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities. Guidelines: a. Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information. b. Provide adequate contrast between essential information and its surroundings. c. Maximize "legibility" of essential information. d. Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions). e. Provide compatibility with a variety of techniques or devices used by people with sensory limitations.

**5:** Tolerance for Error The design minimizes hazards and the adverse consequences of accidental or unintended actions. Guidelines: a. Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded. b. Provide warnings of hazards and errors. c. Provide fail safe features. d. Discourage unconscious action in tasks that require vigilance.

**6:** Low Physical Effort The design can be used efficiently and comfortably and with a minimum of fatigue. Guidelines: a. Allow user to maintain a neutral body position. b. Use reasonable operating forces. c. Minimize repetitive actions. d. Minimize sustained physical effort.

**7: Size and Space for Approach and Use** Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility. Guidelines: a. Provide a clear line of sight to important elements for any seated or standing user. b. Make reach to all components comfortable for any seated or standing user. c. Accommodate variations in hand and grip size. d. Provide adequate space for the use of assistive devices or personal assistance.

## Section 1 of Route 9

## 1.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 1 of 44) respectively.

## 1.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Restaurants
- Retail

## 1.3 Existing

## **Pedestrian Facilities**

Pedestrian only footways are provided on both sides of the streets.

A controlled crossing is provided at the junction between Cookstown Way/Belgard Square junction. The tactile paving is laid out in a 'T' shape rather than the current 'L' shape described in good practice standards. There are no crossings on Belgard Square West or North adjacent to the roundabout, but a controlled pedestrian crossing is provided on Belgard Square West to the east of this section.

A proportion of the bollards provided around footways to the west of the scheme are below 1000mm high, do not meet good practice and are likely to be difficult to avoid for people with vision impairments.

## **Cycle Facilities**

There are no cycle lanes provided.

## **Bus Facilities**

The carriageway linking the roundabout to the Cookstown Way/Belgard Square junction is dedicated to buses only. Bus stops are provided on both sides of Belgard Square West to the east of the section.

## Parking & Drop off

There is no on-street parking, but an off-street car park is provided adjacent to Belgard Square West to the east of the section.

## 1.4 Proposed

## **Pedestrian Facilities**

The footway next to the east bound carriageway of Belgard Square West is shown relatively unchanged but the footway next to the west bound carriageway will be changed significantly to accommodate a new bus interchange. The controlled crossing on Belgard Square West is likely to be removed. However, the design proposals are yet to be finalised.

## **Cycle Facilities**

There are no facilities specifically provided for cyclists on this section of the scheme, but cyclists will be permitted to use the bus lanes.

## **Bus Facilities**

A new bus interchange will be provided to the east of this section of the scheme.

## Parking & Drop off

A section of the off-street car park will be used to create the bus interchange

## 1.5 Recommendations

- The design proposals are yet to be finalised and the pedestrian connections from the east bound footway to the bus interchange and crossings around the bus junctions should be considered further as the design of the interchange is developed.
- The features of the existing environment, including the tactile paving should be brought up to current Universal Design standards.
- The bus interchange will be designed by others and should take into account Universal Design good practice.
- Blue-badge parking should make up a proportion of the remaining spaces within the off-street car park.

## **Section 2 of Route 9**

## 2.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 2 of 44) respectively.

## 2.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Library
- Businesses, restaurants and retail units

## 2.3 Existing

## **Pedestrian Facilities**

Pedestrian only footways are provided on both sides of the streets.

Controlled crossings are provided on three sides of the junction of Old Blessington Road and Belgard Square West. The tactile paving at these crossings is laid out in a 'T' shape rather than the current 'L' shape described in good practice standards.

A number of the uncontrolled crossings to the east of this section have only 450mm of tactile blister paving at the kerb edge when there should be significantly more.

#### **Cycle Facilities**

There are no cycle lanes provided.

### **Bus Facilities**

Bus stops are provided on both sides of Belgard Square West to the east of the section.

### Parking & Drop off

There is no on-street parking, but an off-street car park is provided adjacent to Belgard Square West to the west of this section.

#### 2.4 Proposed

## **Pedestrian Facilities**

The footways on this section of the scheme will generally remain unchanged with the exception of the west bound section of Belgard Square West which will be changed to accommodate a new bus interchange. There are no obvious changes to the pedestrian crossings.

#### **Cycle Facilities**

There are no facilities specifically provided for cyclists on this section of the scheme, but cyclists will be permitted to use the bus lanes.

## **Bus Facilities**

A new bus interchange will be provided to the east of this section of the scheme.

## Parking & Drop off

A section of the off street car park will be used to create the bus interchange

#### 2.5 Recommendations

- The design is yet to be finalised and the pedestrian connections from the east bound footway to the bus interchange and crossings around the bus junctions should be considered further as the design of the interchange is developed.
- The need for controlled crossing on all 4 sides of the Old Blessington Road/Belgard Square West junction should be considered.

## **Section 3 of Route 9**

## 3.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 3 of 44) respectively.

## 3.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Library
- Hospital
- Businesses, including retail and restaurants

## 3.3 Existing

## **Pedestrian Facilities**

Pedestrian only footways are provided on both sides of all streets.

At the Belgard Square West/Belgard Square North roundabout there is an uncontrolled controlled crossing over Belgard Square West and at the hospital entrance but the crossing on west of the roundabout over Belgard Square North only has dropped kerbs on one side and has only 450mm of tactile blister paving at this dropped kerb. A controlled pedestrian crossing is proved to the east of the roundabout. The tactile paving at this crossing is laid out in a 'T' shape rather than the current 'L' shape described in good practice standards.

The uncontrolled crossings, including the crossing over Belgard Lane has no tactile paving. In addition, people with vision impairments are likely to find it difficult to avoid the large glass monolith sign located in the middle of the footway to the east of this Lane.

The footway next to the east bound carriageway is shared with cyclists to the east of this section of the scheme. The only delineation is a painted line.

The bollards on this section of the scheme appear to be lower than 1000mm and lack tonal contrast with their background. Therefore, these items do not meet good practice standards and would be difficult to detect for people with vision impairments. Seats are provided in a number of locations but none of these have back or armrests and therefore do not meet good practice standards.

## **Cycle Facilities**

Cyclists are permitted to share the footway next to the east bound carriageway to the east of this section of the scheme.

## **Bus Facilities**

An east bound bus stop is provided in a lay-by to the east of the roundabout. The stop has a boarding kerb, shelter and seat. However, there does not appear to be adequate parking restrictions to prevent parked cars from blocking buses from getting parallel to the kerb. A west bound bus stop is provided to the east of this section of the scheme. However, it has no shelter, seat or boarding kerb and low bollards could potentially block access to the bus.

## Parking & Drop off

There is no on-street parking but there are a number of off-street car parks.

## 3.4 Proposed

## **Pedestrian Facilities**

The footways on this section of the scheme will remain relatively unchanged. Controlled crossing will be provided on Belgard Square North to the east and west of the junction replacing the roundabout. The uncontrolled crossings over Belgard Square West and at the hospital entrance will be retained. The improvements for cyclists at this junction and generally over the rest of this section of the scheme appear to improve facilities for pedestrians. However, the west bound bus stop includes a shared pedestrian/cycle area which is not ideal, although this meets the BC design guidelines.

## **Cycle Facilities**

Dedicated cycle lanes will be provided on both sides of the carriageway on this section of the scheme.

## **Bus Facilities**

Bus lanes will be provided on both sides of the carriageway over most of this section of the scheme.

## Parking & Drop off

There is no on-street parking proposed and no obvious need for additional parking.

## 3.5 Recommendations

- The design team has been unable to identify enough space to provide an effective island for the new west bound bus stop, hence the reason for the shared pedestrian/cycle areas around this bus stop. The bus stop design meets the revised BC design guidelines, but this bus stop type should be tested with a range of disabled people before adoption across the whole network.
- The existing pedestrian facilities, including dropped kerbs, tactile paving and street furniture, should be brought up to good practice standards as part of the scheme.

## **Section 4 of Route 9**

## 4.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 4 of 44) respectively.

## 4.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Hospital
- Civic Theatre
- Businesses
- University

## 4.3 Existing

## **Pedestrian Facilities**

Footways are provided on both sides of all streets. The only controlled crossings on this section of the scheme are at the junctions between Blessington Road and Belgard Square East and Belgard Road. The controlled crossings have the key accessibility features, including dropped kerbs and the appropriate use of tactile paving. The uncontrolled crossings on this section of the scheme have dropped kerbs but none of these crossings have tactile paving, even those provided at the Belgard Square North/Belgard Square East roundabouts.

#### **Cycle Facilities**

Cyclists lanes are provided on both sides of Belgard Square North and Belgard Square East, some sections of lane are segregated from the footway by a grass verge but most of the cycle lanes are only delineated from the pedestrian routes by a faded painted white line which would be undetectable to most people with vision impairments.

Two way cycle lanes are provided next to the east bound carriageway on Blessington Road and there is a degree of segregation (trees/street furniture location and change in paving material/tonal contrast) from the pedestrian footway and the routes are relatively wide for most of this section but there is no kerb between two routes and there is only limited signage.

#### **Bus Facilities**

An east bound bus stops is provided on Belgard Square North, west of the roundabout. The stop has a boarding kerb, shelter and seat. However, pedestrians must cross the cycle lanes to reach the bus stops and as stated above there is little or no delineation between the cycle lanes and the footways. East and west bound stops are provided on Belgard Square East, but these do not have boarding kerbs, shelters or seats. The cycle lane cuts through the bus lay-by at the west bound stop and pedestrians must cross the cycle lane to reach the east bound stop.

The west bound stop on Blessington Road east of the Belgard Road junction has no shelter, seat or boarding kerb.

## Parking & Drop off

There is no on-street parking but there are a number of off-street car parks.

## 4.4 Proposed

#### **Pedestrian Facilities**

The footways on this section of the scheme will be retained on all streets. Controlled crossing will be provided around the Belgard Square North/Belgard Square East junction replacing the roundabout. A Dutch/Cyclops junction is proposed and the improvements for cyclists at this junction have the potential to add complexity to the pedestrian environment with pedestrians crossing cycle routes to reach crossings over the main vehicle carriageways. However, this arrangement meets the revised BC guidelines and the new arrangement is unlikely to be any worse in accessibility terms than the current arrangement where there are effectively shared footway/cycleways, no tactile paving and no controlled crossings.

## **Cycle Facilities**

The dedicated cycle lanes will be retained on Belgard Square North but there will be no lanes marked on Belgard Square East and cyclists will be expected to share the bus lanes, since a new bus gate is expected to significantly reduce traffic on this road. Cyclists will then be able to join the existing cycleway/footway at the junction with Blessington Road.

## **Bus Facilities**

Bus lanes will be provided on both sides of the carriageway over much of this section of the scheme. The bus stops on Belgard Square East will be moved closer to the roundabout and as stated above it appears that cyclists will be expected to use the bus lanes by-passing these stops. The bus stop on this section of Blessington Road will remain in its current location.

## Parking & Drop off

There is no on-street parking proposed and no obvious need for additional parking.

## 4.5 Recommendations

- The Belgard Square North/Belgard Square East junction is still to be finalised. Therefore, as far as possible the design should minimise the complexity/potential conflict between pedestrians and cyclists at the junction. The Dutch/Cyclops junction described in the revised BC guidelines should be tested with a range of disabled people before being adopted across the network.
- The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.

## **Section 5 of Route 9**

## 5.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 5 of 44) respectively.

## 5.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Businesses, including cafe and restaurant
- Church
- University

## 5.3 Existing

## **Pedestrian Facilities**

Footways are provided on both sides of Blessington Road/Main Street along this section of the scheme. To the west of this section the footway next to the east bound carriageway is adjacent to a cycleway with only limited delineation between the two routes and little or no signage. The cycleway appears to merge with the footway adjacent retail units to the east of the bus gate. A section of kerb is dropped to the east of the retail units for vehicle access

and an adjoining section of kerb appears to be dropped for cyclists to move onto the carriageway (the latter has tactile blister paving) at this point but the whole arrangement is likely to be confusing and particularly off putting for many vulnerable pedestrians, including people with vision impairments. The footway next to the west bound carriageway is narrower than 2m along much of this section of the scheme.

The only controlled crossing is at the junction between Main Street and Old Bawn Road. The tactile paving at these crossings is laid out in mix of 'T' shape and 'L' shapes, the latter being the currently recommended layout for this type of crossing. The uncontrolled crossings have dropped kerbs but do not have tactile paving.

Bollards line the streets in an attempt to prevent parking on the footway, but bollards can be a barrier to people with vision impairments.

## **Cycle Facilities**

A two-way cycle lane is provided next to the east bound carriageway on Blessington Road/Main Street and there is a degree of segregation (change in paving material/tonal contrast) from the pedestrian footway for part of the route but there is no kerb between two routes and little or no signage. The cycleway and footway merge at retail units to the east of a bus gate and it is assumed cyclists are expected to join the carriageway at this point.

## **Bus Facilities**

The east bound bus stop on this section of the scheme has a shelter and seat but no boarding kerb. The west bound bus stop has no boarding kerb, shelter or seat.

## Parking & Drop off

There are a number of cars parked on the footway adjacent to shops and businesses, but it is not clear whether these are official car park spaces. One on-street blue-badge parking bay is provided on Main Street next to other standard bays, to the east of the junction between Main Street and Old Bawn Road.

## 5.4 Proposed

## **Pedestrian Facilities**

The footways on this section of the scheme will remain relatively unaltered and there is no proposal to upgrade the delineation on the footway/cycleway along Blessington Road from the junction with Belgard Square East to the new bus gate by the entrance to the university.

A new signalised junction is proposed at Blessington Road / High Street with controlled pedestrian crossings on all arms.

## **Cycle Facilities**

There are no obvious additional facilities proposed for cyclists.

## **Bus Facilities**

Bus lanes will be provided over much of this section of the scheme. The bus stops will remain in the same locations and these will be conventional stops, where cyclists are expected to use the carriageway to pass stationary buses.

## Parking & Drop off

There is no additional on-street parking proposed but there is likely to be a demand for bluebadge parking given the number of facilities accessed directly from the surrounding streets.

### 5.5 Recommendations

- The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme. All bus stops should at least have a boarding kerb.
- Ideally the delineation between pedestrians and cyclists should be increased to an upstand on the Blessington Road pedestrian/cycle route. As stated above there is already a degree of difference in the texture and tone between the two adjoining surfaces along most of the route but to the east of route where it narrows and at junctions there is little or no noticeable difference between the surfaces and no obvious signage.

## Section 6 & 7 of Route 9

### 6.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 6 & 7of 44) respectively.

## 6.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Businesses, including cafe and restaurant
- Athletics centre
- University campus
- School

## 6.3 Existing

#### **Pedestrian Facilities**

Footways are provided on both sides of Main Street, Old Greenhills Road and Greenhills Road on this section of the scheme.

The only controlled crossing on Main Street is at the junction with Old Bawn Road. The tactile paving at these crossings is laid out in a mix of 'T' and 'L' shapes, the latter being the currently recommended layout for this type of crossing.

A controlled crossing is provided on Greenhills Road near the junction with Bancroft Park and this crossing includes tactile paving on the Old Greenhills Road side of the street but not on the opposite footway.

All of the uncontrolled crossings have dropped kerbs, including the crossing over the TUD access road but none of these crossing has tactile blister paving.

## **Cycle Facilities**

A cycle lane is marked on the east bound carriageway of Main Street from the junction with Old Greenhills Road.

A shared footway/cycleway is provided on both sides of Greenhills Road to the north of the Bancroft Park junction, the only delineation between the two uses is a painted line. There are gaps in the cycle lane around the Greenhills Road/TUD access road junction and at the bus stop near this junction.

#### **Bus Facilities**

A bus stop is marked on the west bound carriageway of Old Greenhills Road but there is no shelter or other facilities at this stop and no obvious nearby east bound bus stop on this section of the scheme.

#### Parking & Drop off

There are a number of on-street parking spaces on Main Street to the east of the junction between Main Street and Old Bawn Road next to the west bound carriageway. These are located outside homes and retail units and the blue-badge space already mentioned to the west of this section is the only identifiable space in this section of the scheme. Pay and display parking spaces are marked on both sides of Old Greenhills Road but none of these bays are designated for blue-badge holders. Old Greenhills Road is blocked to vehicle traffic at its junction with Greenhills Road

#### 6.4 Proposed

#### **Pedestrian Facilities**

The footways will be retained on this section of the scheme and the pedestrian environment will remain relatively unaltered.

Controlled pedestrian crossings will be provided at the Greenhills Road/TUD access road and the cycle facilities added at the junction do not appear to alter the pedestrian facilities. Therefore, there is likely to be an improvement in the facilities available to both user groups.

#### **Cycle Facilities**

The segregation between pedestrians and cyclists on Greenhills Road, north of the Bancroft Park junction, will be brought up to current standards, including a raised delineator strip between cyclists and pedestrians.

#### **Bus Facilities**

The Old Greenhills Road/Greenhills Road junction will be opened to two-way bus traffic. East and west bound bus stop will be provided on Old Greenhills Road.

### Parking & Drop off

The on-street parking on Old Greenhills Road will be removed to make way for bus traffic. There are no obvious facilities accessed directly off this street without their own off-street parking. Therefore, there is unlikely to be a demand for the addition of on-street blue-badge parking in this location.

## 6.5 Recommendations

• The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.

## **Section 8 of Route 9**

## 7.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 8 of 44) respectively.

## 7.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Retail park, including cafes and a garage/petrol station
- Athletics centre
- University campus
- Primary care centre

#### 7.3 Existing

#### **Pedestrian Facilities**

Footways on both sides of Greenhills Road are shared between pedestrians and cyclists up to the Greenhills Road/Airton Road junction, with only a painted white line delineating the difference between the two uses. Therefore, many vulnerable pedestrians, including people with vision impairments are likely to feel uneasy using these routes. Tactile cycleway paving is used in squares to the west and east of the cycle lane at the junction between Greenhills Road and Airton Road, but this is unlikely to be helpful given the limited delineation between pedestrian and cyclists along these routes.

Controlled crossings are provided at the Greenhills Road/Airton Road junction and at on three of the four potential crossings at the 'T' junction between Greenhills Road and access roads to a retail park. The tactic blister paving is laid out in the recommended 'L' shape at these crossings.

All of the uncontrolled crossings along this section of the scheme have dropped kerbs but do not have tactile paving.

Sections of the pedestrian footway are overgrown with vegetation to the east of the junction with retail park access roads.

### **Cycle Facilities**

A shared footway/cycleway is provided on both sides of Greenhills Road and the only delineation between the two uses is a painted white line. Cyclists are expected to use the lanes marked on the carriageway from the Greenhills Road/Airton Road junction eastwards.

#### **Bus Facilities**

East and west bound bus stops are provided to the east of the Greenhills Road/Airton Road junction. The stops have boarding kerbs but no shelter or seat.

## Parking & Drop off

There are no on-street parking spaces on this section of the scheme and no amenities accessed directly from the carriageway but there is off-street parking nearby.

#### 7.4 Proposed

#### **Pedestrian Facilities**

The footways will be retained on this section of the scheme and the pedestrian environment will remain relatively unaltered, although the segregation between pedestrians and cyclists will be brought up to current standards, including providing a raised delineator strip between cyclists and pedestrians.

There are no additional controlled crossings proposed. The cycle facilities proposed at the Greenhills Road/Airton Road junction do not appear to significantly alter the pedestrian facilities around this junction. A staggered island will be introduced at the crossing over Greenhills Road at the junction with the retail park access roads.

The access ramp to the primary care centre will be relocated to provide space to accommodate a bus by-pass island for the east bound stop. It will be important to design the replacement ramp to meet current accessibility standards but there is no obvious reason which this should not be achievable.

#### **Cycle Facilities**

The segregation between pedestrians and cyclists on Greenhills Road up to the Road/Airton Road junction delineated with a raised strip. There are significant improvements to the cycle facilities at the junctions.

#### **Bus Facilities**

The east bound bus stop will remain in its current location east of the Road/Airton Road junction and the west bound stop will be moved west of the junction. Both stops will be located on by-pass islands.

#### Parking & Drop off

There is unlikely to be a demand for the addition of on-street blue-badge parking in this location.

#### 7.5 Assessment

• The existing pedestrian facilities, including dropped kerbs and tactile paving, should

be brought up to good practice standards as part of the scheme.

## **Section 9 of Route 9**

#### 8.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 9 of 44) respectively.

## 8.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Retail park, including cafes and a garage/petrol station
- Primary care centre
- Homes

## 8.3 Existing

#### **Pedestrian Facilities**

Pedestrian footways are provided on both sides of Greenhills Road up to the junction with Mayberry Road where the footway next to the west bound carriageway ends and the footway opposite continues.

The only controlled crossings on this section of the scheme are provided at the Mayberry Road junction. The crossings have dropped kerbs, but the tactile paving is laid out in a 'T' shape rather than the recommended 'L' shape.

All of the uncontrolled crossings along this section of the scheme have dropped kerbs, although the dropped kerbs at the Broomhill Road and Hibernian Industrial Estate access road are poorly aligned and none of the uncontrolled crossings have tactile paving.

## **Cycle Facilities**

Cycle lanes are marked on both the east and west bound carriageways.

#### **Bus Facilities**

East and west bound bus stops are provided on this section of the scheme. The east bound stop is located east of the of the Greenhills Road/Mayberry Road junction and the west bound stop is located west of the Mayberry Road junction-controlled crossings. The east bound stop has a shelter and a seat, but no boarding kerb and the west bound stop has none of these features.

## Parking & Drop off

There are no on-street parking spaces on this section of the scheme and no amenities accessed directly from the carriageway but there is off-street parking nearby.

#### 8.4 Proposed

#### **Pedestrian Facilities**

The arrangement of the existing footways will remain relatively unaltered. The footway next to the west bound carriageway will be extended east of the Mayberry Road junction. The cycle facilities added at the Mayberry Road junction are unlikely to impact on pedestrians using the junction.

Additional staggered controlled crossings will be proposed to the east of the Hibernian Industrial Estate access route and on the eastern side of the Mayberry Road junction.

The exception to these improvements for pedestrians is a new area of shared footway/cycle on the approach to the west bound bus stop which is not ideal.

#### **Cycle Facilities**

Continuous cycleways will be retained on both sides of Greenhills Road and additional cycle facilities will be provided at the junctions.

#### **Bus Facilities**

The bus stop locations will remain the same. The east bound stop will be provided on a bypass island but as stated above the approach to the west bound stop will be shared with cyclists which is not ideal.

#### Parking & Drop off

There is unlikely to be a demand for the addition of on-street blue-badge parking in this location.

## 8.5 Recommendations

- The design team has been unable to identify enough space to provide an effective island for the west bound bus stop, hence the reason for the shared footway/cycleway around this bus stop. The need for the shared area will be assessed again at the next design stage, although this bus stop design meets the revised BC design guidelines. However, this bus stop type should be tested with a range of disabled people before adoption across the whole network.
- The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.

## Section 10 & 11 of Route 9

## 9.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 10 & 11of 44) respectively.

## 9.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Tymon Park

• Sports centre

#### 9.3 Existing

#### **Pedestrian Facilities**

A continuous pedestrian footway is provided next to the east bound carriageway of Old Greenhills Road. The footway next to the west bound carriageway begins at the bus stop opposite Parkview and joins the footway on Castletymon Road. The majority of the footways appear to be narrower than 2m.

The only controlled crossings on this section of the scheme are provided on two of the arms of the Old Greenhills Road/Castletymon Road junction and at the pathway to Treepark Road to the east of this section of the scheme. The crossings have dropped kerbs, but the tactile paving is laid out in a 'T' shape rather than the recommended 'L' shape at the junction crossings and there is no 'tail' on the Treepark Road crossing. All of the uncontrolled crossings along this section of the scheme have dropped kerbs but many of these are poorly aligned and none has tactile paving.

#### **Cycle Facilities**

Cycle lanes are marked on both the east and west bound carriageways.

#### **Bus Facilities**

East and west bound bus stops are provided to the west of 22-25 Parkview/Old Greenhills Road junction a significant distance from a controlled crossing. These stops have no shelters, seats or boarding kerbs. A bus stop is provided on Castletymon Road opposite the junction with Tymonville Road and again this stop has no shelter, seat or boarding kerb. East and west bound stops are provided near the Treepark Road controlled crossing, however only the east bound stop has a shelter and a seat but neither stop has a boarding kerb.

#### Parking & Drop off

There are no on-street parking spaces on this section of the scheme and no amenities accessed directly from the carriageway but there is off-street parking nearby.

#### 9.4 Proposed

#### **Pedestrian Facilities**

Greenhills Road will be realigned. Old Greenhills Road will be used for west bound buses and cyclists and the new Greenhills Road will be used for general two-way vehicle traffic, plus east bound buses and cyclists.

One continuous footway will be provided next to the eastbound carriageway on the new Greenhills Road and one continuous footway will be provided next to the west bound carriageway of Old Greenhills Road.

A controlled crossing will be provided on the east side of the Greenhills Road/Castletymon Road junction but there is no obvious crossing over Castletymon Road at this junction. Controlled crossings will also be provided on all of the arms of the Old Greenhills Road/Castletymon Road junction. The stand-alone crossing on Old Greenhills Road opposite the Treepark Road footpath will be retained and a corresponding controlled Toucan crossing will be provided over the new Greenhills Road aligned with the local footpath network.

#### **Cycle Facilities**

An east bound cycleway will be provided on Greenhills Road and a west bound route will be provided on Old Greenhills Road.

## **Bus Facilities**

The only west bound bus stop shown on this section of the scheme will be located to the west of Old Greenhills Road and the east bound stop will be located east of the Greenhills Road/Castletymon Road Junction and both stops will be provided on by-pass islands.

## Parking & Drop off

There is unlikely to be a demand for the addition of on-street blue-badge parking in this location.

## 9.5 Recommendations

- A controlled crossing will be provided on the east side of the Greenhills Road/Castletymon Road junction but there is no obvious crossing over Castletymon Road at this junction. The need for this additional crossing should be reconsidered at the next design Stage.
- The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.

## **Section 12 of Route 9**

## 10.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 12 of 44) respectively.

## 10.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Tymon Park

## 10.3 Existing

#### **Pedestrian Facilities**

A continuous pedestrian footway is provided next to the east and west bound carriageways on this section of Greenhills Road. The majority of the footways appear to be narrower than 2m.

The only controlled crossing is to the east of this section of the scheme, east of Ballymount Road Upper. The crossing has dropped kerbs and tactile paving.

All of the uncontrolled crossings along this section of the scheme have dropped kerbs but these are not all dropped level with the carriageway and many of these are poorly aligned and none have tactile paving.

#### **Cycle Facilities**

Cycle lanes are marked on both the east and west bound carriageways.

#### **Bus Facilities**

There are no bus lanes on this section of the scheme.

A west bound bus stop is provided to the west of the Ballymount Road Upper/Greenhills Road junction a significant distance from the controlled crossing and an east bound stop is provided east of the controlled crossing. The west bound stop has a shelter and a seat but no boarding kerb. The east bound stop has none of these facilities.

#### Parking & Drop off

There are no on-street parking spaces on this section of the scheme and no amenities accessed directly from the carriageway but there is off-street parking nearby.

#### 10.4 Proposed

#### **Pedestrian Facilities**

Continuous footways will be retained on both sides of the carriageway.

A controlled crossing will be provided to the east of the Ballymount Road Upper/Greenhills Road junction.

## **Cycle Facilities**

Segregated east and west bound cycleways will be provided on Greenhills Road and these will be separated from the footway by a kerb.

#### **Bus Facilities**

Bus lanes will be provided on both sides of the carriageway, although there will no bus stops on this section of the scheme.

#### Parking & Drop off

There is unlikely to be a demand for the addition of on-street blue-badge parking in this location.

#### **10.5** Recommendations

• The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.

## **Section 13 of Route 9**

## 11.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 13 of 44) respectively.

## 11.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Tymon Park

## 11.3 Existing

## **Pedestrian Facilities**

Continuous pedestrian footways are provided next to the east and west bound carriageways on this section of Greenhills Road. The majority of the footways appear to be narrower than 2m.

The only controlled crossing is to the west of this section of the scheme, east of Ballymount Road Upper. The crossing has dropped kerbs and red tactile blister paving.

All of the uncontrolled crossings along this section of Greenhills Road have dropped kerbs but these are not all dropped level with the carriageway and many of these are poorly aligned and none have tactile paving.

However, there is only a pedestrian footway on one side of Ballymount Avenue and there are no controlled crossings.

## **Cycle Facilities**

Cycle lanes are marked on both east and west bound carriageways of Greenhills Road but there are no cycle lanes on Ballymount Avenue.

## **Bus Facilities**

There are no bus lanes on this section of the scheme.

On Greenhills Road a west bound bus stop is provided to the west of the Kilakee Drive/Greenhills Road junction a significant distance from the controlled crossing and an east bound stop is provided to the east of this junction. The east and west bound stops have no shelter, seat or boarding kerb.

## Parking & Drop off

There are no on-street parking spaces on this section of the scheme and no amenities accessed directly from the carriageway but there is off-street parking nearby.

## 11.4 Proposed

## **Pedestrian Facilities**

The road will be realigned with Greenhills Road linking with Ballymount Avenue and the eastern section of Greenhills Road will be blocked to vehicle traffic at its junction with the new section of realigned road.

Continuous footways will be provided on both sides of Greenhills Road/Ballymount Avenue.

A controlled Toucan crossing will be provided at the junction of the blocked off section of Greenhills Road and the new realigned road.

## **Cycle Facilities**

Continuous segregated east and west bound cycleways will be provided on Greenhills Road/Ballymount Avenue.

## **Bus Facilities**

Bus lanes will be provided on both sides of Greenhills Road/Ballymount Avenue. The bus stops on the blocked off section of Greenhills Road will be removed and new east and west bound stops will be provided on the realigned road, to the east and west of the controlled crossing respectively. Both bus stops will be located on by-pass islands.

## Parking & Drop off

There is unlikely to be a demand for the addition of on-street blue-badge parking in this location.

## 11.5 Recommendations

• The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.

## **Section 14 of Route 9**

## 12.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 14 of 44) respectively.

## 12.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Garage
- Business park
- Tymon Park

## 12.3 Existing

## **Pedestrian Facilities**

This section of the route will follow Ballymount Avenue and Calmount Road. Calmount Road has footways on both sides but there is only a pedestrian footway on one side of Ballymount Avenue and there are no controlled crossings on either of these roads. The majority of the footways appear to be narrower than 2m.

There are no controlled crossings and the only uncontrolled crossings along this section of the scheme are over side roads and at the roundabout. This section of the route is through a business park with large plot sizes, therefore although there is no mid-block crossing there is unlikely to be long detours for most pedestrians. The uncontrolled crossings have dropped kerbs, but these are not all dropped level with the carriageway and many of these are poorly aligned and none have tactile paving.

#### **Cycle Facilities**

Ballymount Avenue and Calmount Road do not have cycle lanes.

#### **Bus Facilities**

There are no bus lanes or bus stops on Ballymount Avenue and Calmount Road.

#### Parking & Drop off

There are no on-street parking spaces on this section of the scheme and no amenities accessed directly from the carriageway but there is off-street parking nearby.

#### 12.4 Proposed

#### **Pedestrian Facilities**

The proposals indicate continuous pedestrian only footways on both sides Ballymount Avenue and Calmount Road. Sections of the footway on both roads are segregated from the cycleway by a grass verge and a kerb will segregate the other sections of the route.

The Ballymount Avenue/Camount Road roundabout will be replaced with a signalised junction with controlled pedestrian crossings on all arms which will be a significant improvement for pedestrians. However, pedestrians will require to cross the cycleways before crossing the vehicle carriageways with the Dutch/Cyclops junction arrangement which potentially adds complexity at the junction for some vulnerable users. In addition, if the pedestrian crossings over the cycle route are uncontrolled the recommended tactile paving layout is likely to make it difficult for people with vision impairments to find the controlled crossings.

The new bus stops on this section of the route will be located near the junction crossings. The east bound bus stop on Calmount Road will be located on a by-pass island but cyclists share the approach to the west bound bus stop with pedestrians on this road which is not ideal. The west bound bus stop on Ballymount Avenue will be a conventional stop with cyclists expected to pass stationary buses using the bus lane.

## **Cycle Facilities**

Continuous segregated east and west bound cycleways will be provided on Ballymount Avenue and Camount Road and cycle facilities will be provided at the junction between the two.

#### **Bus Facilities**

Bus lanes will be provided on both sides of Ballymount Avenue and Calmount Road. As stated above the approach to the west bound bus stop on Calmount Road is shared between pedestrians and cyclists which is not ideal.

## Parking & Drop off

There is unlikely to be a demand for the addition of on-street blue-badge parking in this location.

## 12.5 Assessment

- The design team has been unable to identify enough space to provide an effective island for the west bound bus stop on Calmount Road, hence the reason for the shared area of footway/cycleway around this bus stop. The need for a shared area will be assessed again at the next design Stage, although this bus stop design meets the revised BC design guidelines. However, this bus stop type should be tested with a range of disabled people before adoption across the whole network.
- The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.

## **Section 15 of Route 9**

## 13.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 15 of 44) respectively.

## 13.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Garages
- Supermarket
- Business park

This section covers a new link between Calmount Avenue and Greenhills Road at an existing junction.

## 13.3 Existing

## **Pedestrian Facilities**

Greenhills Road has footways next to the east and west bound carriageways, but these appear to be narrower than 2m.

There are no controlled crossings on this section of the scheme and no dropped kerbs at the junction with the side road leading to a supermarket and business yard.

## **Cycle Facilities**

Cycle lanes are marked on both sides of the carriageway

## **Bus Facilities**

A west bound bus stop is location to the east of the junction bell-mouth, but no bus lanes are included on this section of the route.

### Parking & Drop off

There are no on-street parking spaces on this section of the scheme and no amenities accessed directly from the carriageway but there is off-street parking nearby.

### 13.4 Proposed

#### **Pedestrian Facilities**

The proposals include upgrading the junction to a roundabout. Continuous pedestrian only footways are shown on the new link to Calmount Avenue, but the gradients are likely to be steep.

#### **Cycle Facilities**

This section of the route is off the intended cycle route.

#### **Bus Facilities**

The bus stops on Greenhills Road will be removed, since this section of road will no longer be part of the bus route.

#### Parking & Drop off

There is unlikely to be a demand for the addition of on-street blue-badge parking in this location.

### 13.5 Assessment

• The existing pedestrian facilities should be brought up to good practice standards as part of the scheme, including providing dropped kerbs and tactile paving where appropriate.

## **Section 16 of Route 9**

#### 14.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 16 of 44) respectively.

## 14.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

• Business park

## 14.3 Existing

#### **Pedestrian Facilities**

Calmount Road and Calmount Avenue have footways on both sides, but the majority of the footways appear to be narrower than 2m.

There are no controlled crossings on either of these roads. Uncontrolled crossings are provided over side roads. This section of the route is through a business park with large plot sizes, therefore although there is no mid-block crossing there is unlikely to be long detours for pedestrian. The uncontrolled crossings have dropped kerbs, but these are not all dropped level with the carriageway and many of these are poorly aligned and none have tactile paving.

#### **Cycle Facilities**

There are no cycle lanes provided on this section of the scheme.

#### **Bus Facilities**

There are no bus lanes or bus stops on either of these roads.

#### Parking & Drop off

There are no on-street parking spaces on this section of the scheme and no amenities accessed directly from the carriageway but there is off-street parking nearby.

#### 14.4 Proposed

#### **Pedestrian Facilities**

The proposals indicate maintaining continuous pedestrian only footways on both sides of Calmount Road and Calmount Avenue. Cycle lanes will be provided on Calmount Road and sections of the cycleway will be segregated from the footway by a grass verge and the remainder of the route will be separated by a kerb.

The Calmount Avenue/Calmount Road junction will be upgraded to a signalised junction with controlled pedestrian crossings on two of the three arms which will be a significant improvement for pedestrians, although ideally there should be controlled crossings on all three arms.

The new bus stops on this section of the route will be located near the junction crossings. The east bound bus stop on Calmount Road will be located on a by-pass island but cyclists share the approach to the west bound bus stop with pedestrians on this road which is not ideal.

#### **Cycle Facilities**

Continuous segregated east and west bound cycleways will be provided on Calmount Road and cycle facilities will be provided at the Calmount Road/Calmount Avenue junction. The facilities provided for cyclists at the junction are unlikely to impact on pedestrians.

#### **Bus Facilities**

Bus lanes will be provided on both sides of Calmount Road. As stated above the approach to the west bound bus stop on Calmount Road is shared between pedestrians and cyclists which is not ideal.

#### Parking & Drop off

There is unlikely to be a demand for the addition of on-street blue-badge parking in this location.

### 14.5 Assessment

- The design team has been unable to identify enough space to provide an effective island for the west bound bus stop on Calmount Road, hence the reason for the shared pedestrian/cycle areas around this bus stop. The need for a shared area of footway/cycleway will be assessed again at the next Stage, although this bus stop design meets the revised BC design guidelines. However, this bus stop type should be tested with a range of disabled people before adoption across the whole network.
- The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.

## **Section 17 of Route 9**

## 15.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 17 of 44) respectively.

## 15.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Business park

## 15.3 Existing

## **Pedestrian Facilities**

Greenhills Road has footways on both sides for part of the length of this section, but the majority of the footways appear to be narrower than 2m.

There are no controlled crossings on Greenhills Road. Uncontrolled crossings are provided over side roads and many of these have dropped kerbs, but these are not all dropped level with the carriageway and many of these are poorly aligned and none have tactile paving.

## **Cycle Facilities**

There are cycle lanes provided on both sides of Greenhills Road.

## **Bus Facilities**

The bus stops on this section of Greenhills Road have no boarding kerb, shelter or seat and there are no bus lanes on this road.

## Parking & Drop off

There are no on-street parking spaces on this section of the scheme and no amenities accessed directly from the carriageway but there is off-street parking nearby.

## 15.4 Proposed

#### **Pedestrian Facilities**

The proposals include extending Calmount Road to link with Greenhills Road and blocking Greenhills Road to traffic at its junction with the new link. Calmount Road will include segregated cycle lanes and footways on both sides.

A controlled crossing will be provided on Calmount Road west of its junction with the blocked off Greenhills Road.

Bus stops will be provided on Calmount Road. The east bound bus stop is located to the west of the crossing and will be located on a by-pass island. However, a conventional bus stop is shown for the west bound bus stop adjacent to the end of Greenhills Road and cyclists will be expected to pass stationary buses using the bus lane.

## **Cycle Facilities**

As stated above continuous segregated east and west bound cycleways will be provided on Calmount Road.

#### **Bus Facilities**

Bus lanes will be provided on both sides of Calmount Road.

#### Parking & Drop off

There is unlikely to be a demand for the addition of on-street blue-badge parking in this location.

#### 15.5 Recommendations

• The existing pedestrian facilities, including dropped kerbs and tactile paving, should brought up to good practice standards as part of the scheme.

## **Section 18 of Route 9**

#### 16.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 18 of 44) respectively.

## 16.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Businesses, includes local shops and showrooms
- Bank

## 16.3 Existing

#### **Pedestrian Facilities**

Greenhills Road has footways on both sides for most of the length of this section, but the majority of the footways appear to be narrower than 2m.

Uncontrolled crossings are provided over side roads and many of these have dropped kerbs, but these are not all dropped level with the carriageway and many of these are poorly aligned and none have tactile paving.

A controlled crossing is provided to the east of this section of Greenhills Road. The tactile paving is laid out in a 'T' shape rather than the recommended 'L' shape.

## **Cycle Facilities**

There are cycle lanes provided on both sides of Greenhills Road.

#### **Bus Facilities**

The east bound bus stops on this section of Greenhills Road has a shelter and a seat but no boarding kerb. The west bound stop has none of these facilities. The road has no bus lanes.

#### Parking & Drop off

There are no on-street parking spaces on this section of the scheme and no amenities accessed directly from the carriageway but there is off-street parking near the obvious local amenities. However, there is obvious inappropriate parking on the footways obstructing these routes which is problematic for many disabled people including wheelchair users and people with vision impairments.

#### 16.4 Proposed

## **Pedestrian Facilities**

The proposals will include segregated cycle lanes and footways on both sides.

The existing controlled crossing appears to have been removed in the proposals for this section of Greenhills Road. The nearest controlled crossing in the proposed scheme being at the roundabout to the east where a higher density of the local shops and amenities are located.

#### **Cycle Facilities**

As stated above continuous segregated east and west bound cycleways will be provided on Calmount Road.

#### **Bus Facilities**

Bus lanes will be provided on both sides of Greenhills Road. East and west bound bus stops will be provided to east of this section of the road and both stops will be located on by-pass islands.

#### Parking & Drop off

There is unlikely to be a demand for the addition of on-street blue-badge parking in this location.

#### 16.5 Recommendations

• The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.

• Parking restrictions should be enforced to avoid parked cars obstructing the footways.

## Section 19 & 20 of Route 9

## 17.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 19 & 20) respectively.

## 17.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Businesses, includes local shops and restaurants
- Bank

## 17.3 Existing

## **Pedestrian Facilities**

Greenhills Road, Ballymount Road Lower, Walkinstown Avenue, Walkinstown Road, Comwells Ford Road and Saint Peters Road, converge at the Walkinstown Roundabout. All of these roads have footways on both sides of the roads, although a number of sections of the footways appear to be narrower than 2m.

The pedestrian routes around the Walkinstown Roundabout are complex and long. The access roads to off-street car parks are near the roundabout and the controlled crossing points are a significant distance back from the roundabout. Controlled crossings are provided on Greenhills Road, Walkinstown Avenue, Walkinstown Road, Saint Peters Road and Comwells Ford Road and all have dropped kerbs and appropriate tactile paving. The exception to this is the crossing to the west of the roundabout on Greenhills Road where the tactile paving is laid out in a 'T' shape rather than the recommended 'L' shape. In addition, an uncontrolled crossing is provided on Greenhills Road Lower only has an uncontrolled crossing but it does have dropped kerbs and appropriate tactile paving. The crossings over many of the side roads, including the access roads to car parks, do not all have dropped kerbs and where dropped kerbs are provided these are not all dropped level with the carriageway and many of these are poorly aligned and none have tactile paving.

The side road crossings on Walkinstown Road have dropped kerbs and appropriate tactile paving on this section of the scheme. Controlled crossings are provided at the junction with Kilnamanagh Road and all are designed to good practice standards.

## **Cycle Facilities**

There are cycle lanes provided on both sides of Greenhills Road and Saint Peters Road, although these lanes stop before the roundabout. There are also small sections of cycle lane on one side of Comwells Ford Road

## **Bus Facilities**

East and west bound bus stops are provided on Greenhills Road, Walkinstown Avenue, Walkinstown Road, Comwells Ford Road and Saint Peters Road. Not all stops have shelters, seats or boarding kerbs. The bus stop on Saint Peters Road is located in a lay-by with no obvious parking restrictions and there are parked cars which would prevent buses getting close enough to the kerb to deploy boarding ramps. There are no bus lanes provided other than short sections of lane on Walkinstown Road.

#### Parking & Drop off

There is a high concentration of local shops and businesses located around the Walkinstown Roundabout and there is a mix of on and off-street parking provided adjacent to the units and on the approaches to the roundabout, including three electrical charging point spaces on Greenhills Road. However, there are no obvious blue-badge parking spaces designated for disabled people.

The shops on Walkinstown Road near the junction with Kilnamanagh Road have off-street parking which appears to include one blue-badge parking space.

Parked cars obstruct many of the footways and bus stops across this section of the scheme which will be problematic for many disabled people including wheelchair users and people with vision impairments.

#### 17.4 Proposed

#### **Pedestrian Facilities**

Footways will be retained on both sides on all of roads within the scheme.

The controlled crossings will be brought closer to the Walkinstown roundabouts, improving legibility and reducing the travel distance for pedestrians. The only uncontrolled crossing over Ballymount Road Lower will be upgraded to a zebra crossing, although this type of crossing is problematic for people with vision impairments. However, at the Walkinstown roundabout pedestrians will be expected to share sections of the footway and the crossing points with cyclists where each of the roads joins the roundabout, which is not ideal, particularly for vulnerable pedestrians.

#### **Cycle Facilities**

Segregated cycle lanes are shown on Greenhills Road, Comwells Ford Road and Bunting Road. As described above cycle facilities will be provided at the Walkinstown roundabout with off carriageway routes to each of the six connecting roads.

Cyclists will be permitted to use the bus lanes on Walkinstown Road but there will no cycle lanes on this section of the road.

#### **Bus Facilities**

Bus lanes will be provided on both sides of Greenhills Road and Walkinstown Road on this section of the scheme. East and west bound bus stops will be provided, relatively close to the Walkinstown roundabout on these two roads but there are no stops shown on the other roads which currently have bus stops. The bus stops on Greenhills Road will both be located on by-pass islands. The stops on Walkinstown Road are shown as conventional stops and

with no cycle lanes on this section of this road cyclists will be expected to pass stationary buses using the bus lanes.

### Parking & Drop off

The on and off-street parking around the Walkinstown Roundabout will be rearranged as part of the scheme. Therefore, blue badge spaces should make a proportion of the bays in each locate, including those provided with charging points.

## 17.5 Recommendations

- There is a significant amount of shared pedestrian/cycle space around roundabout which could be helpful to many cyclists, but the shared areas are likely to be problematic for many vulnerable pedestrians, including people with vision impairments. Therefore, the need for pedestrian/cycle interaction should be reviewed and alternatives should be explored again at the next design Stage.
- The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.
- Blue badge parking spaces should make a proportion of the bays in each locate, including those provided with charging points, as part of the reorganisation of the parking around the Walkinstown roundabout. Private and council off-street car parks operators should be encouraged to provide blue-badge spaces.
- Appropriate parking restrictions should be provided, and these should be enforced to avoid vehicles obstructing the footway.

## Section 21 & 22 of Route 9

#### 18.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 21 & 22 of 44) respectively.

This section of the scheme includes Walkinstown Road up to the Long Mile Road, the facilities on Long Mile Road around the junction are covered in the review report on the Condalkin (8) scheme.

## 18.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Businesses, includes local shops and restaurants
- Bank

## 18.3 Existing

## **Pedestrian Facilities**

Footways are provided on both sides of Walkinstown Road and all sections appear to be at least 2m wide.

The side road crossings on Walkinstown Road have dropped kerbs and appropriate tactile paving on this section of the scheme. Controlled crossings are provided on all four arms of the junction with Kilnamanagh Road and a supermarket access road and all of these crossings appear to meet good practice standards, including the tactile paving layouts.

#### **Cycle Facilities**

There are no cycle lanes provided on Walkinstown Road

#### **Bus Facilities**

Walkinstown Road includes a bus lane on the eastern section of the east bound carriageway before the junction with Long Mile Road. Two east and one west bound bus stops are provided on this section of Walkinstown Road. All of these stops have boarding kerbs but one of the east bound stops does not have a shelter and none of the stops have seats.

#### Parking & Drop off

The shops on Walkinstown Road have associated off-street parking.

Parked cars obstruct many of the footways on this section of the scheme which will be problematic for many disabled people including wheelchair users and people with vision impairments.

#### 18.4 Proposed

#### **Pedestrian Facilities**

Footways will be retained on both sides of Walkinstown Road.

## **Cycle Facilities**

Cyclists will be permitted to use the bus lanes on Walkinstown Road but there are no cycle lanes included on this section of the scheme.

#### **Bus Facilities**

East and west bound bus stops will be provided on Walkinstown Road, relatively close to the controlled crossings at the junction with Kilnamanagh Road. A further west bound bus stop will be provided on this road, close to the controlled crossings and other bus stops at the Long Mile Road junction. The stops on this road are shown as conventional stops and with no cycle lanes on this section cyclists will be expected to pass stationary buses using the bus lanes.

## Parking & Drop off

There is no obvious need for the addition of on-street parking on this section of the scheme. However, there is a need to implement appropriate parking restrictions to prevent parked cars obstructing footways.

- Private and council off-street car park operators should be encouraged to provide blue-badge spaces.
- Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway.

# Section 23 & 24 of Route 9

#### 19.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 23 & 24 of 44) respectively.

## 19.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Businesses, includes local shops and restaurants
- Bank
- Health clinic
- Post office

## 19.3 Existing

#### **Pedestrian Facilities**

Continuous pedestrian footways are provided on both sides of Drimnagh Road. The trees within the footways narrow the routes but adequate footway widths are maintained. However, parked cars obstruct the footway along the length of this section of the road.

Controlled crossings are provided on two of the three arms of the junction with Errigal Road and these crossings have dropped kerbs and the appropriate tactile paving. Controlled crossings are provided at the Saint Mary's Road junction at all likely crossing points, dropped kerbs are provided at each point but the tactile paving is laid out in a 'T' shape rather than the recommended 'L' shape. Stand-alone controlled pedestrian crossings are provided to the west of Cooley Road and to the east of Rafters Road.

Most of the uncontrolled crossings at side roads to the west of the section have dropped kerbs and tactile blister paving. However, the crossings, particularly those to the east of this section, for example at the junction with Saint Mary's Drive, Crumlin Park, Rafters Road and Cooley Road, have no tactile paving. Given the latter crossing is at a busy junction ideally it should be upgraded to a controlled crossing.

## **Cycle Facilities**

Cycle lanes are provided where there are no bus lanes on Drimnagh Road and Crumlin Road particularly to the east of the section where the carriageway narrows. Cycle lanes are also provided on both sides of Saint Marys Road.

## **Bus Facilities**

Bus lanes are provided on both sides of Drimnagh Road and Crumlin Road for most of this section of the scheme.

A west bound bus stop is provided on a build-out close to the shops and businesses at the Drimnagh Road/Slievebloom Road junction and this stop has a boarding kerb, a shelter and a seat. A west bound stop is provided near the junction with Saint Marys Road and has all of the key accessibility features.

Two east bound stops are provided, one to the east of the Errigal Road junction and one closer to the Saint Marys Road junction and these stops have all of the key accessibility features. The west bound stop opposite is located on an island with no dropped kerb at its eastern end and the island is cluttered with street furniture and trees narrowing the pedestrian routes to the west below acceptable widths.

Two east bound stops are provided east of the Saint Marys Road junction, one of these stops is provided on a build-out.

## Parking & Drop off

On-street parking is provided next to the west bound carriageway of Drimnagh Road near the junction with Slievebloom Road, adjacent to the shops and business in this area. There are no obvious blue-badge parking spaces. A taxi rank is also provided next to the on-street parking near the Slievebloom Road junction.

To the east of this section of the scheme there is some on-street parking adjacent to homes but there are no obvious facilities, such as shops, accessed directly from the carriageway. The majority of shops and other amenities appear to have dedicated off-street parking.

Parked cars obstruct the footway along the whole section of the scheme.

## 19.4 Proposed

#### **Pedestrian Facilities**

Footways will be retained on both sides of Drimnagh Road and Crumlin Road. The controlled crossing on Crumlin Road to the east of Rafters Road will be moved to the west of the junction, closer to the park. However, there are no other additional crossings or significant changes to the crossing arrangements proposed.

## **Cycle Facilities**

Segregated cycle lanes will be provided on both sides of Drimnagh Road up to the junction with Cooley Road. Cyclists will be permitted to use the bus lanes on Crumlin Road but there are no cycle lanes included on this section of the scheme. The cycle lanes on Saint Marys Road will be retained.

#### **Bus Facilities**

Bus lanes will be provided on both sides of the carriageway for the full length of this section of the scheme. The bus stops will remain in similar locations to the current arrangement. The stops on this road are shown as conventional stops and with no cycle lanes on this section cyclists will be expected to pass stationary buses using the bus lanes.

## Parking & Drop off

There is no obvious need for the addition of on-street parking on this section of the scheme. However, there is a need to implement appropriate parking restrictions to prevent parked cars obstructing footways.

#### 19.5 Recommendations

- The provision of an additional controlled crossings should be considered at the Errigal Road and Cooley Road junctions at the next design Stage, particularly the latter where there is no alternative controlled crossing.
- The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.
- Private and council off-street car park operators should be encouraged to provide blue-badge spaces.
- Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway.

# **Section 25 of Route 9**

## 20.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 25 of 44) respectively.

## 20.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Businesses, includes local shops and restaurants
- Pharmacy (late night)
- Epilepsy Ireland
- Petrol station

# 20.3 Existing

#### **Pedestrian Facilities**

Continuous pedestrian footways are provided on both sides of Crumlin Road and most of the footways are at least 2m wide.

Controlled crossings are provided to the east of Rafters Road and at the junction with Iveagh Gardens. The crossing near Rafters Road is described above in 20.3. The Iveagh Gardens controlled crossing has dropped kerbs and the appropriate tactile paving.

The dropped kerbs at the uncontrolled crossings at side roads, including Raphoe Road and Iveagh Gardens, are not fully dropped level with the carriageway and have no tactile blister paving. The crossing at Windmill Road appears to meet current standards of good practice.

## **Cycle Facilities**

Cycle lanes are provided on both sides of Crumlin Road.

#### **Bus Facilities**

There are no bus lanes on this section of Crumlin Road.

An east bound stop is provided to the east of Rafters Road relatively close to a controlled crossing, this stop has a boarding kerb but no shelter or seat. A west bound stop is provided west of controlled crossing at the junction with Iveagh Gardens and this stop has all of the key accessibility features.

## Parking & Drop off

There is no on-street parking on this section of Crumlin Road, but off-street parking is provided adjacent to the shops and business in this area. The off-street parking is accessed over the footway and there is evidence of parked cars obstructing the footway. There are no obvious blue-badge parking spaces in these off-street parking areas

#### 20.4 Proposed

#### **Pedestrian Facilities**

Footways will be retained on both sides of Crumlin Road. The controlled crossing to the east of Iveagh Gardens will be retained and there are no other additional crossings or significant changes to the crossing arrangements proposed.

#### **Cycle Facilities**

The existing cycle lanes will be removed although cyclists will be permitted to use bus lanes which will be provided for sections of the road.

#### **Bus Facilities**

Bus lanes will be provided on sections of Crumlin Road on both sides of the carriageway for the full length of this section of the scheme. However, the east and west bound bus stops appear to have been removed from this section of the scheme. There will be no bus stops between Saint Marys Road and the Rugby Ground, even though there is a number of shops and businesses on this section of the scheme.

## Parking & Drop off

There is no obvious need for the addition of on-street parking on this section of the scheme. However, there is a need to implement appropriate parking restrictions to prevent parked cars obstructing footways.

- The need for bus stops on this section should be reconsidered in the next design Stages.
- The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.
- Private and council off-street car park operators should be encouraged to provide blue-badge spaces.
- Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway.

# Section 26 & 27 of Route 9

# 21.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 26 & 27 of 44) respectively.

# 21.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Businesses, includes local shops and restaurants, business park
- Pharmacy (late night), Bank
- Epilepsy Ireland
- Crumlin Shopping Centre
- Guinness Rugby Ground and Lady's Hockey Club
- Crumlin Further Education College and Loreto College

# 21.3 Existing

## **Pedestrian Facilities**

Continuous pedestrian footways are provided on both sides of Crumlin Road and most of the footways are at least 2m wide.

Controlled crossings are provided at the junction with Iveagh Gardens, east of Clonard Road adjacent to a row of local shops and adjacent to the entrance to Crumlin Further Education College. All three crossing have dropped kerbs and the appropriate tactile paving.

The Crumlin Road/Sundrive Road/Herberton Road junction includes controlled crossings and an additional stand-alone controlled crossing is provided to the east of this junction adjacent to Loreto College. All of these crossing appear to meet current good practice standards.

The dropped kerbs at the uncontrolled crossings at side roads, including Clonard Road, Bangor Drive and Ardagh Road, do not appear to be fully dropped level with the carriageway and have no tactile blister paving.

## **Cycle Facilities**

Cycle lanes are provided on both sides of Crumlin Road.

## **Bus Facilities**

There are no bus lanes on this section of Crumlin Road.

East and west bound bus stops are located adjacent to the Guinness Rugby Ground and relatively close to the controlled crossing east of Clonard Road. The east bound stop has a boarding kerb, a shelter and a seat but the west bound stop has none of these features. An east bound stop is also provided adjacent to Crumlin College next to Brickfield Drive (close to the controlled crossing) and a west bound stop is provided to the west of this.

An east bound stop is provided adjacent to the Crumlin Shopping Centre. The nearest west bound stop being near Crumlin College or the stop adjacent to Loreto College to the east of this section of the scheme. The east bound stop adjacent to the shopping centre and the west bound by Loreto College both have key accessibility features.

# Parking & Drop off

The only on-street parking on this section of Crumlin Road is to the east of the shopping centre, opposite the junction with Old Country Road where the spaces include one charging point. Off-street parking is provided adjacent to most of the shops and business in this area. However, the only obvious blue-badge parking space (on or off-street) on this section of the scheme is located within the bank car park. Much of the off-street parking is accessed over the footway and there is evidence of parked cars obstructing the footway.

A drop-off area is provided next to the entrance to Crumlin College.

A taxi rank is provided next to the Crumlin Shopping Centre

# 21.4 Proposed

## **Pedestrian Facilities**

Footways will be retained on both sides of Crumlin Road. The controlled crossing to the east of Clonard Road will be moved to the west of this road which will be closer to the new bus stop locations in this area. The other crossings will remain relatively unchanged.

Clonard Road and Bangor Road will be blocked to traffic at their junctions with Crumlin Road removing the substandard uncontrolled crossings in these locations.

## **Cycle Facilities**

The existing cycle lanes will be removed although cyclists will be permitted to use the bus lanes which will be provided on this section of the road.

## **Bus Facilities**

Bus lanes will be provided on most of Crumlin Road both sides of the carriageway for this section of the scheme. The bus stops will be rationalised to four stops within this section of the scheme - one east and one west bound stop adjacent to the rugby ground and one east and one west stop adjacent to the shopping centre. The east and west bound stops are opposite one another improving legibility and all stops are relatively close to a controlled crossing.

## Parking & Drop off

There is no obvious need for the addition of on-street parking on this section of the scheme. However, there is a need to implement appropriate parking restrictions to prevent parked cars obstructing footways.

## 21.5 Recommendations

• The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.

• Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway.

# **Section 28 of Route 9**

#### 22.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 28 of 44) respectively.

## 22.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Businesses, includes local shops
- Petrol station
- Loreto College

## 22.3 Existing

## **Pedestrian Facilities**

Continuous pedestrian footways are provided on both sides of Crumlin Road and most of the footways are at least 2m wide.

Controlled crossings are provided adjacent to Loreto College and the Dolphin Road/Crumlin Road junction. As the crossing adjacent to Loreto College appears to meet current good practice standards. The Dolphin Road/Crumlin Road junction has crossings on three arms of the junction but not the eastern side next to the canal at the start of Dolphin Barns. The three junction crossings have dropped kerbs, but the tactile paving is laid out in a 'T' shape rather than the recommended 'L' shape.

The dropped kerbs at the uncontrolled crossings at side roads, including Rutland Avenue, are not fully dropped level with the carriageway and have no tactile blister paving.

## **Cycle Facilities**

Cycle lanes are provided on both sides of Crumlin Road up to the start of the bus lanes east of the Crumlin Road/Sundrive Road/Herberton Road junction and cyclists are permitted to use the bus lanes.

## **Bus Facilities**

Bus lanes are provided on Crumlin Road on both sides of the road from the Crumlin Road/Sundrive Road/Herberton Road junction eastwards.

An east bound stop is provided to the east of the controlled crossing adjacent to Loreto College and a west bound stop is located to the west of this crossing. The west bound stop has a boarding kerb, a shelter and a seat. The east bound stop has a boarding kerb but no shelter or seat. In addition, adjacent east and west bound bus stops are located to the west of Rutland Avenue and these stops have boarding kerbs, shelters and seats.

#### Parking & Drop off

There is no on-street parking on this section of Crumlin Road, but off-street parking is provided adjacent to the shops and business in this area. Much of the off-street parking is accessed over the footway and there is evidence of parked cars obstructing the footway. There are no obvious blue-badge parking spaces in these off-street parking areas.

### 22.4 Proposed

#### **Pedestrian Facilities**

Footways will be retained on both sides of Crumlin Road. The controlled crossing locations remain unchanged and there is no additional crossing proposed to the east of the Dolphin Road/Crumlin Road junction next to the canal.

The addition of cycle facilities at the Dolphin Road/Crumlin Road junction does not appear to change the pedestrian facilities at the junction.

#### **Cycle Facilities**

The existing cycle lanes will be removed with the exception of the Dolphin Road/Crumlin Road junction where cycle facilities will be added linking with the cycle lanes on Dolphin Road/Parnell Road and east of the canal. Cyclists will continue to be permitted to use the bus lanes.

#### **Bus Facilities**

Bus lanes will be maintained on this section of Crumlin Road on both sides of the carriageway. The bus stops to the west of the section adjacent to Loreto College will be removed. The east and west bound bus stops near Rutland Avenue will be retained in their current locations. The bus stops will be conventional stops and since there are no cycle lanes it is assumed that cyclists will use the bus lanes to pass stationary buses.

## Parking & Drop off

There is no obvious need for the addition of on-street parking on this section of the scheme. However, there is a need to implement appropriate parking restrictions to prevent parked cars obstructing footways.

#### 22.5 Assessment

- At the next design Stage consider providing an additional crossing at the Dolphin Barns side of the Dolphin Road/Crumlin Road junction.
- The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.
- Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway.

# Section 29 & 30 of Route 9

# 23.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 29 & 30 of 44) respectively.

# 23.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Businesses, includes local shops and restaurants
- Hospital

# 23.3 Existing

## **Pedestrian Facilities**

Continuous pedestrian footways are provided on both sides of Dolphin Barns and Cork Street. The footways appear to be at least 2m wide.

Controlled crossings are provided on all four arms of the Dolphin Barns/South Circular junction and these include dropped kerbs with the appropriate tactile paving layout. A controlled crossing is provided on Cork Street opposite a hospital, near the junction with Emerald Square, and it includes the key accessibility features.

Controlled crossings are provided on all four arms of the Cork Street/Marrowbone Lane/Donore Avenue junction and these include dropped kerbs with the appropriate tactile paving layout.

The dropped kerbs at a large proportion of the uncontrolled crossings at side roads are not fully dropped level with the carriageway and most do not have tactile blister paving.

## **Cycle Facilities**

Cycle lanes are provided on both sides of Dolphin Barns where bus lanes are not provided, and cyclists are permitted to use the bus lanes. Cycle lanes are also marked on both sides of Cork Street.

## **Bus Facilities**

Bus lanes are provided on both sides of Dolphin Barns for parts of this road and for the full length of Cork Street.

East and west bound stops are located to the west of the Dolphin Barns/South Circular junction. The east bound stop has a boarding kerb, but it is a significant distance from a crossing and has no shelter or seat. The west bound stop is closer to the junction crossings and has a boarding kerb, a shelter and a seat.

A west bound stop is provided relatively close to a hospital on Dolphin Barns to the east of the Dolphin Barns/South Circular junction. The nearest west bound stop is on Cork Street to the east of Emerald Square and a controlled crossing is provided nearby.

### Parking & Drop off

There are some on-street parking spaces on many sections of Dolphin Barns and Cork Street. Off-street parking is also provided adjacent to shops and business in a number of locations. There are no obvious blue-badge parking spaces on or off-street. There is evidence of parked cars obstructing the footway along most of this section of the scheme.

#### 23.4 Proposed

#### **Pedestrian Facilities**

There are no obvious significant changes to the pedestrian environment. The improvements to the cycle infrastructure at the Dolphin Barns/South Circular junction are unlikely to have an impact on pedestrians, assuming cyclists are expected to stop for the pedestrian phase.

#### **Cycle Facilities**

Cycle lanes will be provided on both sides of Dolphin Barns and Cork Street and cycle infrastructure will be provided at the Dolphin Barns/South Circular junction. Cyclists will continue to be permitted to use the bus lanes.

#### **Bus Facilities**

Bus lanes will be provided on both sides of Dolphin Barns and Cork Street. There are no obvious changes proposed to the bus stop locations.

The bus stops are shown as conventional stops with the cycle lanes ending at the bus stops. Therefore, cyclists will be expected to use the bus lane to pass stationary buses.

## Parking & Drop off

Some of the off-street parking will be removed as part of the scheme placing more demand on the remaining spaces on and off-street. Therefore, it is even more important that a proportion of the spaces available in key locations are designated for blue-badge holders.

Appropriate parking restrictions should be implemented to prevent parked cars obstructing footways.

#### 23.5 Recommendations

- The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.
- A proportion of the on and off-street parking spaces in key locations should be designated for blue-badge holders. Private and council off-street car park operators should be encouraged to provide blue-badge spaces.
- Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway.

# Section 31 & 32 of Route 9

#### 24.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 31 & 32 of 44) respectively.

# 24.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Businesses, includes local shops and restaurants
- Parks

# 24.3 Existing

# **Pedestrian Facilities**

Continuous pedestrian footways are provided on both sides of Cork Street and Saint Luke's Avenue. The footways appear to be at least 2m wide.

A stand-alone controlled crossing is provided adjacent to Weaver Park, to the east of Ormond Street, and this crossing includes the key accessibility features, including the appropriate tactile paving layout.

Controlled crossings are provided at the Ardee Street junction and these crossings include the key accessibility features, including tactile paving layout. However, the tactile paving at one of the crossings lacks a 'tail' on the 'L' shape layout and the 'tail' on the paving at other crossings do not extend far enough across the footway. Therefore, these crossings could be difficult to find for people with vision impairments. In addition, there are a number of bollards within the footway at one of these crossings which are likely to be a hazard and/or confusing to people with vision impairments.

A stand-alone controlled crossing is provided on Saint Luke's Avenue, close to the junction with Brabazon Place and this crossing includes the key accessibility features, including the appropriate tactile paving layout.

The dropped kerbs at some of the uncontrolled crossings at side roads are not fully dropped level with the carriageway and most do not have tactile blister paving. The tactile paving at the Ormond Street uncontrolled table crossing does not extend for the full width of the table where the kerb is level with the carriageway, and it appears to have red coloured tactile paving which is the colour reserved for controlled crossings.

# **Cycle Facilities**

Cycle lanes are marked on both sides of Cork Street and Saint Luke's Avenue.

# **Bus Facilities**

Bus lanes are provided on both sides of Cork Street and Saint Luke's Avenue.

East and west bound stops are located to the west of the junction with Brickfield Lane. The east bound stop in particular is a significant distance from the nearest pedestrian crossings which is at the Cork Street/Marrowbone Lane/Donore Avenue junction. Both stops have boarding kerbs, shelters and seats.

East and west bound stops are located near Weaver Park to the east of Ormond Street and relatively close to the crossing adjacent to the park and the crossings at the Ardee Street junction. The west bound stop has a boarding kerb, a shelter and a seat but the east bound stop has none of these features.

East and west bound bus stops are located on Saint Luke's Avenue to the east of the Ardee Street junction. The west bound stop has no boarding kerb but does have a shelter and a seat. The east bound stop has none of these features.

## Parking & Drop off

There are some on and off-street parking spaces on many sections Cork Street and Saint Luke's Avenue but there are no obvious blue-badge parking spaces. There is evidence of parked cars obstructing the footway along most of this section of the scheme.

# 24.4 Proposed

## **Pedestrian Facilities**

There are no obvious significant changes to the pedestrian environment.

## **Cycle Facilities**

Cycle lanes will be provided on both sides of Cork Street and Saint Luke's Avenue. Cyclists will continue to be permitted to use the bus lanes.

## **Bus Facilities**

Bus lanes will be provided on both sides Cork Street and Saint Luke's Avenue. There are no obvious changes proposed to the bus stop locations.

The bus stops are shown as conventional stops with the cycle lanes ending at the bus stops. Therefore, cyclists will be expected to use the bus lane to pass stationary buses.

## Parking & Drop off

There are no obvious changes proposed to the parking provision.

## 25.5 Recommendations

- The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.
- Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway.

# Section 33 & 34 of Route 9

## 25.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 33 & 34 of 44) respectively.

#### 25.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Businesses, includes local shops and restaurants
- Saint Patrick's Cathedral

## 25.3 Existing

#### **Pedestrian Facilities**

Continuous pedestrian footways are provided on both sides of Saint Luke's Avenue, The Coombe/Dean Street, Patrick Street and Nicholas Street. The footways on Saint Luke's Avenue and Patrick Street appear to be at least 2m wide but a section of the footways on The Coombe/Dean Street, west of Francis Street is significantly narrower than 2m.

Controlled crossings are provided on two of the three arms of the Saint Luke's Avenue/The Coombe junction. The crossings include the key accessibility features, but the tactile paving 'L' shaped layouts are incomplete layout in a number of locations.

Controlled crossings are also provided at the Dean Street/Patrick Street junction and these all include key accessibility features.

A Toucan controlled crossing is proved at the Patrick Street/Bull Alley Street junction. However, the area set aside for cyclists to wait is small and the footway is too narrow for cyclists and pedestrians to share. And the tactile paving at this junction is likely to be confusing for many people with a vision impairment. The dropped kerb on the footway intended for cyclists has no tactile paving and therefore people with vision impairments have no delineation between the carriageway and footway where it is safe to walk.

Controlled crossings are provided on two of the three arms of the Patrick Street/Brides Road junction, there is no crossing on the eastern side of this junction although it is on an obvious desire line. The crossings provided have dropped kerbs and the appropriate tactile paving.

Controlled crossings are provided at all arms of the Nicholas Street/High Street/Christchurch Place junction. Dropped kerbs are provided and tactile paving is provided at most of the crossings but the tactile paving at several of the crossings is laid out in a 'T' shape rather than recommended 'L' shape.

The dropped kerbs at some of the uncontrolled crossings at side roads are not fully dropped level with the carriageway and most do not have tactile blister paving. The uncontrolled crossing at New Row uses red coloured tactile paving which is reserved for controlled crossings.

## **Cycle Facilities**

Cycle lanes are marked on both sides of Saint Luke's Avenue and Patrick Street but there are no cycle lanes on The Coombe/Dean Street.

## **Bus Facilities**

Bus lanes are provided on both sides of Saint Luke's Avenue and on some sections of Patrick Street but there are no bus lanes on The Coombe/Dean Street.

An east bound bus stop is provided on Patrick Street east of the junction with Dean Street and this stop has a boarding kerb, a shelter and a seat.

# Parking & Drop off

There are some on and off-street parking spaces on Saint Luke's Avenue but there are no obvious blue-badge parking spaces. There is evidence of parked cars obstructing the footway along Saint Luke's Avenue. Loading bays are provided outside shops on Patrick Street.

# 25.4 Proposed

# **Pedestrian Facilities**

There are no obvious significant changes to the pedestrian environment.

# **Cycle Facilities**

Cycle lanes will be provided on both sides of all of the streets. Cycle facilities will be provided at the Dean Street/Patrick Street and Nicholas Street/High Street/Christchurch Place junctions but provided cyclists are required to stop for pedestrians at the pedestrian crossing phase there is unlikely to be an impact on the pedestrian environment.

## **Bus Facilities**

Bus lanes will be provided on both sides Saint Luke's Avenue and Patrick Street but not on Dean Street. The location of the east bound bus stop on Patrick Street will remain unchanged and an additional west bound stop will be proved diagonally opposite east of the junction with Dean Street improving legibility and bus connectivity. A further east bound bus stop will be provided on Patrick Street to the east of the Bride Road junction.

The bus stops are shown as conventional stops with the cycle lanes ending at the bus stops. Therefore, cyclists will be expected to use the bus lane to pass stationary buses.

# Parking & Drop off

There are no obvious changes proposed to the parking provision.

- Consideration should be given to providing additional controlled crossings at the Saint Luke's Avenue/The Coombe junction and at the Patrick Street/Brides Road junction at the next design stage.
- The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme.
- A proportion of the on and off-street parking spaces in key locations should be designated for blue-badge holders. Private and council off-street car park operators should be encouraged to provide a proportion of blue-badge spaces.
- Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway.

# Section 35, 36 & 37 of Route 9

## 26.1 Introduction

The following overview of the existing and proposed facilities is based on google maps information and a review of the AECOM proposals (Drawing BCD-0000-PRW\_PC-09\_XX\_0000-DR-CR-0002 sheets 35, 36 & 37 of 44) respectively.

# 26.2 Local Amenities (within 500m)

The following facilities were identified within a 500m radius of the route:

- Homes
- Businesses, includes local shops
- Park, church and bowling club

# 26.3 Existing

## **Pedestrian Facilities**

Pedestrian only footways are provided on both sides of Bunting Road and Saint Mary's Road, quite residential streets with low volumes of traffic and with traffic calming measures in place. The footways appear to be 2m wide and paved verges with trees separate the pedestrian routes from the vehicle carriageway along large sections of these roads. The exception to this is the section of footway next to the park where the route is narrowed by overgrown vegetation.

Dropped kerbs are provided at the majority of the side roads, with exceptions such as Balfe Road and Fernvale Drive, but many are not fully dropped level with the carriageway, are poorly aligned with the dropped kerb opposite and none have tactile blister paving (with the except of Saint Agnes Terrace). There is no defined crossings over the main Bunting Road/Saint Mary's Road carriageway.

Parked cars are evident on the verges and obstruct the footways around the shops at the Harty Avenue/Bunting Road junction. Cars also obstruct sections of the footway on Saint Mary's Road where there is no verge.

## **Cycle Facilities**

Cycle lanes are marked on both sides of Bunting Road

## **Bus Facilities**

There are no bus lanes on Bunting Road or Saint Mary's Road. A west bound bus stop is located near the Crumlin Bowling Club east of Saint Agnes Terrace and an east bound stop is located adjacent to the shops at the corner of Saint Mary's Road and Drimnagh Road. Both of these bus stops have shelters and seats but neither has a boarding kerb.

## Parking & Drop off

There are some on-street parking spaces near the junction with Comwell Ford Road and vehicles park adjacent to the shops and businesses at the corner of Harty Avenue, but it is not clear whether these are designated parking spaces. The bowling club and the shops at the corner of Saint Mary's Road and Drimnagh Road have off-street car parking and parked

cars obstruct the footway and cycleway adjacent to both. There is no evidence of bluebadge spaces in either location.

#### 26.4 Proposed

#### **Pedestrian Facilities**

There are no obvious significant changes to the pedestrian environment.

## **Cycle Facilities**

Cycle lanes will be provided on both sides of both Bunting Road and Saint Mary's Road.

## **Bus Facilities**

There are no bus lanes proposed on this section of the scheme. The location of the west bound bus stop east of Saint Agnes Terrace will remain unchanged, but the stop will be provided in a lay-by to maintain a continuous cycle route. Therefore, parking restrictions around the bus stop will be particularly important to ensure bus drivers are able to manoeuvre buses close enough to the kerb to avoid a gap/deploy the ramp. The east bound stop will be removed potentially increasing the travel distance for bus users to the next stop.

## Parking & Drop off

There are no obvious changes proposed to the parking provision.

- At the next design stage consider providing a pedestrian crossing over Bunting Road or Saint Mary's Road. The junctions of Bunting Road/Saint Agnes Terrace/Saint Mary's Road and Bunting Road/Avenue appear to be useful locations for crossing facilities.
- The existing pedestrian facilities, including dropped kerbs and tactile paving, should be brought up to good practice standards as part of the scheme.
- A proportion of the on and off-street parking spaces in key locations should be designated for blue-badge holders. Private and council off-street car park operators should be encouraged to provide a proportion of blue-badge spaces.

Accesssibility Audit - Tallaght to City Centre

	Scheme: Greenhills Route 9 to City Centre Accessibility Audit Stage - Preferred Route Option Date Audit Completed: 28/04/2020				
To Be Completed By Designer					
Section	Assessment Comments	Problem/Observ ation Accepted (yes/no/n/a)	Recommended measure accepted (yes/no/n/a)	Designers Comments	
1	The pedestrian connections from the east bound footway to the bus interchange and crossings around the bus junctions should be considered further as the design of the interchange is developed.	у	n/a	Overall design of this section to be finalised, currently design to be carried out by others and reviewed by Aecom	
2	The pedestrian connections from the east bound footway to the bus interchange and crossings around the bus junctions should be considered further as the design of the interchange is developed. Is it possible to provide a controlled crossing on all 4 sides of the junction of Old Blessington Road and Belgard Square West?	y	n/a	Overall design of this section to be finalised, currently design south of Old Blessington Road to be carried out by others and reviewed by Aecom. Existing controlled pedestrian crossings (2 No,) at Old Blessington Rd / Belgard Square West will be assessed along with pedestrian connections.	
3	The west bound bus stop should be redesigned to avoid share pedestrian/cycle areas around the bus stop. The existing pedestrian facilities, including dropped kerbs, tactile paving and street furniture should be brought up to good practice standards as part of the scheme.	у	у	The westbound bus stop is to be designed in accordance with revised design guidelines for shared bus stop landing zone. Pedestrian facilities will be upgraded in accordance with BC design guidelines.	
4	Is there any way of reducing the complexity/potential conflict between pedestrians and cyclists at the Belgard Square North/Belgard Square East junction? Are cyclists expected to use the carriageway on Belgard Square East removing the need for the existing shared pedestrian/cycle areas on this road? And how does this tie in with the retained cycle route on Blessington Road and is there any intention to improve this two- way route? The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme.	у	n/a	Dutch style junction will be fully signalised with pedestrian and cycle facilities. Dedicated cycle tracks are not proposed for Belgard Square East as Bus Gate will reduce traffic on this section of road. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach.	
5	The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme.	у	n/a	Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach. Blue badge parking requirement will be assessed.	
6 & 7	Will the delineation/segregation between pedestrians and cyclists be improved on the Greenhills Road footway/cycleways, north of the Bancroft Park junction as part of this scheme? Will the parking be removed from Old Greenhills Road? The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme.	у	n/a	Cyclist / pedestrian segregation will be as BC design guidelines with upstand kerb. On street parking on Old Greenhills Road will be removed to facilitate Bus Route. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach.	

8	Will the delineation between pedestrians and cyclists be improved on the Greenhills Road footway/cycleways, west of the Road/Airton Road junction? The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme.	у	n/a	Cyclist / pedestrian segregation will be as BC design guidelines with upstand kerb. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach. Access ramp to primary care centre will be realigned and requirement for blue badge parking provision will be assessed.
9	The west bound bus stop design should be reconsidered to minimise the conflict between cyclists and pedestrians. The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme.	у	n/a	The westbound bus stop is to be designed in accordance with revised design guidelines for shared bus stop landing zone. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach.
10 & 11	Will there be a crossing over Castletymon Road at the Road/Castletymon Road junction? The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme.	у	n/a	There will be a pedestrian crossing on east section of new link road (Castletymon Road) between Greenhills Road and Old Greenhills Road. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach.
12	What method will be used to segregate cyclists from pedestrians and cyclists from vehicles? The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme.	у	n/a	Cyclist / pedestrian / bus lane segregation will be as BC design guidelines with upstand kerb. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach.
13	What method will be used to segregate cyclists from pedestrians and cyclists from vehicles? The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme.	у	n/a	Cyclist / pedestrian / bus lane segregation will be as BC design guidelines with upstand kerb. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach.
14	The shared pedestrian/cyclist approach to the west bound bus stop on Calmount Road is not ideal. What method will be used to segregate cyclists from pedestrians and cyclists from vehicles? The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme.	у	n/a	The westbound bus stop will be reassessed and if possible, a shared bus stop landing zone will be provided. Cyclist / pedestrian / bus lane segregation will be as BC design guidelines with upstand kerb. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach.
15	The existing pedestrian facilities should brought up to good practice standards as part of the scheme, including providing dropped kerbs and tactile paving where appropriate.	у	n/a	Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach
16	The shared pedestrian/cyclist approach to the west bound bus stop on Calmount Road is not ideal. What method will be used to segregate cyclists from pedestrians and cyclists from vehicles? The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme.	у	n/a	The westbound bus stop will be reassessed and if possible, a shared bus stop landing zone will be provided. Cyclist / pedestrian / bus lane segregation will be as BC design guidelines with upstand kerb. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach.

17	There is no by-pass island shown at the west bound bus stop and it is not clear whether cyclists are permitted to share the footway to by-pass parked buses which would not be ideal. What method will be used to segregate cyclists from pedestrians and cyclists from vehicles? The existing pedestrian facilities, including dropped kerbs and tactile paving should brought up to good practice standards as part of the scheme.	y	n/a	The westbound bus stop will be reassessed and if possible, a shared bus stop landing zone and cycle lane demarcation will be provided. Cyclist / pedestrian / bus lane segregation will be as BC design guidelines with upstand kerb. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach.
18	What method will be used to segregate cyclists from pedestrians and cyclists from vehicles? The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme. Appropriate parking restrictions should be provided and effectively enforced.	y	n/a	Cyclist / pedestrian / bus lane segregation will be as BC design guidelines with upstand kerb. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach. Bus Lane demarcation should highlight to road users that parking is not permitted on this section of roadway.
19 & 20	There is a significant amount of shared pedestrian/cycle space around roundabout which is likely to be helpful to many cyclists, but the shared areas are likely to be problematic for many vulnerable pedestrians, including people with vision impairments. Is it possible to avoid the need/mitigate for areas of the pedestrian footway to be shared with cyclists? The stops on Walkinstown Road are shown as conventional stops and there are no cycle lanes on this section of this road, therefore it is assumed cyclists will be expected to overtake parked buses or wait for them to move, rather than using the footways to by-pass the stops? The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme. Blue badge parking spaces should make a proportion of the bays in each locate, including those provided with charging points, as part of the reorganisation of the parking around the Walkinstown roundabout. Private and council off-street car parks operators should be encouraged to provide blue-badge spaces. Appropriate parking restrictions should be provided, and these should be enforced to avoid vehicles obstructing the footway.	у	n/a	Cyclist / Pedestrian interface at junctions will be re-assessed at detail design stage. There is no designated cycle track on this section of Walkinstown Road, cyclists should use Bus lane and roadway as appropriate. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach. Blue badge parking and charging points provision will be assessed at detail design stage. Noted, will be assessed at detail design stage. Bus Lane demarcation should highlight to road users that parking is not permitted on this section of roadway.
21 & 22	The stops on Walkinstown Road are shown as conventional stops and there are no cycle lanes on this section of this road, therefore it is assumed cyclists will be expect to overtake parked buses or wait for them to move, rather than using the footways to by-pass the stops? Private and council off-street car park operators should be encouraged to provide blue- badge spaces. Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway.	у	n/a	There is no designated cycle track on this section of Walkinstown Road, cyclists should use Bus lane and roadway as appropriate. Noted, will be assessed at detail design stage. Noted, will be assessed at detail design stage. Bus Lane demarcation should highlight to road users that parking is not permitted on this section of roadway.
23 & 24	Ideally additional controlled crossings should be provided at the Errigal Road and Cooley Road junctions, particularly the latter where there is no alternative controlled crossing. The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme. Private and council off-street car park operators should be encouraged to provide blue- badge spaces. Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway.	y	n/a	Noted, will be assessed at detail design stage. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach. Noted, will be assessed at detail design stage. Noted, will be assessed at detail design stage. Bus & Cycle Lane demarcation should highlight to road users that parking is not permitted on this section of roadway.

25	Will there be a suitable provision of bus stops to serve this section of the scheme? The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme. Private and council off-street car park operators should be encouraged to provide blue- badge spaces. Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway.	у	n/a	Noted, bus stop requirement will be reassessed at detail design stage. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach. Noted, will be assessed at detail design stage. Noted, will be assessed at detail design stage.
26 & 27	The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme. Private and council off-street car park operators should be encouraged to provide blue- badge spaces. Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway.	у	n/a	Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach. Noted, will be assessed at detail design stage. Noted, will be assessed at detail design stage.
28	Consider providing an additional crossing at the Dolphin Barns side of the Dolphin Road/Crumlin Road junction. The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme. Private and council off-street car park operators should be encouraged to provide blue- badge spaces. Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway.	У	n/a	Noted, will be assessed at detail design stage. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach. Noted, will be assessed at detail design stage. Noted, will be assessed at detail design stage. Bus & Cycle Lane demarcation on Crumlin Road should highlight to road users that parking is not permitted on this section of roadway.
29 & 30	The improvements to the cycle infrastructure at the Dolphin Barns/South Circular junction is unlikely to have an impact on pedestrians, assuming cyclists are expected to stop for the pedestrian phase? Is there any intention to increase the segregation between vehicles and cyclists, from markings on the carriageway to for example a kerb? The proposed bus stops are shown as conventional stops with the cycle lanes ending at the bus stops. Therefore, it is assumed that cyclists will be expected to use the bus lane to by- pass stationary buses rather than using the footway? The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme. A proportion of the on and off-street parking spaces in key locations should designated for blue-badge holders. Private and council off-street car park operators should be encouraged to provide blue-badge spaces. Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway.	У	n/a	Cyclist / Pedestrian interface at junctions will be re-assessed at detail design stage. Cyclist / pedestrian / bus lane segregation will be as BC design guidelines with upstand kerb, build-out islands are also provided at junctions. Right of way width restriction will not allow buffer segregation of cycle lane at bus stops, cyclists should use Bus lane and roadway as appropriate. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach. Noted, will be assessed at detail design stage. Noted, will be assessed at detail design stage. Bus & Cycle Lane demarcation should highlight to road users that parking is not permitted on this section of roadway.
31 & 32	The proposed bus stops are shown as conventional stops with the cycle lanes ending at the bus stops. Therefore, it is assumed that cyclists will be expected to use the bus lane to by- pass stationary buses rather than using the footway? Is there any intention to increase the segregation between vehicles and cyclists, from markings on the carriageway to for example a kerb? The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme. A proportion of the on and off-street parking spaces in key locations should designated for blue-badge holders. Private and council off-street car park operators should be encouraged to provide a proportion of blue-badge spaces. Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway.	у	n/a	Right of way width restriction may not allow buffer segregation of cycle lane at bus stops, cyclists should use Bus lane and roadway as appropriate, this will be reassessed at detail design stage where RoW allows. Cyclist / pedestrian / bus lane segregation will be as BC design guidelines with upstand kerb. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach. Noted, will be assessed at detail design stage. Noted, will be assessed at detail design stage. Noted, will be assessed at detail design stage. Noted, will be assessed at detail design stage. Bus & Cycle Lane demarcation should highlight to road users that parking is not permitted on this section of roadway.

33 & 34	Additional controlled crossing should be provided at the Saint Luke's Avenue/The Coombe junction and at the Patrick Street/Brides Road junction. The proposed bus stops are shown as conventional stops with the cycle lanes ending at the bus stops. Therefore, it is assumed that cyclists will be expected to use the bus lane to by-pass stationary buses rather than using the footway? Is there any intention to increase the segregation between vehicles and cyclists, from markings on the carriageway to for example a kerb? The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme. A proportion of the on and off-street parking spaces in key locations should designated for blue-badge holders. Private and council off-street car park operators should be encouraged to provide a proportion of blue-badge spaces. Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway.	y	n/a	<ul> <li>Will be assessed at detail design stage.</li> <li>Right of way width restriction may not allow buffer segregation of cycle lane at bus stops, cyclists should use Bus lane and roadway as appropriate, this will be reassessed at detail design stage where RoW allows.</li> <li>Cyclist / pedestrian / bus lane segregation will be as BC design guidelines with upstand kerb.</li> <li>Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach.</li> <li>Noted, will be assessed at detail design stage.</li> <li>Noted, will be assessed at detail design stage. Bus &amp; Cycle Lane demarcation should highlight to road users that parking is not permitted on this section of roadway.</li> </ul>
35, 36 & 37	There is no defined pedestrian crossing over Bunting Road or Saint Mary's Road apart from at their junctions with Comwell Ford Road and Drimnagh Road respectively. The junctions of Bunting Road/Saint Agnes Terrace/Saint Mary's Road and Bunting Road/Avenue seem like useful locations for crossing facilities. The existing pedestrian facilities, including dropped kerbs and tactile paving should be brought up to good practice standards as part of the scheme. A proportion of the on and off-street parking spaces in key locations should designated for blue-badge holders. Private and council off-street car park operators should be encouraged to provide a proportion of blue-badge spaces. Appropriate parking restrictions should be implemented to avoid vehicles obstructing the footway and this will be particularly import around bus stops.	У		Noted, will be assessed at detail design stage. Pedestrian facilities will be upgraded in accordance with BC design guidelines and pedestrian crossing points will be provided with tactile paving in each direction of approach. Noted, will be assessed at detail design stage. Noted, will be assessed at detail design stage.

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