


Sandyford Business District Cycle Infrastructure Review

10th September 2018


P·M·C·E
CONSULTANTS
Independent Specialists · Engineering Solutions

ROD
ROUGHAN & O'DONOVAN

Agenda

- Study Area Overview
 - Principal Issues of Concern
 - Action Plan and Prioritisation
- 
- A decorative graphic at the bottom of the slide consisting of several thick, rounded, orange-colored lines that curve and overlap, creating a modern, abstract design.

Study Area

- Sandyford Business Park
 - South County Business Park
 - Central Park
 - Stillorgan Industrial Estate
- 




Map of the SBiD Area

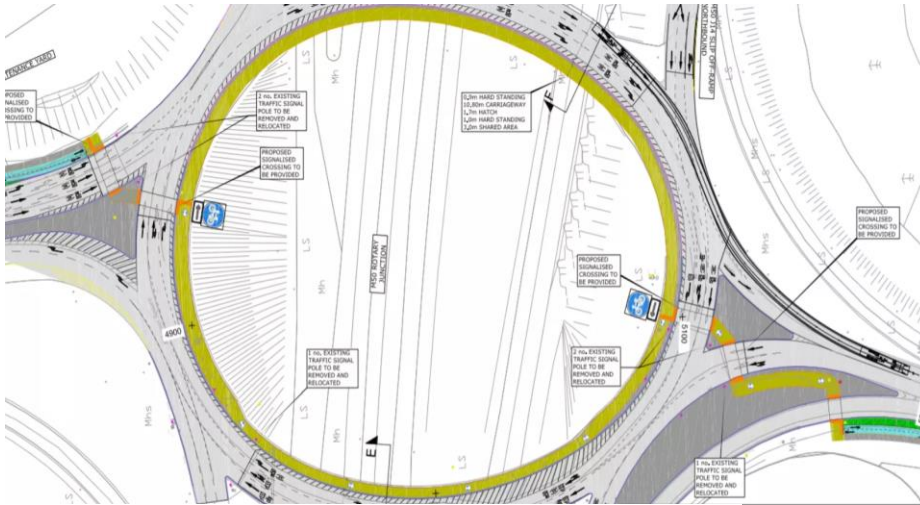
Legend

--- Study Area

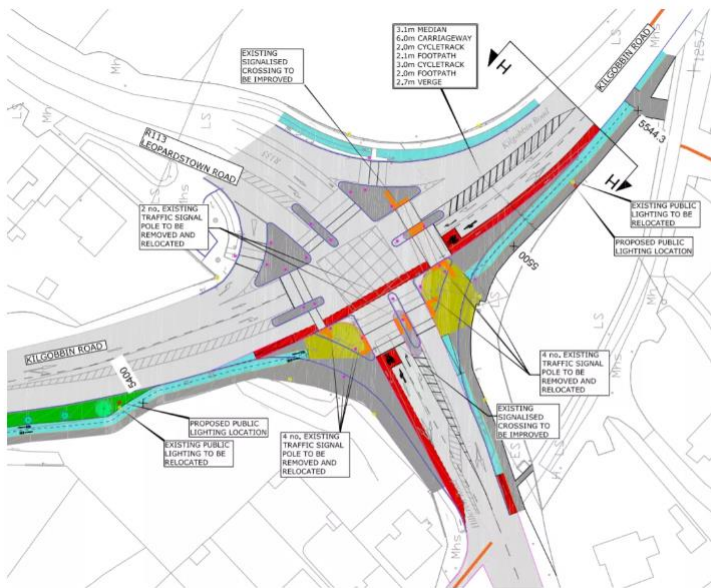
Already Committed Schemes

- Sandyford Cycle Route Scheme (through M50 Junction 13)
 - ESB Link Road from M50 J14 to Blackthorn Road
 - Bracken Road Extension to Drummartin Link Road
- 
- A decorative graphic at the bottom of the slide consisting of several thick, rounded orange lines that curve and overlap, creating a modern, abstract design.

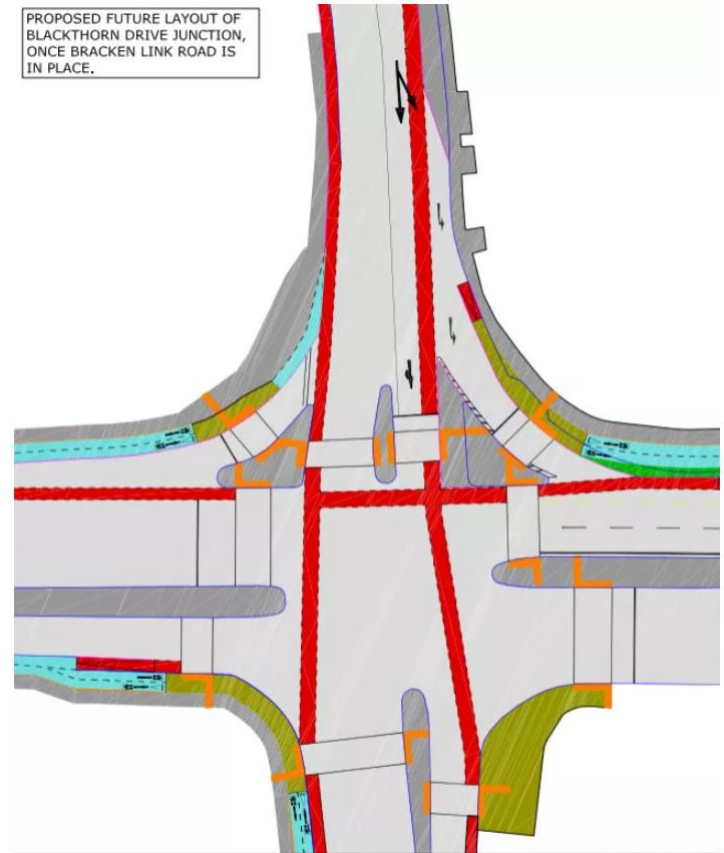
SANDYFORD CYCLE ROUTE SCHEME



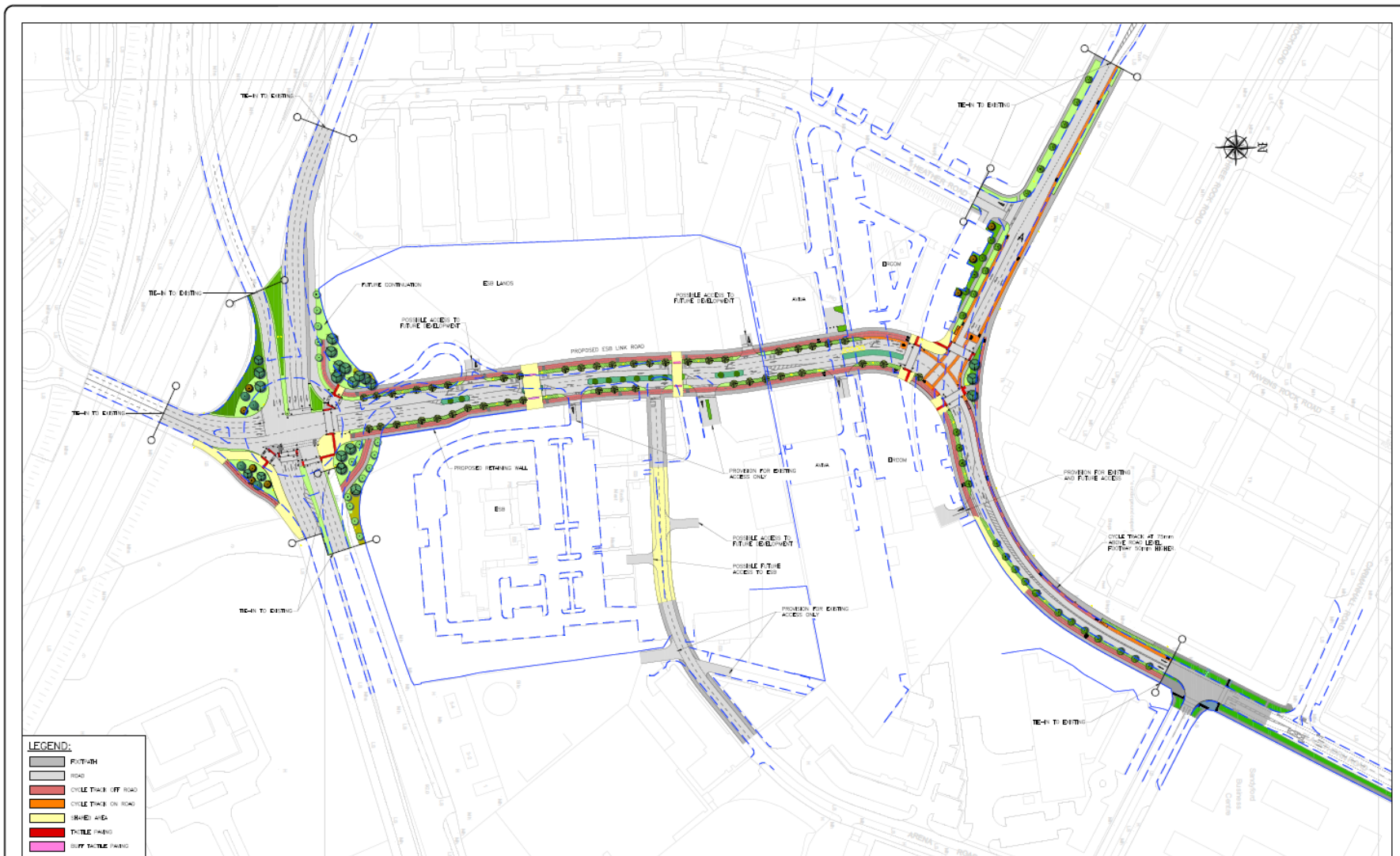
Junction of Kilgobben Road with Leopardstown Rd and Hillcrest Rd:



PROPOSED FUTURE LAYOUT OF BLACKTHORN DRIVE JUNCTION, ONCE BRACKEN LINK ROAD IS IN PLACE.



ESB LINK ROAD SCHEME



LEGEND:


- FOOTPATH
- ROAD
- CYCLE TRACK OFF ROAD
- CYCLE TRACK ON ROAD
- SHADE AREAS
- TABLE PAVING
- BUFF TABLE PAVING

	<p>Roughan & O'Donovan-AECOM Alliance</p> <p>Roughan & O'Donovan AECOM</p> <p>Website: www.rod.ie www.aecom.com</p>	<p>Project Title: ESB LINK ROAD</p> <p>Drawing Title: SCHEME OVERVIEW</p>	<p>Drawn: OP Job No: 12.171 Drawing No: 001</p> <p>Scale: 1:1000 @ A1 Date: NOV 2012 Rev: -</p>																																																															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Revision</th> <th>Date</th> <th>By</th> <th>Check</th> <th>App'd</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No.	Revision	Date	By	Check	App'd																															<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Stage</th> <th>Date</th> <th>App'd</th> </tr> </thead> <tbody> <tr> <td>PRELIMINARY</td> <td> </td> <td> </td> </tr> <tr> <td>APPROVAL</td> <td> </td> <td> </td> </tr> <tr> <td>ISSUE</td> <td> </td> <td> </td> </tr> <tr> <td>CONSTRUCTION</td> <td> </td> <td> </td> </tr> </tbody> </table>	Stage	Date	App'd	PRELIMINARY			APPROVAL			ISSUE			CONSTRUCTION			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Design</th> <th>EOC</th> <th>Checked EOC</th> <th>Approved</th> <th>SMD</th> <th>Drawn</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Design	EOC	Checked EOC	Approved	SMD	Drawn							<p>Design: EOC Checked EOC Approved: SMD Drawn: -</p>
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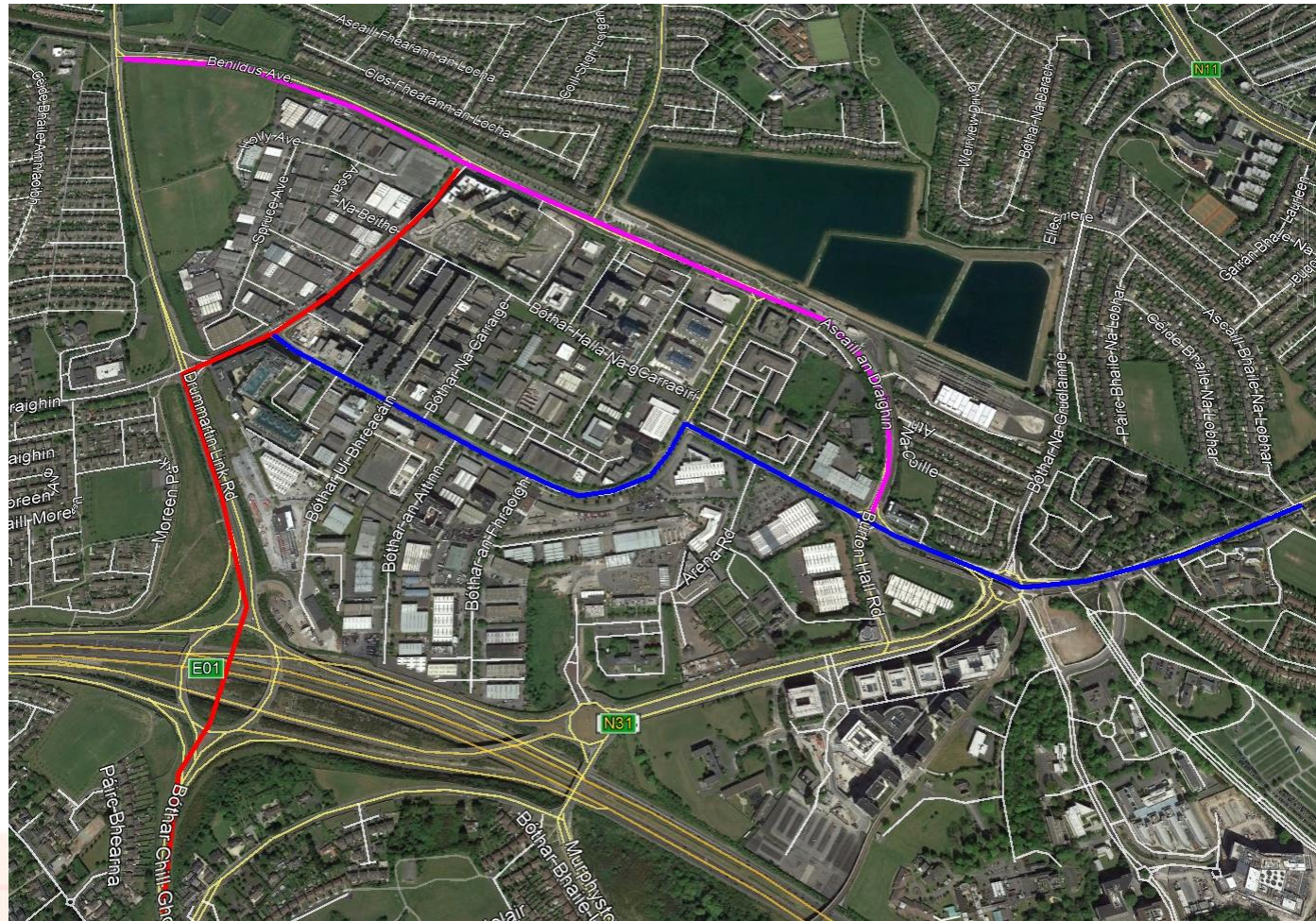
BRACKEN ROAD EXTENSION



Principal Issues of Concern

- Discontinuous or absent Cycle Facilities
 - Issues at Junctions
 - Localised Issues
 - Enforcement and Maintenance Issues
- 
- A decorative graphic at the bottom of the slide consisting of several thick, rounded, orange-colored lines that overlap and curve, creating a modern, abstract design.

PRIORITY INTERVENTIONS

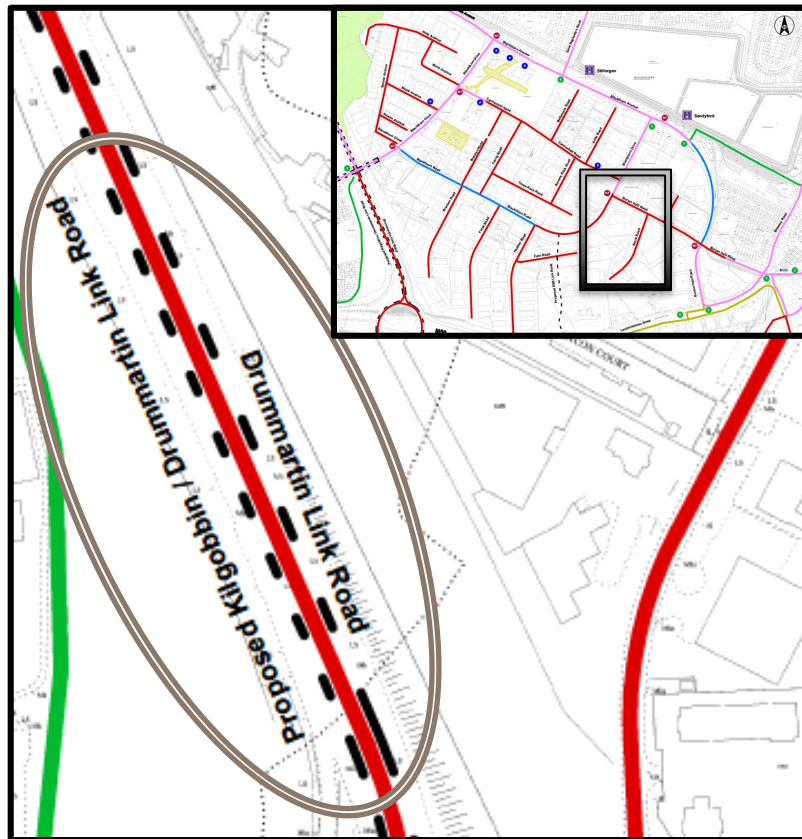


Legend

-  Priority Route 1
-  Priority Route 2
-  Priority Route 3

Priority Route 1

Priority 1 Issue



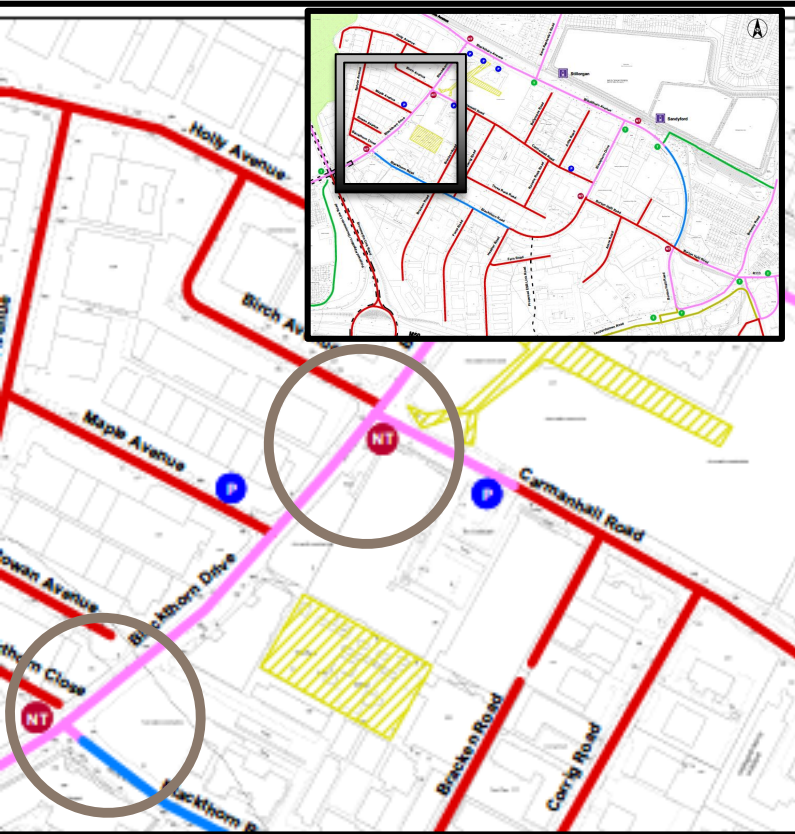
No cycle facilities provided.

Legend

- Two-way cycling facilities
- Cycle facilities on one side
- Cycle facilities through public area
- Shared use area with bicycle bays
- Sports ground
- NT No toucan crossing provided
- Cycle facilities on both sides
- No Cycle facilities
- Proposed scheme
- Luas Stop with bicycle racks
- T Toucan crossing provided
- P Roadside cycle stands

Priority Route 1

Blackthorn Drive/Blackthorn Road and
Blackthorn Drive/Carmanhall Road signalised junctions



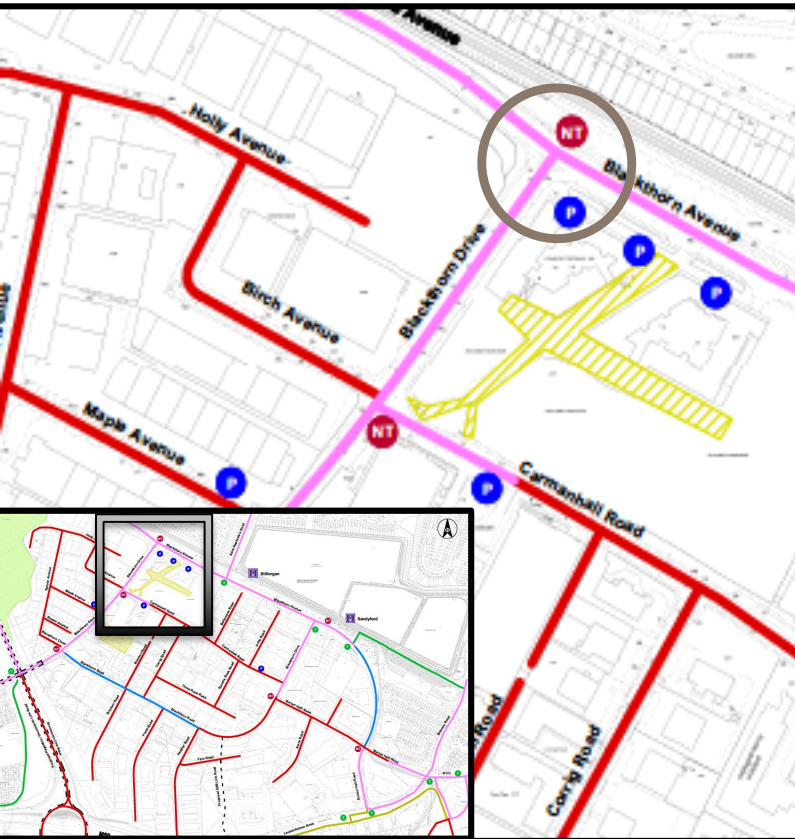
No cycle facilities have been provided for right turning cyclists to Blackthorn Road

Legend

- Two-way cycling facilities
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Priority Route 1

Blackthorn Drive/Benildus Avenue Signalled Junction

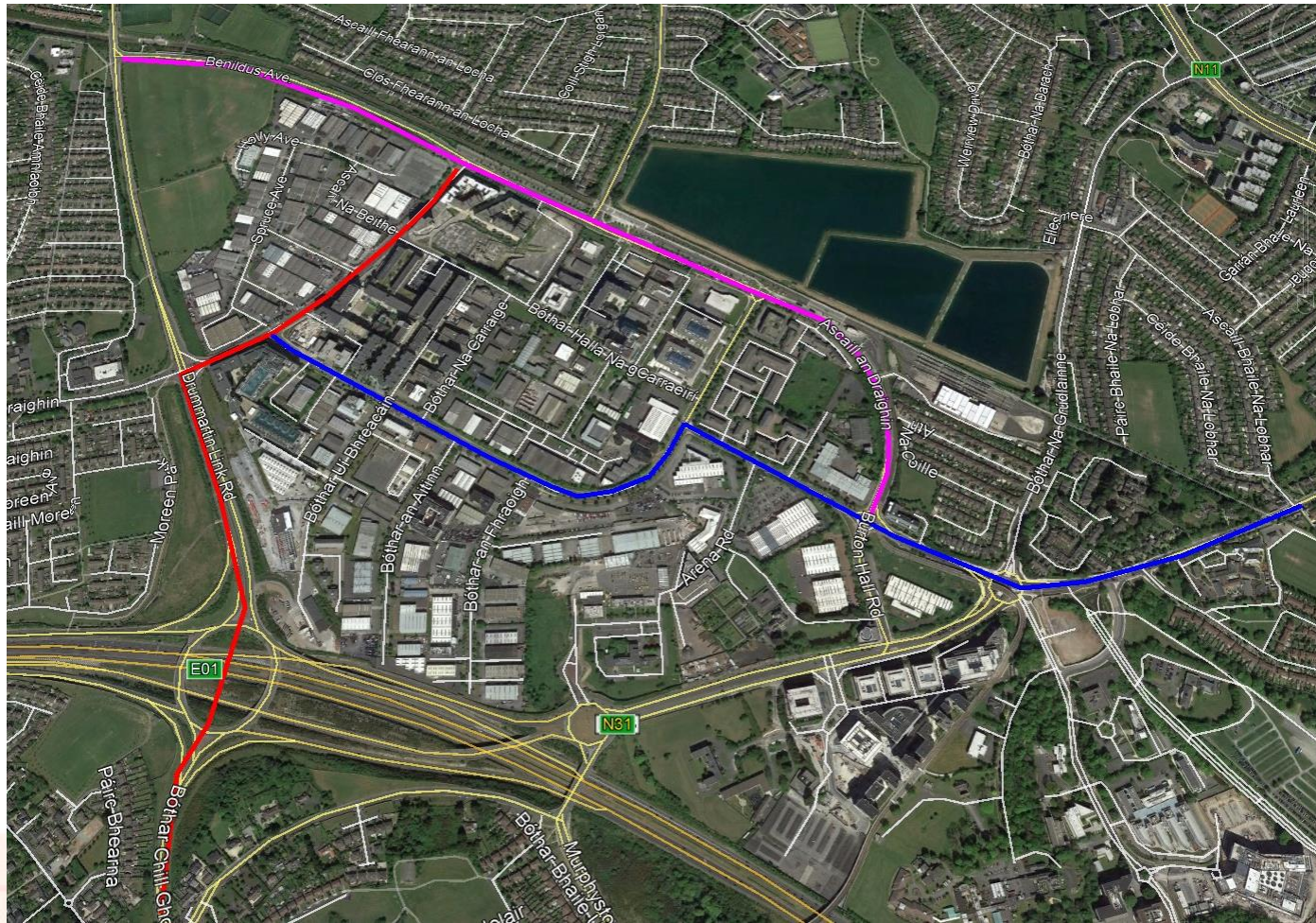


- No signal for right turning cyclist.
- Cyclists travelling west on Blackthorn Drive must move into running carriageway as a result of island located within cycle path.

Legend

Two-way cycling facilities	Cycle facilities on one side	Cycle facilities through public area	Shared use area with bicycle bays	No toucan crossing provided
Cycle facilities on both sides	No Cycle facilities	Proposed scheme	Luas Stop with bicycle racks	Toucan crossing provided
				Roadside cycle stands

PRIORITY INTERVENTIONS

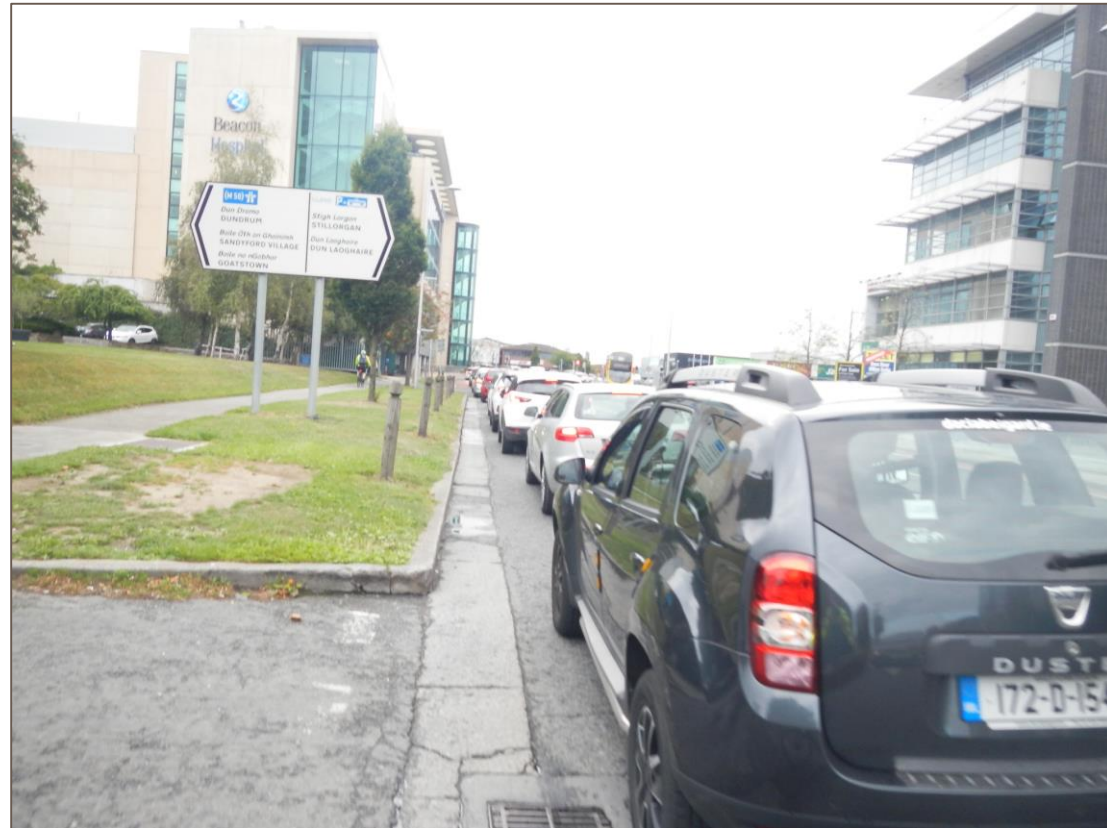
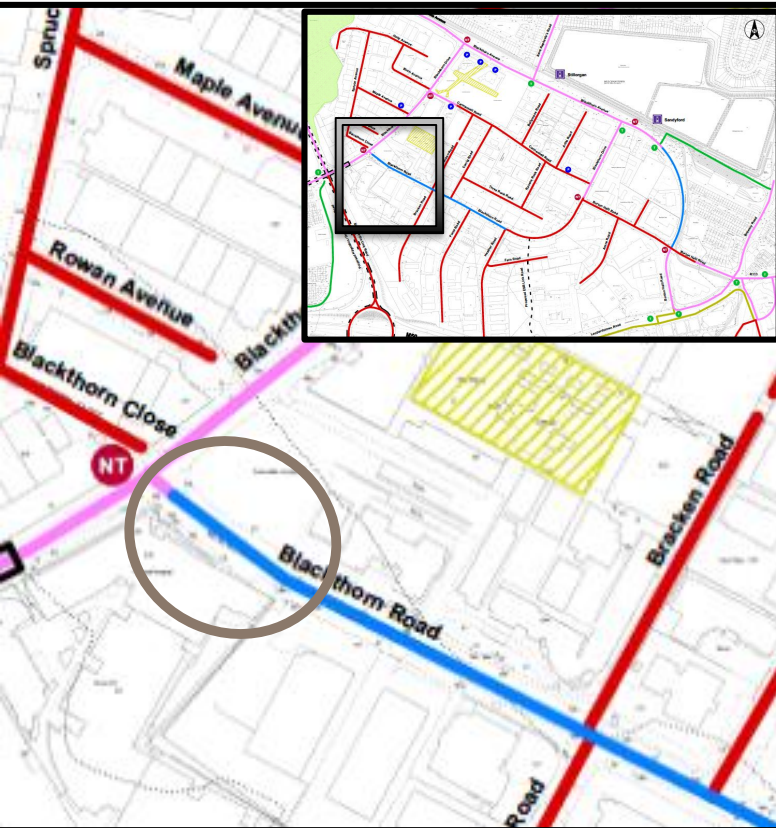


Legend

- Priority Route 1
- Priority Route 2
- Priority Route 3

Priority Route 2

Insufficient protection of cycling facilities



Vehicles queued from Beacon junction blocking the cycle lane

Legend

- Two-way cycling facilities
- Cycle facilities on one side
- Cycle facilities through public area
- Shared use area with bicycle bays
- Sports ground
- No toucan crossing provided
- Cycle facilities on both sides
- No Cycle facilities
- Proposed scheme
- Luas Stop with bicycle racks
- Toucan crossing provided
- Roadside cycle stands

Priority Route 2 – Insufficient Protection of Cycle Lanes

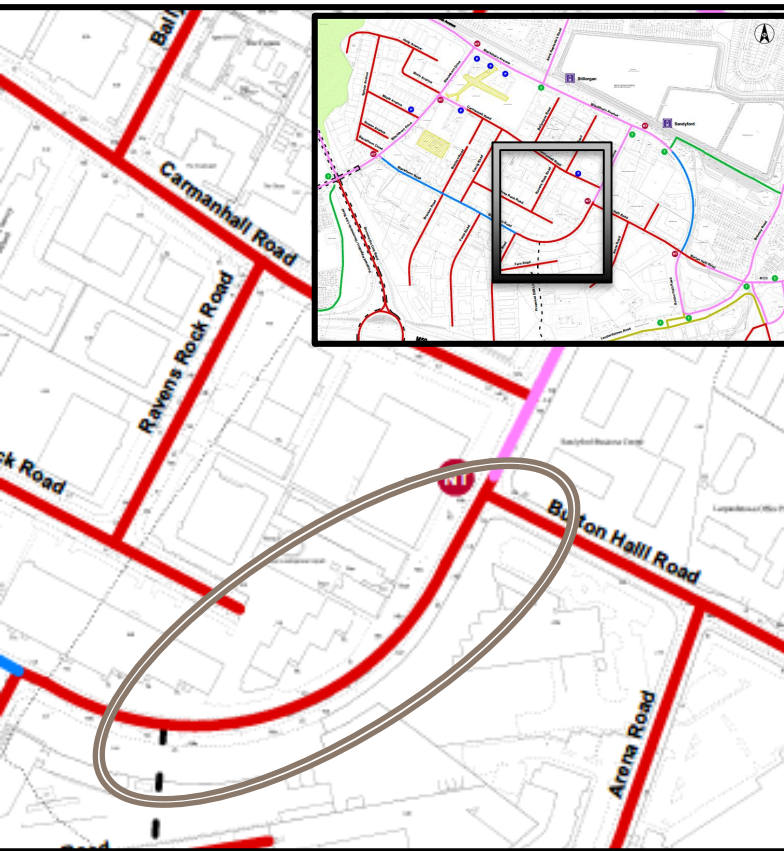


Traffic blocking cycle lane



Priority Route 2

Absence of Cycling Facilities



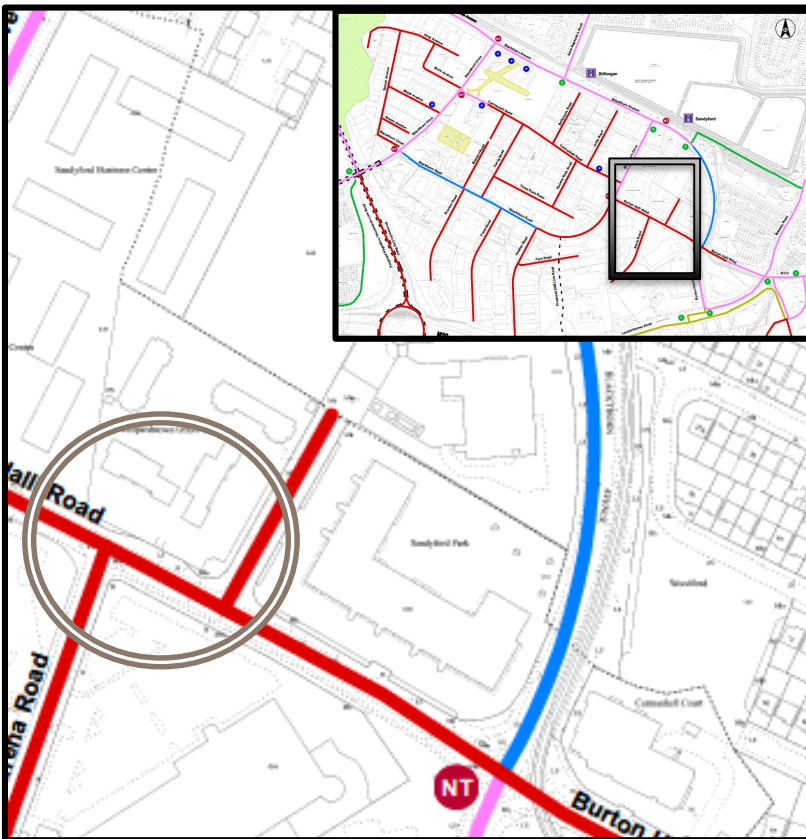
No cycle facilities provided. Several cyclists were identified cycle on grass verge

Legend

- | | | | | | |
|--------------------------------|------------------------------|--------------------------------------|-----------------------------------|--------------------------|-----------------------------|
| Two-way cycling facilities | Cycle facilities on one side | Cycle facilities through public area | Shared use area with bicycle bays | Sports ground | No toucan crossing provided |
| Cycle facilities on both sides | No Cycle facilities | Proposed scheme | Luas Stop with bicycle racks | Toucan crossing provided | Roadside cycle stands |

Priority Route 2

Absence of Cycle Facilities



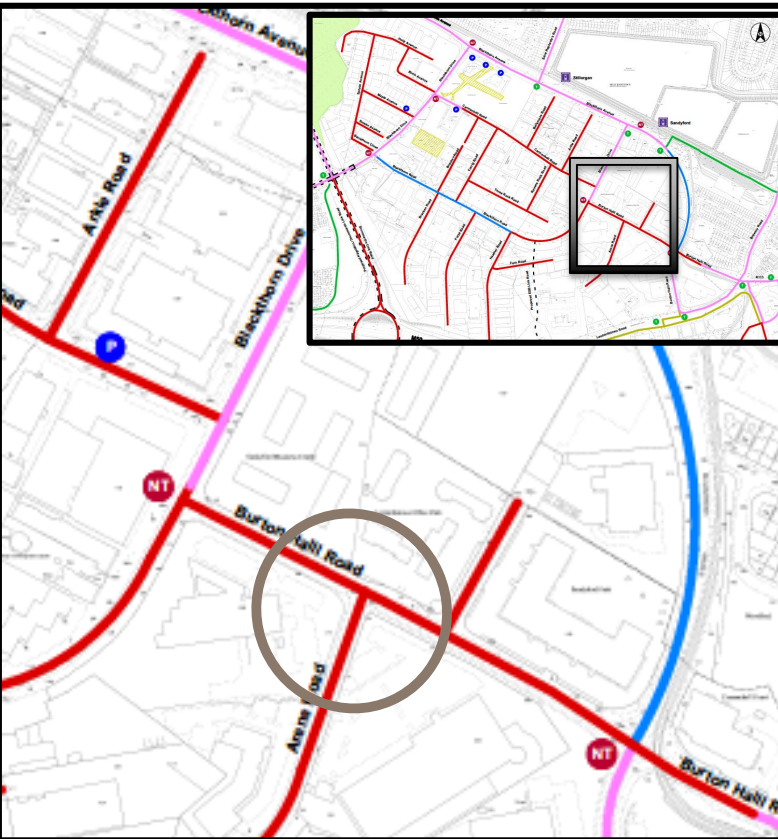
No cycle facilities provided.

Legend

- Two-way cycling facilities
- Cycle facilities on one side
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Priority Route 2

Burton Hall Road/ Arena Road junction



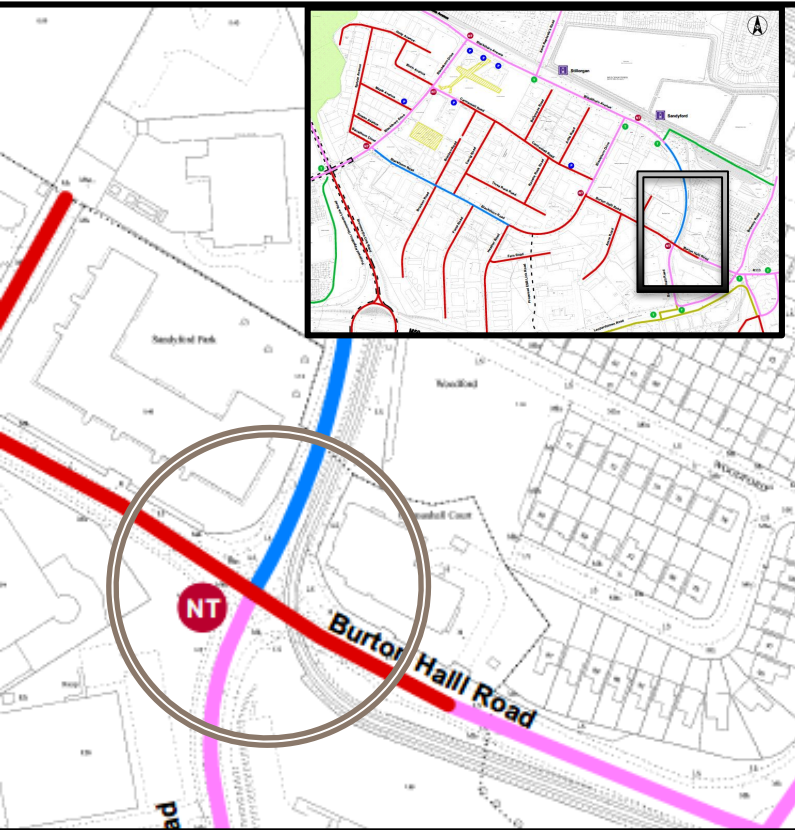
The existing arrangement does not allow for cyclists from Arena Road to turn right.

Legend

- | | | | | | |
|--------------------------------|------------------------------|--------------------------------------|-----------------------------------|--------------------------|-----------------------------|
| Two-way cycling facilities | Cycle facilities on one side | Cycle facilities through public area | Shared use area with bicycle bays | Sports ground | No toucan crossing provided |
| Cycle facilities on both sides | No Cycle facilities | Proposed scheme | Luas Stop with bicycle racks | Toucan crossing provided | Roadside cycle stands |

Priority Route 2

Burton Hall Road/Blackthorn Avenue Signalled Junction



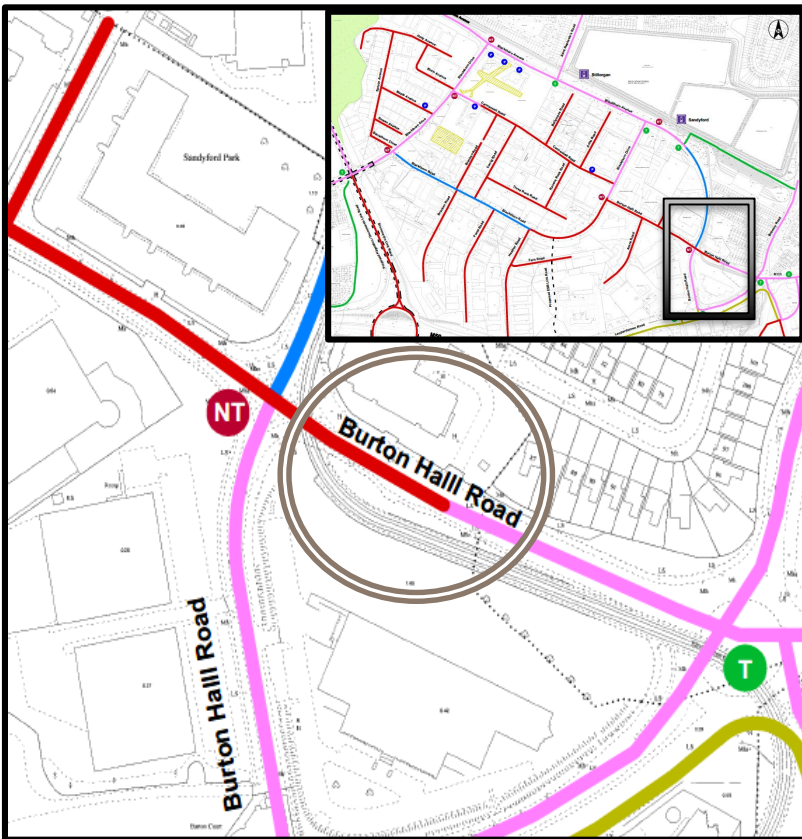
- Shared surface provided at junction without the provision of toucan crossings.
- No warning of end of cycle facilities.
- Cyclists identified not using existing cycle facilities on the northern arm (Blackthorn Avenue).

Legend

Two-way cycling facilities	Cycle facilities on one side	Cycle facilities through public area	Shared use area with bicycle bays	Sports ground	No toucan crossing provided
Cycle facilities on both sides	No Cycle facilities	Proposed scheme	Luas Stop with bicycle racks	Toucan crossing provided	Roadside cycle stands

Priority Route 2

Lack of joined up facilities



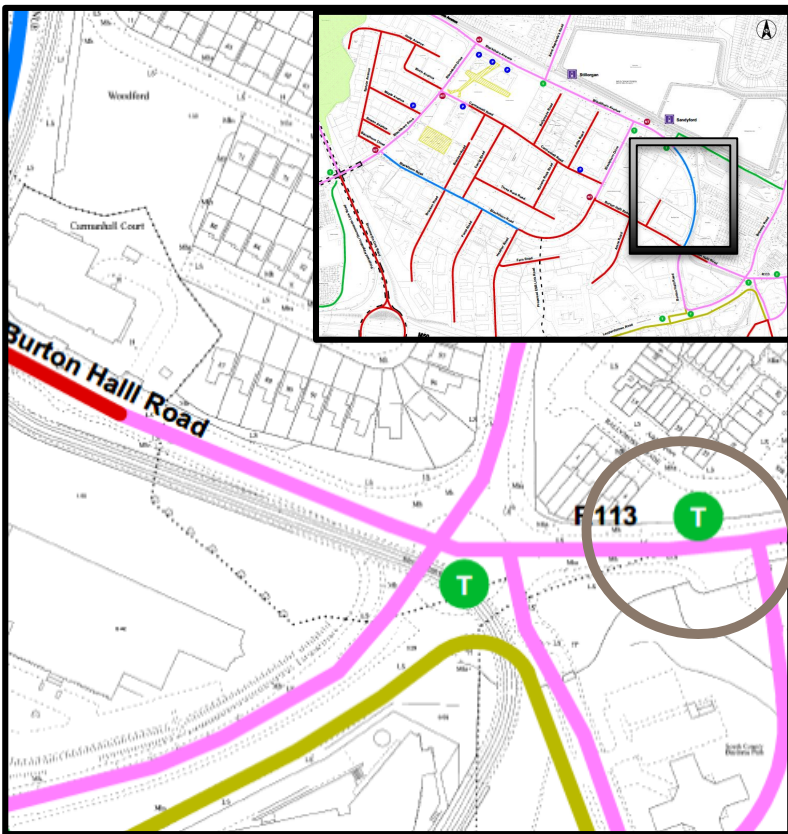
Short section of road with no cycle facilities.

Legend

- Two-way cycling facilities
- Cycle facilities on one side
- Cycle facilities through public area
- Shared use area with bicycle bays
- Sports ground
- NT No toucon crossing provided
- Cycle facilities on both sides
- No Cycle facilities
- Proposed scheme
- Luas Stop with bicycle racks
- T Toucon crossing provided
- P Roadside cycle stands

Priority Route 2

Leopardstown Road

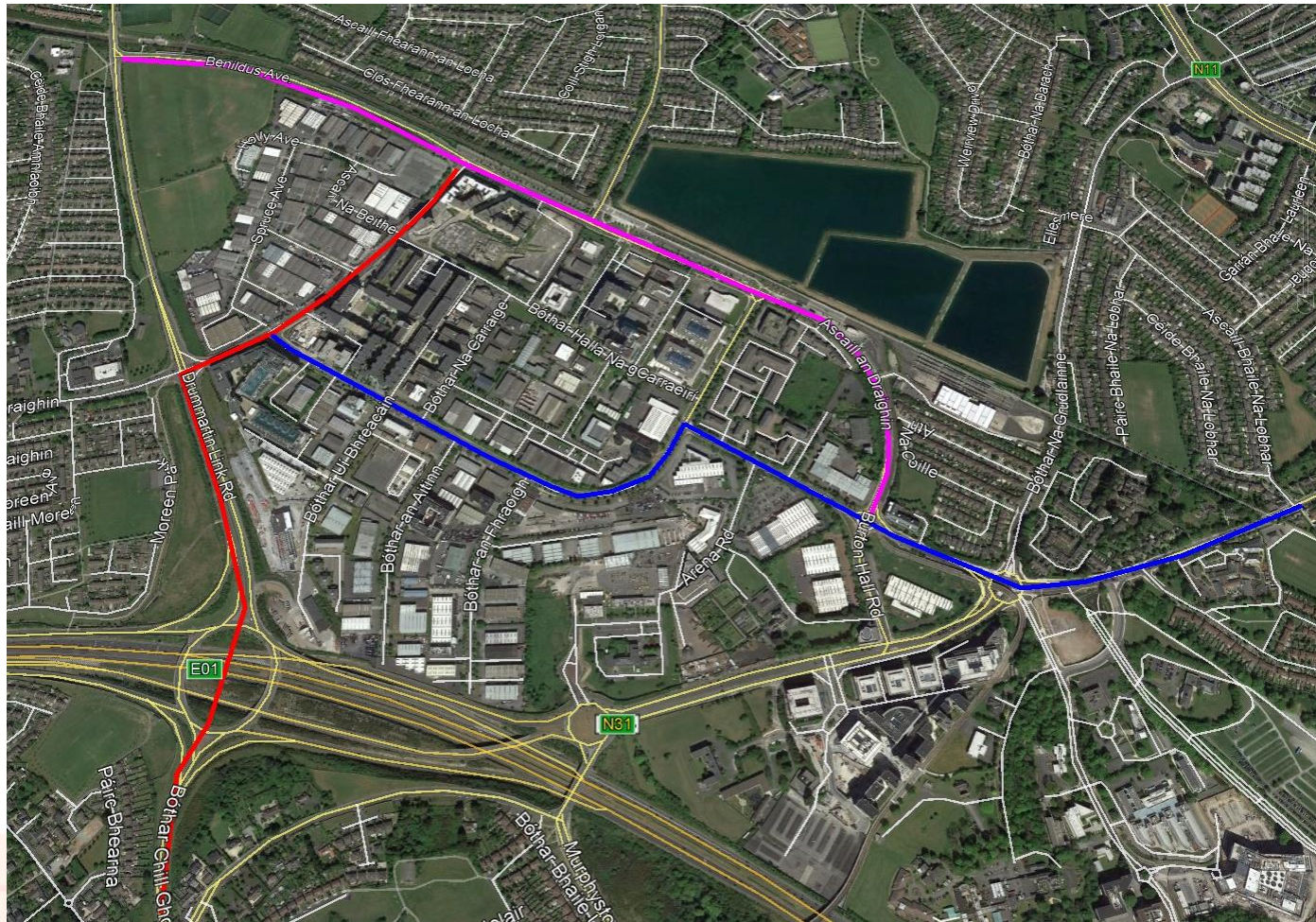


Lack of continuity and priority on cycle track

Legend

- Two-way cycling facilities
- Cycle facilities on one side
- Cycle facilities through public area
- Shared use area with bicycle bays
- Sports ground
- NT No toucon crossing provided
- Cycle facilities on both sides
- No Cycle facilities
- Proposed scheme
- Luas Stop with bicycle racks
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PRIORITY INTERVENTIONS

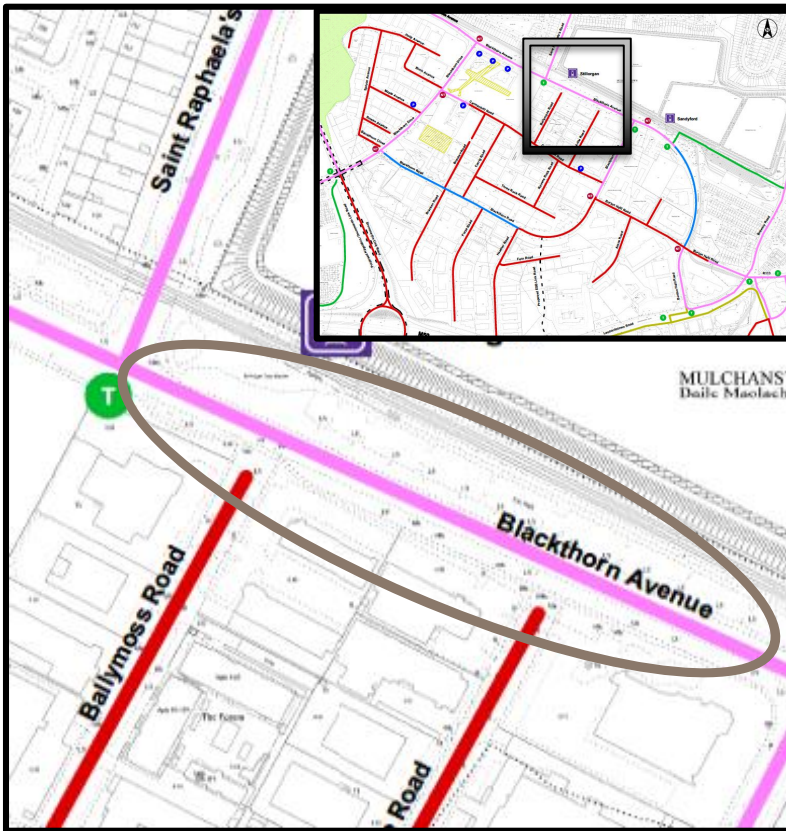


Legend

-  Priority Route 1
-  Priority Route 2
-  Priority Route 3

Priority Route 3

Unprotected cycling facilities



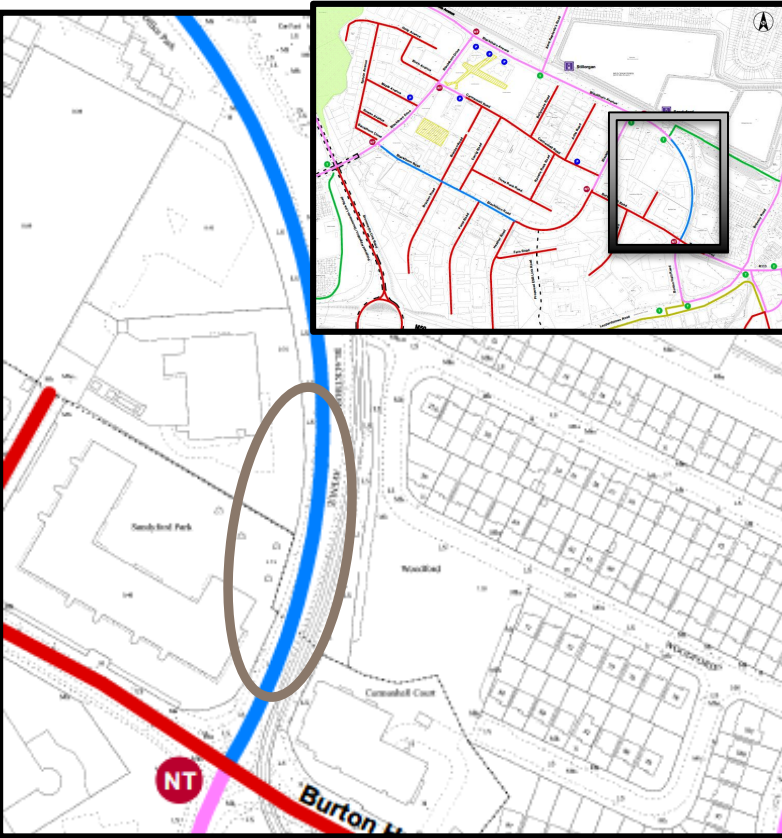
Vehicle speeds on Blackthorn Avenue were considered high and Verge shows signs of pedestrians walking along an uneven surface
Two-way cycle facility should be provided on southern side

Legend

Two-way cycling facilities	Cycle facilities on one side	Cycle facilities through public area	Shared use area with bicycle bays	Sports ground	No toucan crossing provided
Cycle facilities on both sides	No Cycle facilities	Proposed scheme	Luas Stop with bicycle racks	Toucan crossing provided	Roadside cycle stands

Priority Route 3

Partial Cycling Facilities only



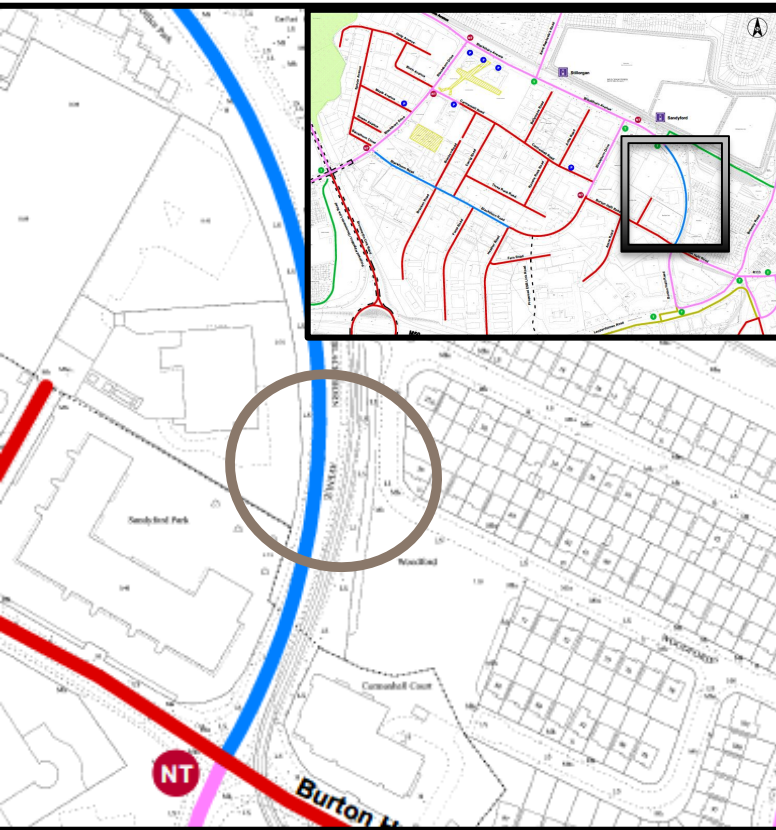
No cycle facilities provided for northbound cyclists from Burton Hall Road to Blackthorn Avenue

Legend

- Two-way cycling facilities
- Cycle facilities on one side
- Cycle facilities through public area
- Shared use area with bicycle bays
- Sports ground
- NT No toucon crossing provided
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- No Cycle facilities
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- Luas Stop with bicycle racks
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- P Roadside cycle stands

Priority Route 3

Unattractive / unusable facility



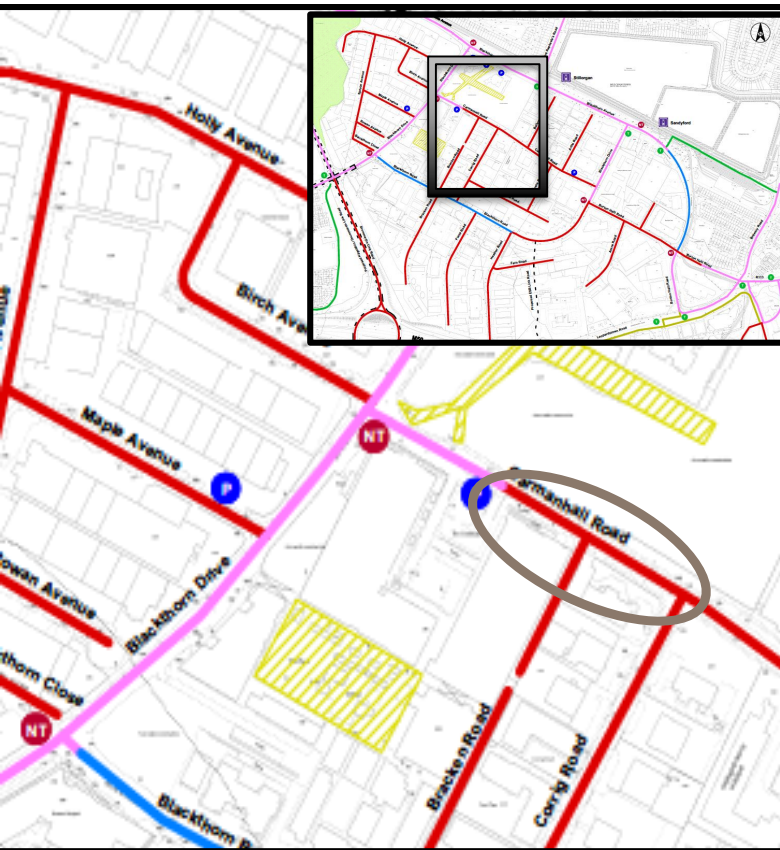
Luas crossing for cyclists and pedestrians creates conflict point and not used by cyclists.

Legend

- Two-way cycling facilities
- Cycle facilities on one side
- Cycle facilities through public area
- Shared use area with bicycle bays
- Sports ground
- NT No toucan crossing provided
- Cycle facilities on both sides
- No Cycle facilities
- Proposed scheme
- Luas Stop with bicycle racks
- T Toucan crossing provided
- P Roadside cycle stands

Other Local Issues

Partial facilities on Carmanhall Road

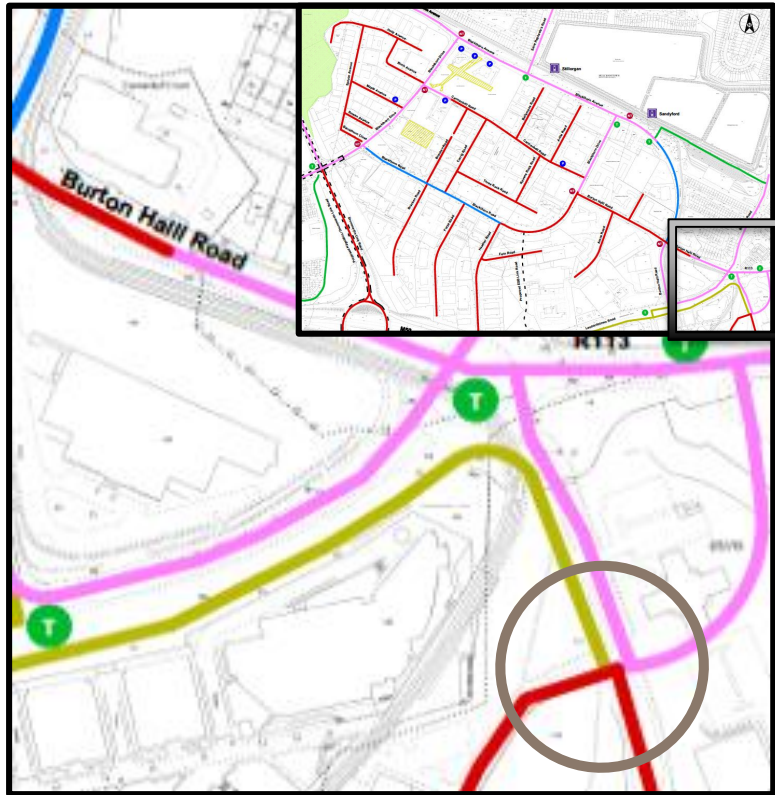


Consider extending

Legend

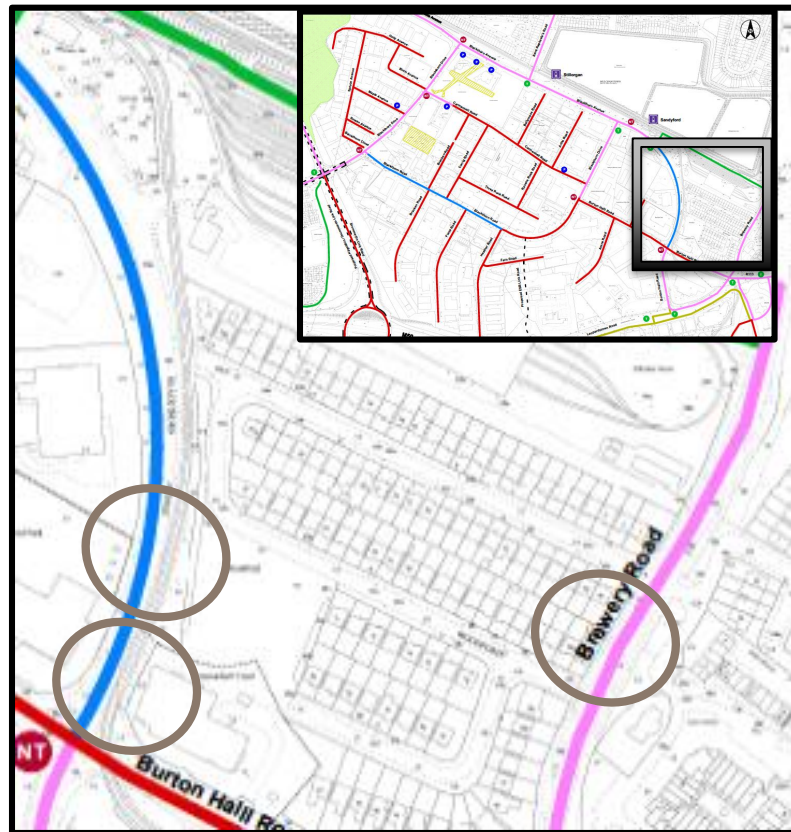
-  Two-way cycling facilities
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-  Shared use area with bicycle bays
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-  No toucan crossing provided
-  Cycle facilities on both sides
-  No Cycle facilities
-  Proposed scheme
-  Luas Stop with bicycle racks
-  Toucan crossing provided
-  Roadside cycle stands

Other Local Issues



- Insufficient facilities have been provided for cyclists traveling between the northern and southern arms of the junction.
- There is limited visibility to vehicles approaching from the south for cyclists wishing to continue east.
- Protection required for increased volumes of cyclists from new Microsoft HQ and new school

Other Local Issues



Manholes in cycle lane/track

Legend

- Two-way cycling facilities
- Cycle facilities on one side
- Cycle facilities through public area
- Shared use area with bicycle bays
- Sports ground
- Cycle facilities on both sides
- No Cycle facilities
- Proposed scheme
- Luas Stop with bicycle racks
- Toucon crossing provided
- No toucon crossing provided
- Roadside cycle stands

Other Local Issues



- No cycling facilities into Central Park Estate
- Opportunity to provide link through to South County Business Park should be explored

Maintenance Issues

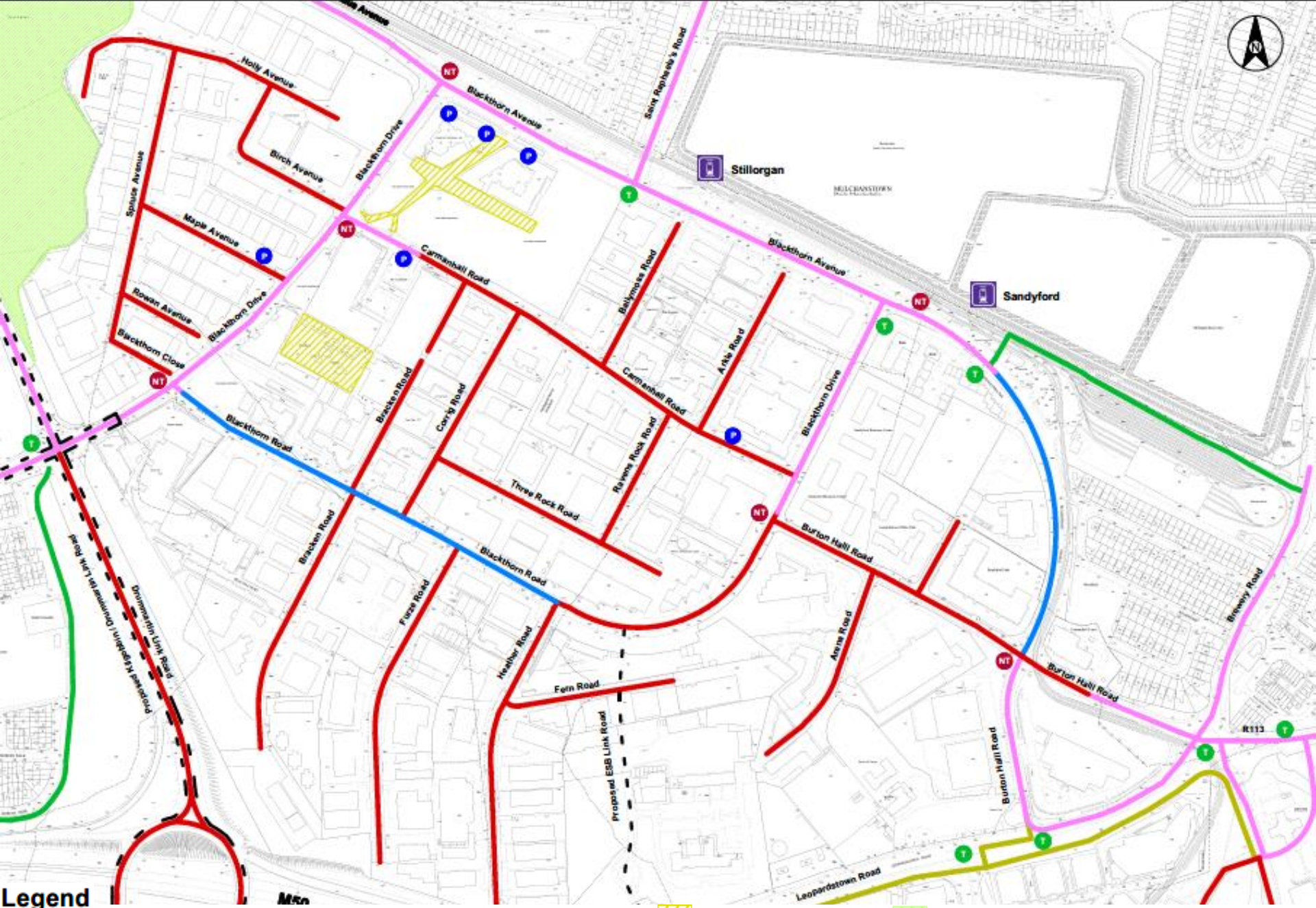


Grass encroaching onto cycle facilities

Maintenance Issues



Gullies not flush with the pavement




Legend

- ▬ Two-way cycling facilities
- ▬ Cycle facilities on one side
- ▬ Cycle facilities through public area
- Shared use area with bicycle bays
- Sports ground
- NT No toucon crossing provided
- P Roadside cycle stands
- T Toucon crossing provided
- Proposed scheme
- M Luas Stop with bicycle racks
- P Roadside cycle stands

Action Plan and Prioritisation

Immediate attention required for Priority Route 1:

Drummartin Link Road - Blackthorn Drive:

- Link to Sandyford Business District from south at M50 Junction 13 East;
 - Revised layout at Drummartin Link Road Junction;
 - Introduction of right – turn for cyclists into Blackthorn Road;
 - Introduction of right-turn for cyclists into Carmanhall Road.
- 

Action Plan and Prioritisation

Immediate attention required for Priority Route 2:

Blackthorn Road – Burton Hall Road – Leopardstown Road East:

- Address issues at junction with Blackthorn Drive;
- Provide fully segregated and protected cycle facilities continuously along Blackthorn Road;
- Introduce two-way cycling facility along Burton Hall Road, with appropriate access provision at all junctions and link to existing facilities at eastern end;
- Reconstruct existing cycle tracks along Leopardstown Road East to remove discontinuities at junctions and address ride quality deficiencies at accesses.

Action Plan and Prioritisation

Immediate attention required for Priority Route 3:

Benildus Avenue – Blackthorn Avenue:

- Address issues at junction with Blackthorn Drive;
- Provide footpath on northern side along Blackthorn Avenue to prevent pedestrians walking on cycle lane;
- Introduce two-way cycle route on southern side of Blackthorn Drive;
- Review requirement for northbound cycle route on Blackthorn Avenue West;
- Adjust junctions to suit.

Action Plan and Prioritisation

Local Issues

- Provide Cycling Facilities at entrance to Central Park and explore potential for link to South County Business Park
- Provide continuous cycle facilities on Carmanhall Road;
- Review ironmongery in cycle tracks – with particular attention to depressed gullies;
- Improve cycle parking provision throughout estate;
- Ensure regular maintenance of all grassed edges – possibly in conjunction with enhanced landscaping;
- **ENFORCEMENT, ENFORCEMENT, ENFORCEMENT!**

Thank you for your time.

Questions?