SDCC Cycle Infrastructure Condition Survey

Background

- Over 200km of existing cycle infrastructure within South Dublin
- Much of the cycle infrastructure not up to current design standards
- €400,000 being spent annually on maintenance of these cycle track
- Road Maintenance reluctant to invest in substandard design and want to upgrade the standard of cycle track as part of the maintenance works
- Barry Transportation was appointed to carry out a survey of existing infrastructure based on
  - Type of Cycle Infrastructure
  - Width of Cycle Infrastructure
  - Treatment at Junctions
  - Pavement Condition

Type of Cycle Infrastructure

Link Type		Score
C4	Cycle Lane, advisory road markings	0
S1	Shared walking and cycling	0.33
C3	Cycle Lane, solid road markings	
S2	Walking and cycling segregated by white line only (same surface material)	0.66
G1	Cycle trail/greenway	1
C1	Cycle track segregated from road	
C2	Cycle track immediately adjacent to road but segregated with kerb, bollards or similar	

Width of Cycle Provision

Level	Description	Score
1	Less than or equal to 1.3m (width below which a cargo bike could not pass)	0
2	1.3 – 1.75m	0.5
3	1.75 or greater (Up to standard according to NCM)	1

Treatment at side roads

Level 1 - Cyclists give way to side road traffic with no crossing features provided for them. May be unclear who has right of way.

Level 2 - Cyclists share pedestrian crossing and give way to side road traffic.

Level 3 - Cyclists have dedicated infrastructure to take them across side road separately to pedestrians, however it may be unclear who has priority between cyclists and cars

Level 4 - Cyclists have priority across junction

Treatment at Large Junctions

Level 1 - No cycle provision, or cycle provision stops short of junction. Mutiple lanes to cross makes the junction dangerous even for confident cyclists.

Level 2 - No cycle provision but fewer lanes or left only provision

Level 3 - Provision for a non-confident cyclist to make a left and straight ahead movement. No provision for right turns without conflict

Level 4 - Provision suitable for a non-confident cyclist to safely make all movements. Cyclists do not share space with pedestrians.

Pavement Condition Examples

Level 1 - Major surface deterioration (loss of wearing course, potholes and structural defect, & tree root uplift)

Level 2 - Minor surface defects (surface cracking, ravelling)

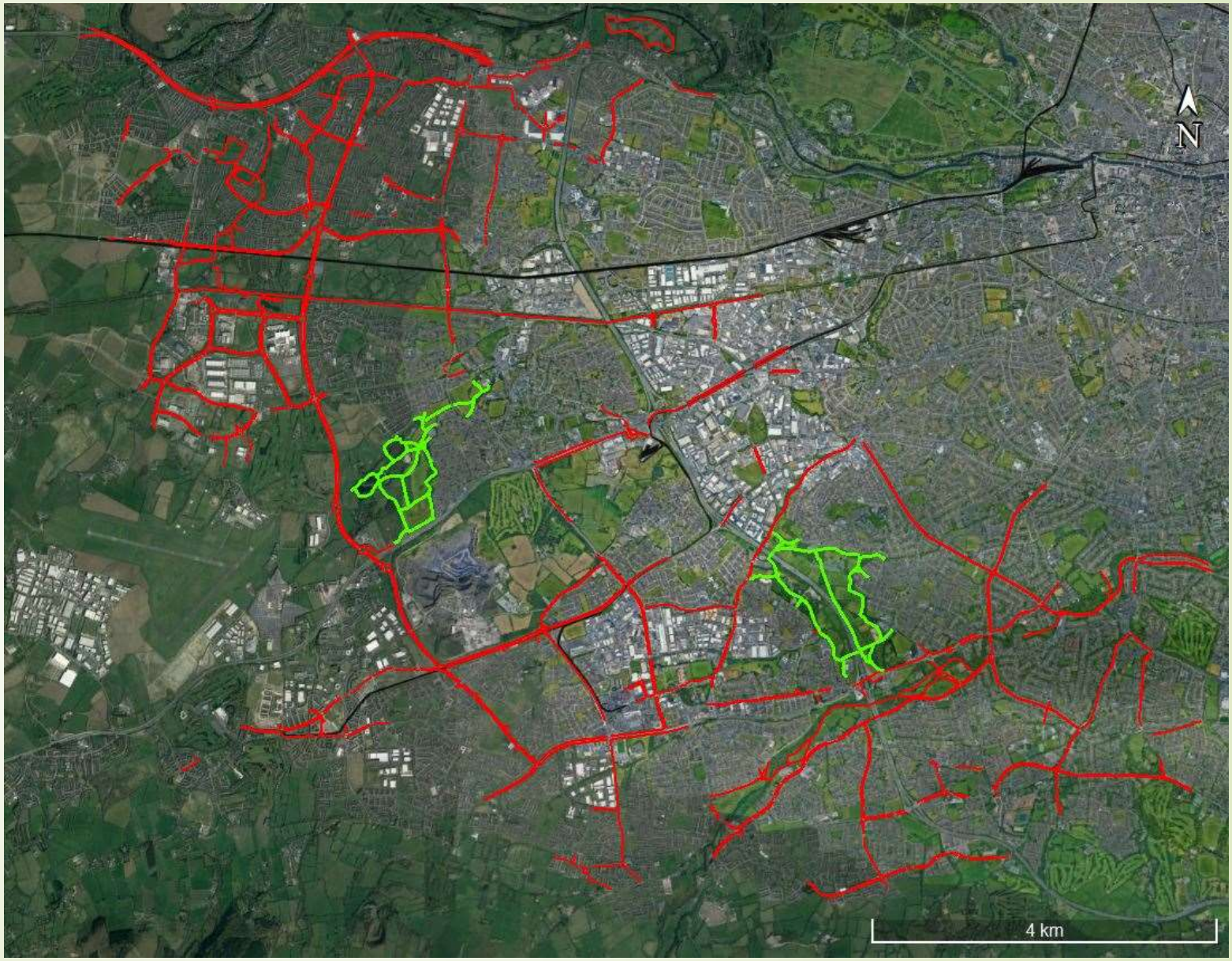
Level 3 - No surface defects but poor appearance (cycle track markings could require refreshing)

Level 4 - Good, no action required.

Results Breakdown

- Pavement Condition
- Quality of Design
  (combination of type and width)
- Junction Treatment (Major and Minor junctions)

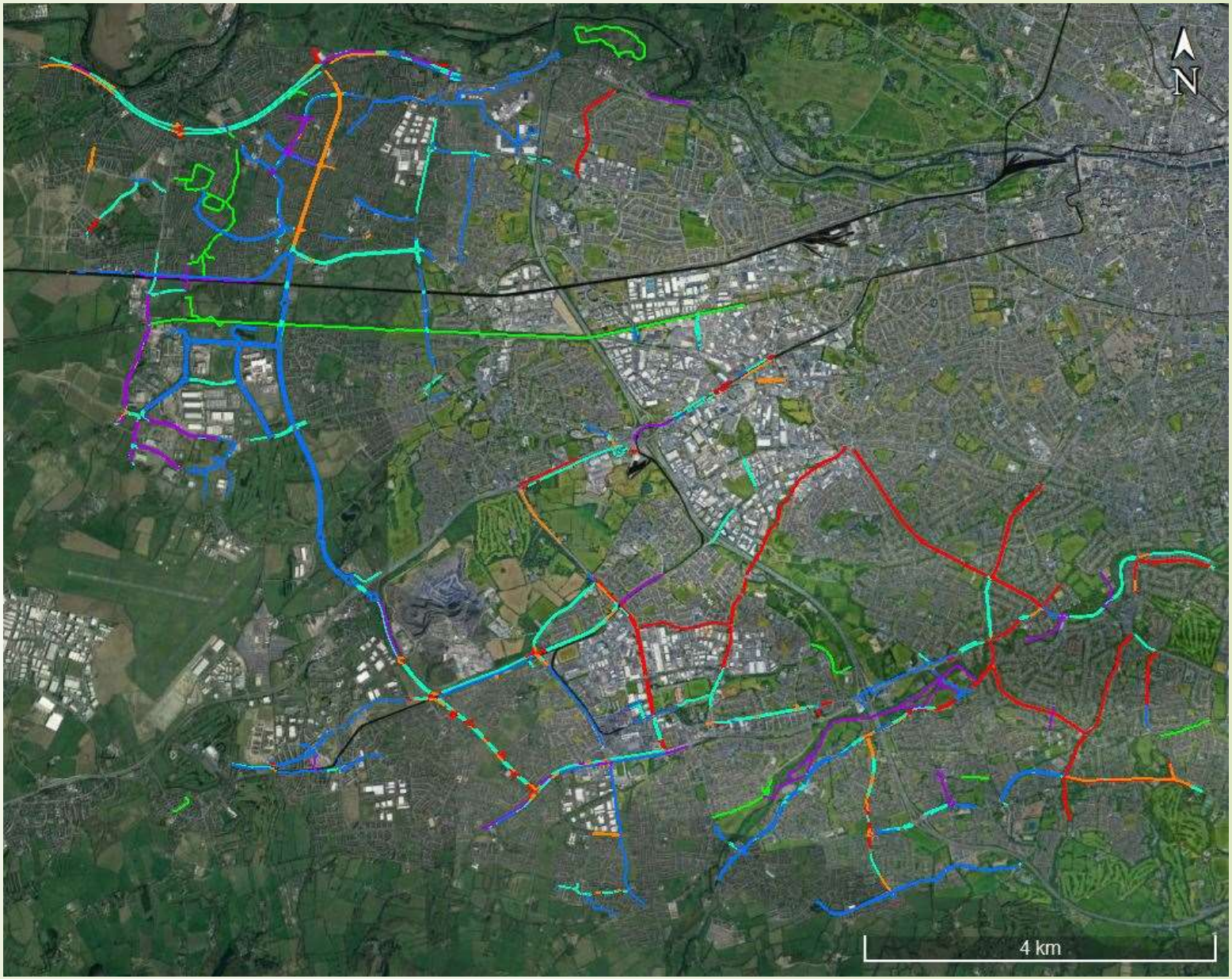
SDCC Cycle Network - July 2022



Legend

- Existing Cycleway Network
- Park Permeability

Cycle Infrastructure Type

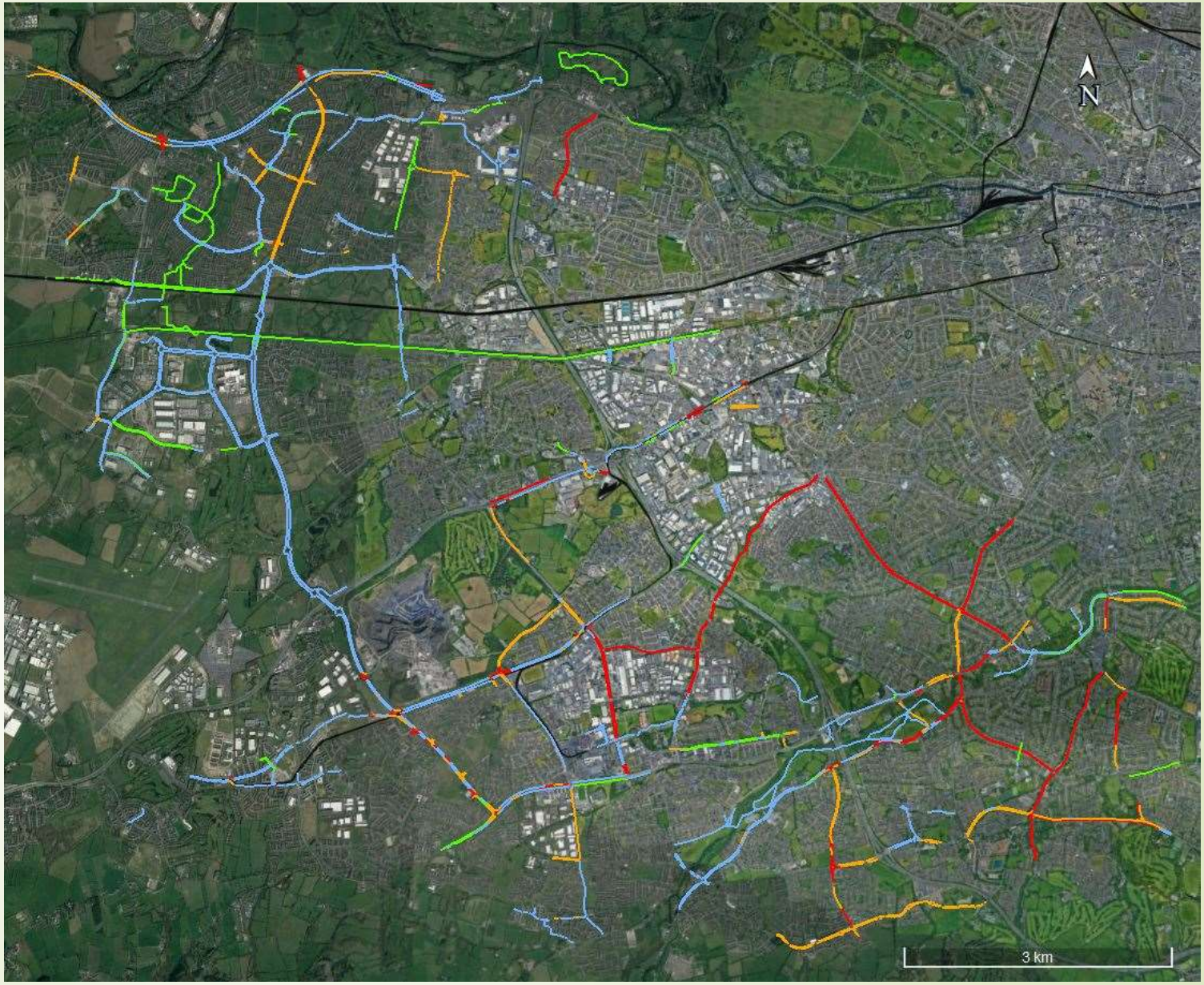


Legend

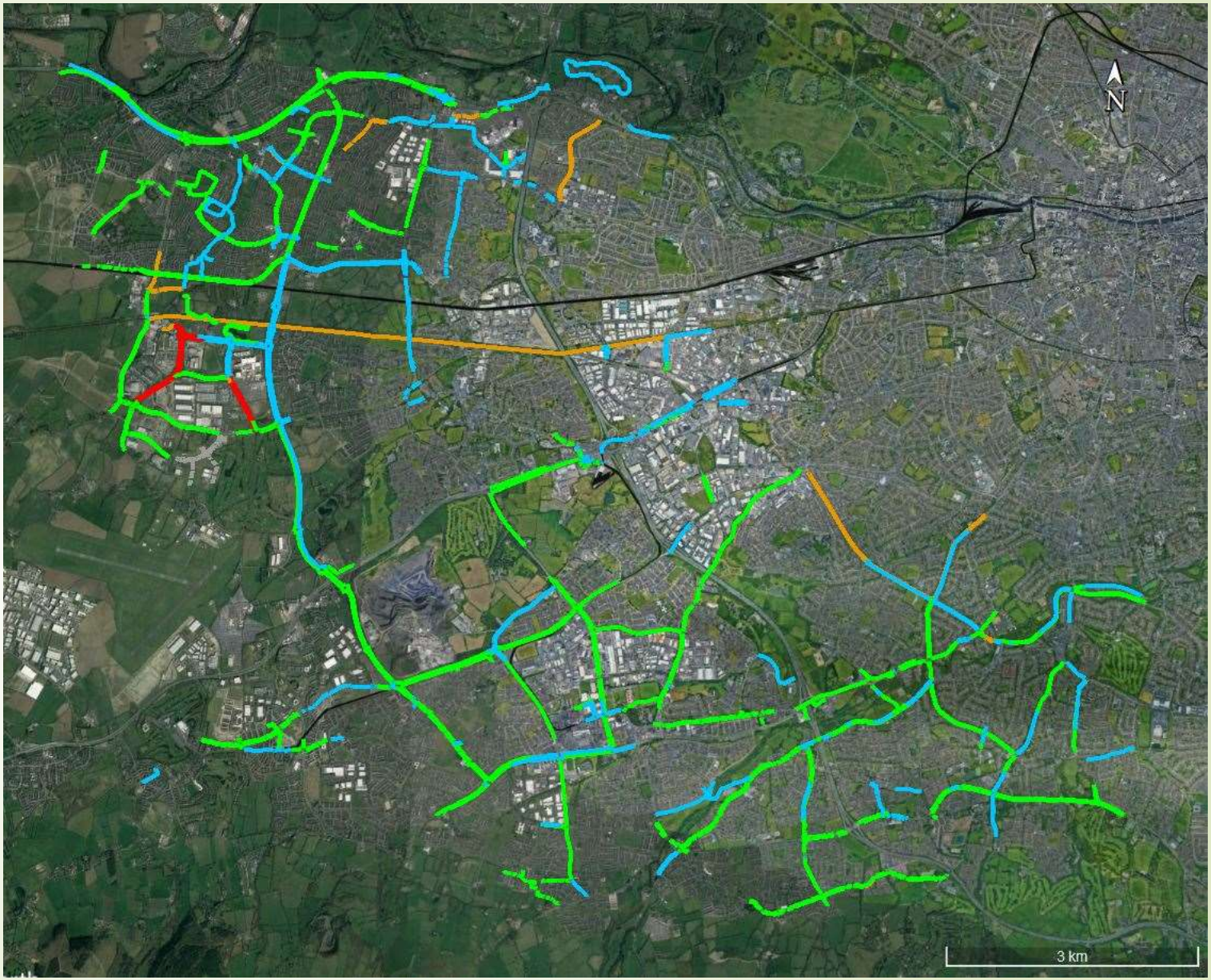
- C1 Cycle Track Separated from Road
- C2 Cycle Track Immediately Adjacent
- C3 Cycle Lane, solid road markings
- C4 Advisory Cycle lane on Road
- G1 Cycle Trail or Greenway
- S2 Shared Walking and Cycling

Quality of Infrastructure Design

(Combination of type and width)



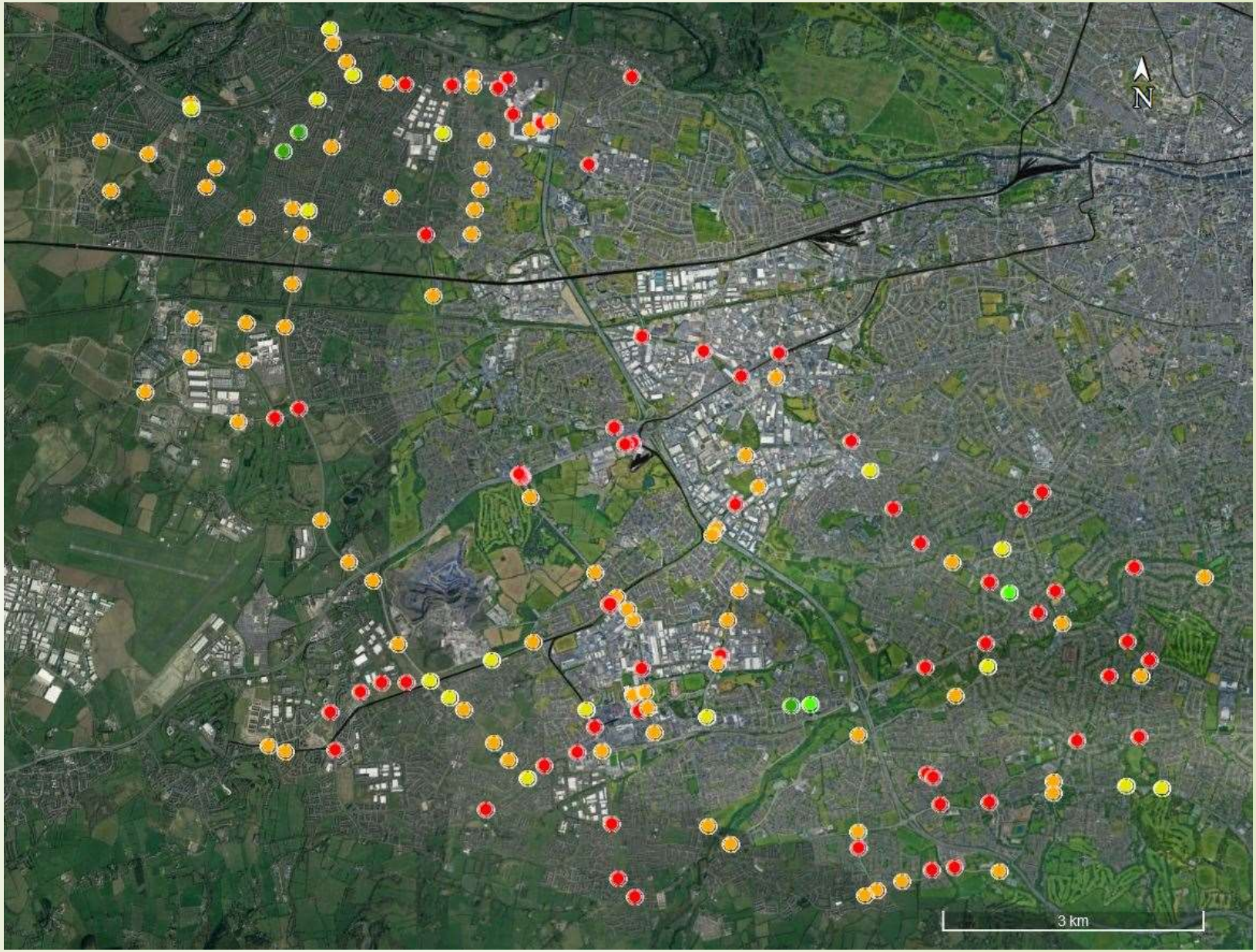
Pavement Condition



Pavement Condition

- Level 1
- Level 2
- Level 3
- Level 4

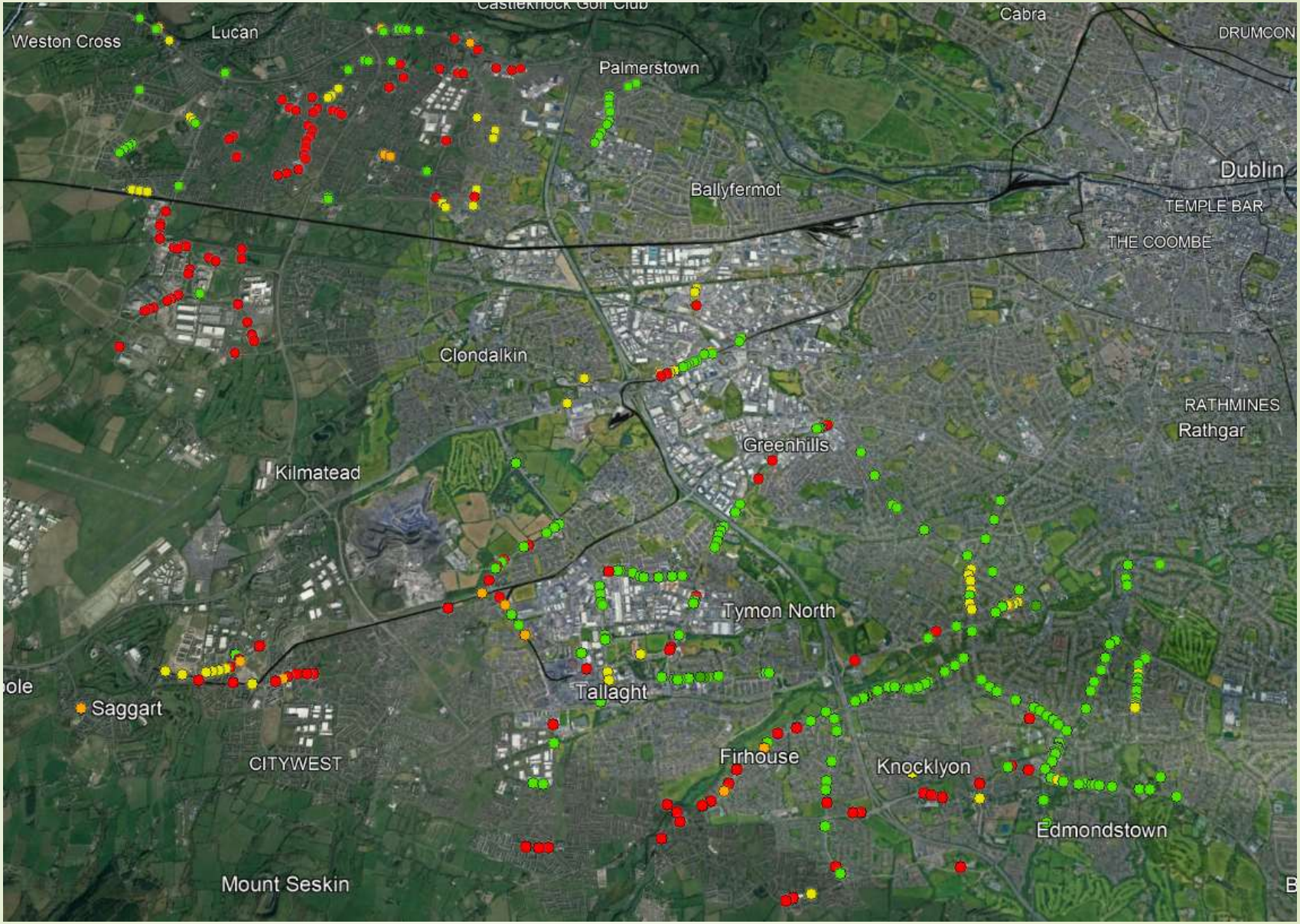
Junction Treatments - major junctions



Major Junctions Score

- 1.00 - 1.60
- 1.60 - 2.20
- 2.20 - 2.80
- 2.80 - 3.40
- 3.40 - 4.00

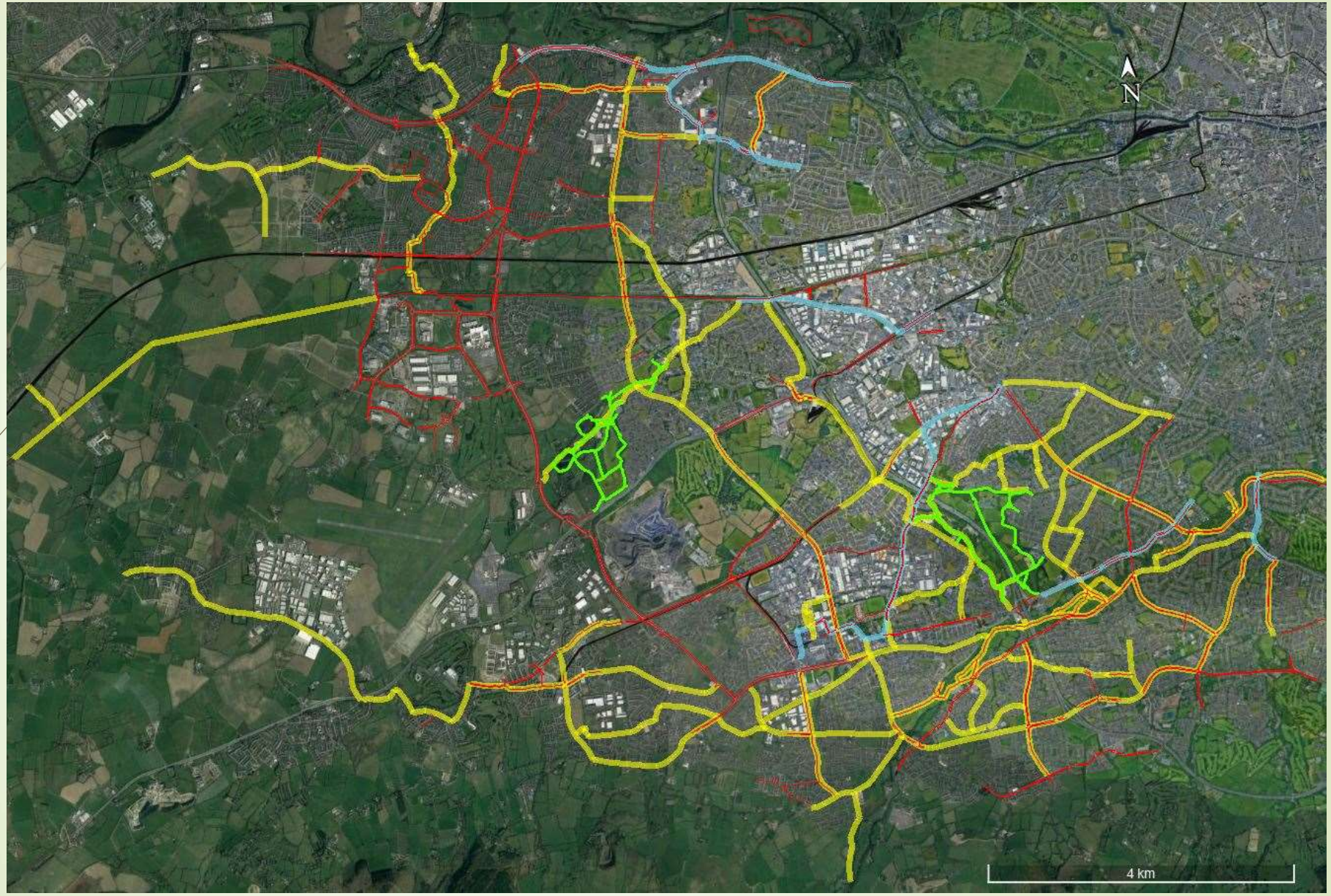
Junction Treatments - side roads



Side Road Junctions

- Level 1
- Level 2
- Level 3
- Level 4
- Level 5

Future SDCC Cycle Network



Legend

- Existing Cycleway Network
- Park Permeability
- Cycle South Dublin Routes
- BusConnects

Key findings

- Pavement surface is good in most instances
- Canal greenway has structural issues with clear signs of subsidence
- Majority of routes are between 1.3 – 1.7m, likely in line with the old 1.5m standard so adequate in most cases.
- Junction design for cyclists is of a poor standard throughout county

Assessment of Findings

- Advisory cycle lanes (on road with insufficient width) are weakest sections of network and will need full re-design to rectify in most instances
- On road with sufficient width could be converted to raised adjacent. Junction details to be assessed on a case by case

- Major junctions are providing a poor service level for cyclists but will need a detailed design to resolve, likely requiring a consultant to be appointed
- Side road junction details tend to be consistent along each route. These should be reviewed based on stretches of road as opposed to individual junctions. Standard details are sufficient to upgrade these in most instances

Proposed Works

- Identify areas for rapid build cycle protection, these routes will be primarily on road with available widths of 1.5m or greater
- Identify any local links that will improve connectivity for cyclists
- Identify routes where the upgrade of side road junctions will raise the quality of the route to compliance with current cycling standards
  - Junctions will be upgraded for both cyclists and pedestrians
- Establish a term maintenance contract to carry out these works.
  - Contract type will provide flexibility so that "quick win" works can be progressed at a reasonable pace.

Update the Cycle Survey on a quarterly basis to reflect the works carried out to date

2023 Plan

- Q1
  - Identify locations to prioritise first
  - Ensure standard design works are applicable to the locations
  - Carry out a non statutory public consultation as part of a Section 38 process
- Q2
  - Prepare tender docs and procure a contractor to undertake the works
- Q2 – Q4
  - Carry out upgrade works
- Q4
  - Review 2023 programme and identify areas of improvement
  - Prepare 2024 Plan

Questions?