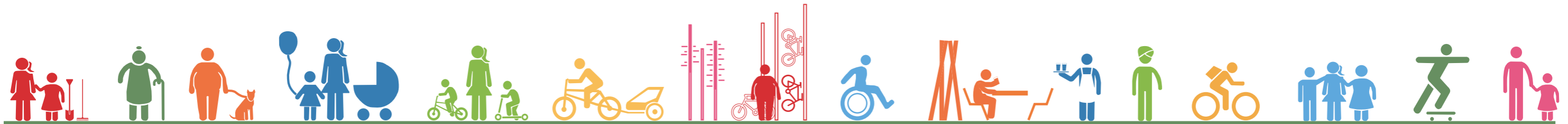


# LN

GLASGOWS LIVEABLE NEIGHBOURHOODS



# MANSEWOOD TO SHAWLANDS

# LIVEABLE

# NEIGHBOURHOODS

**Stage 2 Report**

**SHAWLANDS AND STRATHBUNGO: AREA-WIDE SIDE ROAD ACCESSIBILITY AUDIT**

December 2023

## Notice

This document and its contents have been prepared and are intended solely as information for Glasgow City Council.

AtkinsRéalis assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

This document has 68 pages including the cover.

## Document History

<b>Revision</b>	<b>Purpose description</b>	<b>Originated</b>	<b>Checked</b>	<b>Reviewed</b>	<b>Authorised</b>	<b>Date</b>
1.0	First draft	OM	AM	CH	CH	20.12.23

## Client Signoff

<b>Client</b>	Glasgow City Council
<b>Project</b>	Glasgow Liveable Neighbourhoods
<b>Job Number</b>	5218303
<b>Client Signature &amp; Date</b>	



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# 1. INTRODUCTION



## 1.1 Project Context

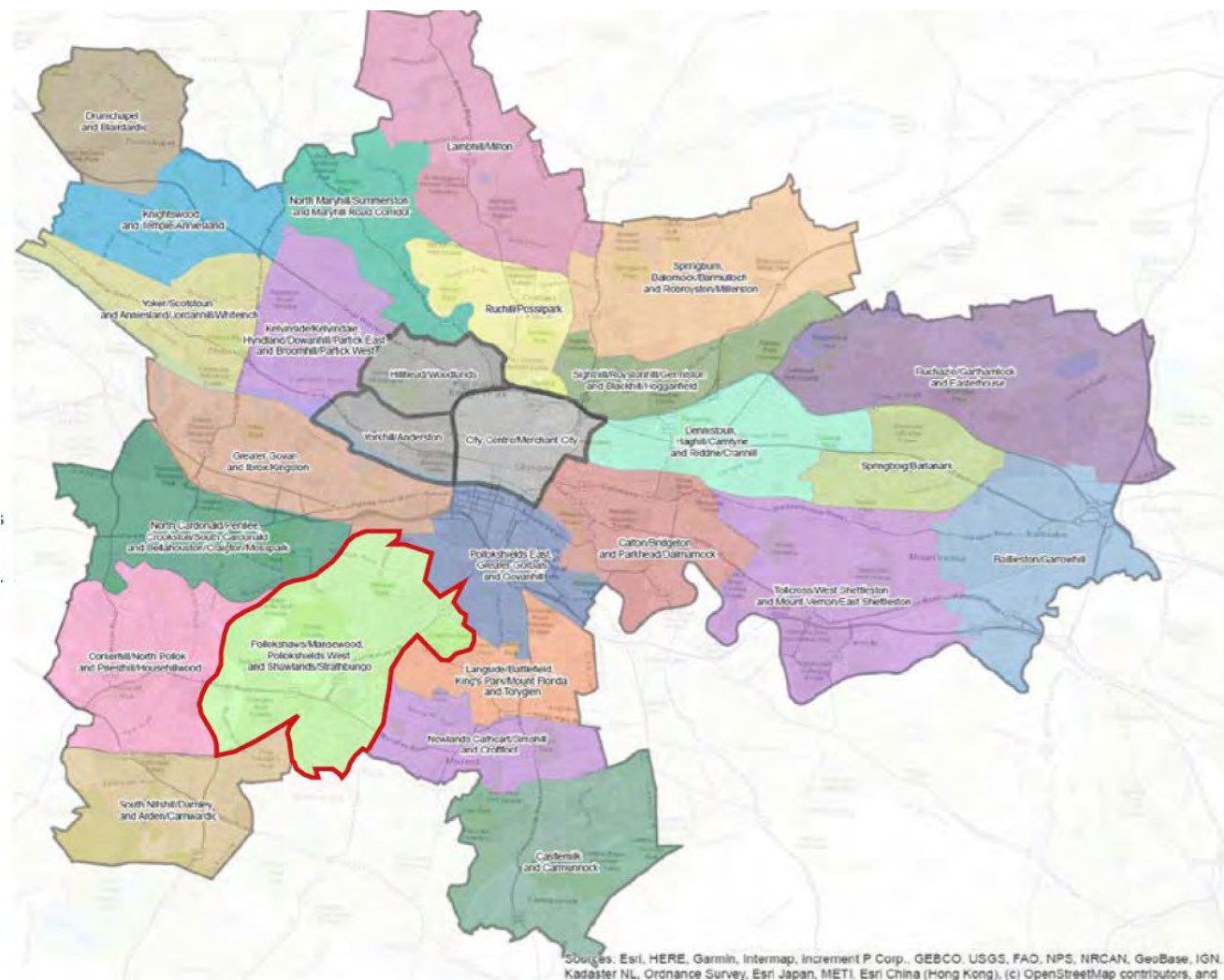
The Shawlands and Strathbungo Accessibility Audit was identified as an intervention opportunity through work that formed part of a Stage 1 Report for Mansewood to Shawlands Liveable Neighbourhood (see **figure 1**), along with sites in Mansewood & Hillpark ('Creating Safer Routes: Mansewood and Hillpark'), and Transforming Kildrostan Triangle (locations shown on **figure 3**).

The report included assessment and engagement work undertaken in a number of neighbourhoods in this study area to identify a range of intervention opportunities that could help support one or more of the Liveable Neighbourhood Programmes four theme. Those themes being *Everyday Journeys*, *Active Travel*,

*Local Centre and Streets for People* (see **figure 2** for more detail). The site in this report scored particularly well in relation to *Streets for People* and *Everyday Journeys*.

For further information on the Liveable Neighbourhoods programme visit the following website: <https://www.glasgow.gov.uk/liveableneighbourhoods>

**Figure 1:** Plan showing Mansewood to Shawlands Liveable Neighbourhood



**Figure 2:** Diagram describing the key themes of the Glasgow Liveable Neighbourhood Programme

### EVERYDAY JOURNEYS

The transport sector is Scotland's major contributor of carbon emissions. The majority of journeys made by car are short. By improving the conditions for walking and cycling within neighbourhoods there is a significant opportunity to reduce carbon emissions and improve health outcomes. For example, journeys to schools and other local amenities. However, it is also recognised that the needs of different age groups, genders and physical abilities is crucial in designing suitable streets and infrastructure.

### ACTIVE TRAVEL

Glasgow has an ambitious target to make walking and cycling considered as first choice modes of travel. A key element of this will be the implementation of a city-wide segregated active travel network. The Liveable Neighbourhoods approach will create the bridge between the front door and the city-wide segregated network.

### LOCAL TOWN CENTRES

Glasgow's network of centres is a key strength of the City in moving towards an ambition of creating liveable neighbourhoods. Many of Glasgow's local centres are busy social spaces that provide many functions beyond retail and commercial. With the major challenges created by retail competition and the shift to online shopping there is a significant opportunity to strengthen the position of many local town centres in Glasgow by harnessing their role as social and community destinations, improving their accessibility and environmental quality.

### STREETS FOR PEOPLE

Over time Glasgow's streets and public spaces became dominated by the needs of motorised transportation. This includes vehicle movement and parking. International best practice has shown that as space is reallocated and vehicle speeds and flows are reduced, there is significant potential to improve the quality of street spaces. This creates opportunities to increase the range of people and activities that are on the street. It also creates space for increased green infrastructure, which is an important tool in climate adaptation and mitigation.





# 1. INTRODUCTION

## 1.2 Project Location

The Shawlands and Strathbungo Accessibility Audit seeks to address a range of accessibility and permeability issues within the Shawlands and Strathbungo area by improving pedestrian permeability, removing barriers to walking and generally strengthening connections between residential zone and key trip generators and attractors. Consultation with the communities identified the following as being key issues to be addressed at existing side road junctions:

- Lack of direct crossings;
- Wide bell mouths;
- Lack of pedestrian and cycling priority;
- Barriers for people with mobility issues;
- Lack of level access; and
- Neglected public realm and maintenance.

The prioritisation process identified that resolving these issues for the community was both achievable and desirable within the Liveable Neighbourhoods programme. There are two possible mechanisms for delivering identified upgrades:

1. During programmed 'business as usual' maintenance operations; or
2. As a stand-alone project where multiple junctions require attention within a key area.

Providing high quality pedestrian priority infrastructure at side roads can improve journey times and enhance the perception of safety for people moving in and around neighbourhoods, particularly for people who suffer from visual or mobility impairments. These measures can help to support efforts to decarbonise transport and increase physical activity levels in local communities.

Figure 3: Map showing the study area set within a city-wide context





# 1. INTRODUCTION

## 1.3 Engagement

This section summarises the overarching engagement, methods and activities undertaken during Stage 2. It details the engagement undertaken on the three projects that emerged from the Mansewood to Shawlands Liveable Neighbourhood, including:

- Transforming Kildrostan Triangle
- Creating Safer Routes: Mansewood and Hillpark
- Improving Connections: Shawlands and Strathbungo

### 1.3.1 PURPOSE

Through a collaborative approach to engagement, involving the public and key stakeholders we have undertaken further community engagement within the Mansewood to Shawlands Liveable Neighbourhood helping these areas to become even better places to live, work and enjoy daily life.

Engagement undertaken during Stage 2 aimed to inform residents and stakeholders of the three projects being taken forward into concept design. To seek feedback from stakeholders in each of the project areas on the developing designs, opportunities, and constraints, informing the development of the designs.

Engagement undertaken during Stage 2 aimed to:

- Inform people about the selected project(s)
- Seek feedback on the concept designs.
- Identify if there is anything missing in terms of opportunities and constraints.
- Generate content – attendance numbers, photos, feedback for stage 2 report, inform designs.

### 1.3.2 ACTIVITIES

A range of in person and digital activities have been undertaken during Stage 2. These have been summarised over the following pages for all three areas. Project specific findings are summarized within each project section.

#### Website

During stages 0-1 a dedicated website was launched on 31st January 2023 to act as the main communication point for the Mansewood to Shawlands Liveable Neighbourhood: [Latest News | Liveable Neighbourhoods - Mansewood to Shawlands \(arcgis.com\)](#)

Visitors to the website could find out more about Liveable Neighbourhoods, and the 'Latest News' section was updated to promote all stage 2 events and hosted the survey.

#### In Person Members Briefings

Follow up briefings from stage 0-1 were held at Glasgow City Chambers on 18th May 2023 for Mansewood and Hillpark, with 7 in attendance representing the following Wards: Ward 2 (Newlands / Auldburn) and Ward 6 (Pollokshields)

Meeting purpose:

- To present the ideas and opportunities emerging from Stages 0-1.
- To give Elected Members the opportunity to validate / challenge the key messages coming from communities and to add to these as part of the prioritisation process.

#### Internal Glasgow City Council Drop-In event

A drop-in session was held on the 14th September for Officers within Glasgow City Council, ranging from Planning and Heritage, Parking, Flooding and Drainage departments. The purpose was to provide an opportunity to raise awareness of the projects at stage 2

design and to seek feedback on designs including opportunities and constraints from an internal perspective. A total of 18 Officers attended.

#### Mansewood Youth Group Workshop

A 45-minute workshop was held on 26th September with the Mansewood Community Centre Youth Group. The session took place talking to 8 local young people about their journey to and from school, likes dislikes and ideas for improvements around the area.

#### Survey

A survey was made available for people to complete online, at libraries and drop-in events between 19th September and 6th of October asking for feedback on initial designs, seeking feedback on the opportunities and constraints of the designs. After the designs were further developed a second survey was open from 16th November – 30th November enabling people to leave further feedback on the concept designs.

A full summary of all the feedback is provided in **Appendix B**.

#### Drop-ins

A series of Drop-in, 'Meet the Designer' and public showcase events took place in both September and November 2023. The events took place in each respective neighbourhood area, updating and informing residents and stakeholders of the six projects being progressed to concept design. The first stage (stage2a) informed stakeholders of the six projects and the emerging ideas for the designs. The follow up stage (stage2b) showcased the concept designs, presenting a series of graphic-rich plans and visualisations.

The purpose of both stages was to seek feedback from stakeholders in each of the six project areas on the developing designs and ideas, giving those in attendance or viewing online the opportunity to highlight anything we may have missed.

Figure 4: Website providing a digital presence for the project during stage 2

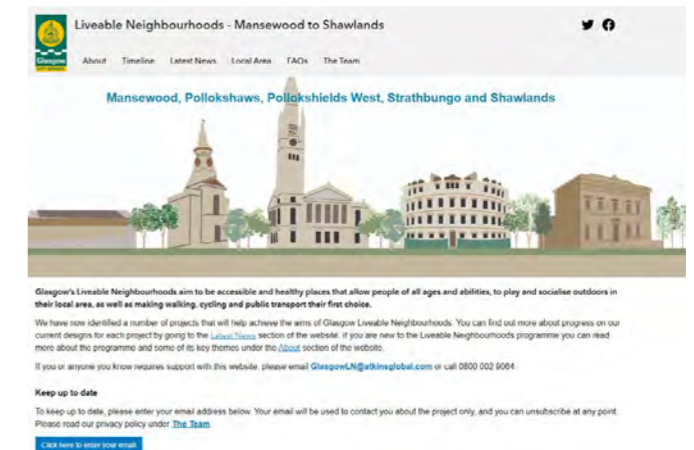


Figure 5: Online survey run during both stages of consultation

A screenshot of a feedback form titled 'Liveable Neighbourhood Stage 2 Feedback Form Follow-up'. The form contains four questions: 1. 'Which of the projects would you like to comment on?' with radio button options for 'Transforming Kildrostan Triangle', 'Creating Safer Routes: Mansewood & Hillpark', 'Improving Connections: Shawlands and Strathbungo', 'Destination Laurieston', 'Re-imagining Albert Drive Streetscape', and 'Crown Street Retail Park Links'. 2. 'Do you think our concept design captures all the site's /area's opportunities and constraints?' with radio button options for 'Yes' and 'No'. 3. 'If not, let us know what we've missed?' with a text input field. 4. 'Do you have any other comments/feedback?' with a text input field. At the bottom, there is a blue button labeled '+ Add new'.



# 1. INTRODUCTION

Feedback has informed the refinement of each concept design (see **section 3** for more details) and was useful to:

- Inform people about the selected project(s)
- Seek feedback on the concept designs.
- Identify if there is anything missing in terms of opportunities and constraints.
- Generate content – attendance numbers, photos, feedback for stage 2 report, inform designs.

## Stage 2a: Drop-In Events

The following drop-ins took place in September 2023:

- Creating Safer Routes: Mansewood and Hillpark, Eastwood Parish Church, 4-7pm on 26th September.
- Improving Connections: Shawlands and Strathbungo Destiny Church, 4-7pm on 27th September.
- Transforming Kildrostan Triangle, Pollokshields Library, 4-7pm on 28th September.

## Stage 2b: Meet the Design Team Drop-In Events

The following drop-ins took place in November 2023:

- Improving Connections: Shawlands and Strathbungo, G41 Art Space, 3:30-5pm, on 21st November
- Creating Safer Routes: Mansewood and Hillpark, Mansewood Community Centre, 5:30-6:30pm, on 21st November
- Transforming Kildrostan Triangle, Pollokshields Library, 5:00-6:30pm, on 23rd November

## Public Showcase

In addition to the dedicated 'Meet the Design Team' sessions, a public showcase of the designs were displayed in the following locations from November 16th – November 30th for members of the public to view in their own time. Flyers were available at all the venues with information of the drop in sessions as well as links to the online survey.

- Pollokshields Library
- Pollokshaws Library
- G41 Art Space

## 1.3.3 COMMUNICATIONS

To promote the engagement during Stage 2, several communication channels were utilised including:

- Notifications emailed to key stakeholders and local community groups identified through Stakeholder Mapping
- Promotion of the Story Map websites to all stakeholders
- Social media posts through Glasgow City Council's channels and local groups
- Leaflets and surveys left at drop-in venues to promote completion of the surveys

In addition, an email address and freephone number were available for people to speak directly to the project team.

A full list of all stakeholders is listed in **Appendix A**.

**Figure 7:** Photos from the stage 2 consultation drop-in events and showcase exhibitions in September and November 2023



**Figure 6:** Leaflets circulated before each of the drop in sessions and exhibitions in September and November 2023

## LIVEABLE NEIGHBOURHOODS

### MANSEWOOD TO SHAWLANDS

TELL US ABOUT YOUR NEIGHBOURHOOD:

1. CREATING SAFER ROUTES: MANSEWOOD AND HILLPARK
2. TRANSFORMING KILDROSTAN TRIANGLE
3. IMPROVING CONNECTIONS: SHAWLANDS AND STRATHBUNGO

**JOIN US IN SEPTEMBER**

- Creating Safer Routes: Mansewood & Hillpark**  
Tuesday 26 September: 4pm - 7pm  
Eastwood Parish Church
- Improving Connections: Shawlands & Strathbungo**  
Wednesday 27 September: 4pm - 7pm  
Destiny Church, Gym Hall
- Transforming Kildrostan Triangle**  
Thursday 28 September: 4pm - 7pm  
Pollokshields Library

**COMPLETE A SURVEY**

Available online (scan the QR code or use the link to our website below) and paper copies available at your local library.

The survey will be open until Saturday 30th September

**CONTACT US**

Tel: 0800 002 9064

Email: [GlasgowLN@atkinsglobal.com](mailto:GlasgowLN@atkinsglobal.com)

Web: [mansewood-to-shawlands-in-glasgow.hub.arcgis.com](http://mansewood-to-shawlands-in-glasgow.hub.arcgis.com)

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## LIVEABLE NEIGHBOURHOODS

### MANSEWOOD TO SHAWLANDS

TELL US ABOUT YOUR NEIGHBOURHOOD:

1. CREATING SAFER ROUTES: MANSEWOOD AND HILLPARK
2. TRANSFORMING KILDROSTAN TRIANGLE
3. IMPROVING CONNECTIONS: SHAWLANDS AND STRATHBUNGO

**TAKE A LOOK AT THE PROPOSALS**

Exhibition boards will be displayed until Thursday 30th November at the following locations:

- Transforming Kildrostan Triangle**  
Pollokshields Library
- Creating Safer Routes: Mansewood & Hillpark**  
Pollokshaws Library
- Improving Connections: Shawlands & Strathbungo**  
G41 ArtSpace, 124 Kilmarnock Road

**COMPLETE A SURVEY**

Available online (please scan the QR code or use the link to our website below).

The survey will be open until Thursday 30th November

**CONTACT US**

Tel: 0800 002 9064

Email: [GlasgowLN@atkinsglobal.com](mailto:GlasgowLN@atkinsglobal.com)

Web: [mansewood-to-shawlands-in-glasgow.hub.arcgis.com](http://mansewood-to-shawlands-in-glasgow.hub.arcgis.com)



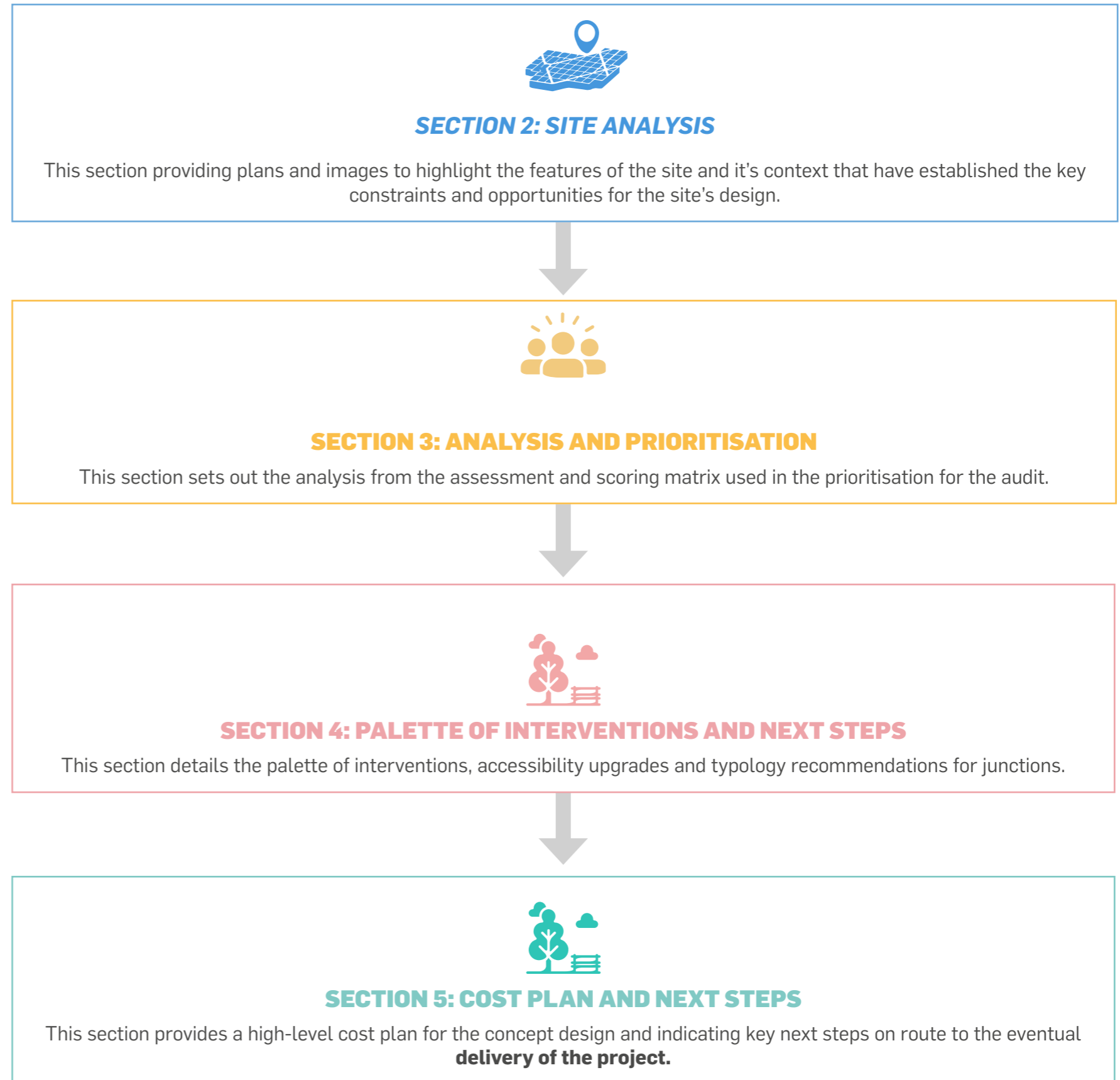


# 1. INTRODUCTION

## 1.4 Document Structure

This report is structured to help provide a clear and concise breakdown of the assessment, analysis and design thought that has led to the emergence of a concept design for the site (set out in **section 4**). **Figure 8** sets out the key sections in the document and a summary of their purpose and scope.

**Figure 8:** Diagram showing structure of the document by briefly describing sections 2 - 5







## 2. BASELINE DATA COLLECTION

### 2.1 Issues and opportunities

As part of the initial assessment process, the design team visited the Shawlands and Strathbungo study area and undertook a walkover review to identify and observe the issues that had been raised by the community as part of the Stage 0-1 consultation process. Through this review, the team noted a range of significant accessibility issues which could and should be addressed.

Of particular note, there are numerous junctions located within the Shawlands area which have substantially excessive bell mouths which are subject to undesirable parking behaviours including double parking and parking within the footway. In addition to other obstructions such as poorly located signage and street furniture, the area near Shawlands Academy and Crossmyloof Train Station were noted as being particularly poor for pedestrians. Across the wider study area, there is a distinct lack of appropriate tactile paving in place which is likely to have a negative impact on blind or partially sighted people.

Visibility at crossing points is also a common problem in the area, both for drivers and pedestrians.

Figure 9: Examples of existing accessibility issues



1 Extremely wide bell-mouths which encourage obstructive parking behaviours



2 Other street furniture obstructions and lack of dropped kerbs / tactile paving.



3 Poor visibility and drainage issues.



4 Generally dangerous and inaccessible crossing arrangements.







## 2. BASELINE DATA COLLECTION

### 2.2 Assessment and Design Methodology

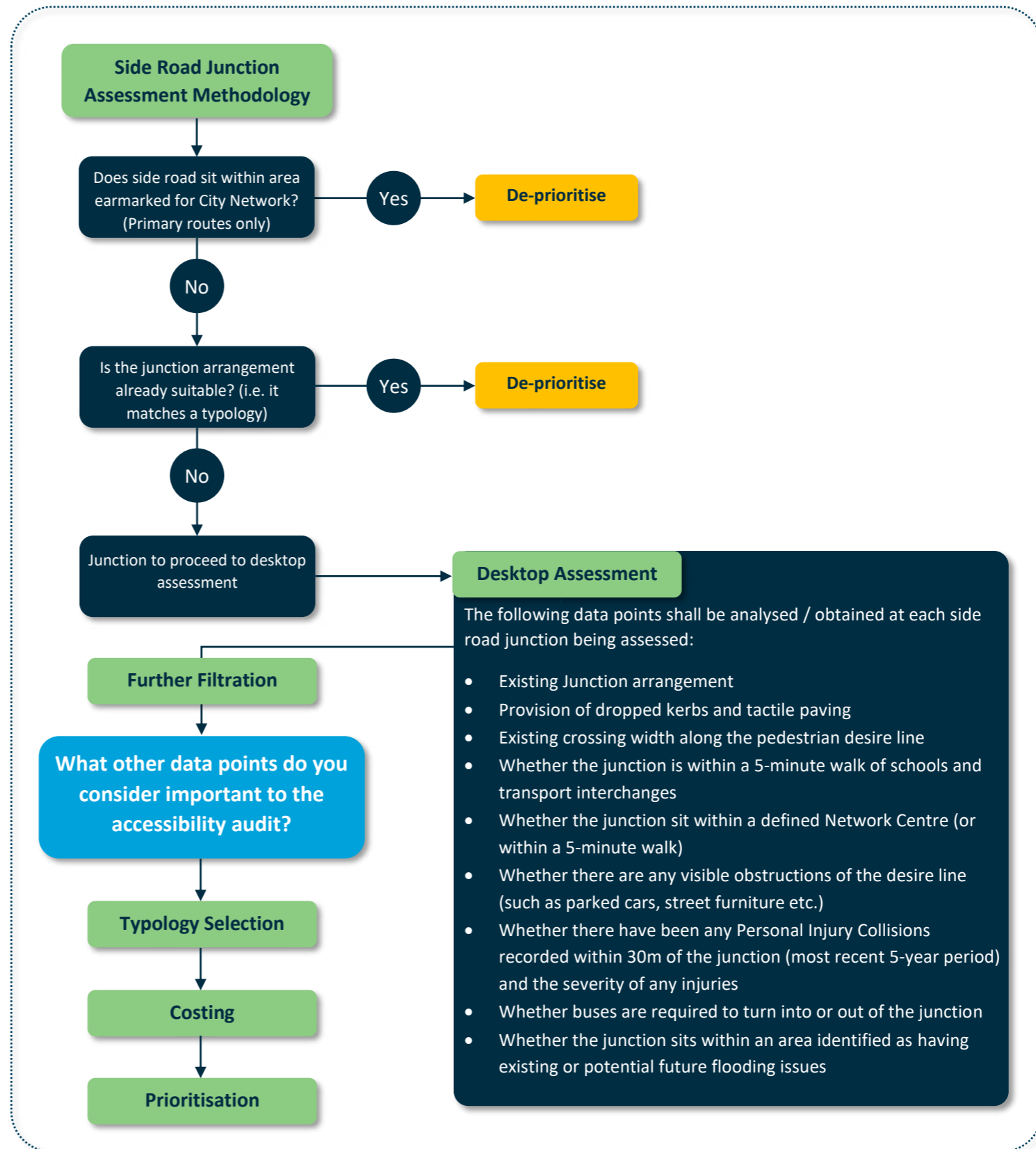
There are 246 existing side road junctions within the 2.0km<sup>2</sup> study area and- it is impractical to undertake a site visit to each of these. The assessment methodology therefore comprised a desktop-based quantitative analysis of each side road junction to collect data on the following parameters:

- Existing junctions / side road arrangement (e.g. standard priority, raised table, etc.)
- Provision of dropped kerbs / tactile paving (or lack of)
- Existing crossing width
- Obstructions (such as parking, signage, street furniture, etc.)
- Personal injury collisions (PICs) within 30 metres of the junction
- Existing or potential future flooding issues.

Key trip generators (for example, network centres, schools and train stations) were mapped and a journey analysis was undertaken on each location to capture the 5-minute walking isochrones. This data was then overlain onto the mapped side roads in order to ascertain which junctions were located in proximity to these key destinations.

The flow chart presented in **Figure 10** opposite sets out the assessment framework. Key to this is the prioritisation of side roads which do not interface with Glasgow City Council's proposed 'City Network' which is currently in design for protected cycling infrastructure. This ensures that junctions being considered for upgrade under this project will not coincide with those planned for upgrade as part of this separate project. This process has identified a methodology that can be utilised for undertaking similar processes throughout the city.

Figure 10: Junction audit flow chart





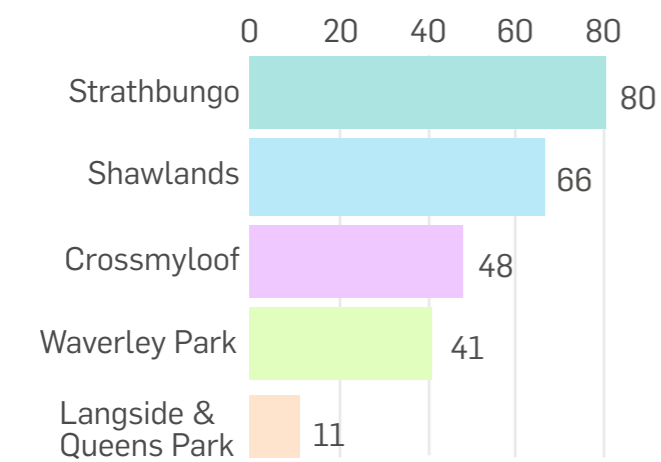
## 2. BASELINE DATA COLLECTION

### 2.3 Side Road Junctions

The study area has been broken down into the five local neighbourhoods of Shawlands, Strathbungo, Crossmyloof, Waverley Park and Langside and Queens Park. This allows for a more detailed analysis of the accessibility within each area and has helped to identify key hotspots where there is a multitude of accessibility constraints.

Utilising GIS (geographical information system) software, all of the side road junctions within the study area were mapped and analysed. In total, over 3,200 data points have been collected across all of the side roads.

Figure 11: All side road junctions zone split

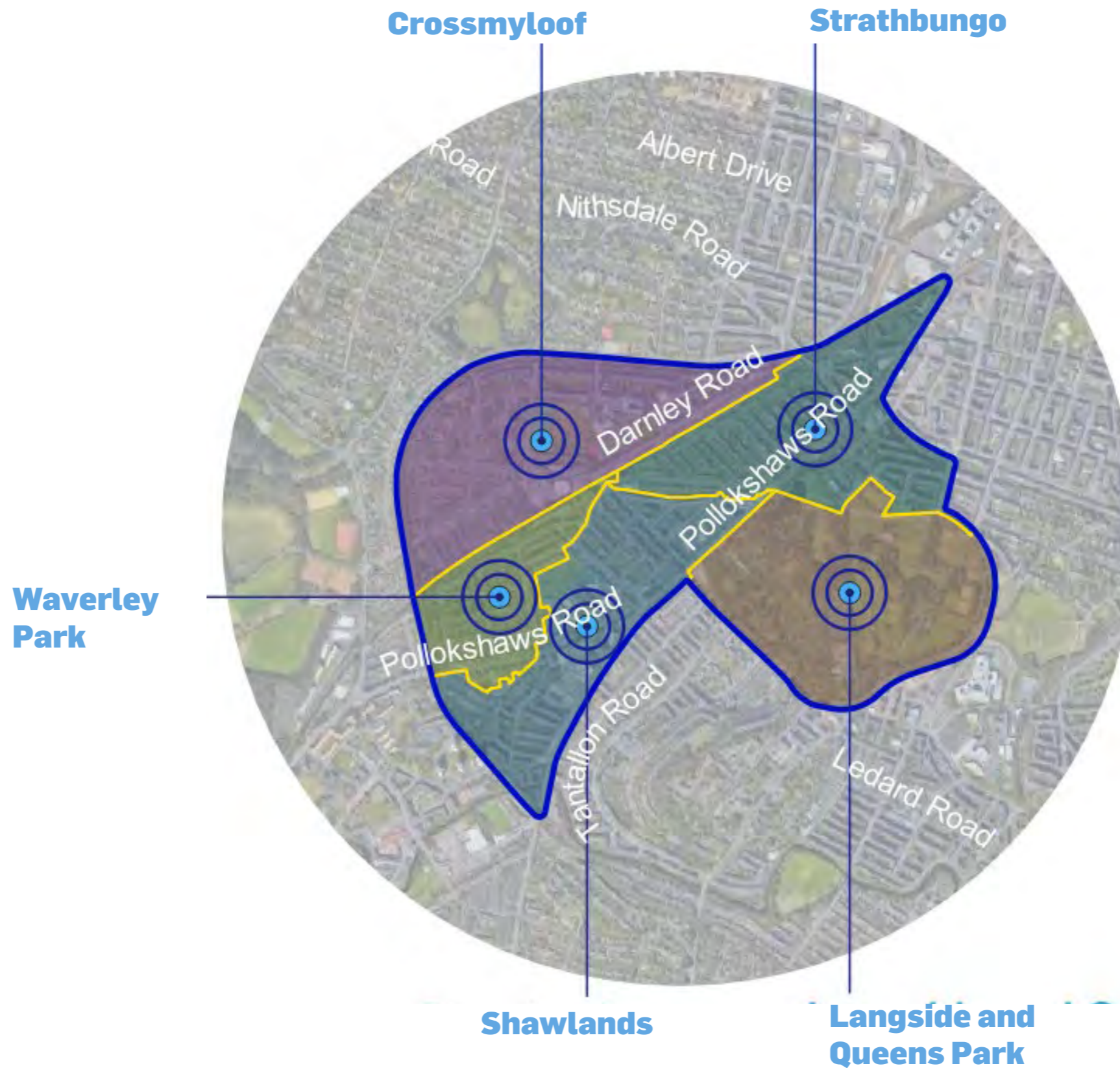


#### Key

Project study area

#### Assessment zones

- Crossmyloof
- Langside & Queens Park
- Shawlands
- Strathbungo
- Waverley





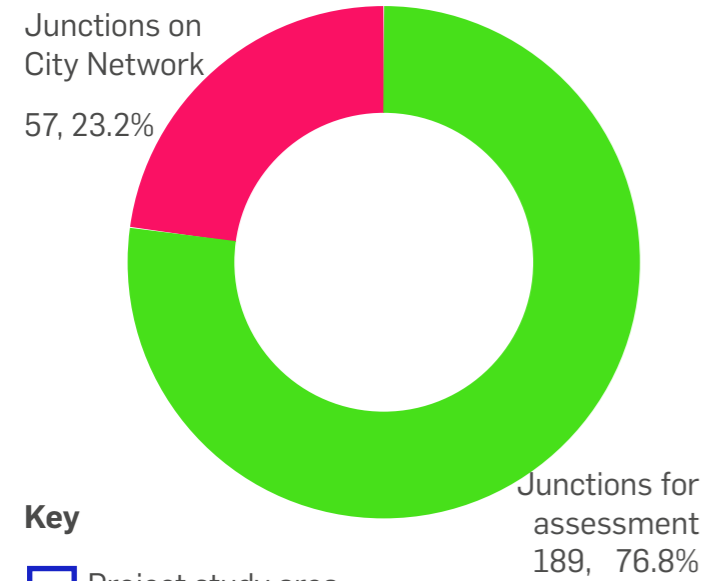


## 2. BASELINE DATA COLLECTION

### 2.4 Glasgow's City Network

It is fundamental to understand where infrastructure upgrades are already planned to inform the identification and prioritisation process within this project. In that regard, GCC is currently developing concept designs for the Inner South City Network. This will provide recommendations and designs for protected cycling infrastructure including the upgrade of side roads which are situated on the identified routes.

Of the 246 side roads within the study area, 57 junctions (around 23%) are situated within a planned City Network route. These side roads have subsequently been de-prioritised and were not taken forward to the next stage of assessment. The rationale is that these junctions will be upgraded as part of the City Network development. The remaining 189 side roads have been carried forward to the detailed assessment stage.



#### Key

Project study area

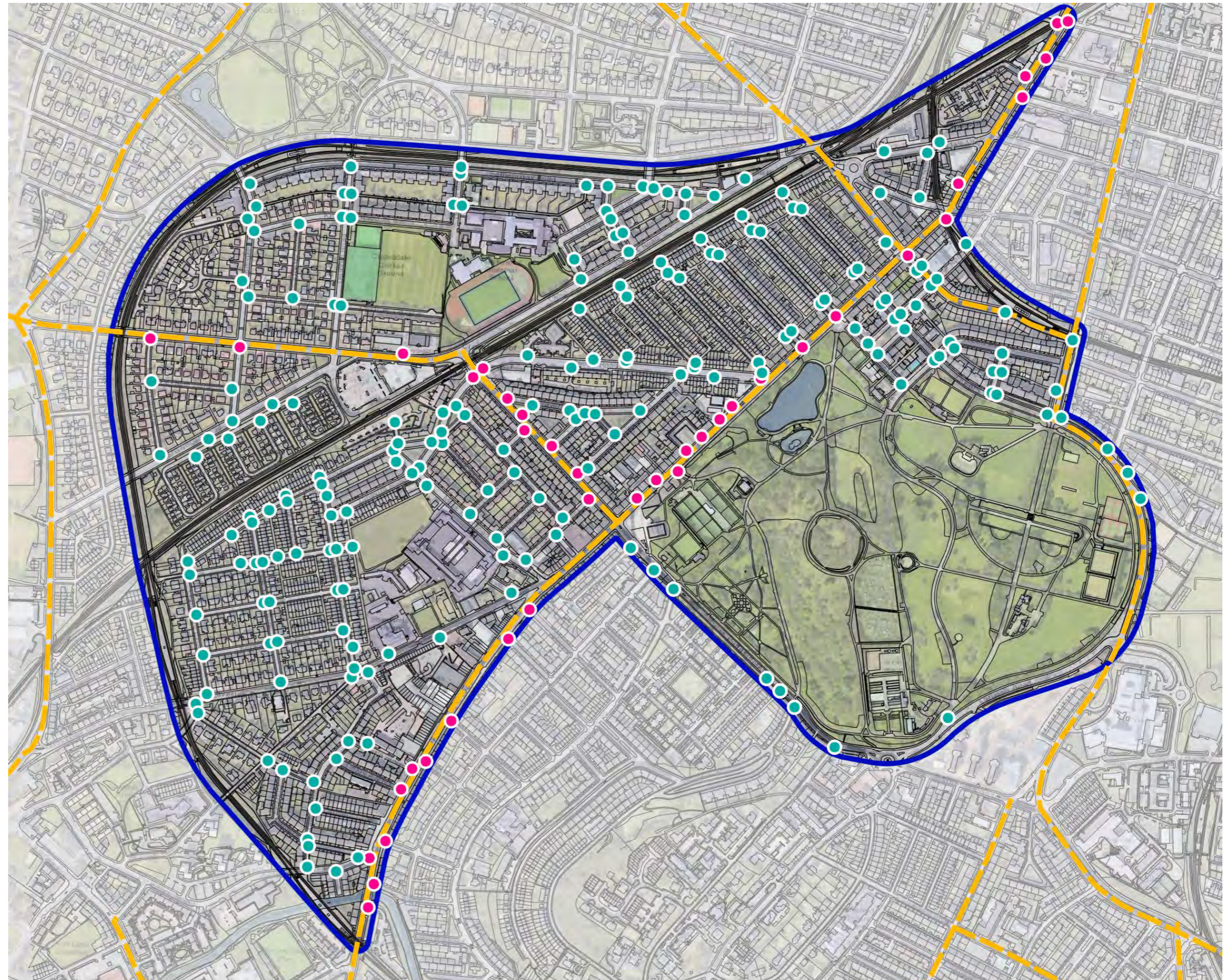
#### Junction prioritisation (Stage 2)

Junctions for assessment

Junctions on City Network

GCC City Network (Inner South)

Figure 12: Prioritisation of side roads using Glasgow's City Network





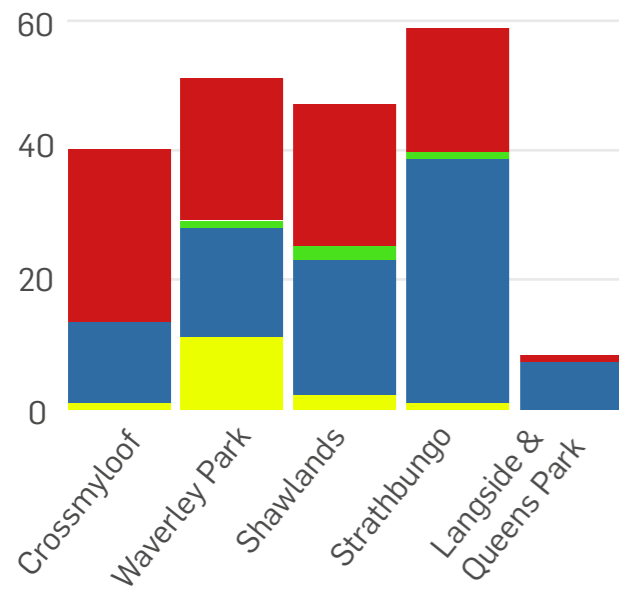


## 2. BASELINE DATA COLLECTION

### 2.5 Accessibility for Visually and Mobility Impaired Users

Accessibility of side roads for people with visual and mobility impairments, as well as people with pushchairs, is a critical aspect to strengthening the infrastructure at crossing points and is fundamental to achieving the project aims of improved accessibility for all user groups. Each side road has therefore been assessed against its provision of dropped kerbs and tactile paving.

Figure 13 demonstrates the substantially limited existing provision of both dropped kerbs and tactile paving, with just four side roads in total across the five areas providing both.



#### Key

Project study area

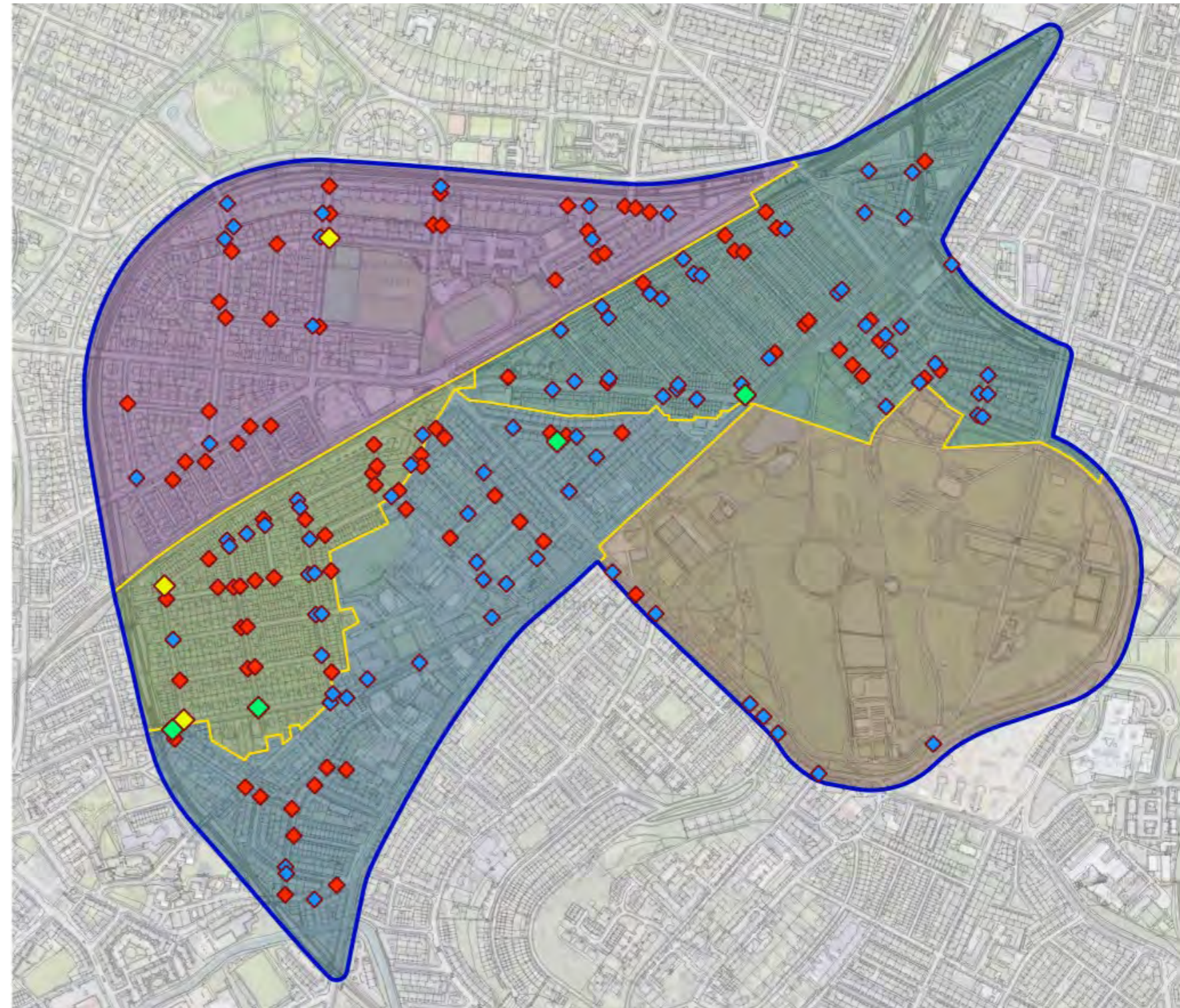
#### Infrastructure at crossing point

- ◆ Has both tactiles and dropped kerbs
- ◆ Has neither tactiles or dropped kerbs
- ◆ Has tactiles only
- ◆ Has dropped kerbs only

#### Assessment zones

- Crossmyloof
- Langside & Queens Park
- Shawlands
- Strathbungo
- Waverley
- Assessment zones

Figure 13: Side roads with accessibility features







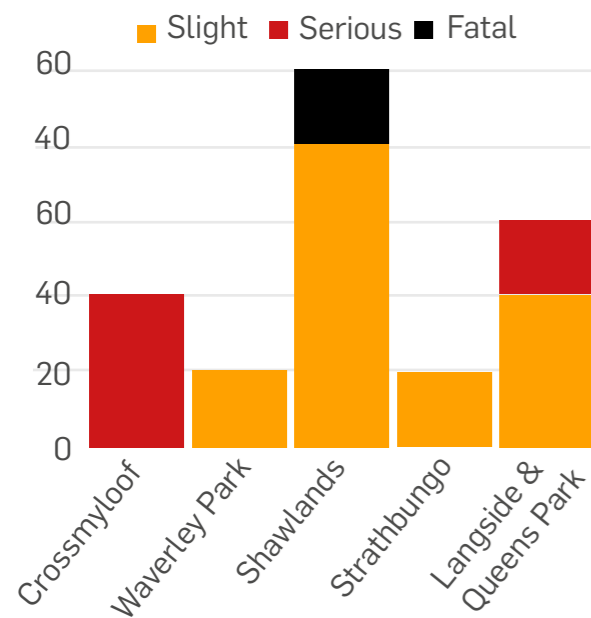
# 2. BASELINE DATA COLLECTION

## 2.6 Personal Injury Collisions – Pedestrians

Utilising road safety data available from the Department for Transport (DfT), the personal injury collisions (PICs) have been mapped and categorised against road users and severity (i.e. the extent of injury caused by a road traffic accident and the user group sustaining injury).

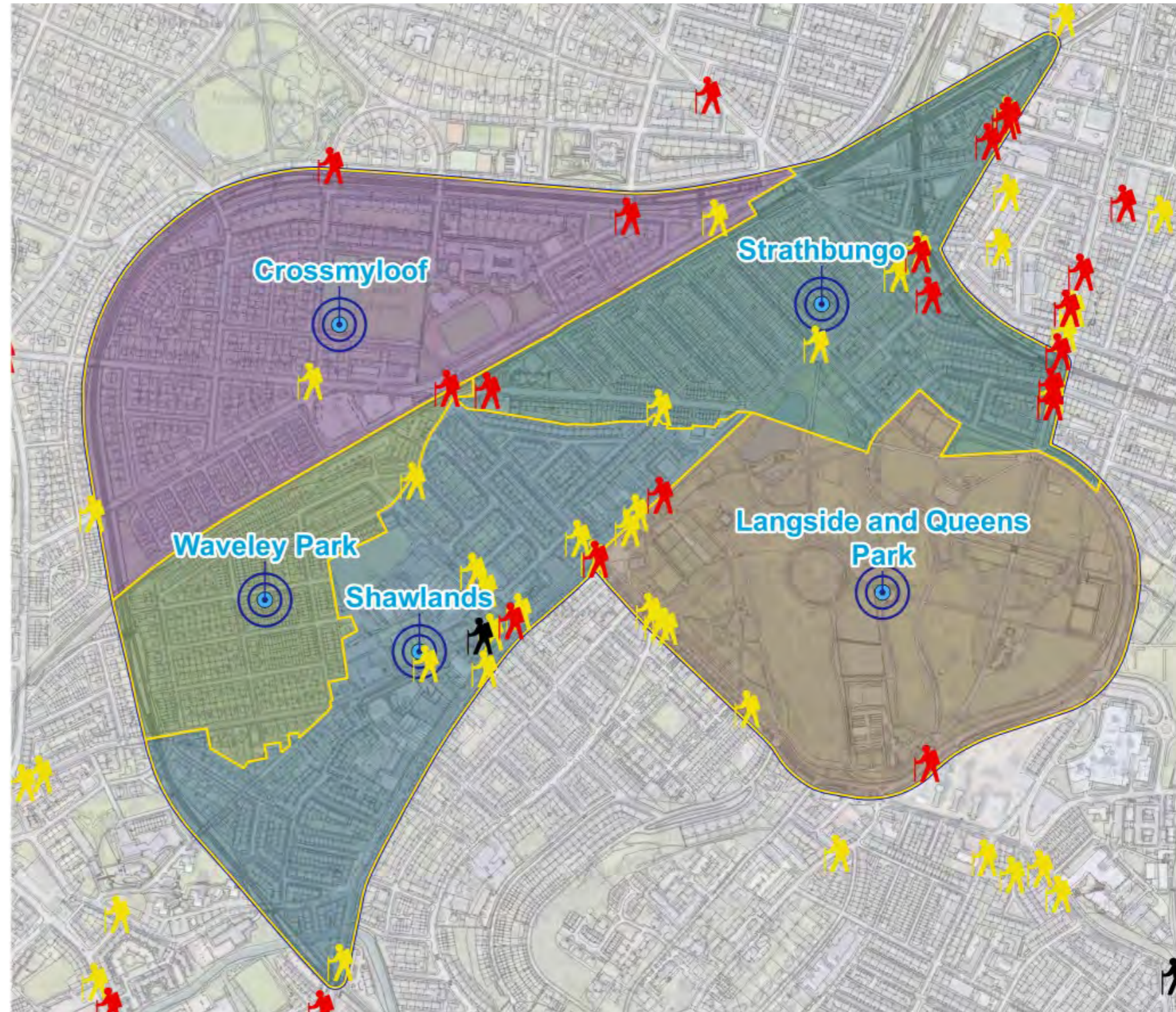
The casualty types are as 'slight', 'serious' or 'fatal'. Figure 14 demonstrates the location and severity of the pedestrian collisions which have occurred in the study area within the previous 5-year period (2017-2022). In total, there were 41 pedestrian collisions recorded; of these, 16 occurred within 30 metres of a side road junction being assessed.

Figure 14: Pedestrian personal injury collisions



- Key**
- Project study area
- Pedestrian collision severity**
- Fatal
  - Serious
  - Slight

- Assessment zones**
- Crossmyloof
  - Langside & Queens Park
  - Shawlands
  - Strathbungo
  - Waverley Park
  - Assessment zones





## 2. BASELINE DATA COLLECTION

### 2.7 Personal Injury Collisions – Cyclists

Similarly, cyclist PICs have been mapped and categorised by severity. The geographical distribution of these collisions is shown in Figure 15. Within the study area, there were 24 cycling collisions across the 5-year period. Of these, 6 occurred within 30 metres of one of the 189 side roads being assessed.

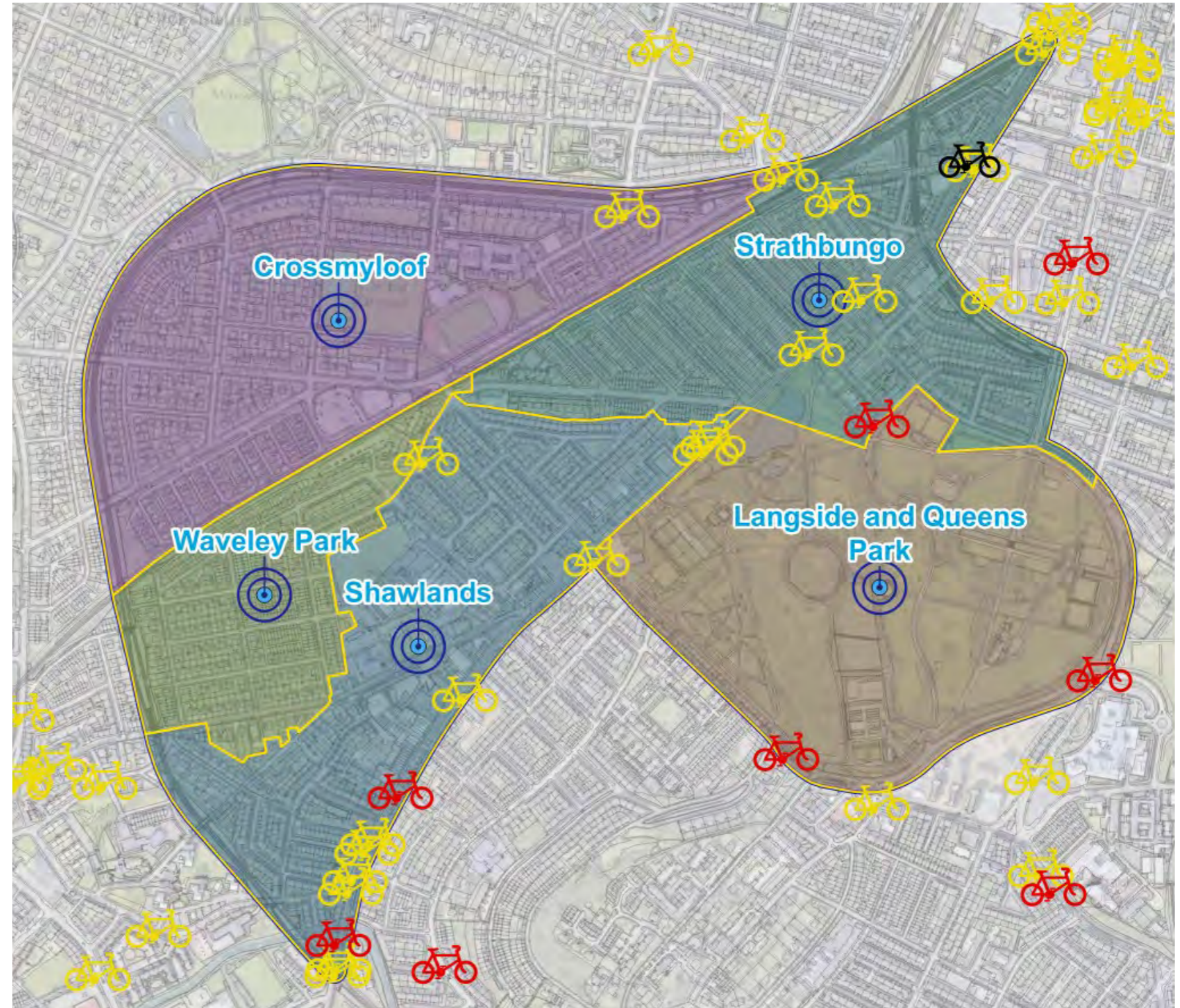
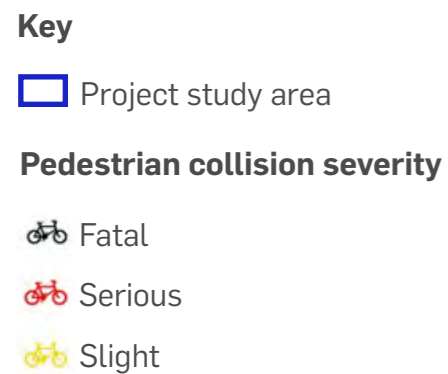
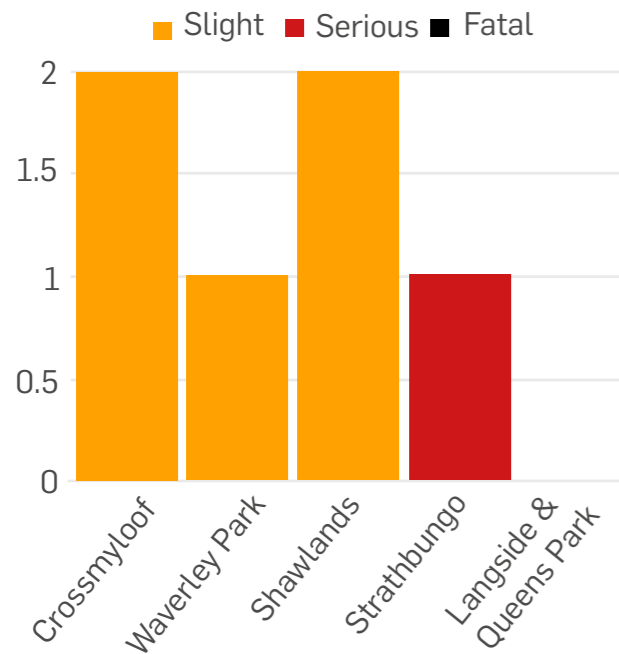


Figure 15: Cyclist personal injury collisions



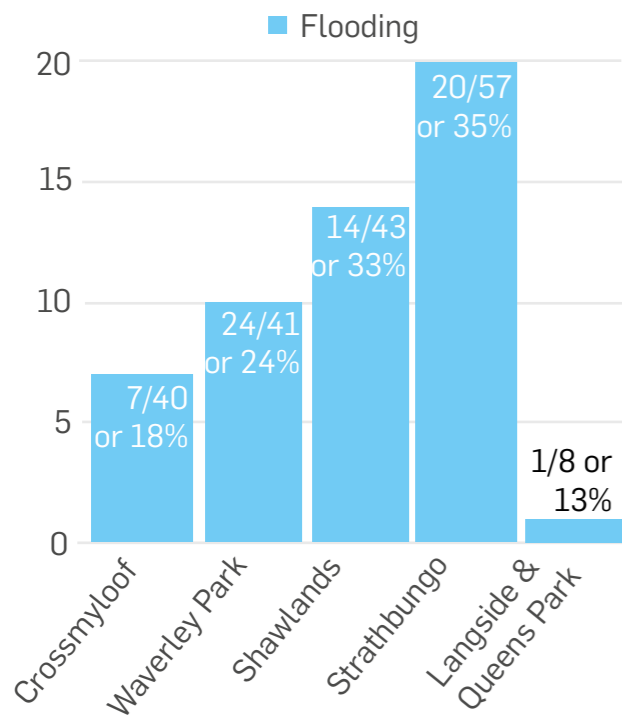


## 2. BASELINE DATA COLLECTION

### 2.8 Flood Risk

Flood risk is another key factor which influences accessibility of side roads for all users, but particularly for pedestrians as heavy flooding can prevent people from being able to cross at an appropriate crossing point, even if there is suitable infrastructure in place.

The likelihood of flooding at side roads, both now and in the future, has been assessed using the Scottish Environmental Protection Agency's (SEPA) flood risk map. This indicates that 52 side roads are susceptible to flooding or have a known flooding issue.



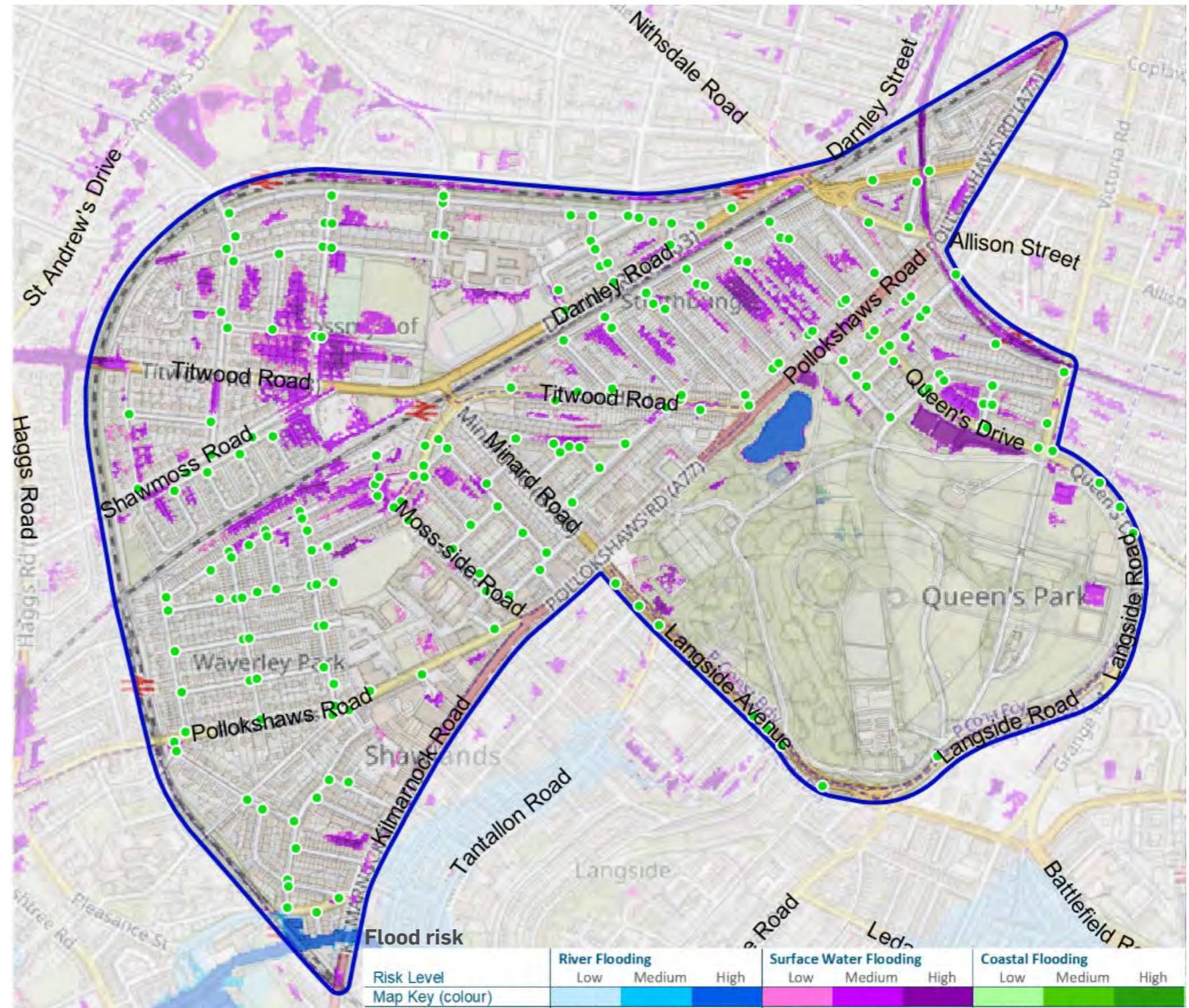
#### Key

Project study area

#### Prioritised junctions (stage 2)

All side roads

Figure 16: Map of flood risk and all side roads



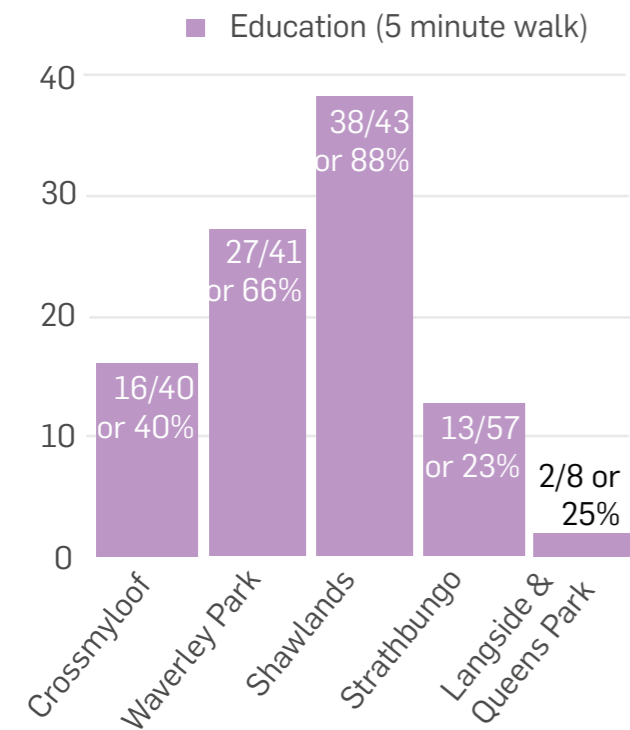


# 3. ANALYSIS AND PRIORITISATION



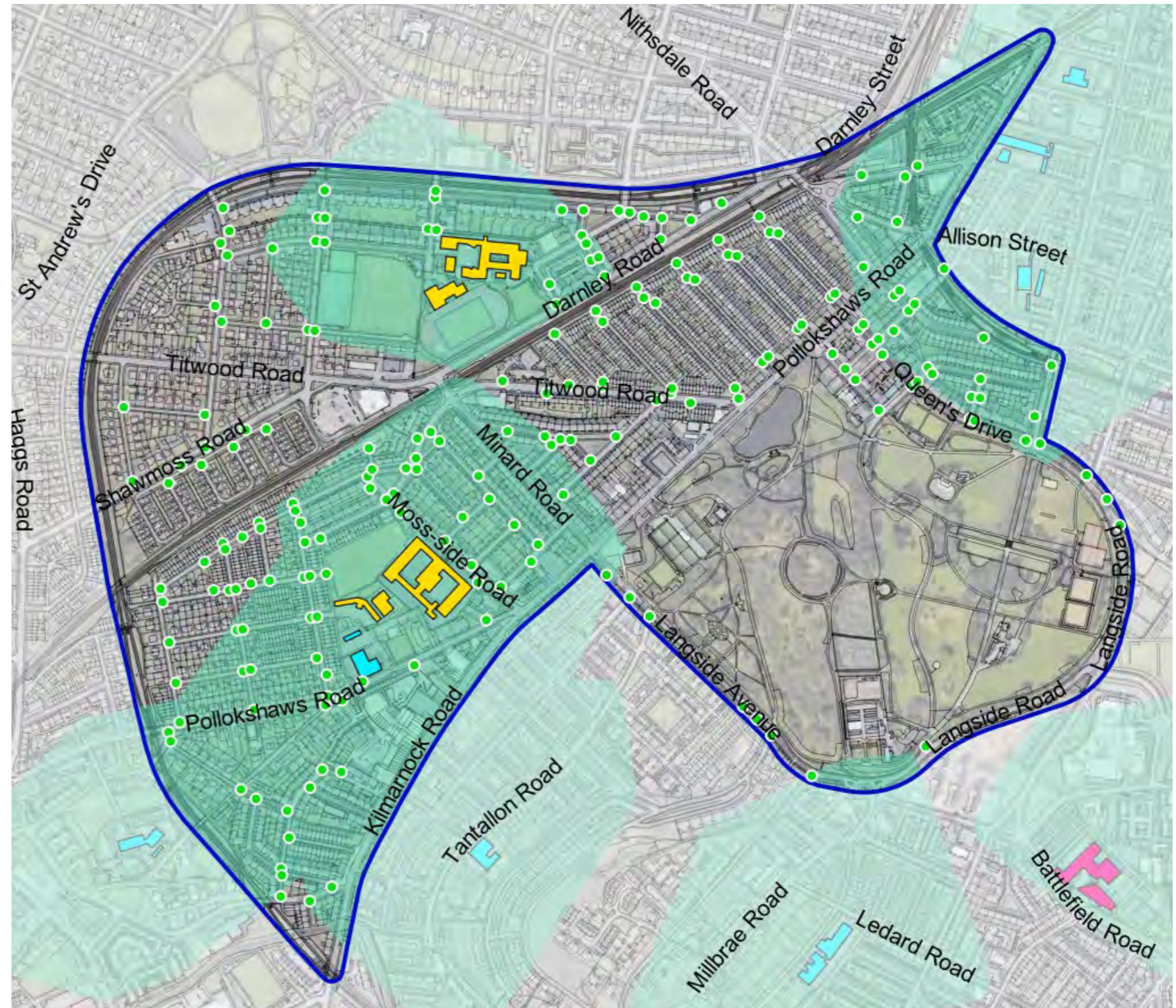
## 3.1 Education

Key trip attractors have been mapped to assess the proximity of these to the side roads being assessed. Education facilities, namely primary and secondary schools have been mapped and a journey time analysis undertaken to determine the 5-minute walking isochrones. Side roads falling within a 5-minute walk were recorded. A total of 96 out of 189 side roads fall within a 5-minute walk of an education facility.



- Key**
- Project study area
  - Prioritised junctions (stage 2)**
  - All side roads
  - Education**
  - Primary Education
  - Secondary Education
  - Further Education
  - Education Isochrones (5-min)

Figure 17: Education centres and side roads within a 5-minute walk



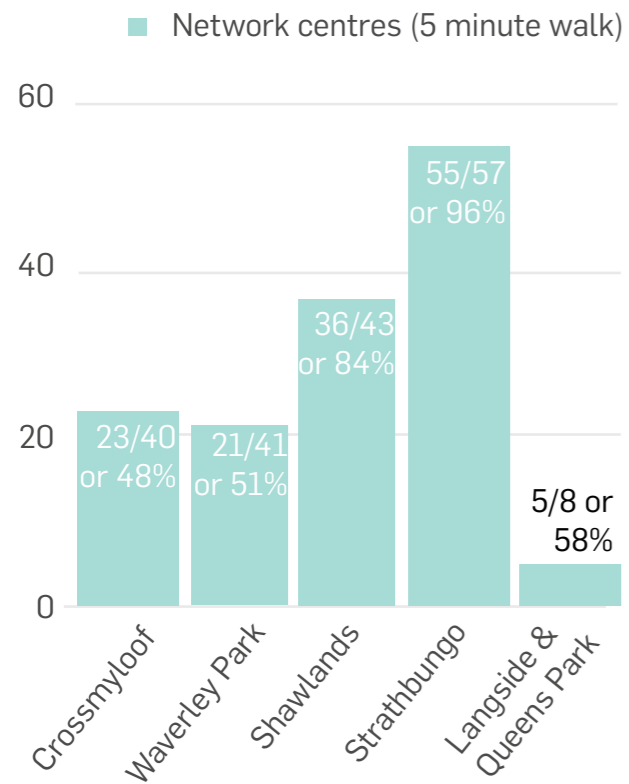




# 3. ANALYSIS AND PRIORITISATION

## 3.2 Network Centres

The side roads within a 5-minute walk of a Network Centre have also been recorded, as shown in **Figure 18**. The chart below presents the breakdown by neighbourhood. A total of 140 out of 189 within the study area sit within a 5-minute walking distance of a defined network centre.



### Key

Project study area

### Prioritised junctions (stage 2)

All side roads

### Network Centre

Albert Drive

Shawlands

Battlefield

Strathbungo

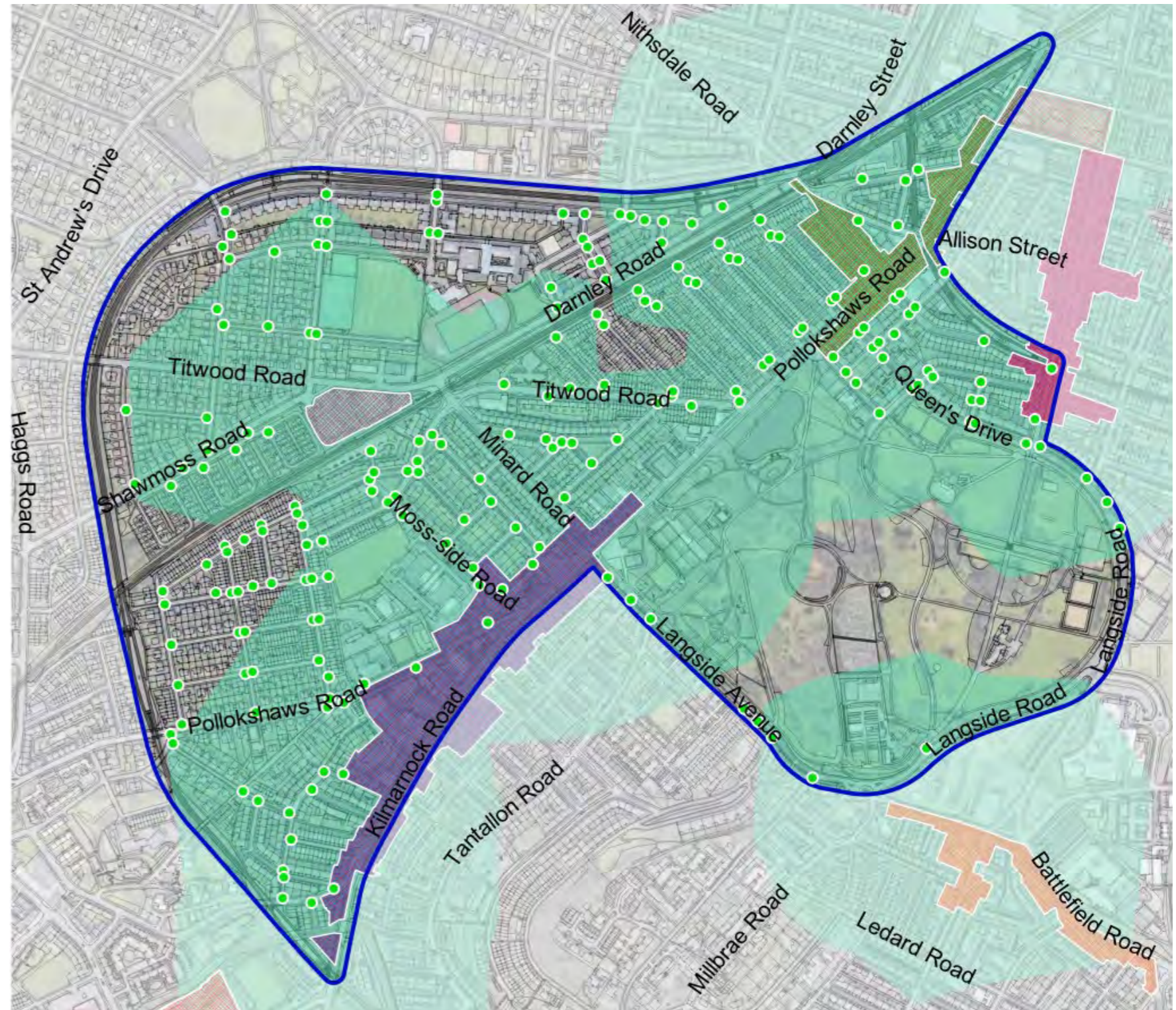
Govanhill

Victoria Road

Morrisons Crossmyloof

Network Centre Isochrones (5-min)

Figure 18: Network centres and side roads within a 5-minute walk

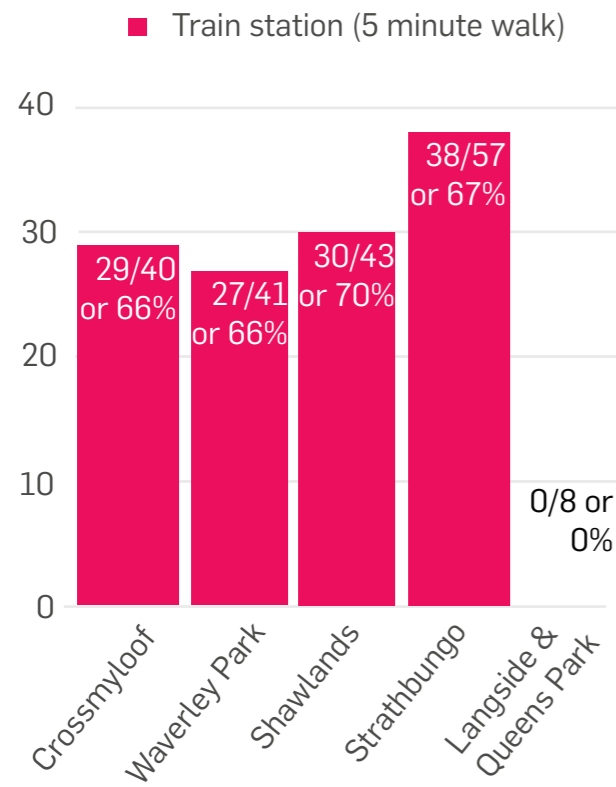




# 3. ANALYSIS AND PRIORITISATION

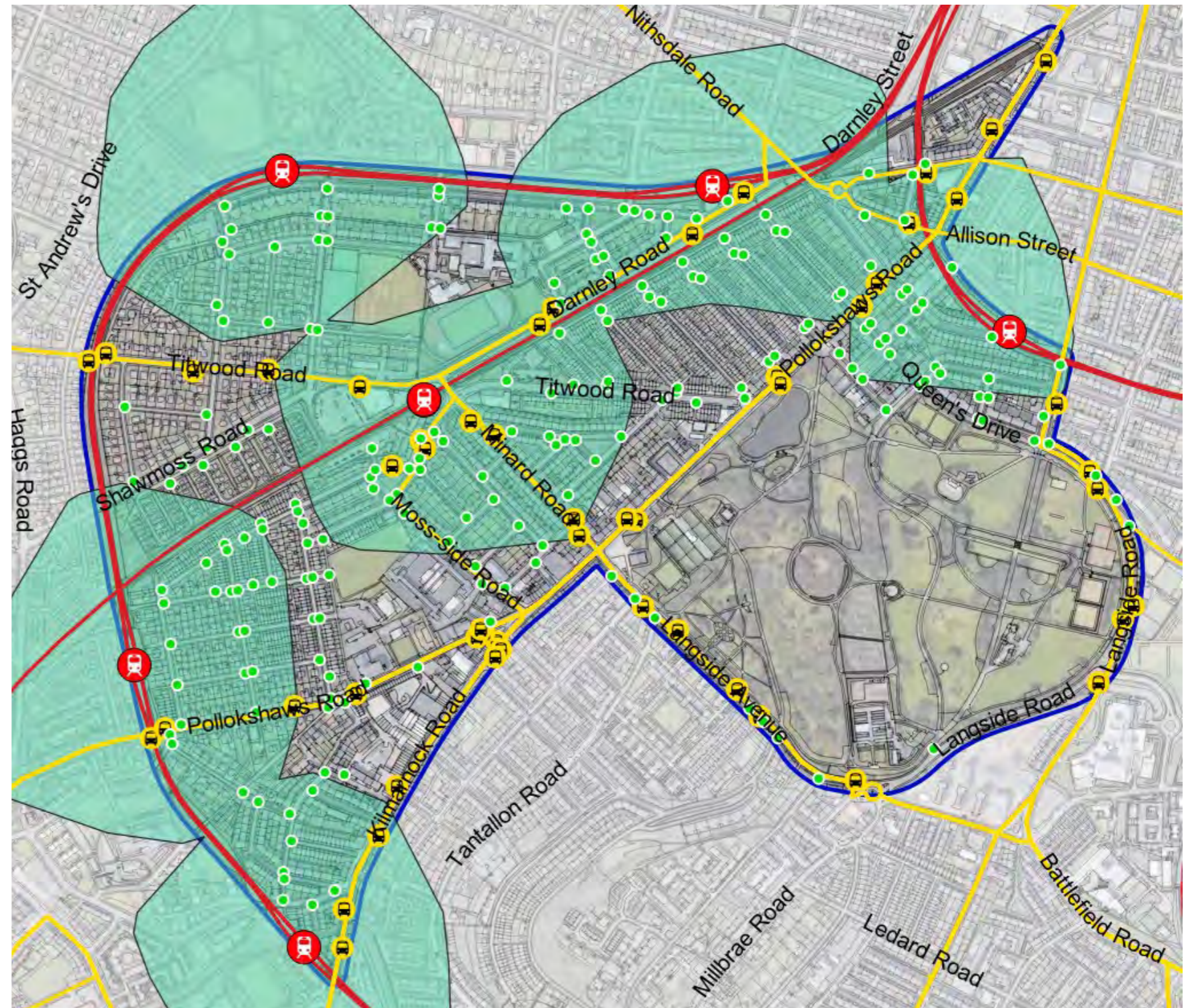
## 3.3 Transportation Hubs

Finally, the side roads situated within a 5-minute walk of a train station were recorded as train stations are key to encouraging sustainable transport in Glasgow. A total of 124 out of 189 side roads are within a 5-minute walk of a train station.



- Key**
- Project study area
  - Prioritised junctions (stage 2)**
  - All side roads
  - Bus route
  - Railway
  - Ⓜ Train station
  - Train station isochromes (5-min)

Figure 19: Transportation hubs and side roads within a 5-minute walk







# 3. ANALYSIS AND PRIORITISATION

## 3.4 Prioritisation

### 3.4.1 SCORING MATRIX

Following the baseline data collection, a scoring matrix has been developed to rank the junctions by their priority for interventions. The scoring of each data point is shown in Table 1. This method was applied to all 189 side roads by assigning each parameter a weight of between zero and five (five being most critical). The final score is the sum of all weightings.

#### Personal Injury Collisions

Fatal collisions involving pedestrian or cyclist casualties both received the highest weighting of 5, underlining the critical need to address areas with a history of known road safety issues, particularly where multiple collisions have occurred. Other vehicular collisions were incorporated for a comprehensive review but received relatively less weighting than those involving active modes.

#### Crossing Width

The crossing widths have been categorised by percentile across all 189 junctions. This ensures an equitable weighting of the crossing width parameter.

#### Trip Generators (within a 5 min walk)

Education facilities have been weighted the highest, followed by Network Centres and Train Stations, indicating the importance of safety in high-footfall areas, particularly where children will be walking unaccompanied.

Figure 20: Multi-Criteria Scoring Matrix

SCORING MATRIX			
Parameter	Weight (0-5)	Parameter	Weight (0-5)
<b>Arrangement and Accessibility</b>		<b>Personal Injury Collisions</b>	
Continuous Footway, raised table or build-out	0	Pedestrian & Cyclist Collisions - Severity	
Other Arrangement	3	Slight	2
Has dropped kerbs	0	Serious	4
Does not have dropped kerbs	4	Fatal	5
Has tactiles	0	Pedestrian & Cyclist Collisions - Number	
Does not have tactiles	3	1 (already counted above)	0
Crossing Obstructions	4	2	3
Flooding (or future flooding potential)	3	3+	5
<b>Crossing Width</b>		<b>Other Vehicle Collision Types - Severity</b>	
Up to 4.4m (20th Percentile)	0	Slight	1
Up to 7.4m (40th Percentile)	1	Serious	2
Up to 9.0m (60th Percentile)	2	Fatal	3
Up to 11.0m (80th Percentile)	3	Other Vehicle Collision Types - Number	
Up to 19.0m (95th Percentile)	4	1 (already counted above)	0
Up to 27.4m (100th Percentile)	5	2	2
<b>Trip Generators (within a 5 minute walk)</b>		3+	3
Education	5		
Network Centre	4		
Train Station	3		

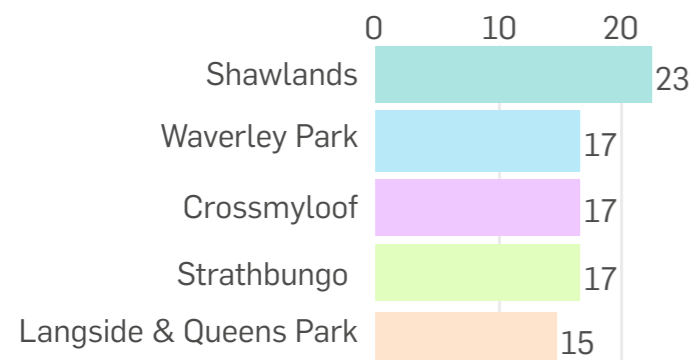




# 3. ANALYSIS AND PRIORITISATION

## 3.5 Prioritisation results

The 189 priority side road junctions were systematically ranked using the multi-criteria scoring matrix and subsequently categorised into percentiles ranging from 10th to 100th, as depicted in **Figure 21**. This information has been classified within QGIS in order to visualise the ranking of side roads in terms of their need for interventions. The junctions shown in red to amber represent the side roads which have a multitude of accessibility or road safety issues currently. The average score and rank for each zone was calculated and is presented in the bar chart below. Notably, Shawlands emerged as the highest priority neighbourhoods, with an average score of 23 (across 43 side roads).



**Key**  
Project study area

### Prioritised junctions (Stage 2)

- 10th percentile
- 20th percentile
- 30th percentile
- 40th percentile
- 50th percentile
- 60th percentile
- 70th percentile
- 80th percentile
- 90th percentile
- 100th percentile



**Figure 21:** Priority-Ranked Junctions Based on Multi-Criteria Scoring Matrix



Junctions with least issues Junctions with most issues





# 3. ANALYSIS AND PRIORITISATION

## 3.6 Threshold Assessment

As part of the prioritisation process, it is necessary to set a scoring threshold which must be met before a junction can be considered necessary to upgrade. This is a fundamental part of the process as not all junctions within the study area can be upgraded and not all junctions warrant it. Therefore, by setting a threshold, only the side roads which are most in need of accessibility improvements will be recommended for such.

To define the threshold, the weighting of certain parameters has been summed to reach a benchmark of 18 points which must be met in order for a side road to be recommended for improvements. By summing the weight of the least critical parameters (i.e., those which do not necessarily indicate lack of accessibility), a threshold of 17 is reached. This includes some parameters which already have a zero weighting; however, they have been included in the table for information.

The figure of 18 has been reached based on the calculation in Table 2 plus 1 point so that side roads must exceed the threshold be considered. It is noted that the threshold of 18 equals the median score across all 189 side roads assessed.

### 3.6.1 RATIONALE

**Arrangement and Accessibility** – the existing junction arrangement does not necessarily indicate lack of accessibility therefore this has been included in the threshold calculation.

**Crossing Width** – widths of 7.4m or less are generally ok for crossing.

**Trip Generators** – the proximity of local trip generators, whilst important for prioritisation, does not have a bearing on a junction's accessibility.

**Personal Injury Collisions** – vehicle collisions which are slight in nature (excluding those with pedestrians / cyclists) do not necessarily correlate to a side roads accessibility.

Figure 22: Table 2: Priority-Ranked Junctions Based on Multi-Criteria Scoring Matrix

Parameter (least critical)	Weight
<b>Arrangement and Accessibility</b>	
Continuous Footway, raised table or build-out	0
Other Arrangement	3
Has dropped kerbs	0
Has tactiles	0
<b>Crossing Width</b>	
Up to 4.4m (20th )	0
Up to 7.4m (40th )	1
<b>Trip Generators (within a 5-minute walk)</b>	
Education	5
Network Centre	4
Train Station	3
<b>Personal Injury Collisions</b>	
<b>Other Vehicle Collision Types - Severity</b>	
Slight	1
<b>TOTAL</b>	<b>17</b>







# 3. ANALYSIS AND PRIORITISATION

## 3.7 Key Intervention Locations (Top 50%)

The threshold assessment identified that the median score of 18 was the critical point at which a side road junction should be considered for upgrade to mitigate the accessibility issues identified. Figure 14 illustrates the locations of side roads which meet the threshold score of 18 and therefore are recommended for improvements. The junctions remain classified in 10 percentile increments (from 50th to 100th) to visually indicate the most critical junctions.

The trip generators and school catchment areas have also been included in the figure for reference as it is noted that some of these junctions could be upgraded as a standalone project, should funding be available. On that basis, it is likely that side roads which serve a strategic function (for example, those located on key school walking routes or in town centres) will be prioritised for such funding.

Notwithstanding the above, all of the side roads shown within **Figure 23** have been coupled with a side road typology as a recommendation (see overleaf).

An A1-scale General Arrangement drawing of **Figure 23** is provided in **Appendix D**.

### Key

Project study area

### Prioritised junctions (score range)

- 18-19
- 19-21
- 21-22.4
- 22.4-26
- 26-34

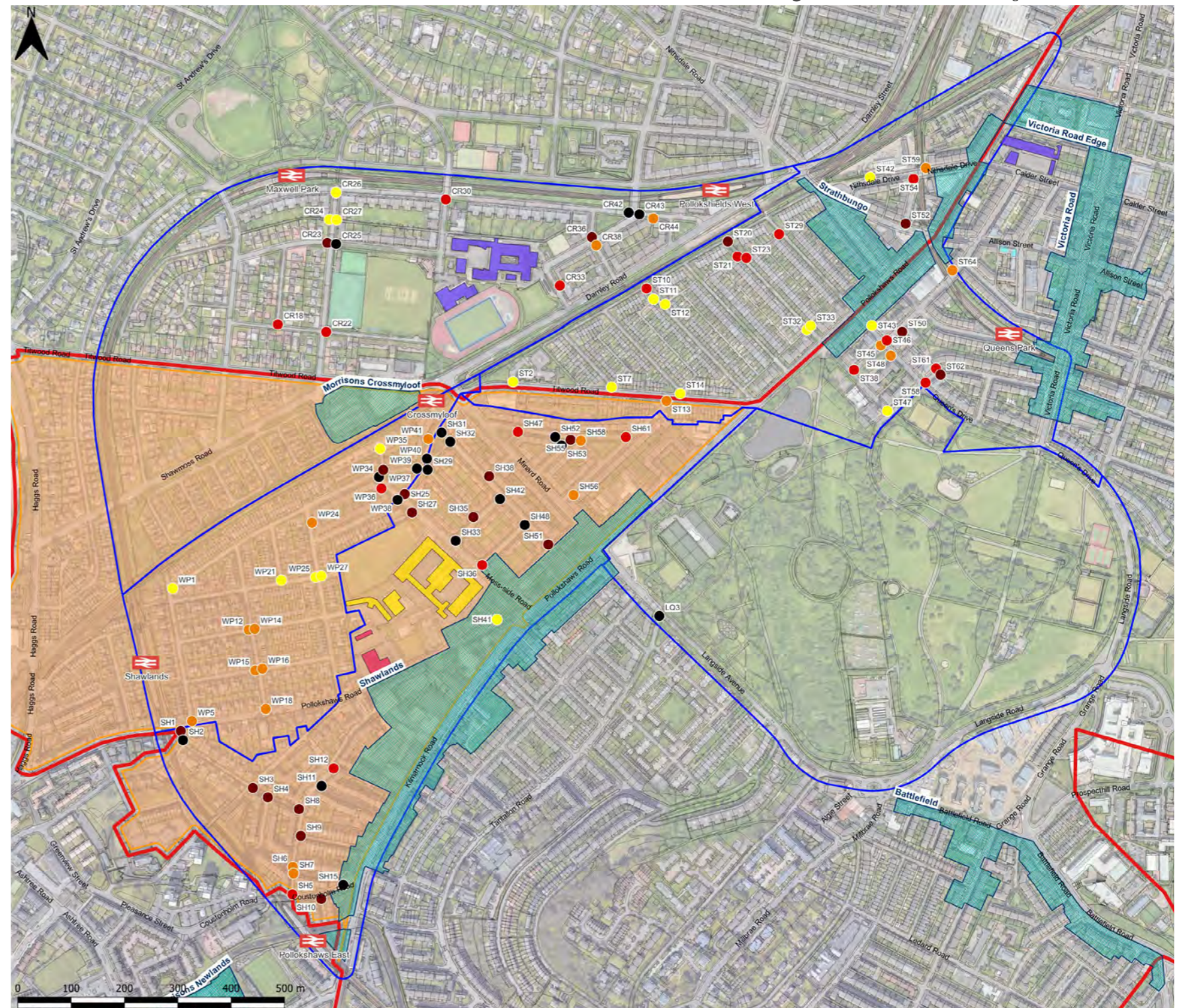
### Trip generators

- Train station
- Network centre
- Shawlands Primary School
- Shawlands Academy
- Hutchesons' Grammar School

### School catchments

- Shawlands Primary School catchment
- Shawlands Academy catchment

Figure 23: Side roads exceeding threshold assessment







# 3. ANALYSIS AND PRIORITISATION

## 3.8 Engagement stages

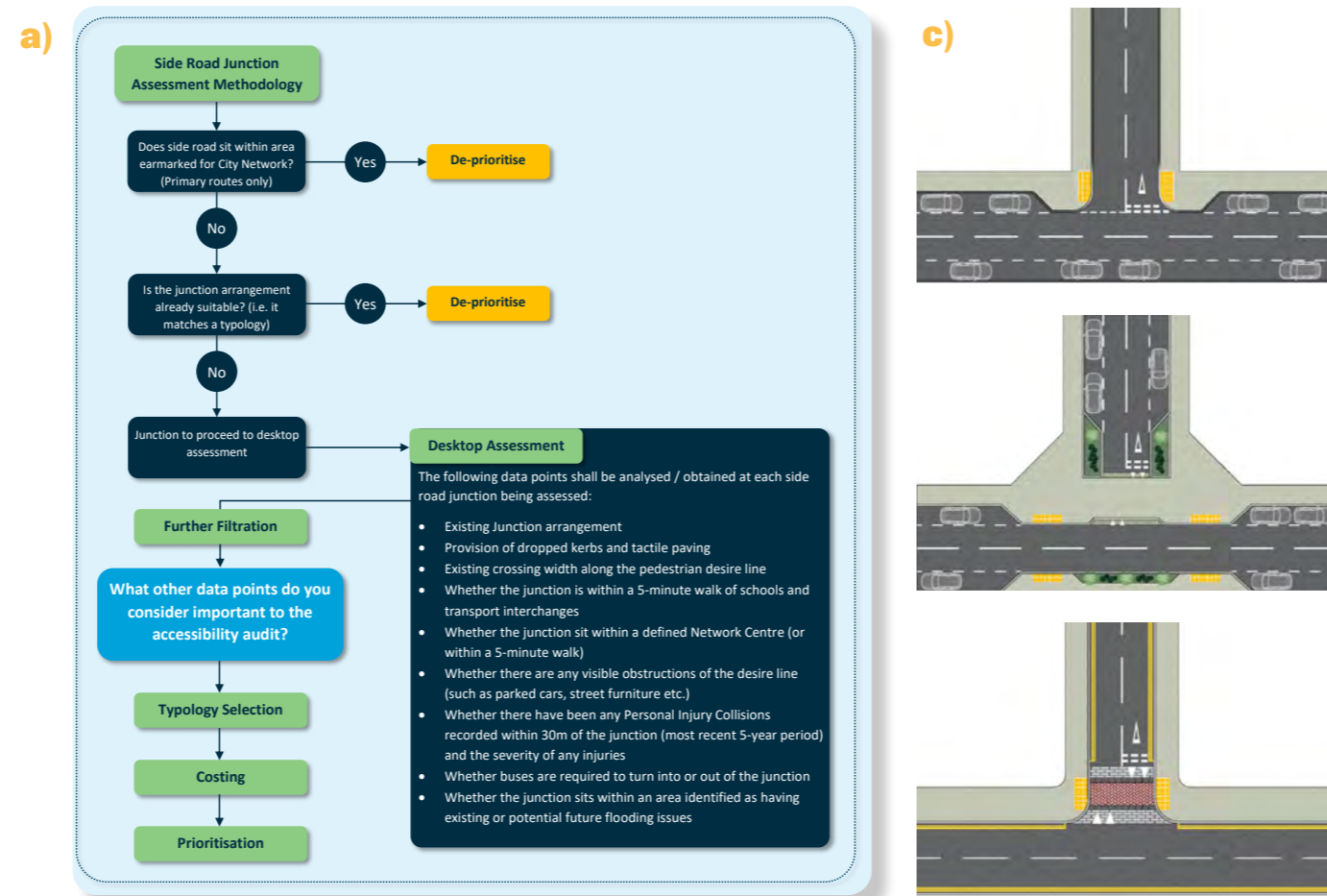
As set out in the introduction a range of engagement has been undertaken as part of stage 2. This has helped inform and, most importantly, inform the development of key issues and opportunities in the area over the last 3 months. The following sets out the key stages of the engagement, concluding with a selection of some feedback received.

### 3.8.1 Stage 2A: Emerging designs and ideas

A drop-in event took place in September to showcase the Improving Connections: Shawlands and Strathbungo project as an opportunity to talk to people in more depth, explain the project and its aims and objectives. This was attended by 18 people. A dedicated website with information was updated to promote the events with a Design Workbook was made available giving the community an early opportunity to view and comment on the initial analysis and emerging ideas (see **figures 24 and 25**).

There were 32 responses to an online and paper survey that was made available for a month in September/October fed into the next stage of the design process.

**Figure 24:** Early assessment methodology (a) and identification of junctions to be assessed (b) and potential palette of interventions (c).



**Figure 25:** Exhibition material displayed as part of emerging designs and ideas in September

**LIVEABLE NEIGHBOURHOODS**  
Pollokshields East to Gorbals

**IMPROVING CONNECTIONS: SHAWLANDS & STRATHBUNGO**

**THE AREA:**

Re-prioritising the safety, convenience and comfort for those walking and wheeling within these two neighbourhoods by addressing many of the area's difficult junctions.

Project aims: To address accessibility and inclusivity constraints at existing side road junctions through:

- Improved permeability
- Removing barriers to walking
- Strengthening connections between neighbourhoods and key trip attractors

**OPPORTUNITIES, IDEAS AND ASSESSMENT STRATEGY:**

**ASSESSMENT METHODOLOGY**

**MAP OF SIDE ROADS TO BE ASSESSED**

**PALETTE OF JUNCTIONS**

Neighbourhood	Number of side roads
Crossmyloof	48
Landside & Queen's Park	11
Strathbungo	66
Shawlands	80
Waverley Park	41
<b>Total</b>	<b>246</b>

**Neighbourhood** | **Number of side roads**

Crossmyloof | 48

Landside & Queen's Park | 11

Strathbungo | 66

Shawlands | 80

Waverley Park | 41

**Total** | **246**

**PALETTE OF JUNCTIONS**

- General accessibility upgrades
- Asbestos buildings
- Raised table pedestrian crossing
- Continuous footway
- Direct driveway or lane access
- Integrated pedestrian priority and planning solution



**Stage 2A feedback:**

"Most dangerous junction in Glasgow as a pedestrian or cyclist: Junction of Titwood Road with Minard Road and Dinmont Road."

"Current problems include speeding traffic, high traffic volumes for a minor residential street, no safe crossings for children, and a particularly dangerous junction at Minard Road."







# 3. ANALYSIS AND PRIORITISATION

## 3.8.2 Stage 2B: Developed concept design

In November a public showcase exhibition and a 'Meet the Designer' session was held to display the developed project design and an updated online design workbook was made available (see figures 26 and 27).

There were 6 responses to an online survey that was made available for two weeks in November, while 10 people attended the drop in.

## 3.8.3 GCC workshops/meetings

In addition to community engagement there were a series of vital workshops and meetings held with departments within Glasgow City Council. These helped refine the design to ensure it aligned with internal guidance and existing projects in the area.

In October, a meeting with Glasgow City Council Roads colleagues took place to inform internal departments, seek key information regarding junction design, and to gain buy in for future development.

Figure 26: November exhibition boards

**LIVEABLE NEIGHBOURHOODS**  
Mansewood to Shawlands  
IMPROVING CONNECTIONS:  
SHAWLANDS & STRATHBUNGO

**VISION FOR THE AREA**  
The Shawlands and Strathbungo Accessibility Audit seeks to address a range of accessibility and permeability issues within the Shawlands and Strathbungo area by improving pedestrian permeability, removing barriers to walking and generally strengthening connections between residential zones and key trip generators and attractors.

**OUTCOME OF ACCESSIBILITY AUDIT**

**PRIORITISATION METHOD**

**LIVEABLE NEIGHBOURHOODS**  
Pollokshields East to Gorbals  
IMPROVING CONNECTIONS:  
SHAWLANDS & STRATHBUNGO

**IDENTIFIED INTERVENTIONS**

**INTERVENTION OPTIONS**

**POSSIBLE DESIGN OPPORTUNITIES**

Figure 27: Selected pages from the design workbook accessible on the project website

**GLASGOW LIVEABLE NEIGHBOURHOODS**  
Design Workbook  
November 2023  
GlasgowLN@atkinsglobal.com

**6. Improving Connections: Shawlands and Strathbungo**

The Shawlands and Strathbungo Accessibility Audit seeks to address a range of accessibility and permeability issues within the Shawlands and Strathbungo area by improving pedestrian permeability, removing barriers to walking and generally strengthening connections between residential zones and key trip generators and attractors.

Consultation with the communities identified the following as being key issues to be addressed at existing side road junctions:

- Lack of direct crossings;
- Wide belt mouths;
- Lack of pedestrian and cycling priority;
- Barriers for people with mobility issues;
- Lack of level access; and
- Neglected public realm and maintenance.

The prioritisation process identified that resolving these issues for the community was both achievable and desirable within the Liveable Neighbourhoods programme.

There are two possible mechanisms for delivering identified upgrades:

- During programmed business as usual maintenance operations; or
- As a stand-alone project where multiple junctions require attention within a key area.

**6. Improving Connections: Shawlands and Strathbungo**

**Identified Interventions**

The accessibility audit identified a key area within Shawlands that has significant issues across multiple junctions. The plan on this page demonstrates some of the current problems along Diamond Road, near to Shawlands Academy and Crossford Train Station, which could be addressed as part of a 'standalone' focused project.

By implementing both raised tables and continuous footways where appropriate, many of the current accessibility constraints can be addressed and drastically improved. One of the key benefits of this is that Diamond Road also has wider connections to other projects identified during the Stage 1 Engagement, including Moss Side Greenway Improvements and Waverley Park Filtered Permeability. This project therefore offers the opportunity to quickly deliver critical interventions on the ground which will have far-reaching benefits for a wide range of users.

**Interventions Options**

**Example Issues on Diamond Road:**

Excessive junction belt and crossing width encourage high vehicle speeds.

High pedestrian flow but distinct lack of pedestrian crossing infrastructure.

Continuous footways are used to visually show the priority for pedestrian across side roads. This is achieved through raising the height of the crossing and the use of consistent materials across the junction as are used for the approach footways. These types of junctions are generally only appropriate where pedestrian flows are higher than 100 pedestrians per peak hour and where vehicle flows are lower than 100 vehicles per peak hour.

**Interventions Options**

1. Raised Tables are used to slow vehicles on approach to a junction and therefore increase the likelihood that drivers will give way to pedestrians waiting to cross. This is achieved by raising the section of the carriageway of the crossing point to be flush with the footway height. This type of junction is appropriate on side roads where the main road speed is less than 30mph or less (i.e. in built-up areas), particularly where there is a medium to high pedestrian flow such as in town centres or along key routes.

2. Continuous footways are used to visually show the priority for pedestrian across side roads. This is achieved through raising the height of the crossing and the use of consistent materials across the junction as are used for the approach footways. These types of junctions are generally only appropriate where pedestrian flows are higher than 100 pedestrians per peak hour and where vehicle flows are lower than 100 vehicles per peak hour.

## 3.8.4 KEY FEEDBACK THEMES

Some of the key themes that emerged from feedback during engagement stages 2A and 2B related to continuous footways, modal filters, more trees, cycle infrastructure improvements, and improved connections, especially at difficult junctions. Below are a selection of comments that reflect these themes, for the full list of feedback refer to appendix B.

**Stage 2B feedback:**

"More trees, continuous footways, segregated cycle lanes. Modal filters!"

"Will your plan to deal with the difficult junction (for pedestrians, cyclists AND drivers) at either end of Titwood Road?"

"There are opportunities for proper cycle infrastructure like we have on Victoria Road"

"The quality of public realm across all streets needs a significant overhaul. If you want to improve connections, consider placing high quality streetscapes and detangling narrow roads"



# 4. PALETTE OF INTERVENTIONS



A key goal of liveable neighbourhoods is to enhance the attractiveness of walking / wheeling and cycling for short journeys. Pedestrian and cycle priority measures are therefore important components in designing successful liveable neighbourhoods and should be placed along routes where the demand from people who walk / wheel and cycle is highest, known as desire lines. Pedestrian and cycle priority infrastructure solutions include the following, with more details provided in the respective information sheets:

- General accessibility upgrades to accommodate users with protected characteristics.
- Side road treatments – whereby the road is raised to the level of the kerb, making it easier for people who are walking / wheeling and cycling to cross.
- Continuous Footway (or Copenhagen) crossings – takes the raised treatment a step further and is where the footway / cycleway is made continuous across the side road.
- Enhanced Continuous Footway crossings with Green-blue infrastructure built in as a form of sustainable drainage (and also performing as a control feature for undesirable parking).

The remaining junction forms illustrated below are included to demonstrate the range of upgrade options available to tackle the accessibility issues in the area whilst remaining cognizant of the need to maintain an appropriate level on street parking for residents. Additional measures that could be deployed include utilising junction build-outs to formalise the parking whilst deterring parking within the junction itself. This has the added benefit of improving visibility of the crossing for drivers.

Another measure includes not over-engineering lower trafficked accesses (such as back lanes or property accesses) to provide simple driveway-style arrangements. This type of treatment reverts smaller / local side roads to a more intuitive arrangement for pedestrian priority whereby the need for facilities such as dropped kerbs or tactile paving is removed due to the lower levels of traffic.

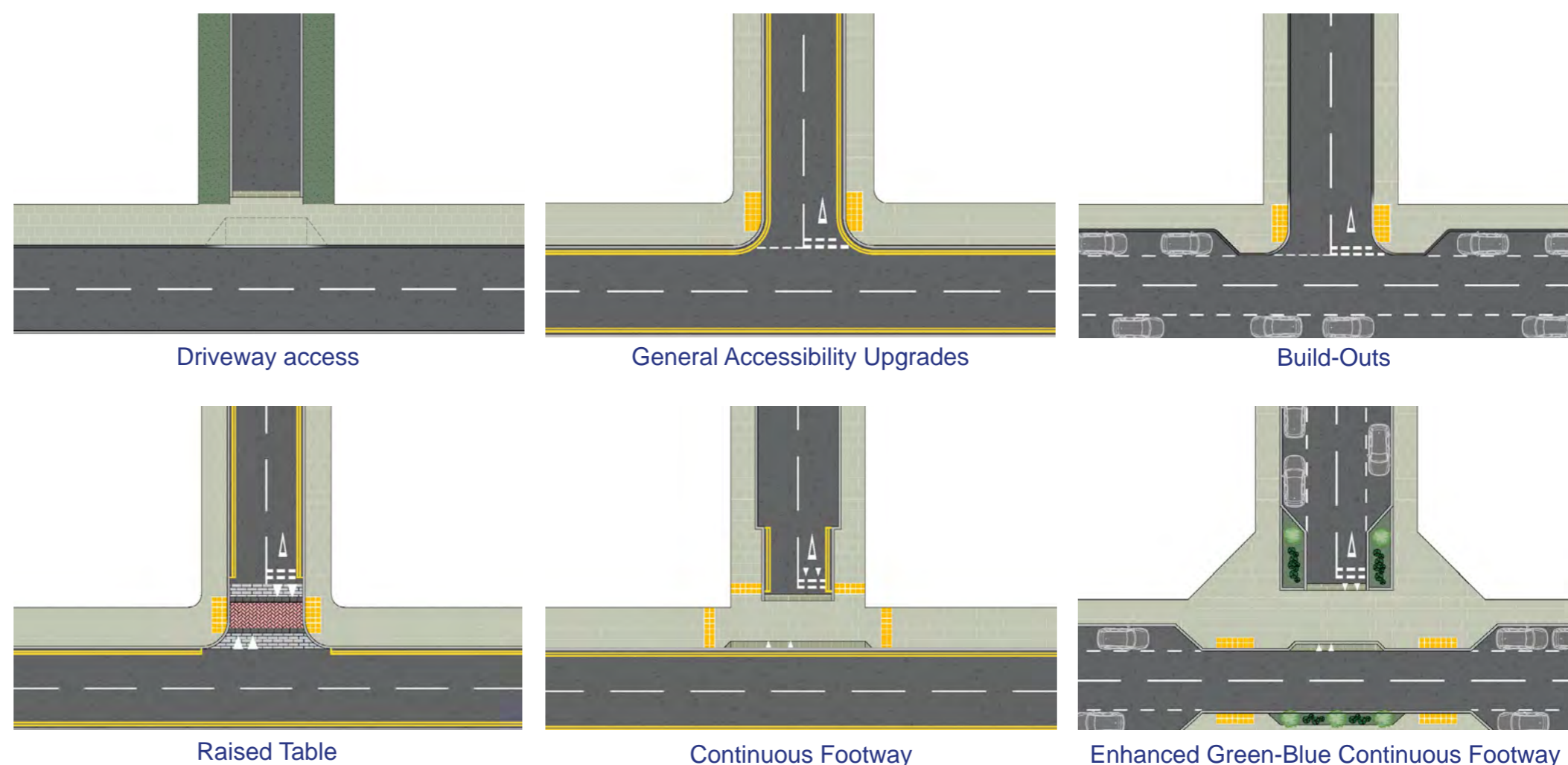


Figure 28: Palette of Intervention







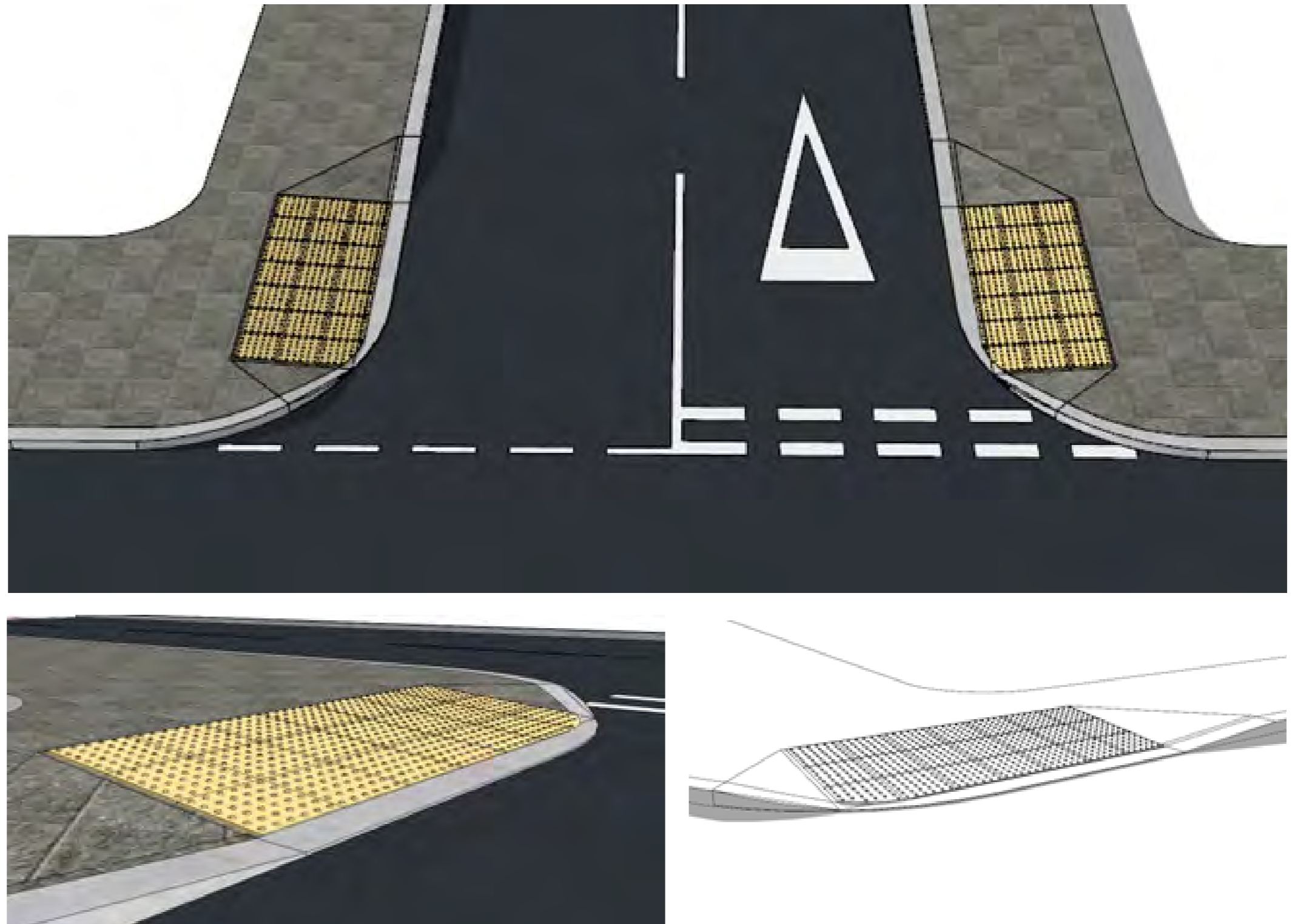
## 4. PALETTE OF INTERVENTIONS

### 4.1 General Accessibility Upgrades

To better accommodate pedestrians crossing the side road, principally those with visual or mobility impairments. The baseline assessment identified there is a substantial number of junctions which lack dropped kerbs and tactile paving across the study. General accessibility upgrades are a simple and cost-effective upgrade. This type of intervention forms the do-minimum option for any junction which does not already have this infrastructure built in (which is the vast majority).

Notwithstanding the above, it is not always practical to simply provide dropped kerbs and tactile paving as this will not address all accessibility issues. The baseline assessment also identified that there is a significant issue in some areas with excessive crossing widths and wide chamfered bell mouths. In such locations, general accessibility upgrades must include narrowed crossing widths and more appropriate turning radii. This will ensure that the tactile paving can be delivered in a straight alignment as per the design standards. Finally, where existing on-street parking occurs, there may be a need to formalise this parking using build-outs as referenced above. This would form part of the general accessibility upgrades as it will also support improved visibility for all road users.

Figure 29: General accessibility upgrades 3D model







## 4. PALETTE OF INTERVENTIONS

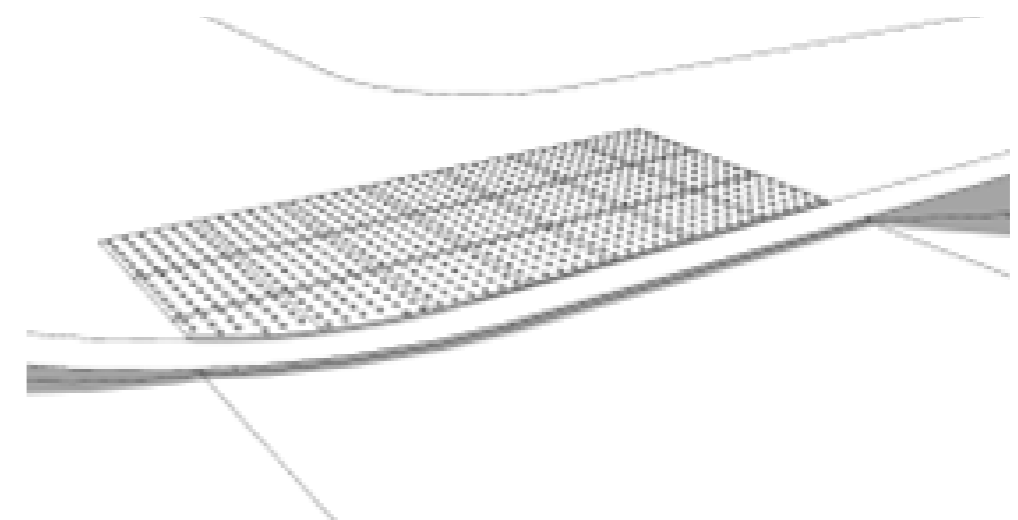
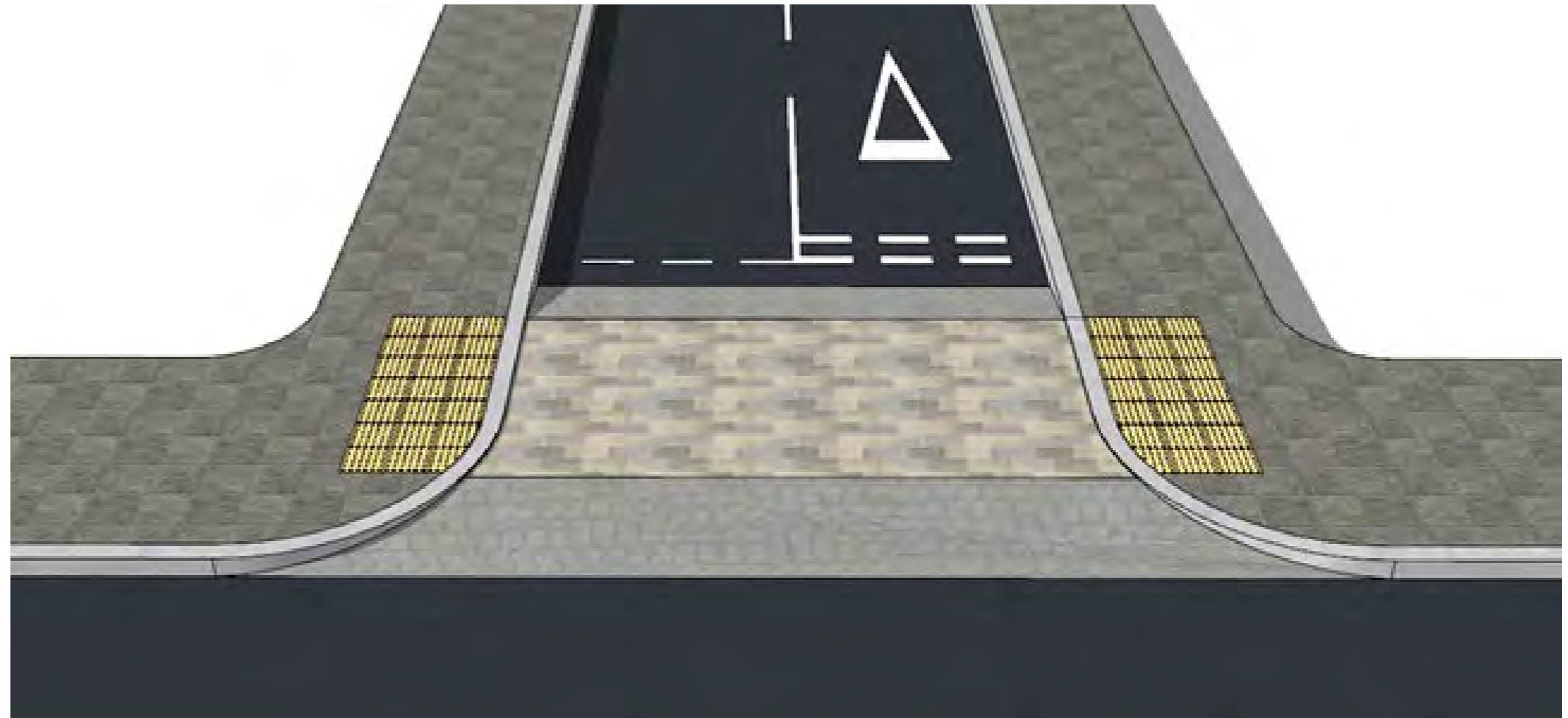
### 4.2 Raised Table Crossing

The Highway Code has recently been updated to improve priority for pedestrians crossing side roads. This stipulates that drivers must give-way to pedestrians crossing or waiting to cross the side road arm, regardless of whether the driver is turning into or out of the side road.

Raised Table are used to slow vehicles on approach to a junction and therefore increase the likelihood that drivers will give-way to pedestrians waiting to cross in line with the Highway Code. This is achieved by raising the section of the carriageway at the crossing point to be flush with the footway height via a ramped hump across the side road arm. This type of junction is appropriate on side roads where the main road speed is 30mph or less (i.e. in built-up areas), particularly where there is medium to high pedestrian flows such as in town centres or along key routes.

There are various examples of existing raised tables within the study area. However, these are generally in poor condition due to the material used (primarily block paving). This was also fed back as part of the engagement process and raises an important issue around material specification. This should generally be an asphalt material to match the existing road to reduce the maintenance burden on the Council.

Figure 30: Raised table crossing 3D model





## 4. PALETTE OF INTERVENTIONS

### 4.3 Continuous Footway

Continuous footways are used to visually show the priority for pedestrians across side roads. This is achieved through raising the height of the crossing and the use of consistent materials across the junction as are used for the approach footways. These types of junctions are generally only appropriate where pedestrian flows are higher than 180 pedestrians per peak hour and where vehicle flows are lower than 100 vehicles per peak hour (see **Appendix E** for design standard information).

A fully continuous asphalt or paved surface stretches across the side arm to remove / reduce the visual delineation between it and the carriageway. This is a similar principle to a raised table but goes a step further by providing a visual indication to both pedestrians and drivers that the pedestrian has right-of-way and that vehicles must yield before crossing the footway. Tactile paving is optional but is often preferred by partially sighted groups to warn of the danger that this is still a shared space with vehicles. GCC's Interim Delivery Plan stipulates that tactile paving should be provided as per the 3D visualisation opposite.

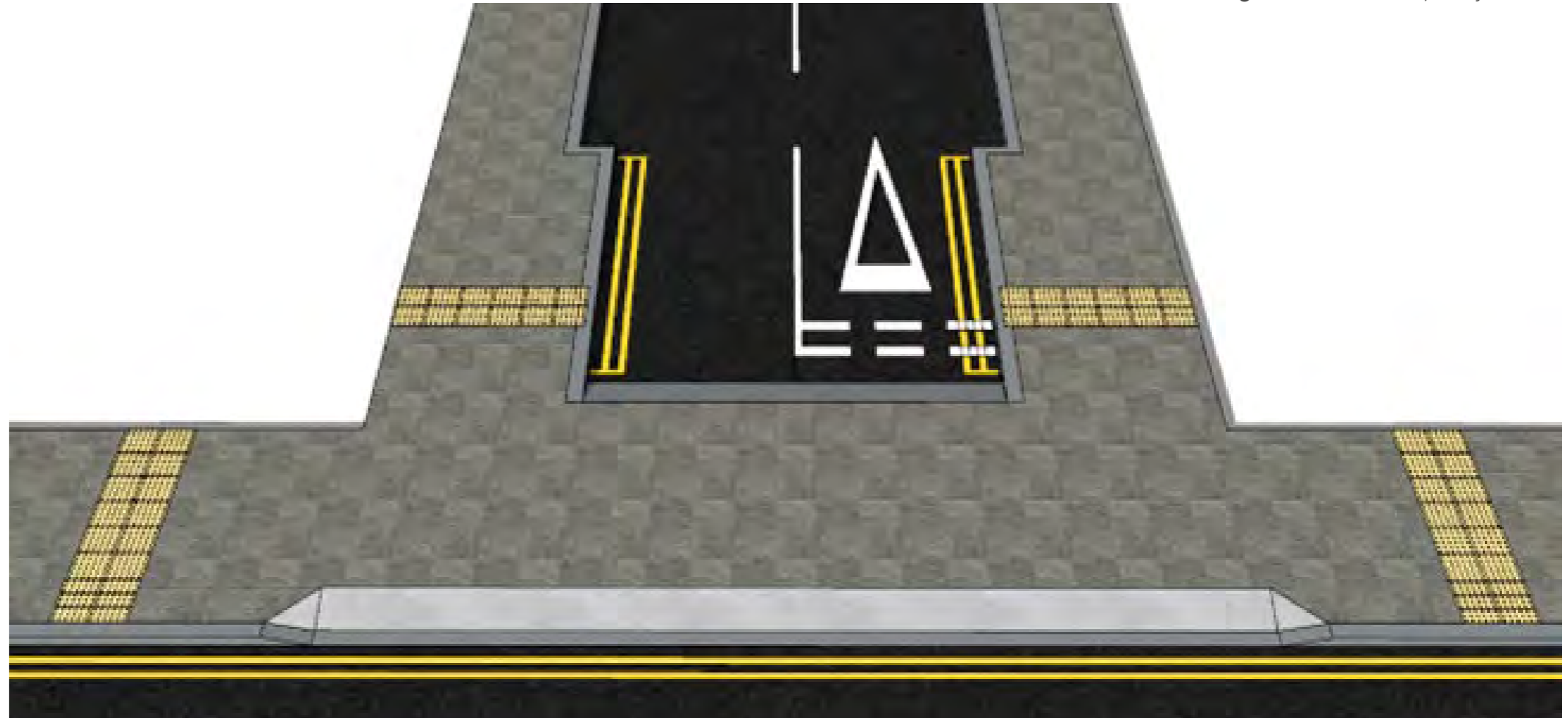
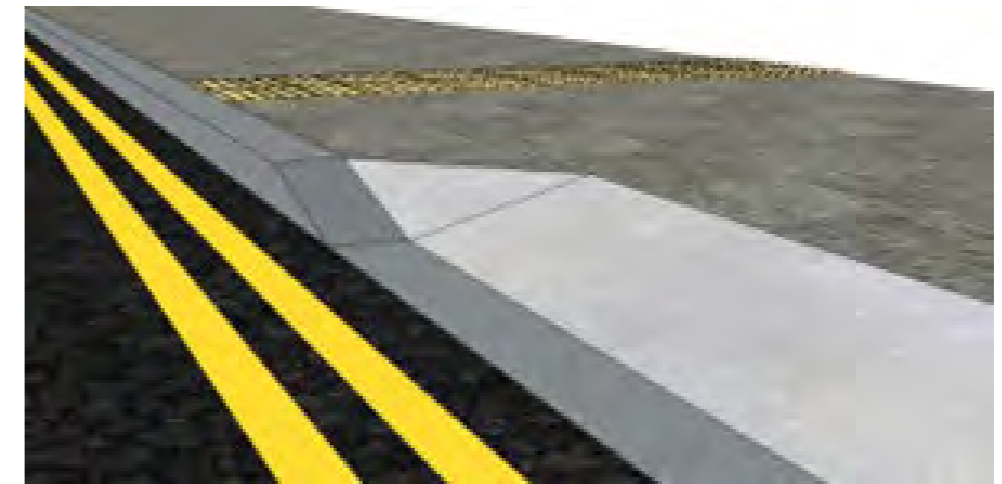
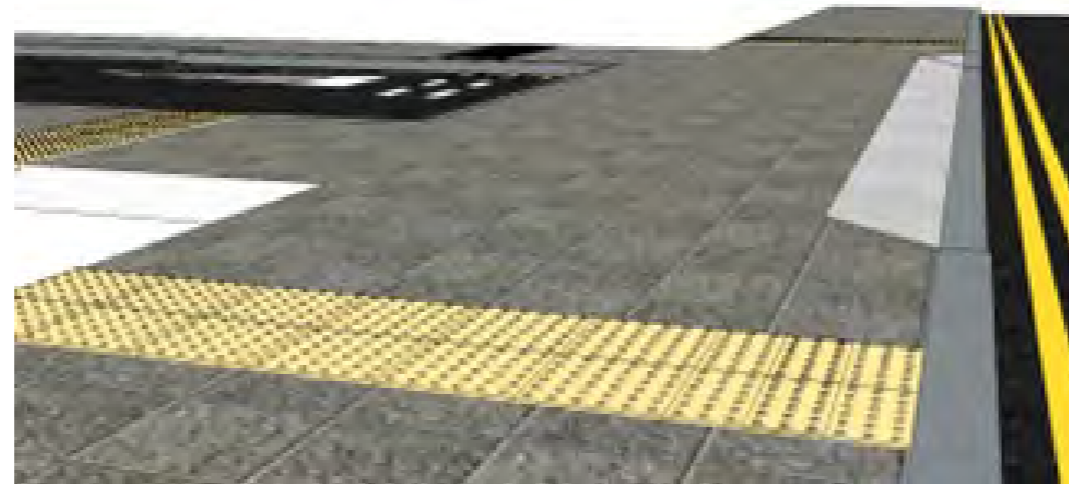


Figure 31: Continuous footway 3D model







# 4. PALETTE OF INTERVENTIONS

## 4.4 Typology Recommendations

Applying the palette of available intervention options to the prioritisation index allows recommendations to be made as to the most suitable typology to be deployed at each side road. Recommendations have been made for the 94 junctions which meet the threshold of 18 points.

The recommendations are set out within Figure 19 opposite, with an equivalent A1 drawing provided in **Appendix D**. These recommendations form the basis of potential future upgrade works to be progressed further by GCC's Roads and/or Maintenance teams. **Appendix D** also contains further, detailed recommendations on various site-specific requirements, for example, where the pedestrian crossing width should be reduced, if there is a requirement for build outs or removal of obstructions, and whether existing drainage provisions should be reviewed.

Please note that these recommendations are based purely on analysis of the available baseline data and do not consider things like current traffic volumes which may have an impact on the feasibility of certain typologies. This information is intended to guide the prioritisation of interventions. However, there remains a requirement to review individual junctions on a case-by-case basis as future design work progresses.

Figure 32: Typology recommendations

### Key

Project study area

### Typology recommendations

- Continuous footway
- Driveway access (continuous footway)
- General accessibility upgrades
- Raised table







# 4. PALETTE OF INTERVENTIONS

## 4.5 Standalone Junction Improvement Strategy

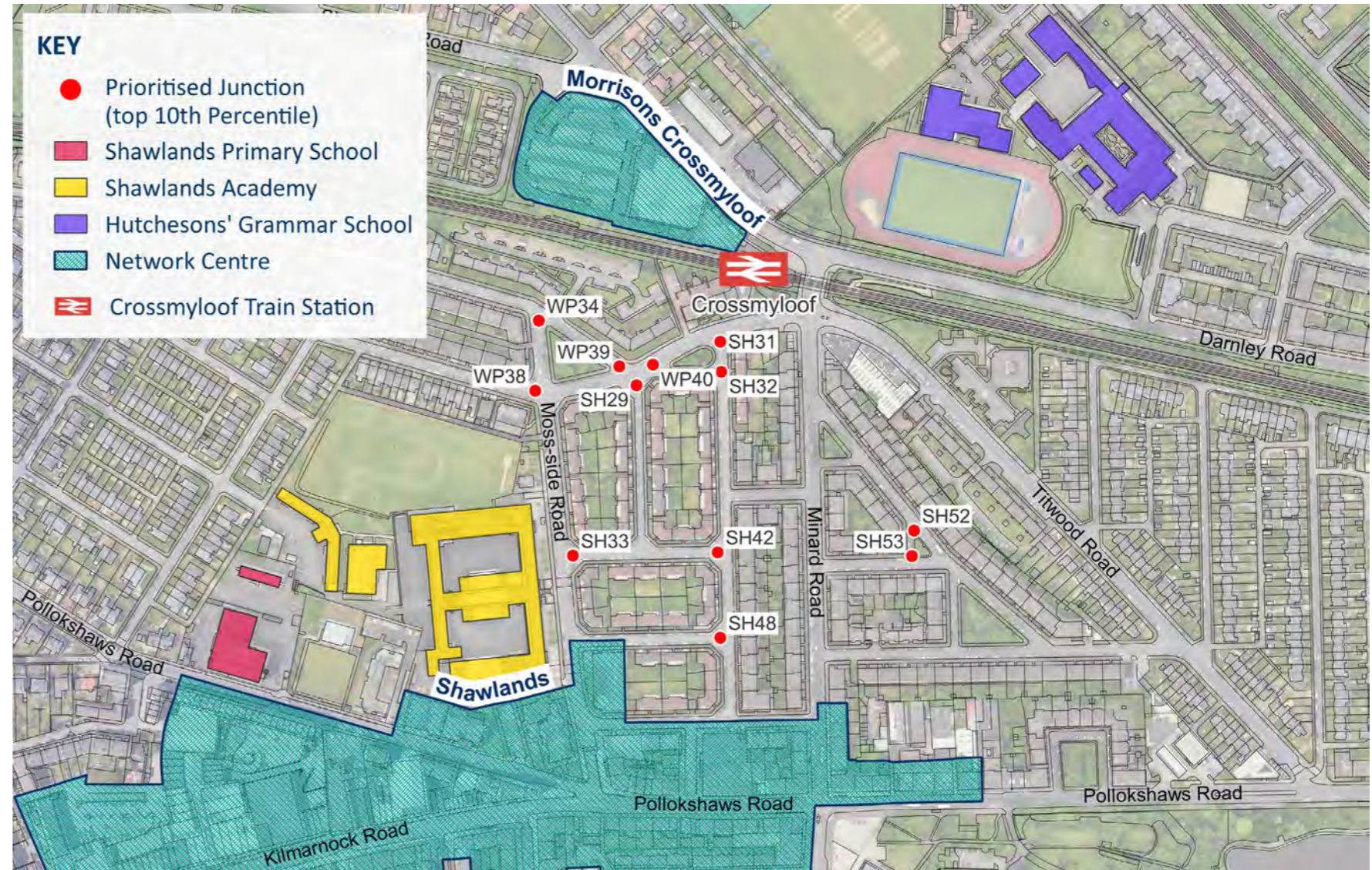
As noted previously in the design report, there is also the opportunity for the accessibility audit to identify a flagship project which could be delivered in a key intervention area. To identify where this project could be located, the GIS model was further filtered for the side roads within the top 10th percentile only. The resultant 19 side roads were predominantly located within the Shawlands neighbourhood (12 in total), with a key hotspot noted around the Dinmont Road area along its northern boundary (shared with Waverley Park where there are a further four junctions in the top 10th percentile).

Further, the area along Dinmont Road sits immediately adjacent to two other projects which were identified during the Stage 0-1 engagement process of the wider Liveable Neighbourhoods Project. These are:

1. Waverley Park Filtered Permeability (which has been the subject of a previous study); and
2. Moss Side Greenspace Improvements, which included reviewing potential improvements to the triangular wedge of unused greenspace between Dinmont Road, Moss-Side Road and Durward Avenue, including improving the accessibility from the surrounding residential areas across these roads.

On review of the key issues at the junctions on Dinmont Road (leading to their inclusion within the top 10th percentile), it is clear that there are a multitude of existing accessibility and road safety concerns which must be addressed, including both pedestrian and cyclist PICs, excessive crossing widths and an identified flooding issue at its western extent. In addition, it lies within a key school catchment and along a primary commuter route (for people travelling between Shawlands and Crossmyloof Train Station). All of these factors unequivocally support the inclusion of Dinmont Road as an early intervention / flagship project to be developed and deployed as a matter of urgency. On that basis, the design team has produced a concept design for the potential upgrade of the seven side road junctions on or adjacent to Dinmont Road (see overleaf).

Figure 33: Most critical 10% (Shawlands)



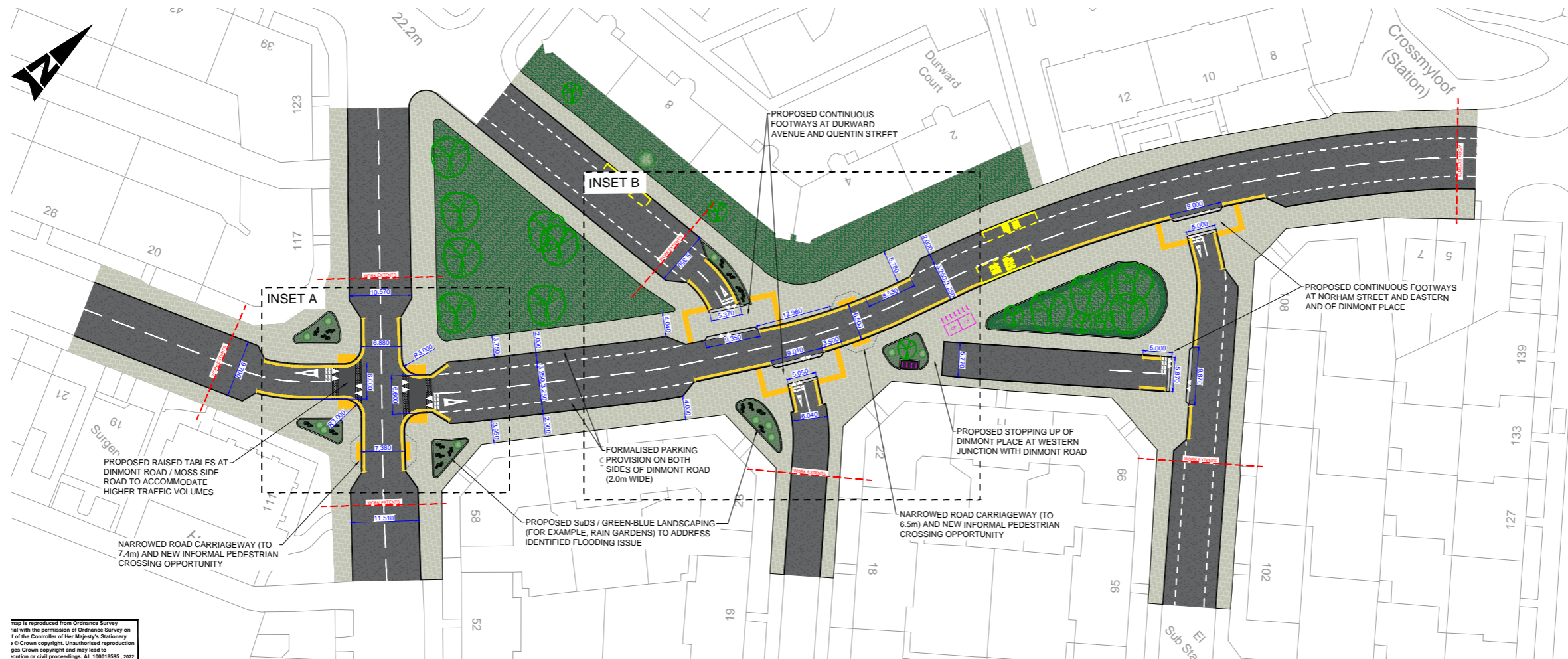




# 4. PALETTE OF INTERVENTIONS

## 4.6 Dinmont Road Concept General Arrangement Plan

Figure 34: Dinmont Road concept general arrangement plan (See Appendix C for A1-drawing)







# 4. PALETTE OF INTERVENTIONS

## 4.7 Dinmont Road Visualisation 1

Figure 35: Bird's eye view visualisation showing an example of continuous footway side street junctions







## 4. PALETTE OF INTERVENTIONS

### 4.8 Dinmont Road Visualisation 2

**Figure 36:** Ground level view visualisation showing an example of continuous footway side street junctions







## **Appendix A: List of Stakeholders**



# Mansewood to Shawlands Liveable Neighbourhoods

## Stakeholders Contacted

Category	Stakeholder
<b>Accessibility</b>	Arthritis Care Euan's Guide Centre for Sensory Impaired People Glasgow Access Panel Glasgow Disability Alliance Guide Dogs Scotland RNIB Scottish Disability Equality Forum
<b>Active Travel</b>	Bike for Good GoBike Shawlands Bike Bus Soul Riders South West Community Cycles Get Glasgow Moving Sustrans Scotland Living Streets Scotland Paths for All
<b>Community Council</b>	Mansewood & Hillpark Community Council Newlands & Auldhouse Community Council Pollokshields Community Council Shawlands & Strathbungo Community Council
<b>Community Group</b>	The Strathbungo Society Southside Fringe Festival Friends of Pollok Park Friends of Queens Park Langside Hall Mansewood Allotment Association Pollokshaws Community Hub Pollokshields Area Network Pollokshields Heritage Group Pollokshields Mutual Aid and Community Food Point



	<p>Pollokshields Trust</p> <p>Strathbungo Eco Group</p> <p>Waverley Park Collective</p> <p>Mansewood Community Centre</p> <p>The Bowling Green</p> <p>Nan McKay Community Hall</p> <p>South Seeds</p>
<b>Education</b>	<p>Cuthbertson Primary</p> <p>Hillpark Secondary</p> <p>Hutchesons Grammar</p> <p>Pollokshaws After School Service</p> <p>Shawlands Academy</p> <p>Shawlands Primary</p> <p>St Convals RC Primary</p> <p>Tinto Primary</p>
<b>Glasgow City Council</b>	<p>Community Council Officers</p> <p>Neighbourhood Liaison Officers</p> <p>Housing Officers</p> <p>Economic &amp; Planning Officers</p> <p>Spatial Strategies Officers</p> <p>Roads Officers</p> <p>Newlands Auldburn Area Partnerships Officer</p> <p>Pollokshields Area Partnership Officer</p>
<b>Housing Associations</b>	<p>Urban Union</p> <p>Glasgow Housing Association / Weatley Group</p> <p>Southside Housing Association</p>
<b>Place of Worship</b>	<p>Auldhouse Community Church</p> <p>Greenview Church</p> <p>Pollokshaws Parish Church</p> <p>Shawlands Church</p> <p>Shawlands Trinity Church</p> <p>St Margaret of Scotland</p> <p>Glasgow Gurdwara Guru Granth Sahib</p> <p>Langside Synagogue</p> <p>Madrassa Taleem ul Islam</p>



	<p>Madrassa-Tul-Madinah (Dawat-E-Islami)</p> <p>Masjid Noor</p> <p>Pollokshaws Methodist Church</p> <p>Pollokshields Church of Scotland</p> <p>St Albert's Catholic Church</p> <p>St Ninian's Scottish Episcopal Church</p>
<b>Political</b>	<p>Ward 2 (Newlands / Auldburn)</p> <p>Ward 6 (Pollokshields)</p>
<b>Other</b>	<p>Pollokshaws Library</p> <p>Pollokshields Library</p> <p>My Shawlands BID</p> <p>ArtSpace G41</p> <p>Tramway</p> <p>Glasgow Centre for Population Health</p> <p>Glasgow Life</p> <p>Glasgow Chamber of Commerce</p> <p>Glasgow Council for Voluntary Sector</p> <p>Glasgow Third Sector Forum</p> <p>Glasgow Bus Partnership</p> <p>NHS Greater Glasgow and Clyde</p> <p>Community Activist Panel</p> <p>Glasgow's Schools Young People's Forum</p> <p>One Parent Families Scotland</p> <p>Simon Scotland</p>



## **Appendix B: Summary of Stage 2 Engagement Feedback**



## Improving Connections Shawlands and Strathbungo

### Stage 2a Feedback (September-October 2023)

Do you think our concept design captures all the site's /area's opportunities and constraints?	If not, let us know what we've missed?	Do you have any other comments/feedback?
Yes		I think you also need to take into consideration the fact that Ravenswood Drive could also be connected properly to existing cycle routes, if traffic calming measures and/or the Dinmont/Durward loop were implemented. It is a cut through for people coming into Shawlands from Pollokshields (via Shields Rd/Darnley Gardens/Boleyn Rd/Darnley Rd/Dinmont Rd, or from Maxwell Park/St Andrew's Drive via Dolphin Rd. It then allows connection either to Pollok Park, cutting through Rossendale Rd, or the White Cart walkway or Langside cycle paths, via Eastwood Ave, Carment Dr, Regwood. I use these routes frequently in order to stay off the dangerous main roads and avoid Shawlands Cross.
Yes		
Yes		
Yes		More trees, continuous footways, segregated cycle lanes. Modal filters!
No	It's not clear if you plan to deal with the difficult junction (for pedestrians, cyclists AND drivers) at either end of Titwood Road.	It would be worth looking at the Minard/Pollokshaws (A77) junction to see if it can be improved. Eg to allow m77/Hampden traffic priority on event days. Using 4-way lights (each direction taking turns) could allow lifting of banned turns (often disregarded by drivers) & allow programming of lights for the different traffic flow on Hampden event days.



Yes		Looking great! There's also a empty plot which could be a pocket park at the corner of Leslie street and Forth street, that folk regularly use for dumping. If you're making one nearby could be good to improve that space too. Thanks!
Yes		These proposals look wonderful and would make a transformative impact. I particularly like the Figure 40 designs and these should be used wherever possible. I hope that both ends of Titwood Road can have treatments like that.
No	You have a good understanding of some of them. No mention of overgrown hedges causing pavements to be so narrow as to be unusable at times, especially when combined with pavement parking.	Please consider when looking at tactile paving and raised table crossings that these often become loose over time - raised tables are a trip hazard at a time when pedestrians need to be looking all around them not watching where they place their feet! And tactile paving slabs seem to loosen and become waterlogged so walking on them often results in an unexpected soaked foot.
No	I am hopeful that you took the time to walk and drive around these streets at peak times and particularly on sunny days where the park is being used by thousands of people and on dark winter nights.	I live on Marywood square and have to turn right onto Pollokshaws road to get to work. It's honestly quite unbelievable the number of dangerous decisions the council have made to make this a catastrophe waiting to happen (although I believe there have been crashes here ) as you turn right you are faced with many dangers. A bus shelter usually with a mass of people obscuring your view. If you are lucky enough to see past the people, the council have placed a large black bin to make sure you are can't see any oncoming traffic. There are two lanes that have traffic coming at very different speeds , bus lanes and static traffic. Then the council opened a park gate across from the Junction where there is a steady stream of dog walkers , teenagers etc running through traffic. I honestly feel frightened every morning facing this. There seems to be a concerted effort to add as much danger as possible to this turning. Obviously no one has bothered to drive or even stand her to see the impact of their decisions. Is there no holistic strategy to the planning on our streets ?
No	There are opportunities for proper cycle infrastructure like we have on Victoria Road	



<p><b>Yes</b></p>		<p>Paths for All welcomes the opportunity to respond to this consultation. We do not have the local knowledge to comment on the detail of the proposals but would like to make some general points. We will limit these to aspects that have direct relevance to the work and objectives of Paths for All. We support Liveable Neighbourhoods - Glasgow's approach to blending the 20-minute neighbourhood concept with the place principle. We agree that the global climate crisis as well as the COVID-19 pandemic has had a significant impact on local neighbourhoods and town centres highlighting the importance of local public space and the need to re-prioritise the balance of streets. We support the intention to rebalance the way streets are designed and used to make them more people friendly and to place active travel and public transport as the first choices for transport in the city. Paths for All is Scotland's walking charity. Established in 1996, we work in partnership with 30 national organisations with a shared vision of a healthier, happier, greener Scotland, where everyone can be active every day. Walking is the easiest and most accessible way to be active, and our work to change the way people move, travel, and enjoy life in Scotland is focused on the following three themes: • Walking is for everyone. • Walking is for everywhere. • Walking is for every day. Our strategy sets out our vision for tackling physical inactivity, poor mental health, increased health and transport inequalities and the climate emergency.</p>
<p><b>Yes</b></p>		<p>Train services are infrequent and unreliable from Shawlands and Pollokshaws East train stations. Bus routes are congested and busy. Cycle routes up Kilmarnock Road and Pollokshaws Road are hostile environments and alternatives are crowded by onstreet parking. Focus should also be on leisure routes increasing access to other parts of the city and not just as fast commuter routes.</p>



<p><b>No</b></p>	<p>I am concerned that there is no reference to assessing side roads with specific consideration to unsafe driving behaviours related to school drop off and pick up. We live at 2 Beaton Road, and find that the junction outside our home - where Beaton Road meets Fotheringay Road - as well as the junction of Beaton and Kirkcaldy Road are lethal at these times, with cars pulling in to the "keep clear" sections constantly (as evidenced by how much the road markings have been rubbed away, from being constantly driven over) without any consideration for pedestrians crossing the road. Our 1 year old in her buggy, and our 4 year old on a scooter / bike / walking, have come within inches of being hit by cars (typically adults dropping off Hutchie pupils) on multiple occasions - and there are many young families in the area who I have seen have similar difficulties whilst they try to walk their primary school age children to school. I have contacted the school to see if they can help, but with no response. Unfortunately, if you were to assess these junctions at any other time other than school drop off and pick up, they would appear to be much safer than they are in reality. Along with many of our neighbours, we regularly walk our 4 year old to Shawlands Primary and experience similarly terrifying behaviour on Dimont and Moss-side Road by parents dropping off pupils at Shawlands Academy; these are also areas that would benefit from a school drop off &amp; pick up analysis, to see how the roads are truly used. Without looking at these areas in particular, at these times of day, you will not get a true picture of how dangerous the situation currently is for pedestrians and cyclists.</p>	<p>I am so glad this is finally being looked at - as a parent of young children living here for nearly 5 years, who always tries to walk or cycle rather than drive, it feels at time as though the road network has been designed to be as unsafe for pedestrians and cyclists as it possibly could be! There is currently far too much focus on prioritising our neighbourhood for cars, and this has resulted in an ugly, unenjoyable and actively hostile environment for the most vulnerable groups - pedestrians and cyclists, particularly those who are children. Our 4 year old would love to cycle to school every day, but unfortunately due to how unsafe - and car-orientated - the local road network is, she is only able to do this on Fridays, with the Shawlands bike bus. I hope with these improvements, I will finally be able to safely ride with my children to Shawlands Primary without the ever present threat of dangerous junctions - and no longer feel I need to avoid leaving my home at school drop off and pick up times out of fear that my young children will be hit by one of the countless SUV drivers who prioritise their own convenience over the safety of everyone else.</p>
<p><b>Yes</b></p>		<p>If this project really does manage to improve all the junctions it's setting out to address, I'll be very impressed - and this whole area will be a much more liveable neighbourhood.</p>
<p><b>No</b></p>	<p>I don't see how you can address pedestrian safety/accessibility in Shawlands and Strathbungo by taking an isolated assessment of side road junctions without considering things like: speeding enforcement, 20mph zones,</p>	<p>1) Titwood road. Is this part of city network or not? Final city network delivery plan suggests yes. Wider liveable neighbourhoods suggest it is a cycle route but this plan suggests it isn't at it hasn't been deprioritised in the screening (where all other city network</p>



school streets (or lack of), pavement parking, how people move across major junctions etc. etc.

routes have) 2) why is this only side junctions? Some of the worst junctions (as per quoted comments in the design workbook) are the big ones. Titwood/Minard/Darnley, the granary etc. 3) is screening out the roads that will have cycle paths appropriate? This assumes the cycle paths will definitely be built and also means in the interim these roads won't be addressed for pedestrians, and some of them are the worst right now. Wouldn't it be better to design them to accommodate cycle lane later and still address the pedestrian permeability today? 4) it's not clear to me if the list of data to be collected for each junction in fig 30 is then to be used for filtering, but assuming it is: a) why use existing injury/collision data? If people don't feel safe crossing somewhere, they won't cross there so any injury data is not giving a full picture of the safety of a particular junction. b) why only 5 min radius of schools? Many people walk further than that to school. c) could you not map routes/collect data on which routes are either optimal for connecting centre of population (density?) with amenities like schools, shops etc. Some of these junctions will be rarely walked over while some heavily used and this doesn't seem to be taken into account. 5) I don't understand why you are asking non experts like me to comment on design options. Surely you should be asking the need questions and then using experts to design the most appropriate intervention? I get you're trying to engage the local community but we are not, on the whole, transport engineers. Ask us what our end goal/desire is, not how you should be filtering/designing junctions. My end desire is a safe and pleasant walking environment for my kids to grow up in. Seems to me the main impediment to that is our bending over backwards to the needs of drivers at the exclusion of all other citizens. Reduce the number of cars on our streets through parking permits, enforcement of illegal and pavement parking, reducing cut through traffic, more bus lanes, school streets, genuinely putting pedestrians at the top of the hierarchy of transport users and you'd be a long way there without having to re-engineer junctions. Even just stopping drivers illegally park their cars within 10m of junctions would make a difference. A few suitably placed bollards could do this.



<p><b>Yes</b></p>		<p>Although the focus is on the junctions, one of the major issues is the speed of traffic on Titwood rd from Minard Rd to Haggs Rd. The speed camera doesn't deter speeding on the rest of the stretch. Police do speed checks on Dumbreck Rd for traffic coming off the M77 but the issue is about 300m further down the road in the built up areas. The lights at Dolphin Rd/Shawmoss Rd see people flying out or speeding up to get through and there have been some big accidents there. Titwood Rd and shawmoss rd don't need to be dual carriage ways, it encourages reckless driving, traffic calming is needed...why not narrow them and make them nice access routes to Pollokpark from Crossmyloof and Shawlands?</p>
<p><b>No</b></p>	<p>The document is generally well present and readable, which is good. My concern is that it does not reference the significant amount of work already done in the Waverley Park area of Shawlands, with reference to traffic calming/reduction: <a href="https://www.waverleyparkstreets.com/">https://www.waverleyparkstreets.com/</a> . The solutions presented there are bold and highly innovative, yet don't get a mention. This makes me concerned it has already been decided that blocking through access will not happen, which would be a shame to discount it so soon.</p>	<p>I would like to have better awareness of things like this survey - it was quite hard to find! Many people wil have missed this opportunity to feedback.</p>
<p><b>No</b></p>	<p>Stop this utter nonsense</p>	<p>Roll on the council elections so these out of touch councillors can be voted out and the desecration of a great city can be halted before it's too late</p>
<p><b>Yes</b></p>		
<p><b>No</b></p>	<p>Roads in an appalling state. Potholes no road marking and weeds are prolific Litter everywhere. No enforcement of planning rules and regulations</p>	<p>No. Justcdeal with priorities above instead of tinkering around the egdes</p>



Yes		<p>I was rather disappointed to go along to a Liveable Neighbourhoods consultation for the area I live in to find that the public was being consulted on a choice of junctions. Of course, junctions contribute to livability and inclusion. Of course, consultation is important when public funds are being used and when projects, like buildings, may create a variety of impacts on the surrounding residents. But, junctions? Surely, because designs like the junctions' are research driven and data informed, a choice can be made about what kind of junction is, objectively, scientifically in terms of the research basis, the most appropriate? Why are we, subjective citizens, who are merely opinion led in this matter, being consulted on junctions? The problem is that with something so critical to the road safety of all users, it's going to come to the lowest common denominator of a car-centric majority of respondents (assumption here, not scientific, I hope I'm wrong) usually of an older demographic who tend to be the ones who engage in public consultations (based on my sample size of five when I attended the event at Destiny Church in Shawlands). Consider what the public might say, sure, but please be data led on these junctions, particularly for the sakes of pedestrians and cyclists.</p>
Yes		<p>The whole of Shawlands and strathbungo has terrible parking. A lot of non residents come here to park to use the shops and amenities</p>
Yes		<p>As part of the improvements to the area, the pavement on Pollokshaws Rd should be widened between Ravenswood Dr and the Shawlands Cross junction, and the top of Ravenswood Drive should become a modal filter to remove unsafe vehicle movements and obstructive parking at this junction that is very busy with families traveling to/from the primary school by foot and cycle</p>
Yes		
Yes		<p>Too many cars. Parked cars are a major problem. Reduce car parking on main roads and public transport will flourish. More dedicated cycle infrastructure please, lanes, parking spaces, hangars, bicycle hire facilities</p>



Yes		
Yes		
No	Area has been left in a state of disrepair and the kids from hillpark school leave the area like a rubbish tip at lunchtimes.	Parking is horrendous and drivers verbally abusive
Yes		Please can you consider the following: dropped kerbs for more accessible streets; comprehensive parking permit scheme across the district to ensure that when cars occupy public space the drivers pay for the privilege; enforcement for parking related offences; 20 mile per hour speed limit enforced across city; more pedestrian crossings; attention given to children's rights to navigate the city safely; better placement of bins and other obstructions in the street; more communication with the community; revised sequences for traffic lights to ensure that pedestrians are able to cross faster; an integrated and segregated cycle lane system with more enforcement for drivers who behave irresponsibly or dangerously.



## Stage 2b Feedback (November 2023)

Do you think our concept design captures all the site's /area's opportunities and constraints?	If not, let us know what we've missed?	Do you have any other comments/feedback?
<b>No</b>	Pollokshaws/Kilmarnock road is a problem. It has too much traffic and the crossing points for pedestrians take too long. If the hierarchy of users is to be addressed it should have segregated cycle lanes.	
<b>No</b>	When discussing intervention options for side street treatment, you say that continuous footways are only suitable for areas with high pedestrian flows and low vehicle flows. I think it's wrong to treat pedestrian and vehicle numbers as static when we know that people's transport choices are influenced by the type of infrastructure available. For example, if a driver knows they have to slow down significantly on a residential rat-run - they may just stay on the main road. Likewise, if a pedestrian knows they will benefit from continuous crossings on their route, they are more likely to take that route. Raised tables are an improvement on the status quo but when they have been used elsewhere, they are often ignored unless very steep. The correct approach is a steep raised table, reduced corner radii and completely continuous surface for the footway. The way this has been done on Victoria road for example is not great and has resulted in many near misses when I've been cycling there as drivers are not sufficiently incentivised to yield priority to pedestrians or cyclists.	
<b>No</b>	It's really unclear here which junctions you have prioritised. There are no legends on maps and one of them is so low resolution it's barely readable. Could you please indicate somewhere which junctions will be improved? Also, the use of accident statistics for prioritisation is flawed. People do not cross where they do not feel safe and so footfall will be lower and hence accidents lower in places that are genuinely in need of improvement more than others. Beyond the prioritisation, it is not clear which if any of the junctions will be improved. Can this be listed somewhere?	



<b>No</b>	Lots of opportunity to fix pedestrian crossings just by adjusting the timings has been ignored (Shawlands Cross and the junction of Minard Road and Pollokshaws Road for example). The Shawlands Cross junction in particular could be made far more accessible by removing the barriers which force pedestrians to cross a single road in two separate sections with long waits between. Incidentally those barriers also cause the pavement to become so clogged at busy times that it's impossible to walk past.	
<b>No</b>	When we went to Bungo in the Back Lanes, my partner was left in tears because they couldn't access any of it in their wheelchair - the cobbles make it impossible. My understanding is residents looked to address this, but were unable to manage the funding by themselves. In general it is barely possible to traverse Strathbungo in chair, and requires being in the street; I'd recommend creating mixed use space with heavily restricted (disabled-only) on-street parking enabling enough room to move about. The easiest way to get from Kildrostan triangle to Govanhill is to go through the car park and hope the dropped kerb back to the pavement is not blocked.	V excited for the addressing of kerbs and pavements - currently my partner and I rarely traverse roads that we don't know the state of in advance because usually there will be dangerous or impossible kerbs etc.
<b>No</b>	The quality of public realm across all streets needs a significant overhaul. If you want to improve connections, consider placing high quality streetscapes and detangling narrow roads. Offer more ample provision for parking in nearby vacant land or small pockets to encourage urban sprawl	

## **Appendix C: Dinmont Road Concept General Arrangement Plan**





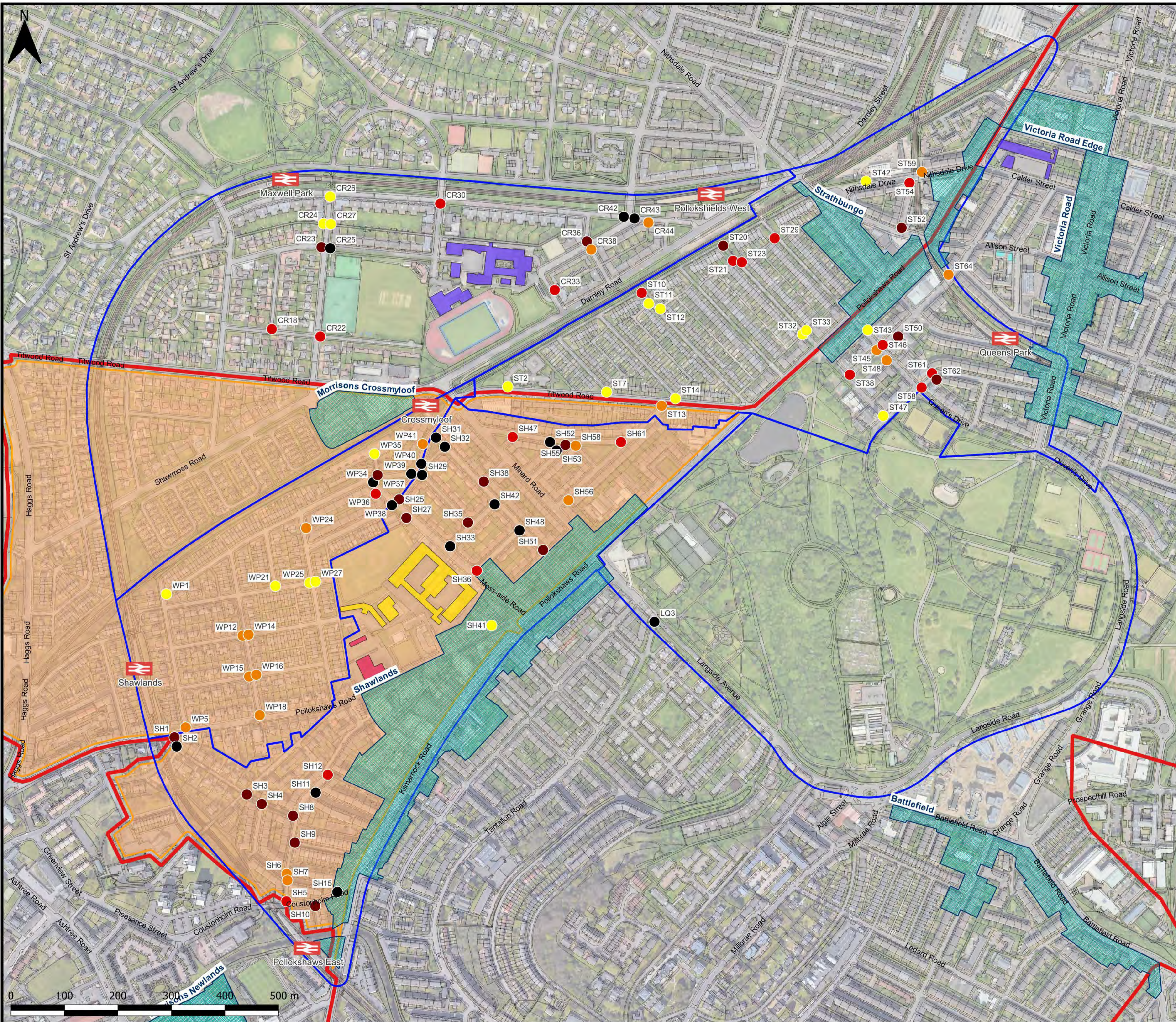






## **Appendix D: Priority index and typology recommendations**





**NOTES**

- DO NOT SCALE FROM THIS DRAWING.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS AND DOCUMENTS ASSOCIATED WITH THIS PROJECT.

**KEY**

- Project Study Area

**Prioritised Junctions (Score Range)**

- 18 - 19
- 19 - 21
- 21 - 22.4
- 22.4 - 26
- 26 - 34

**Trip Generators**

- Train Station
- Network Centre
- Shawlands Primary School
- Shawlands Academy
- Hutchesons' Grammar School

**School Catchments**

- Shawlands Primary School Catchment
- Shawlands Academy Catchment

Drawing Suitability	Status
	S0

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Client

Glasgow  
CITY COUNCIL

Project Title  
**GLASGOW LIVEABLE NEIGHBOURHOODS**

Drawing Title  
**IMPROVING CONNECTIONS  
SHAWLANDS AND STRATHBUNGO  
PRIORITISED SIDE ROADS**

Drawing Number	Originator	Volume
Project	5218303 - ATK	272 -
		XX - DR - CH - 101
Location	Type	Role
Original Size: A1	Scale: 1:3400	Project Ref. No. 5218303
		Sheet: 1 of 1
		Rev: P01.1



# Side Road Prioritisation Index and Data



Junction ID	Final Rank	Final Score	Easting	Northing	Zone	Existing Arrangement	No. PICs (all)	Severity (all)	No. PICs (peds)	Severity (peds)	No. PICs (cyclists)	Severity (cyclists)	Drop Kerbs	Tactile Paving	Crossing Width (m)	Obstruction	Bus turn	Flooding Potential
SH29	1	34	257033.259	662312.737	Shawlands	Standard	2	Slight	1	Slight	1	Slight	no	no	18.0	Cars, Lighting		yes
CR25	2	34	256861.685	662736.064	Crossmyloof	Standard	1	Slight					no	yes	9.4	Lighting		yes
SH15	3	31	256875.088	661534.227	Shawlands	Standard	1	Slight			1	Slight	no	no	9.0	Signage, Chairs		yes
SH52	4	30	257272.345	662374.093	Shawlands	Standard							no	no	14.5	Lighting, Cars, Bin		yes
CR43	5	30	257430.247	662791.627	Crossmyloof	Standard	3	Serious	1	Serious	1	Slight	no	no	14.5	Cars		
WP34	6	30	256941.974	662299.100	Waveley Park	Standard							no	no	15.9	Cars		yes
CR42	7	29	257410.234	662794.881	Crossmyloof	Standard	3	Serious	1	Serious	1	Slight	no	no	10.4	Signage		
WP40	8	29	257032.001	662333.497	Waveley Park	Standard	1	Slight			1	Slight	no	no	15.4	Cars, Lighting		
SH2	9	29	256574.639	661805.654	Shawlands	Standard (side road of a side road)							no	no	10.6	Cars, Signage, Utilites		yes
WP39	10	28	257013.242	662314.788	Waveley Park	Standard	1	Slight	1	Slight			yes	no	16.4	Cars	yes	yes
SH48	11	27	257215.379	662209.154	Shawlands	Standard							no	no	22.4	Cars, Bin		
SH42	12	27	257168.846	662257.802	Shawlands	Standard							no	no	23.0	Cars		
SH33	13	27	257085.787	662179.543	Shawlands	Standard							no	no	25.7	Cars, Signage		
SH32	14	27	257075.797	662365.300	Shawlands	Standard							no	no	17.8	Cars, Bin		
LQ3	15	27	257467.607	662038.480	Langside and Queens Park	Raised Crossing (very damaged)	4	Slight	3	Slight			yes	no	14.9	Bollards		yes
SH31	16	27	257059.354	662382.406	Shawlands	Standard							no	no	19.2	Cars, Lighting		
SH11	17	27	256834.494	661719.463	Shawlands	Standard							no	no	11.9	Signage		
SH53	18	26	257284.506	662358.108	Shawlands	Standard							yes	yes	6.8	Cars (Obscured)		yes
WP38	19	26	256976.858	662256.175	Waveley Park	Standard							yes	no	18.8	Cars		yes
SH25	20	26	256990.362	662267.076	Shawlands	Standard							no	no	17.2		yes	yes
SH8	21	26	256792.069	661676.204	Shawlands	Standard							no	no	10.4	Signage, Cars		
SH4	22	26	256733.740	661698.302	Shawlands	Standard							no	no	9.3	Lighting, Signage		
SH55	23	25	257301.265	662368.846	Shawlands	Standard							no	no	15.7	Cars, Bins		yes
SH38	24	25	257148.589	662300.349	Shawlands	Standard							yes	no	9.2	Cars		yes
SH10	25	25	256833.802	661507.788	Shawlands	Standard							yes	no	10.2	Cars, Signage		yes
SH51	26	24	257259.471	662172.546	Shawlands	Standard							no	no	17.2	Cars, Signage		
CR36	27	24	257341.249	662748.836	Crossmyloof	Standard	2	Slight					no	no	10.7	Signage, Cars		
WP37	28	24	256950.114	662312.511	Waveley Park	Standard							no	no	8.0			yes
SH9	29	24	256795.527	661626.031	Shawlands	Standard							no	no	6.8	Cars, Signage		
SH3	30	24	256705.695	661715.965	Shawlands	Standard							no	no	6.4	Cars, Signage		
SH1	31	24	256570.530	661822.738	Shawlands	Raised Table + Build Out							yes	yes	9.6	Signage		yes
ST62	32	23	257994.761	662490.771	Strathbungo	Lane (Continuous Footway)							no	no	4.4			yes
ST52	33	23	257929.436	662774.238	Strathbungo	Standard							yes	no	11.1	Cars		
ST50	34	23	257922.969	662571.227	Strathbungo	Lane Access							yes	no	4.9	Bins		yes
ST20	35	23	257596.080	662740.742	Strathbungo	Standard							no	no	7.9	Signage, Cars		yes
SH35	36	23	257119.059	662223.960	Shawlands	Standard							yes	no	22.7	Cars, Bin		
SH27	37	23	257003.988	662232.461	Shawlands	Church Access							no	no	4.3	Lighting		
CR23	38	23	256845.252	662738.016	Crossmyloof	Standard	1	Slight					yes	no	10.0			yes
ST61	39	22	257986.382	662502.567	Strathbungo	Lane Access							yes	no	4.0	Lighting		yes
ST46	40	22	257894.130	662555.445	Strathbungo	Standard							yes	no	10.8	Cars		
ST29	41	22	257692.196	662754.693	Strathbungo	Lane Access							no	no	4.6	Narrow Footway		yes
ST10	42	22	257443.710	662652.639	Strathbungo	Standard							no	no	14.2	Signage		
SH61	43	22	257404.946	662374.012	Shawlands	Standard							no	no	17.9	Cars		
SH47	44	22	257202.545	662383.611	Shawlands	Standard							yes	no	10.0	Cars		
CR33	45	22	257281.212	662658.049	Crossmyloof	Lane Access							no	no	4.0			yes
WP36	46	22	256946.697	662277.530	Waveley Park	Lane Access							no	no	3.1			yes
CR30	47	22	257067.422	662819.367	Crossmyloof	Standard							no	no	9.6	Signage		
CR22	48	22	256843.137	662571.166	Crossmyloof	Standard							no	no	6.9	Signage		yes
SH5	49	22	256779.704	661516.492	Shawlands	Standard							no	no	6.0	Cars, Signage		yes
CR18	50	22	256752.431	662585.158	Crossmyloof	Standard							no	no	6.3	Cars		yes
ST58	51	21	257966.776	662475.843	Strathbungo	Standard							no	no	9.5	Bins		
ST54	52	21	257944.059	662858.009	Strathbungo	Standard							yes	no	9.3			yes
ST38	53	21	257832.669	662499.963	Strathbungo	Standard							no	no	10.6	Cars (Obscured)		

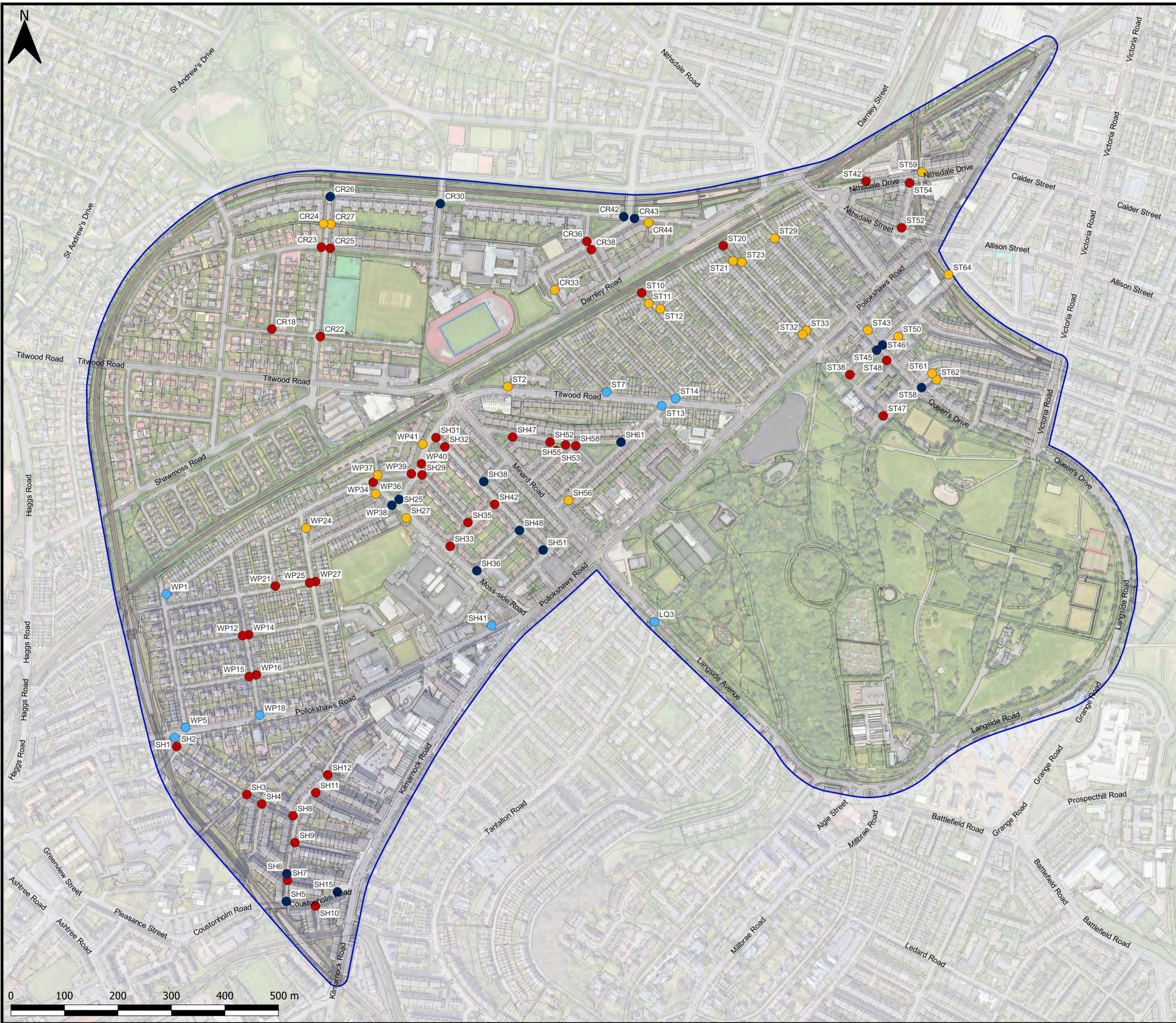


# Side Road Prioritisation Index and Data



Junction ID	Final Rank	Final Score	Easting	Northing	Zone	Existing Arrangement	No. PICs (all)	Severity (all)	No. PICs (peds)	Severity (peds)	No. PICs (cyclists)	Severity (cyclists)	Drop Kerbs	Tactile Paving	Crossing Width (m)	Obstruction	Bus turn	Flooding Potential
ST23	54	21	257630.817	662709.991	Strathbungo	Lane Access							no	no	4.3	Utilities (Obscured)		yes
ST21	55	21	257614.303	662712.513	Strathbungo	Lane Access							no	no	4.1	Cars (Narrow Pavement)		yes
SH36	56	21	257135.573	662133.986	Shawlands	Standard	2	Slight	2	Slight			yes	no	16.5	Cars, Bin		
SH12	57	21	256857.028	661752.654	Shawlands	Standard							no	no	14.1	Signage, Utilities, Lighting		
SH7	58	21	256781.819	661555.622	Shawlands	Standard							yes	no	8.3	Cars, Lighting		
SH6	59	21	256780.355	661567.906	Shawlands	Standard							yes	no	8.9	Cars (Obscured)		
WP16	60	21	256723.531	661939.558	Waveley Park	Standard							no	no	8.3			
WP15	61	21	256710.190	661936.222	Waveley Park	Standard							no	no	8.1			
WP14	62	21	256709.051	662014.400	Waveley Park	Standard							no	no	8.6	Cars, Signage		
WP12	63	21	256697.906	662012.611	Waveley Park	Standard							no	no	8.0	Signage		
ST59	64	20	257967.406	662878.428	Strathbungo	Lane Access							no	no	5.1			yes
ST45	65	20	257882.903	662545.845	Strathbungo	Standard							no	no	8.9	Cars		
ST13	66	20	257481.010	662441.859	Strathbungo	Standard	1	Slight	1	Slight			yes	no	27.3	Bin, Lighting, Cars		yes
SH58	67	20	257320.464	662367.219	Shawlands	Standard							yes	no	10.6	Cars		yes
WP41	68	20	257034.556	662370.432	Waveley Park	Raised Building Access							yes	no	7.1	Lighting		
WP24	69	20	256816.617	662213.466	Waveley Park	Lane Access							no	no	3.9	Lighting		
WP5	70	20	256591.438	661841.204	Waveley Park	Raised Table+Build Out							no	yes	8.1			
WP18	71	20	256729.815	661864.023	Waveley Park	Raised Table and Build out							yes	yes	7.5			
ST64	72	19	258017.051	662686.786	Strathbungo	Lane Access							yes	no	3.7	Signage		
ST48	73	19	257901.533	662526.646	Strathbungo	Standard							yes	no	8.7	Cars		yes
SH56	74	19	257306.797	662265.408	Shawlands	Lane Access							yes	no	5.4			yes
CR44	75	19	257456.279	662783.980	Crossmyloof	Lane Access							no	no	4.9	Lighting		
CR38	76	19	257349.547	662733.542	Crossmyloof	Standard	2	Slight					yes	no	8.4	Signage		
WP27	77	19	256834.168	662113.648	Waveley Park	Standard							yes	no	10.1	Cars (Obscured, Lighting)		
CR27	78	19	256862.580	662781.214	Crossmyloof	Lane Access							no	no	3.2			
CR24	79	19	256849.076	662781.946	Crossmyloof	Lane Access							yes	no	4.3	Lighting		
WP1	80	19	256555.481	662090.219	Waveley Park	Standard							no	no	8.9	Signage		
ST47	81	18	257895.106	662423.046	Strathbungo	Standard	1	Serious			1	Serious	yes	no	9.7	Cars		
ST43	82	18	257866.186	662583.104	Strathbungo	Lane Access							no	no	3.5	Signage		
ST42	83	18	257862.871	662861.100	Strathbungo	Site Access							yes	no	10.0			
ST33	84	18	257751.318	662582.453	Strathbungo	Lane Access							no	no	4.1	Signage		yes
ST32	85	18	257744.241	662575.254	Strathbungo	Lane Access							no	no	3.1	Signage		yes
ST7	86	18	257378.182	662467.565	Strathbungo	Standard							no	no	20.9			
ST2	87	18	257193.516	662477.490	Strathbungo	Continuous Footway (Building Access)							no	no	5.9			yes
ST14	88	18	257506.838	662455.403	Strathbungo	Standard							yes	no	21.8	Signage, Cars, Utilities		yes
ST12	89	18	257478.610	662622.864	Strathbungo	Lane Access							yes	no	5.0	Cars		yes
ST11	90	18	257456.889	662632.626	Strathbungo	Lane Access							yes	no	4.7	Cars		yes
SH41	91	18	257163.253	662031.606	Shawlands	Raised Table	2	Fatal	2	Fatal			yes	no	10.6	Cars, Bins		
WP35	92	18	256944.374	662352.075	Waveley Park	Standard							no	no	8.5			
WP25	93	18	256823.267	662111.289	Waveley Park	Standard							yes	no	7.8	Utilities		
CR26	94	18	256861.685	662832.546	Crossmyloof	Standard							no	no	9.7			
WP21	95	18	256759.081	662105.269	Waveley Park	Standard							no	no	8.2	Cars, Signage		





**NOTES**

- DO NOT SCALE FROM THIS DRAWING.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS AND DOCUMENTS ASSOCIATED WITH THIS PROJECT.

- KEY**
- Project Study Area
- Typology Recommendations**
- Continuous Footway
  - Driveway Access (continuous footway)
  - General Accessibility Upgrades
  - Raised Table

Drawing Suitability	Status
	S0



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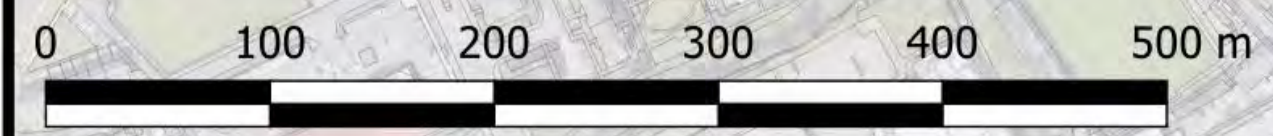


**Glasgow**  
CITY COUNCIL

Project Title  
**GLASGOW LIVEABLE NEIGHBOURHOODS**

Drawing Title  
**IMPROVING CONNECTIONS  
SHAWLANDS AND STRATHBUNGO  
TYPOLOGY RECOMMENDATIONS**

Drawing Number Project	5218303	Originator - ATK	Volume - 272 -
			XX - DR - CH - 102
Original Size:	A1	Scale: 1:3400	Project Ref. No. 5218303
		Sheet: 1 of 1	Rev: P01.1





# Typology Recommendations

Junction ID	Final Rank	Final Score	Easting	Northing	Zone	Proposed Typology	Reduce Crossing Width	Build-Out Requirement	Parking Control (physical or enforcement)	Other Obstruction Removal	Provide New Dropped Kerbs and Tactiles	Review Drainage
SH29	1	34	257033.259	662312.737	Shawlands	Continuous Footway	✓	✓	✓	✓	✓	✓
CR25	2	34	256861.685	662736.064	Crossmyloof	Continuous Footway	✓			✓	✓	✓
SH15	3	31	256875.088	661534.227	Shawlands	Raised Table	✓	✓	✓	✓	✓	✓
SH52	4	30	257272.345	662374.093	Shawlands	Continuous Footway	✓	✓	✓	✓	✓	✓
CR43	5	30	257430.247	662791.627	Crossmyloof	Raised Table	✓	✓	✓		✓	
WP34	6	30	256941.974	662299.100	Waveley Park	Continuous Footway	✓	✓	✓		✓	✓
CR42	7	29	257410.234	662794.881	Crossmyloof	Raised Table	✓			✓	✓	
WP40	8	29	257032.001	662333.497	Waveley Park	Continuous Footway	✓	✓	✓	✓	✓	
SH2	9	29	256574.639	661805.654	Shawlands	Continuous Footway	✓	✓	✓	✓	✓	✓
WP39	10	28	257013.242	662314.788	Waveley Park	Continuous Footway (must accommodate bus)	✓	✓	✓		✓	✓
SH48	11	27	257215.379	662209.154	Shawlands	Raised Table	✓	✓	✓	✓	✓	
SH42	12	27	257168.846	662257.802	Shawlands	Continuous Footway	✓	✓	✓		✓	
SH33	13	27	257085.787	662179.543	Shawlands	Continuous Footway	✓	✓	✓	✓	✓	
SH32	14	27	257075.797	662365.300	Shawlands	Continuous Footway	✓	✓	✓	✓	✓	
LQ3	15	27	257467.607	662038.480	Langside and Queens Park	General Accessibility Upgrades	✓			✓	✓	✓
SH31	16	27	257059.354	662382.406	Shawlands	Continuous Footway	✓	✓	✓	✓	✓	
SH11	17	27	256834.494	661719.463	Shawlands	Continuous Footway	✓			✓	✓	
SH53	18	26	257284.506	662358.108	Shawlands	Continuous Footway		✓	✓		✓	✓
WP38	19	26	256976.858	662256.175	Waveley Park	Raised Table	✓	✓	✓		✓	✓
SH25	20	26	256990.362	662267.076	Shawlands	Raised Table (must accommodate bus)	✓				✓	✓
SH8	21	26	256792.069	661676.204	Shawlands	Continuous Footway	✓	✓	✓	✓	✓	
SH4	22	26	256733.740	661698.302	Shawlands	Continuous Footway	✓			✓	✓	
SH55	23	25	257301.265	662368.846	Shawlands	Continuous Footway	✓	✓	✓	✓	✓	✓
SH38	24	25	257148.589	662300.349	Shawlands	Raised Table	✓	✓	✓		✓	✓
SH10	25	25	256833.802	661507.788	Shawlands	Continuous Footway	✓	✓	✓	✓	✓	✓
SH51	26	24	257259.471	662172.546	Shawlands	Raised Table	✓	✓	✓	✓	✓	
CR36	27	24	257341.249	662748.836	Crossmyloof	Continuous Footway	✓	✓	✓	✓	✓	
WP37	28	24	256950.114	662312.511	Waveley Park	Driveway Access (continuous footway)	✓				✓	✓
SH9	29	24	256795.527	661626.031	Shawlands	Continuous Footway		✓	✓	✓	✓	
SH3	30	24	256705.695	661715.965	Shawlands	Continuous Footway		✓	✓	✓	✓	
SH1	31	24	256570.530	661822.738	Shawlands	General Accessibility Upgrades	✓			✓	✓	✓
ST62	32	23	257994.761	662490.771	Strathbungo	Driveway Access (continuous footway)					✓	✓
ST52	33	23	257929.436	662774.238	Strathbungo	Continuous Footway	✓	✓	✓		✓	
ST50	34	23	257922.969	662571.227	Strathbungo	Driveway Access (continuous footway)				✓	✓	✓
ST20	35	23	257596.080	662740.742	Strathbungo	Continuous Footway	✓	✓	✓	✓	✓	✓
SH35	36	23	257119.059	662223.960	Shawlands	Continuous Footway	✓	✓	✓	✓	✓	
SH27	37	23	257003.988	662232.461	Shawlands	Driveway Access (continuous footway)				✓	✓	
CR23	38	23	256845.252	662738.016	Crossmyloof	Continuous Footway	✓				✓	✓
ST61	39	22	257986.382	662502.567	Strathbungo	Driveway Access (continuous footway)				✓	✓	✓
ST46	40	22	257894.130	662555.445	Strathbungo	Raised Table	✓	✓	✓		✓	
ST29	41	22	257692.196	662754.693	Strathbungo	Driveway Access (continuous footway)					✓	✓
ST10	42	22	257443.710	662652.639	Strathbungo	Continuous Footway	✓			✓	✓	
SH61	43	22	257404.946	662374.012	Shawlands	Raised Table	✓	✓	✓		✓	
SH47	44	22	257202.545	662383.611	Shawlands	Continuous Footway	✓	✓	✓		✓	
CR33	45	22	257281.212	662658.049	Crossmyloof	Driveway Access (continuous footway)					✓	✓
WP36	46	22	256946.697	662277.530	Waveley Park	Driveway Access (continuous footway)					✓	✓
CR30	47	22	257067.422	662819.367	Crossmyloof	Raised Table	✓			✓	✓	
CR22	48	22	256843.137	662571.166	Crossmyloof	Continuous Footway				✓	✓	✓
SH5	49	22	256779.704	661516.492	Shawlands	Raised Table		✓	✓	✓	✓	✓
CR18	50	22	256752.431	662585.158	Crossmyloof	Continuous Footway		✓	✓		✓	✓



# Typology Recommendations

Junction ID	Final Rank	Final Score	Easting	Northing	Zone	Proposed Typology	Reduce Crossing Width	Build-Out Requirement	Parking Control (physical or enforcement)	Other Obstruction Removal	Provide New Dropped Kerbs and Tactiles	Review Drainage
ST58	51	21	257966.776	662475.843	Strathbungo	Raised Table	✓			✓	✓	
ST54	52	21	257944.059	662858.009	Strathbungo	Continuous Footway	✓				✓	✓
ST38	53	21	257832.669	662499.963	Strathbungo	Continuous Footway	✓	✓	✓		✓	
ST23	54	21	257630.817	662709.991	Strathbungo	Driveway Access (continuous footway)				✓	✓	✓
ST21	55	21	257614.303	662712.513	Strathbungo	Driveway Access (continuous footway)		✓	✓		✓	✓
SH36	56	21	257135.573	662133.986	Shawlands	Raised Table	✓	✓	✓	✓	✓	
SH12	57	21	256857.028	661752.654	Shawlands	Continuous Footway	✓			✓	✓	
SH7	58	21	256781.819	661555.622	Shawlands	Continuous Footway	✓	✓	✓	✓	✓	
SH6	59	21	256780.355	661567.906	Shawlands	Raised Table	✓	✓	✓		✓	
WP16	60	21	256723.531	661939.558	Waveley Park	Continuous Footway	✓				✓	
WP15	61	21	256710.190	661936.222	Waveley Park	Continuous Footway	✓				✓	
WP14	62	21	256709.051	662014.400	Waveley Park	Continuous Footway	✓	✓	✓	✓	✓	
WP12	63	21	256697.906	662012.611	Waveley Park	Continuous Footway	✓			✓	✓	
ST59	64	20	257967.406	662878.428	Strathbungo	Driveway Access (continuous footway)					✓	✓
ST45	65	20	257882.903	662545.845	Strathbungo	Raised Table	✓	✓	✓		✓	
ST13	66	20	257481.010	662441.859	Strathbungo	General Accessibility Upgrades	✓			✓	✓	✓
SH58	67	20	257320.464	662367.219	Shawlands	Continuous Footway	✓	✓	✓		✓	✓
WP41	68	20	257034.556	662370.432	Waveley Park	Driveway Access (continuous footway)				✓	✓	
WP24	69	20	256816.617	662213.466	Waveley Park	Driveway Access (continuous footway)				✓	✓	
WP5	70	20	256591.438	661841.204	Waveley Park	General Accessibility Upgrades	✓	✓			✓	
WP18	71	20	256729.815	661864.023	Waveley Park	General Accessibility Upgrades	✓	✓			✓	
ST64	72	19	258017.051	662686.786	Strathbungo	Driveway Access (continuous footway)				✓	✓	
ST48	73	19	257901.533	662526.646	Strathbungo	Continuous Footway	✓	✓	✓		✓	✓
SH56	74	19	257306.797	662265.408	Shawlands	Driveway Access (continuous footway)					✓	✓
CR44	75	19	257456.279	662783.980	Crossmyloof	Driveway Access (continuous footway)				✓	✓	
CR38	76	19	257349.547	662733.542	Crossmyloof	Continuous Footway	✓			✓	✓	
WP27	77	19	256834.168	662113.648	Waveley Park	Continuous Footway	✓	✓	✓		✓	
CR27	78	19	256862.580	662781.214	Crossmyloof	Driveway Access (continuous footway)					✓	
CR24	79	19	256849.076	662781.946	Crossmyloof	Driveway Access (continuous footway)				✓	✓	
WP1	80	19	256555.481	662090.219	Waveley Park	General Accessibility Upgrades	✓			✓	✓	
ST47	81	18	257895.106	662423.046	Strathbungo	Continuous Footway	✓	✓	✓		✓	
ST43	82	18	257866.186	662583.104	Strathbungo	Driveway Access (continuous footway)				✓	✓	
ST42	83	18	257862.871	662861.100	Strathbungo	Continuous Footway	✓				✓	
ST33	84	18	257751.318	662582.453	Strathbungo	Driveway Access (continuous footway)				✓	✓	✓
ST32	85	18	257744.241	662575.254	Strathbungo	Driveway Access (continuous footway)				✓	✓	✓
ST7	86	18	257378.182	662467.565	Strathbungo	General Accessibility Upgrades	✓				✓	
ST2	87	18	257193.516	662477.490	Strathbungo	Driveway Access (continuous footway)					✓	✓
ST14	88	18	257506.838	662455.403	Strathbungo	General Accessibility Upgrades	✓	✓	✓	✓	✓	✓
ST12	89	18	257478.610	662622.864	Strathbungo	Driveway Access (continuous footway)		✓	✓		✓	✓
ST11	90	18	257456.889	662632.626	Strathbungo	Driveway Access (continuous footway)		✓	✓		✓	✓
SH41	91	18	257163.253	662031.606	Shawlands	General Accessibility Upgrades	✓	✓	✓	✓	✓	
WP25	93	18	256823.267	662111.289	Waveley Park	Continuous Footway	✓			✓	✓	
CR26	94	18	256861.685	662832.546	Crossmyloof	Raised Table	✓				✓	
WP21	95	18	256759.081	662105.269	Waveley Park	Continuous Footway	✓	✓	✓	✓	✓	

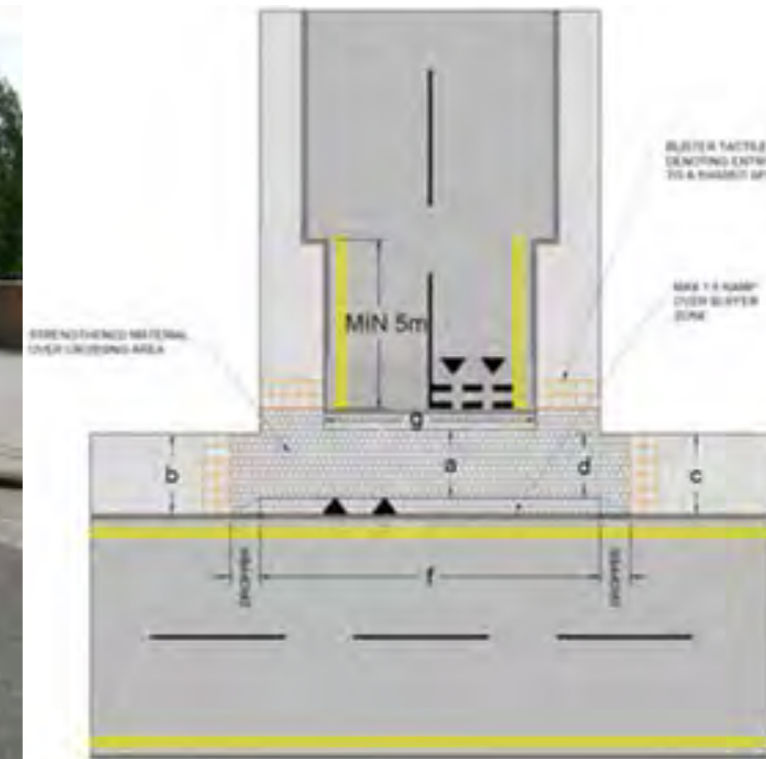


# APPENDIX E: SIDE ROAD DATA SHEETS

## Continuous Footway

Continuous footways are used to visually show the priority for pedestrians. To do so, consistent use of materials and junction geometry must be used.

Relevant Requirements	Appropriate context
<ol style="list-style-type: none"> <li>30mph or less.</li> <li>No radius kerbs</li> <li>No perpendicular kerbing across continuous footway or cycleway.</li> <li>When cycleway is present, it must be raised through the junction to the footway.</li> <li>No parking on minor road within 5m of end of road.</li> </ol>	<p>Change of environment. Transition into residential areas. School Zones.</p>
Appropriate traffic conditions	Appropriate pedestrian conditions
<p>Minor Road has &lt;100 vehicles/hour, especially HGVs, during peak.</p>	<p>Medium to High Pedestrian Flow, <math>\geq 180</math>/hour.</p>



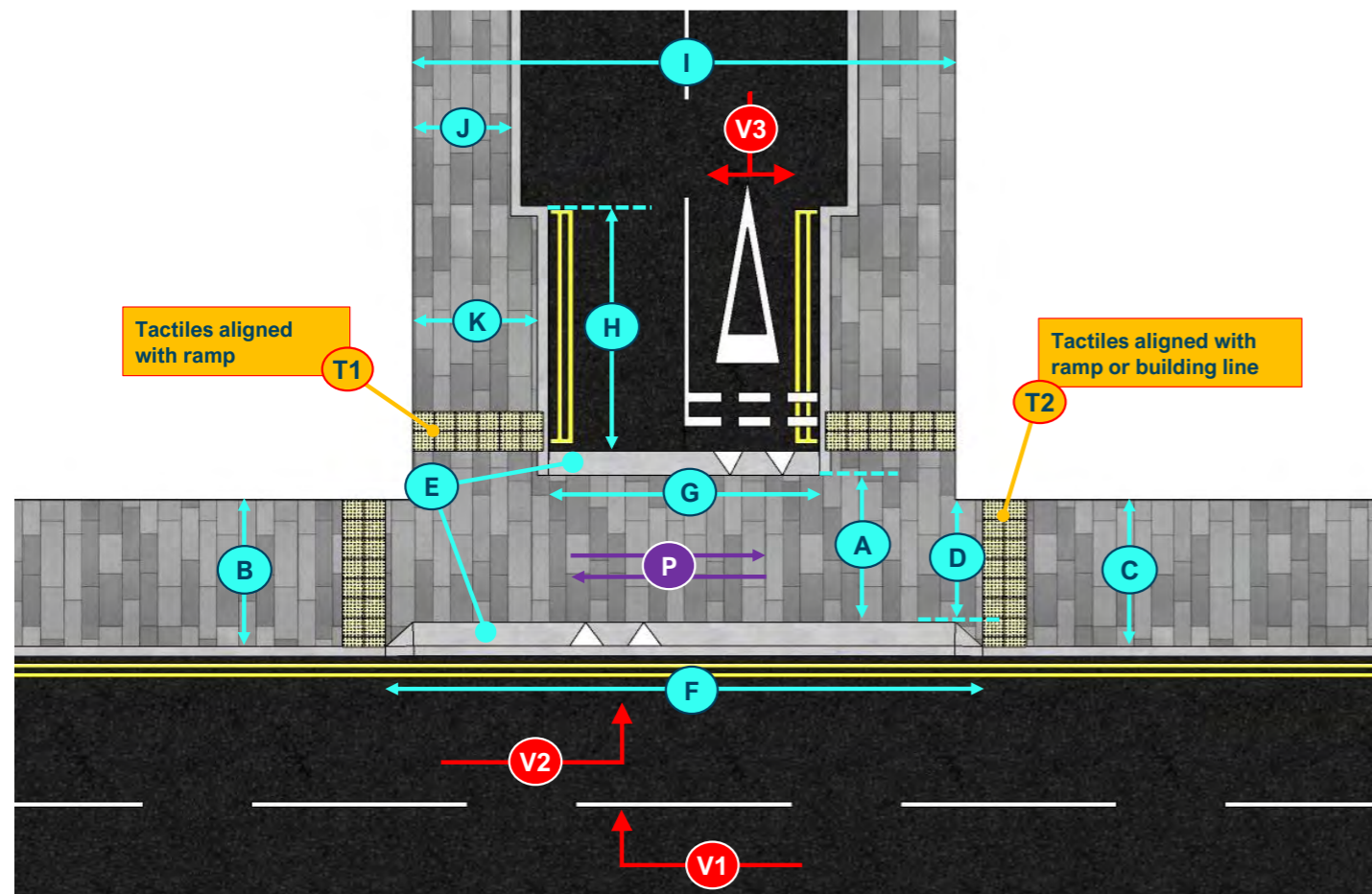
**Figure 37:** Continuous Footway Geometric Design

### Geometric Design Elements (source: Glasgow Interim Delivery Plan)

- a.** Not less than adjoining footway
- b & c.** Existing widths of adjoining footway
- d.** Not less than 1.5m
- e.** Desirable 1:5, Minimum 1:10
- f.** 2-4m greater than g.
- g.** 4.5-6m (maintained minimum 5m beyond back of footway) for two-way roads. For one-way roads maximum of 3m.



# Continuous Footway Design Detail (two-way side road)



## KEY

- X Geometric Standard
- T Tactile Standard
- V Vehicular Volume
- P Pedestrian Volume

## Design Parameters

Item:	A	B	C	D	E	F	G	H	I	J	K
Parameter:	Calculated	Input	Input	MIN	MIN	Calculated	MIN	MIN	Input	Input	Calculated
Geometry (m):	2.0	2.0	2.0	1.5	1:10	6.5	4.5	5.0	9.0	2.0	2.3

## Design Guidance

Glasgow City Council (GCC) [Interim Delivery Plan](#)  
 City of Edinburgh Council (CEC) [Edinburgh Street Design Guidance](#)  
 Transport Scotland [Cycling by Design](#)

## Design Geometry

Item	Minimum Requirement	Source
A	Not less than adjoining footway widths	GCC Interim Delivery Plan
B	Existing width of adjoining footway	GCC Interim Delivery Plan
C	Existing width of adjoining footway	GCC Interim Delivery Plan
D	Absolute minimum 1.5m	GCC Interim Delivery Plan
E	Desirable 1:5, Minimum 1:10, Side Road 1:15	GCC Interim Delivery Plan
F	2.0m to 4.0m greater than G	GCC Interim Delivery Plan
G	4.5m to 6.0m (for minimum 5.0m setback)	GCC Interim Delivery Plan
H	5.0m	GCC Interim Delivery Plan
I	Existing Street Width (between back of footway on each side)	GCC Interim Delivery Plan
J	Existing width of adjoining side road footway	GCC Interim Delivery Plan
K	0.5*(Side street width - G)	GCC Interim Delivery Plan

## Tactile Paving Guidance

Item	Minimum Requirement	Source
T1	Side road tactiles should be aligned with the bottom of the ramp	CEC ESDG
T2	Main road tactiles should be aligned either with the top of the drop kerb / Dutch kerb OR with the side road building line (whichever is furthest from the centre of the side road)	CEC ESDG / Atkins Design Team Recommendation

## Appropriate Traffic and Pedestrian Flow Conditions

V1+V2+V3	Up to 100 vehicles per peak hour	GCC / Cycling by Design
P	Medium to high pedestrian flow of 180+* Pedestrians per peak hour (or otherwise an important/key route for pedestrians)	GCC / ESDG

\* When pedestrian flows are expected to be lower than this the junction must have less than 100 vehicles per hour at peak

## Material Consideration

- The visually distinctive colour and/or surface of the cycle track and footway, distinct from each other and from the adjacent roads, should be maintained for a minimum of 10 m on each approach to the side road
- Where approach footways on the main road are of an asphalt material, visual delineation between the carriageway and the footway should be provided at the back of the continuous footway using an appropriate flush kerb which runs parallel to the edge of the adjacent primary road carriageway

## Other Key Considerations

- The continuous cycle track at side road layout should only be used in locations where the main road and side road have a speed limit of 30 mph or less.
- Adequate visibility of the footway from the side road should be provided relative to the give-way marking using the appropriate set-back (see Cycling by Design - Chapter 4)
- Adequate visibility of the main road from the side road should be provided relative to the edge of the main road using the appropriate set-back (see Cycling by Design - Chapter 4)
- No kerbed radius should be provided.



# Raised Table

Raised tables promote pedestrian safety by slowing vehicles, improving visibility of crossing points, and raising driver awareness. They visually prioritise pedestrians, with the raised design reinforcing the highway code, urging drivers to yield to pedestrians at the crossing.

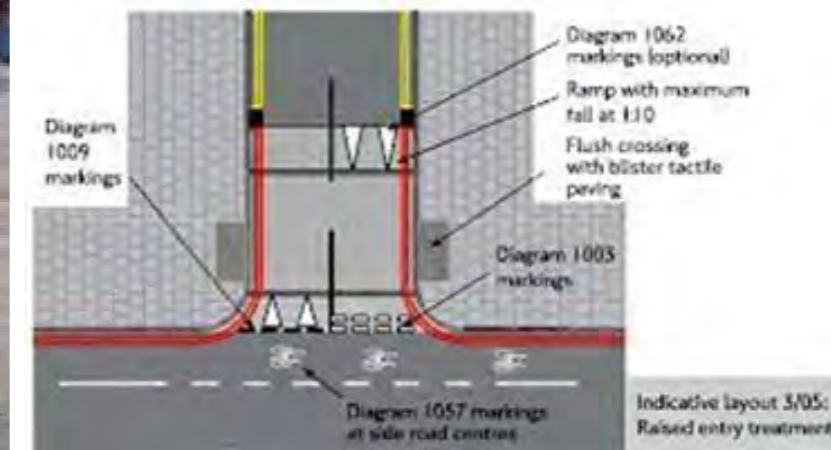
Relevant Requirements	Appropriate context
<ul style="list-style-type: none"> <li>1. Max 30mph or less</li> <li>2. Avoid on primary route if junction is not signals</li> <li>3. May not be appropriate near bus stops</li> <li>4. May need to seek emergency services views</li> </ul>	<p>Near schools, shopping districts, transit stops School Zones.</p>
Appropriate traffic conditions	Appropriate pedestrian conditions
<p>Likely more suitable than a continuous footway where side road traffic is medium to high (i.e. over 60 average / 120 peak hour vehicles per hour).</p> <p>Edinburgh Street Design Guidance</p>	<p>High Levels – 'significant flow of pedestrians', Glasgow Public Realm</p>

Photograph



Figure 38: Raised Table Geometric Design

Layout Diagram



## Geometric Design Elements (source: CHICYCLE)

1. Give way Markings at entry and exit
2. Ramp with maximum fall at 1:10 (Typically 1:12 for side road entry – GCC Public Realm)
3. Flush crossing with blister tactile paving
4. Change in appearance over crossing



# Kerb Build Outs

Kerb Buildouts are traffic calming features which widen the side road for a short distance, tighten kerb radii slowing down vehicles and improving visibility for pedestrians, allowing a larger crossing surface area and allows both pedestrians and drivers to see each other, when parked vehicles would otherwise obstruct visibility.

Relevant Requirements	Appropriate context
Less than 30mph Requires Narrowed Kerb Radii 3. Tactile Paving at least 200mm from edge of the build out	Near schools, shopping districts, transit stops
Appropriate traffic conditions	Appropriate pedestrian conditions
Medium to High	Medium to High

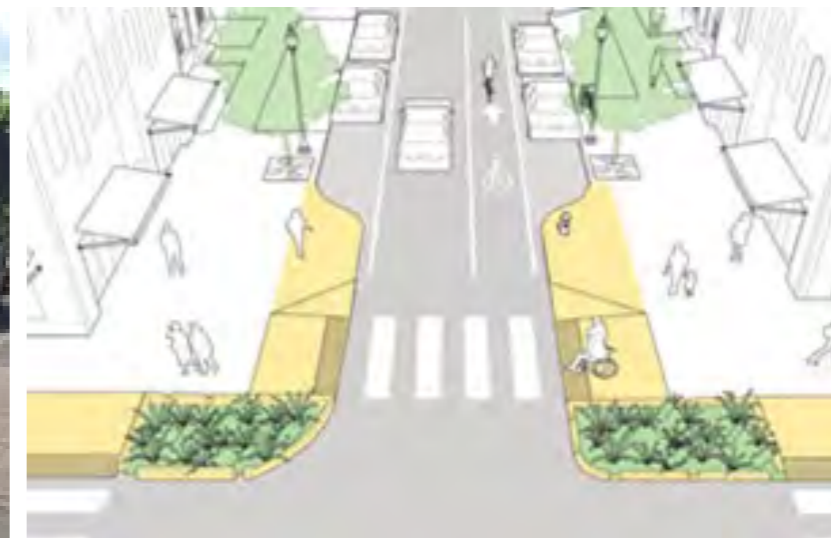
*(Source: Roads for all, National Association of City Transportation Officials)*

**Figure 39:** Kerb Build Outs Geometric Design

Photograph



Layout Diagram



## Geometric Design Elements (source: National Association of City Transportation Officials)

The National Association of City Transportation Officials, states that the length of a kerb extension should at least be equal to the width of the pedestrian crossing, but is recommended to extend to the advanced stop bar. Although specific dimensions are not mentioned in 'main' UK guidance.

It is also recommended that a kerb extension be generally 1–2 feet narrower than the parking lane, except where the parking lane is treated with materials that integrate it into the structure of the pavement. Kerb extensions should be installed whenever on-street parking is present to increase visibility, reduce the crossing distance, provide extra queuing space, and allow for enhancements such as seating or greenery.



# Accessibility Upgrades – Narrowed Kerb Radii

Narrowed kerb radii aims to reduce vehicle turning speeds at intersections, enhancing pedestrian safety by minimising vehicle-pedestrian conflicts. The intervention seeks to create safer crossing points and more manageable road interactions. Pedestrians' priority at side roads with narrowed kerb radii is more accentuated.

Relevant Requirements	Appropriate context
1. Maintain pedestrian desire lines 2. Improve visibility 3. Slow vehicle movements	Near schools, shopping districts, transit stops
Appropriate traffic conditions	Appropriate pedestrian conditions
Moderate to High Traffic Conditions	Moderate to High Pedestrian Conditions

(source: Glasgow Interim Delivery Plan, Road Safety Toolkit)

Photograph

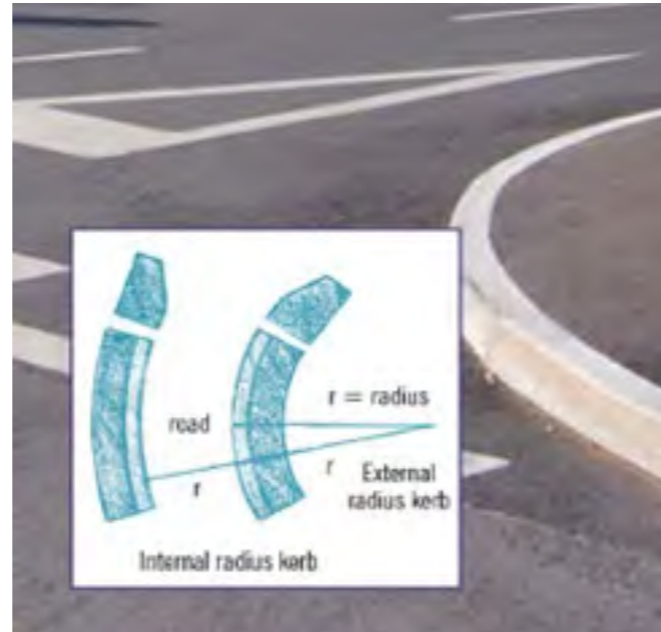
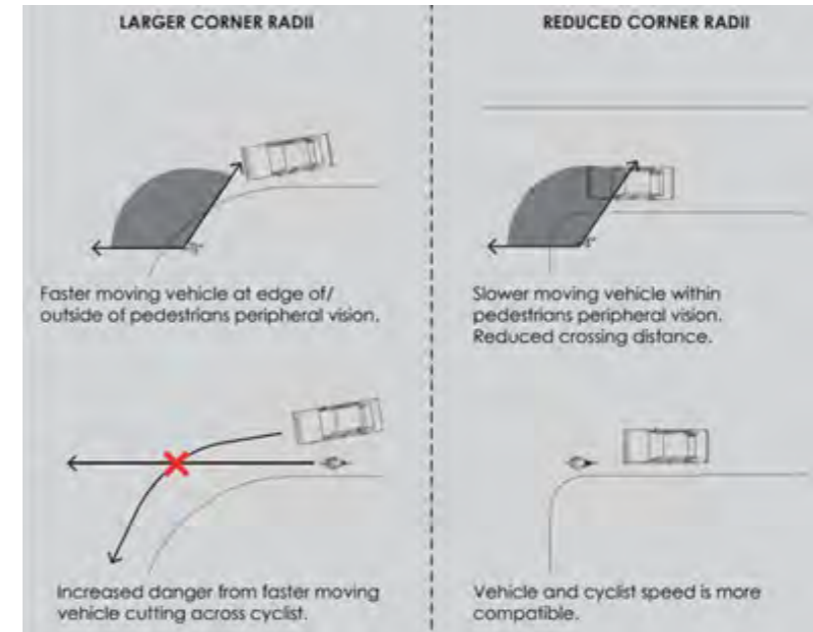


Figure 40: Narrowed Kerb Radii Geometric Design

Layout Diagram



## Geometric Design Elements (source: UK Manual for Streets (2007), Design Manual for Urban Roads and Streets)

1. On Local streets with low design speeds and infrequent large vehicle movements, a maximum corner radii of 1-3m is recommended.
2. For turns from Arterial or Link streets into Local streets, corner radii may be reduced to 4.5m.
3. In areas with frequent turns by articulated vehicles, like Industrial Estates, coner radii may increase to 9m.



# Accessibility Upgrades – Dropped Kerbs

Dropped kerbs are pavement sections that are designed to smoothly transition to the same level as the road surface. They often include tactile paving for visually impaired individuals. Without them, mobility challenges can arise for wheelchair users and others. Dropped kerbs also encourage safer pedestrian crossings and enhance overall urban safety.

Relevant Requirements	Appropriate context
1. Maintain pedestrian desire lines 2. Improve visibility 3. Slow vehicle movements	Near schools, shopping districts, transit stops
Appropriate traffic conditions	Appropriate pedestrian conditions
Moderate to High Traffic Conditions	Moderate to High Pedestrian Conditions

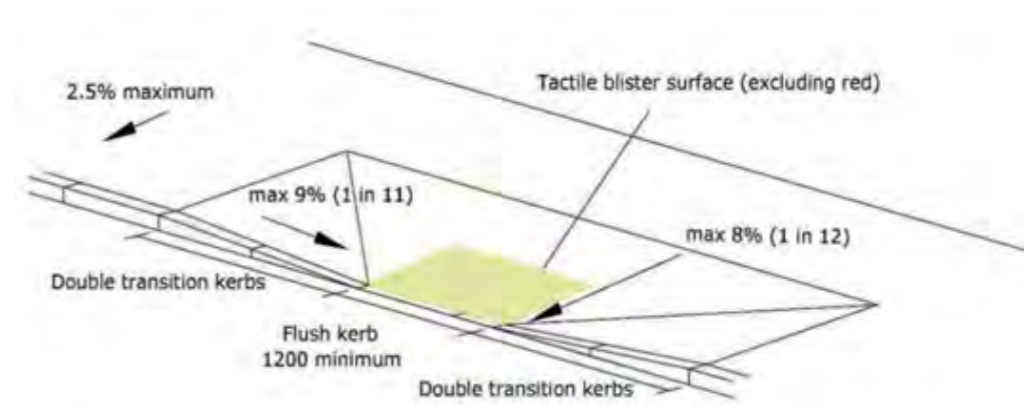
*(source: Roads for all, Scotsnet, Glasgow Interim Delivery Plan, Edinburgh Street Design Guidance)*

Photograph



**Figure 41:** Dropped Kerb Geometric Design

Layout Diagram



## Geometric Design Elements (source: roads for all (see scotnet for additional detail))

- Dimensions illustrated in diagram.



# Accessibility Upgrades – Tactiles (Blister Paving)

In the UK, there are six recognised on street tactile surfaces for effective warning for visually impaired individuals. The most frequently used is blister paving which aids vision impaired individuals to pedestrian crossing points by marking the transition from footway to carriageway, especially where a kerb upstand over 25mm is absent. At controlled crossings, it guides them to the crossing point.

Relevant Requirements	Appropriate context
<p>1. Should contrast tonally with the surrounding paving materials. For safety red coloured is reserved for controlled crossings.</p> <p>2. Top surface should be flat to avoid slipping</p>	<p>Tactile paving is appropriate in areas where pedestrian-vehicle interactions are common, such as high streets, transit stations, and areas with varying road environments.</p>
Appropriate traffic conditions	Appropriate pedestrian conditions
Moderate to High Traffic Conditions	Medium to High Pedestrian Conditions

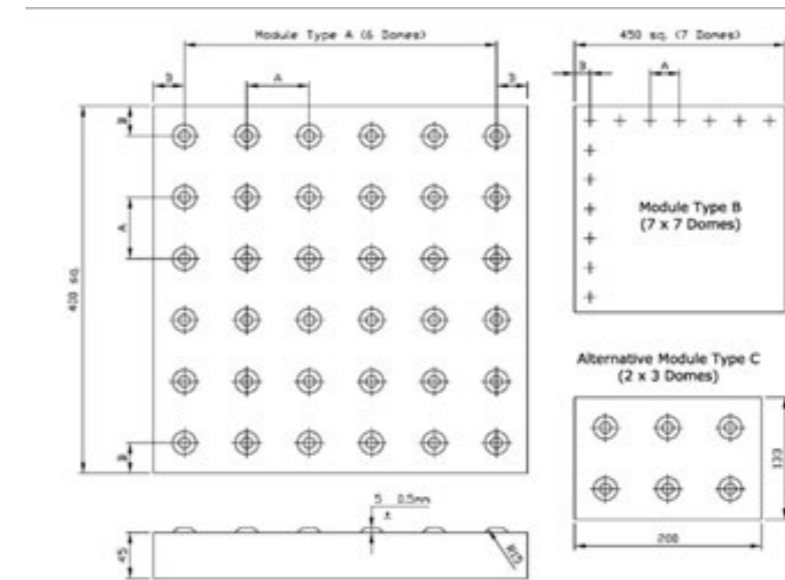
(source Department for Transport publication 'Guidance on the Use of Tactile Paving Surfaces')

Photograph



Figure 42: Blister Paving Geometric Design

Layout Diagram



Module Type	Size	Pitch Dimensions	
		A	B
A	400 sq.	66.8	33
B	450 sq.	64	33
C	200 x 133	67	33





# LNN

## GLASGOWS LIVEABLE NEIGHBOURHOODS

