CEC Footway Parking Prohibition

Report on the survey, analysis and recommendations for footway parking in relation to the Transport (Scotland) Act 2019

City of Edinburgh Council

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EXECUTIVE SUMMARY

This report describes the process followed by Project Centre Limited (PCL) for the survey and review of footway parking on Edinburgh's roads.

A desktop study identified locations where footway parking is taking place around the city. The results of this assessment were used to classify Edinburgh's roads (into Red, Amber and Green categories) and ascertain those that required a site visit. Red roads being areas that had significant levels of footway parking, amber moderate levels and green no footway parking or had footway parking but where the prohibition would have little impact, for example where carriageways were wide enough to accommodate parking and unobstructed traffic flow. A flowchart with the checks carried out for the classification of each road is included in Appendix A. In addition, a list of roads in each ward where footway parking was identified, regardless of the classification of the road, is included in Appendix D.

PCL assessed the parking displacement envisaged as a result of the introduction of the legislation at each road where significant footway parking was identified (i.e. RED roads). Furthermore, PCL identified potential interventions that could help to mitigate the impact of the new legislation coming into effect at these locations. PCL then proposed a final recommendation for each location. Physical mitigations such as footway widening will be more expensive than "soft" measures such as the considered introduction of road markings. Therefore, where multiple mitigation options were identified, interventions were prioritised based on current policy and those which could achieve best value. The included indicative prices for mitigation measures are based on 2021-22 prices and these may change should measures need to be introduced in future years. These costs are based on potential Traffic Regulation Order (TRO) or Exemption Order prices which may include various elements such as signage, road markings, traffic management and enforcement services where required. Economies of scale could be achieved by batching potential orders together, but this has not been included and for the purposes of this report single streets or clusters are reported individually."

PCL completed site visits to those roads that were categorised as Unclassified during the desktop study. These roads were not classified for various reasons (e.g. the road

was under construction at the time of the assessment). A site visit was undertaken for all the Unclassified roads to assess footway parking on-site and classify them. As shown in Table 1, several roads remain Unclassified as it is still not possible to classify them. Further details about these roads are included in Section 3 of this report.

PCL visited those areas identified during the desktop study as clusters. A cluster, for the purposes of this study, is formed by a group of roads, or sections of road, classified as RED and in close proximity to one another where significant parking displacement is envisaged as a result of the introduction of the legislation. Additionally, in some instances, there is less than ample capacity in adjacent roads to accommodate displaced vehicles. It is expected that areas identified as clusters will face increased parking problems, for example residents not being able to park as close to their homes as they've become accustomed to and may require mitigation measures, such as community engagement and increased enforcement.

A breakdown of the RAG category and number of clusters in each ward is shown in Table 1. The records from each site visit are included in Appendix B. The results of the pavement parking assessment, possible parking displacement and proposed mitigations for each RED road are included in Appendix C.

Table 1: Executive Summary - RAG Breakdown per Council Ward

Council Ward	Total	RED	AMBER	GREEN	UNCLASSIFIED	Clusters
01 - Almond	470	57	1	412	0	0
02 - Pentland Hills	331	27	0	304	0	0
03 - Drum Brae / Gyle	234	19	0	215	0	1
04 - Forth	297	55	0	242	0	2
05 - Inverleith	345	18	0	327	0	0
06 - Corstorphine / Murrayfield	265	31	0	234	0	2
07 - Sighthill / Gorgie	259	24	1	233	1	1
08 - Colinton / Fairmilehead	265	41	2	222	0	1
09 - Fountainbridge / Craiglockhart	220	19	0	201	0	1
10 - Morningside	242	9	0	233	0	0
11 - City Centre	456	5	3	447	1	0
12 - Leith Walk	207	24	1	182	0	0

13 - Leith	240	48	11	181	0	3
14 - Craigentinny / Duddingston	252	41	4	207	0	1
15 - Southside / Newington	327	9	0	318	0	0
16 - Liberton / Gilmerton	368	70	10	288	0	0
17 - Portobello / Craigmillar	407	59	2	343	3	3
TOTAL	**5185**	**556**	**35**	**4589**	**5**	**15**
%	**100%**	**10.7%**	**0.7%**	**88.5%**	**0.1%**	

1. Introduction

Background

1.1.1 The Scottish Government intends to introduce national prohibitions on footway and double parking and parking at dropped crossings under the Transport (Scotland) Act 2019.

1.1.2 The main aim of the legislation is to improve walking conditions for pedestrians and to grant local authorities additional enforcement powers to help keep footways clear of parked vehicles.

1.1.3 The City of Edinburgh Council (CEC) appointed Project Centre Limited (PCL) on 12th January 2022 to carry out a study of the streets within its boundary, including all roads already enforced within controlled parking zones (CPZ).

1.1.4 The Strategic Review of Parking (SRoP) is in the early stages of its implementation phase. The interventions proposed in this report, while aware of the SRoP proposals, are independent of the introduction of any additional parking controls that may be implemented within the city.

1.1.5 The intention of the study is to provide an improved understanding of the city's streets and in particular, areas where the legislation referenced above will apply and may require additional enforcement and/or interventions, such as exemptions or mitigation measures.

2. Methodology

2.1 Study Phases

2.1.1 This study was completed in two different phases:

- Phase 1: provided an initial overview and a single 'classification' for each street within Edinburgh.
- Phase 2: focussed on the worst-affected streets, assessing footway parking, potential parking displacement as a result of the legislation coming into effect and providing recommendations for specific streets at a segmented level.

2.1.2 The methodology for each phase is detailed in the following sections.

2.2 Phase 1

2.2.1 Only publicly adopted streets in the City of Edinburgh Council area were assessed to determine whether footway parking is currently taking place. The study area comprised all adopted roads within the red bounded areas shown in Figure 1. Major trunk roads (i.e. the M8) and unclassified roads without footways, such as many in rural West Edinburgh were omitted from the project, as they are likely to be outwith the scope of the legislation.

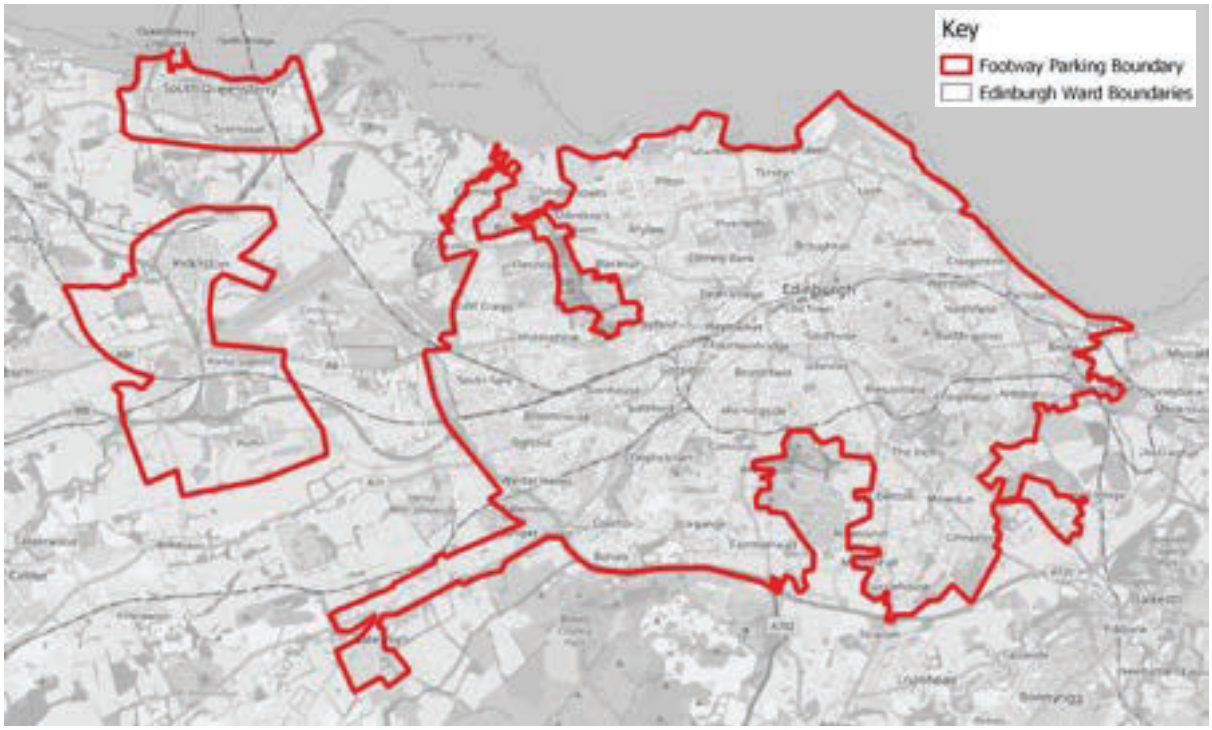

Figure 1: Study Extents

2.2.2 The Council provided PCL with a Graphic Information System (GIS) database containing all road and carriageway boundaries within Edinburgh, categorised by adoption status, e.g. 'adopted' 'prospectively adopted', 'private', etc. PCL processed the database to exclude 'private' roads and those streets outside the study boundary.

2.2.3 PCL setup a spreadsheet with tabs for each of the Council's 17 Wards. Within each of these tabs, all public roads in the Ward were listed. The following attributes were then assigned to each road:

- Ward code
- Street Name
- Road Identification Unique Code
- Current Road Adoption Status
- Road Length
- Number of carriageway lanes
- Minimum carriageway width along the road
- Footway 1 (if present) minimum width along the road
- Footway 2 (if present) minimum width along the road
- Level of Footway Parking on Footway 1 (if present) - expressed as a percentage of the approximate length of footway occupied by parked vehicles
- Level of Footway Parking on Footway 2 (if present) - expressed as a percentage of the approximate length of footway occupied by parked vehicles

2.2.4 Some carriageways and footways had assigned widths in the database provided by the Council. However, there were considerable gaps in this information. PCL manually input this information during the Phase 1 desktop study to complete the data.

2.2.5 For those roads that lack this information in the database, PCL took 3 measurements for the carriageway, Footway 1 and Footway 2 (if present) and input the average values in the spreadsheet. PCL used CEC's ArcGIS online tool[1] to obtain any length or width that was not included in the database provided by the Council.

[1] https://www.edinburgh.gov.uk/statutorypublicroads

2.2.6 Once this information was gathered and the spreadsheet was set up, PCL completed a desktop assessment of the streets. Streets were categorised using Red/Amber/Green (RAG) status, with red being areas that had significant levels of footway parking, amber moderate levels and green no footway parking. This is explained in further detail below:

- **RED** – Significant levels of footway parking currently taking place and may need consideration of mitigation measures.
    - These are typically streets with narrow footways and carriageways, where endemic footway parking takes place. Where parking fully on the carriageway may present problems for the free flow of traffic, block it entirely, or force motorists to drive on the footway to pass. There may also be a significant loss of parking for local residents and displacement into other areas where there may not be surplus capacity to accommodate further parking demands.
    - Moderate levels of footway parking taking place but the resulting unobstructed footway width where footway parking is taking place is less than 1.5m.
- **AMBER** – Moderate levels of footway parking currently taking place; however, footway parking could be prohibited with minimal impact.
    - These streets typically have wider footways and ample carriageway widths to safely accommodate parking on at least one side and allow the free passage of vehicles on the other. There is enough parking capacity for all demand, but vehicles would need to be parked further from residents' homes.
- **GREEN** – No footway parking taking place and footway parking can easily be prohibited with no discernible impact.
    - These roads typically have wide footways and wide carriageways; enough to allow parking on both sides of the road and enable the free passage of traffic (even on a one-way basis). The majority of streets in the city fall into this category.
- **Unclassified** – Unable to assess and classify the road into the categories described above.
    - These roads were not classified during the desktop study. The most common reasons were that road was under construction at the time of the assessment, or there was insufficient information about the

road on GIS mapping systems or Google Street View resources. A site visit was undertaken for all the 'Unclassified' roads in order to assess those on-site and classify them. The outcome of the site visit is described in the following sections of this report (Section 3).

2.2.7 PCL performed a series of checks to assign a RAG classification to each street. A flowchart diagram illustrating the classification using this process is included in Appendix A.

2.2.8 This methodology was developed to minimise subjectivity in the assessment of footway parking and provide a structured framework for the consistent and objective application of the RAG classification.

2.3 Phase 2

2.3.1 The desktop assessment carried out during Phase 1 resulted in some roads remaining as 'Unclassified'. The assessor classified these roads as 'Unclassified' in the following scenarios:

- The road/footways are under construction and footway parking cannot be assessed via desktop study
- There is an issue with the road record extracted from the CEC database (e.g. wrong/blank road name).
- The record does not correspond to a road (e.g. cycle track, path, etc.)
- The road is not found in the CEC ArcGIS database or Google Maps.
- Footway parking cannot be assessed via desktop study.

2.3.2 A sense-check of these 'Unclassified' roads was undertaken by a second assessor. This assessor broke down these roads into:

- Code the section in RAG: the second assessor was able to classify the road performing the checks included in Appendix A.
- 'Site Visit Required': where the assessor believed the road could be coded via site visit (e.g. area under construction in Google Maps).

2.3.3 Following the completion of the preliminary RAG classification, PCL carried out a detailed analysis of those streets categorised as RED. The roads contained in the Council's GIS database were split into different segments, an extract of which is shown in Figure 2.

2.3.4 A specific identifier (Section ID) was assigned to each individual road segment. For example, Addiston Crescent is split in the database into four different segments. Therefore, the Section IDs for the road are:

- 02-Pentland Hills-Addiston Crescent-CW-1
- 02-Pentland Hills-Addiston Crescent-CW-2
- 02-Pentland Hills-Addiston Crescent-CW-3
- 02-Pentland Hills-Addiston Crescent-CW-4

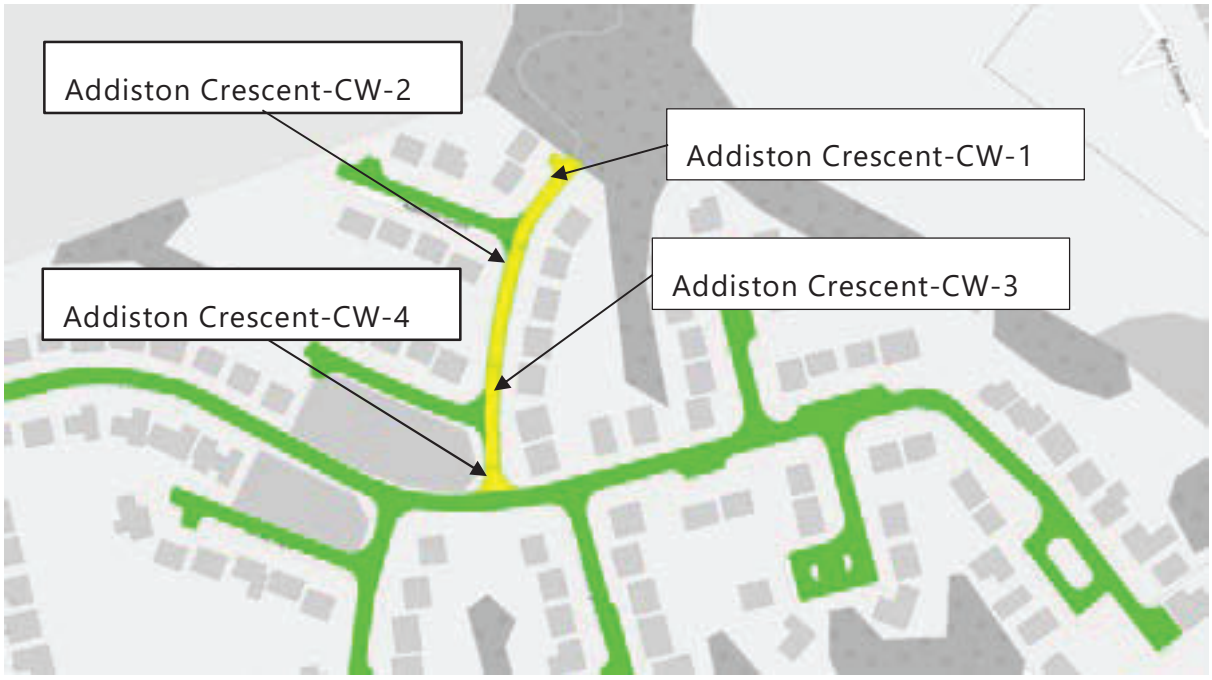

Figure 2: Street Segments in the GIS Database – Addiston Crescent

2.3.5 This enabled PCL to complete a granular assessment of the streets categorised as RED. Rather than studying roads classified as RED as single entities, PCL assessed footway parking on each segment, providing more robust data to support more detailed conclusions on impacts and interventions.

2.3.6 PCL gathered factual information for each segment where footway parking was taking place (i.e. segment length, carriageway width, number of lanes, footways width, number of cars parked on each footway, etc.) and carried out the granular assessment.

2.3.7 In the completion of the granular assessment, PCL assessed if the introduction of the legislation will lead to a reduction in parking capacity,

or if the legislation will not lead to a considerable loss of parking. Examples of the latter case include:

- Parking displacement from footway to carriageway will not create a problem for emergency vehicles.
- There are available parking spaces nearby that the cars currently parked on the footway could be using.
- Cars currently parked on the footway are possibly second household cars and there is space available in properties (garages or driveways) next to the road.
- Cars parked temporarily on the footway (deliveries, trades people, etc.)
- Considerable parking available in the adjacent streets.

2.3.8 Following the above, PCL assessed the segment's geometry to identify suitability of the following potential mitigation measures to alleviate footway parking:

- Introduction of parking bays
- Footway widening
- Introduction of staggered parking bays in combination with passing places
- Introduction of road markings
- Exemption

2.3.9 PCL then proposed a final recommendation for each location. Physical mitigations such as footway widening will be more expensive than "soft" measures such as the introduction of road markings. Therefore, where multiple mitigation options were feasible, recommendations were prioritised by the most cost-effective option.

2.3.10 As mentioned in Section 1 in this report, the Strategic Review of Parking (SRoP) is currently under way and the final decision on its outcomes have yet to be made. However, any interventions proposed in this report, while recognising the SRoP work are independent of it.

2.3.11 PCL developed a project spreadsheet to incorporate the results of the granular assessment and the recommended mitigations and map-based digital information files (i.e. GIS Shapefiles) for each Council Ward. These GIS Shapefiles included a visual representation of all the street segments

included within each Ward. These segments were assigned a red, amber, green or purple colour to reflect the assessed level of footway parking. The project spreadsheet and the GIS Shapefiles were shared with CEC as part of the study package.

2.3.12 The proposed mitigation measures identified for each road and the potential impact on nearby locations caused by the envisaged parking displacement was then assessed. Table 2 shows how parking displacement was assessed.

Table 2: Methodology – Impact of Parking Displacement

Impact Parking Displacement	Assessment
No impact	**0%** of identified footway parking will be likely to be displaced to nearby roads. Sufficient on-carriageway space on the same road
Minor	**<25%** of identified footway parking will be likely to be displaced to nearby roads **AND** **100%** of parking displacement can be accommodated on surrounding roads without introducing additional parking pressures (i.e. available parking spaces on nearby roads will likely be reduced by <25%)
Moderate A	**<25%** of identified footway parking will be likely to be displaced to nearby roads **AND** **100%** of parking displacement can be accommodated but leading to 'Moderate' parking pressures on surrounding roads (i.e. available parking spaces on nearby roads will likely be reduced by 25%-50%)
Moderate B	**25-50%** of identified footway parking will be likely to be displaced to nearby roads **AND** **Up to 50%** of parking displacement could be accommodated on surrounding roads without introducing additional parking pressures (i.e. available parking spaces on nearby roads will likely be reduced by <25%)
Significant A	**<25%** of identified footway parking will be likely to be displaced to nearby roads **AND** **100%** of parking displacement can be accommodated but leading to 'Significant' parking pressures on surrounding roads ((i.e. available parking spaces on nearby roads will likely be reduced by >50%)
Significant B	**25-50%** of identified footway parking will likely be displaced to nearby roads **AND** **Up to 50%** of parking displacement could be accommodated but 'Moderate' parking pressures will be introduced on surrounding roads (i.e. available parking spaces on nearby roads will likely be reduced by 25%-50%)
Significant C	**>50%** of identified footway parking will be likely displaced to nearby roads **AND** **100%** of parking displacement can be accommodated on surrounding roads without introducing additional parking pressures (i.e. available parking spaces on nearby roads will likely be reduced by <25%)
Significant D	**>50%** of identified footway parking will be likely displaced to nearby roads **AND** **100%** of parking displacement can be accommodated but leading to 'Significant' parking pressures on surrounding roads ((i.e. available parking spaces on nearby roads will likely be reduced by >50%)

2.3.13 PCL completed a geospatial analysis to identify clusters of segments with endemic footway parking. A cluster is formed by a group of roads or segments where significant footway parking is taking place (RED segments) which are near one another. In order for a group of RED segments to be defined as a cluster, parking displacement to nearby roads as a result of the introduction of the legislation must be envisaged. A group of RED segments is not defined as a cluster if the footway parking identified can be accommodated fully on the carriageway or in other segments of the same road or those adjacent to it, without introducing parking pressures on nearby roads. It is expected that, once the legislation comes into being, residents living in areas identified as clusters will face increased parking problems as incorrect parking is addressed. Therefore, footway parking has holistically been assessed at these clusters and different mitigation measures have been identified for each of them.

2.3.14 After the completion of the granular assessment and cluster analysis, PCL arranged two workshops (07/06/2022 & 14/07/2022) with CEC to present the outcome of the cluster analysis and present the potential mitigation measures identified.

3. Results

3.1 Overall Results

3.1.1 Following completion of the Phase 1 and Phase 2 assessments above, this Section summarises the results.

3.1.2 The overall results are presented below, and this is followed by separate sections providing a detailed analysis for each Council Ward.

3.2 Overall Results – RAG Classification

3.2.1 A breakdown of the roads assessed in each Council Ward, by RAG category, is shown in Table 3.

Table 3: RAG Breakdown per Council Ward

Council Ward	Total	RED	AMBER	GREEN	UNCLASSIFIED
01 - Almond	470	57	1	412	0
02 - Pentland Hills	331	27	0	304	0
03 - Drum Brae / Gyle	234	19	0	215	0
04 - Forth	297	55	0	242	0
05 - Inverleith	345	18	0	327	0
06 - Corstorphine / Murrayfield	265	31	0	234	0
07 - Sighthill / Gorgie	259	24	1	233	1
08 - Colinton / Fairmilehead	265	41	2	222	0
09 - Fountainbridge / Craiglockhart	220	19	0	201	0
10 - Morningside	242	9	0	233	0
11 - City Centre	456	5	3	447	1
12 - Leith Walk	207	24	1	182	0
13 - Leith	240	48	11	181	0
14 - Craigentinny / Duddingston	252	41	4	207	0
15 - Southside / Newington	327	9	0	318	0
16 - Liberton / Gilmerton	368	70	10	288	0
17 - Portobello / Craigmillar	407	59	2	343	3
TOTAL	**5185**	**556**	**35**	**4589**	**5**
%	**100%**	**10.7%**	**0.7%**	**88.5%**	**0.1%**

3.2.2 The overall RAG breakdown of the roads within the study network is shown in Figure 3.

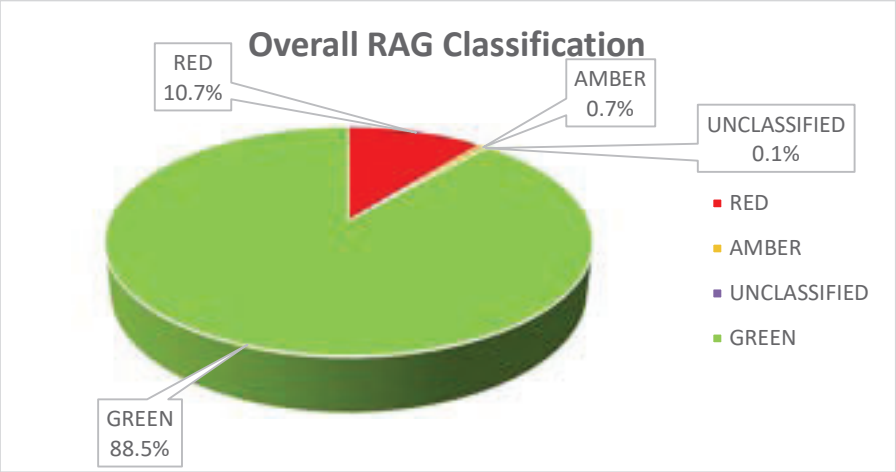

Figure 3: Overall RAG Classification

3.3 Overall Results - Cluster analysis

3.3.1 A cluster is formed by a group of roads, or segments, near each other that are all classified as RED where significant parking displacement is envisaged as a result of the introduction of the new legislation. As mentioned before in this report, it is expected that residents of and visitors to such areas identified as clusters will face increased parking problems and may possibly require additional mitigation measures as incorrect parking is addressed.

3.3.2 A total of 15 clusters have been identified during the study and a further breakdown by ward is included below. Wards 13 and 17 had the most clusters; each with three being identified. However, eight Wards had zero clusters identified with the rest having one or two. Table 4 includes a breakdown of the clusters identified in this study.

Table 4: Overall cluster breakdown

Council Ward	Clusters
01 - Almond	0
02 - Pentland Hills	0
03 - Drum Brae / Gyle	1
04 - Forth	2
05 - Inverleith	0
06 - Corstorphine / Murrayfield	2
07 - Sighthill / Gorgie	1
08 - Colinton / Fairmilehead	1
09 - Fountainbridge / Craiglockhart	1
10 - Morningside	0
11 - City Centre	0
12 - Leith Walk	0
13 - Leith	3
14 - Craigentinny / Duddingston	1
15 - Southside / Newington	0
16 - Liberton / Gilmerton	0
17 - Portobello / Craigmillar	3
TOTAL	**15**

3.4 Ward 1 - Almond

3.4.1 Ward 1 – Almond is located in the north-west area of Edinburgh (See Figure 4). This Ward has an associated area of 72.1km2. 470 roads within this Ward formed part of the study.

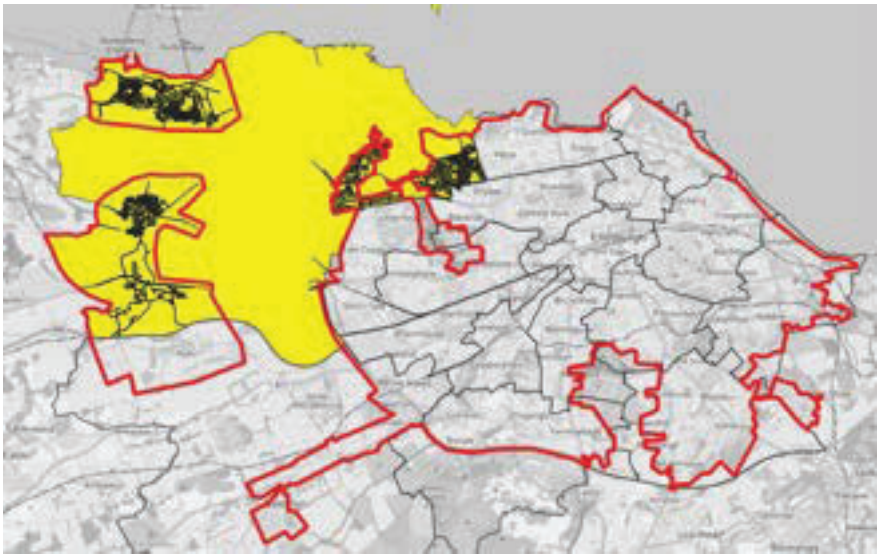

Figure 4: Ward 1- Almond- Location

3.4.2 PCL identified 6 'Unclassified' roads in this Ward. The data available during the desktop study was not sufficient to classify these roads. The assessors believed the completion of a site visit would aid coding these particular roads. PCL completed a site visit of these roads on 15/06/2022 The resulting RAG classification of these roads is shown below.

Table 5: Ward 01- Almond- Unclassified Roads

Street Name	RAG Classification
Balneil Place	GREEN
Daybell Loan	GREEN
Lambsmiln Place	GREEN
Stair Place	GREEN
Templar Crescent	RED
Templar's Cramond	GREEN

3.4.3 PCL identified a total of 165 cars parked on the footways in this Ward. This led to 57 roads in this Ward to be classified as RED.

3.4.4 The resulting RAG classification breakdown for this Ward is shown in the figure below.

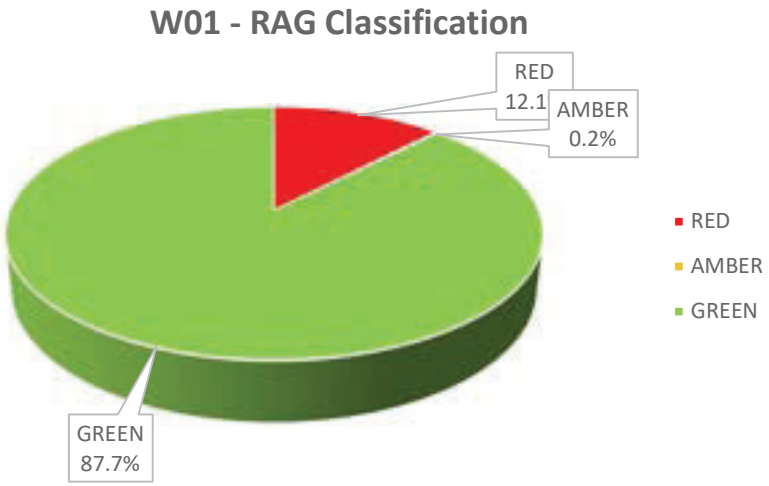

Figure 5: Ward 01- Almond- RAG Classification

3.4.5 Phase 2 of the study included a granular assessment of the 57 RED roads and the results and recommendations for each road are shown in the following sections.

3.4.6 A list of the RED roads identified for Ward 1 is included in Table 6.

3.4.7 A detailed breakdown of each road listed, including the proposed mitigation measures identified for each segment, is included in Appendix C-1.

Table 6: Ward 01- Almond- Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Ashburnham Gardens	Cramond Park	Marjoribanks Road
Avon Road	Cramond Regis	Packard Street
Barnton Park Avenue	Cramond Vale	Queen Margaret Drive
Barnton Park Crescent	Davidson Gardens	Salvesen Grove
Barnton Park Dell	East Barnton Gardens	Silverknowes Crescent
Barnton Park Drive	Echline Gardens	Silverknowes Grove
Barnton Park Gardens	Eilston Drive	Silverknowes Neuk
Barnton Park Place	Eilston Road	Silverknowes Terrace
Barnton Park View	Essex Brae	Silverknowes View
Braehead Avenue	Essex Road	Skene Place
Braehead Drive	Ferry Gait Drive	South Scotstoun
Braehead Park	Glendinning Road	Springfield Crescent
Cammo Bank	Hillwood Rise	Strathalmond Park
Cammo Brae	Inchkeith Avenue	Templar Crescent
Cammo Grove	Inveralmond Drive	Upper Cramond Court
Cammo Parkway	Lauriston Farm Road	West Fairbrae Crescent
Cammo Place	Linn Mill	Wester Drylaw Drive
Catelbock Close	Maitland Road	
Craigroyston Grove	Malachi Gait	
Cramond Grove / Cramond Gardens	Marchfield Grove	

Cluster analysis

3.4.8 No clusters were identified in this Ward.

3.5 Ward 2 – Pentland Hills

3.5.1 Ward 2 – Pentland Hills is located in the south-west area of Edinburgh (See Figure 6). This Ward has an associated area of 80.2km2. 331 roads within this Ward formed part of the study.

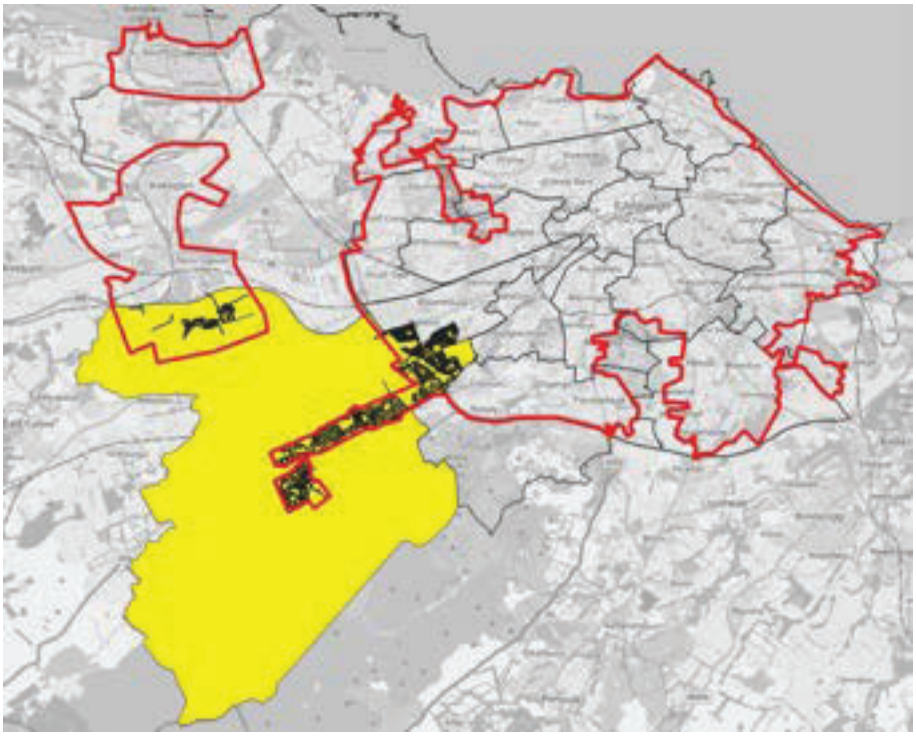

Figure 6: Ward 02- Pentland Hills- Location

3.5.2 PCL identified 4 'Unclassified' roads in this Ward. The data available during the desktop study was not sufficient to classify these roads. The assessors believed the completion of a site visit would aid coding these particular roads. PCL completed a site visit of these roads on 15/06/2022. The resulting RAG classification of these roads is shown below.

Table 7: Ward 02- Pentland Hills- Unclassified Roads

Street Name	RAG Classification
Greenstone Loan	GREEN
Kings View Close	GREEN
Kings View Crescent	GREEN
Whinstone Place	GREEN

3.5.3 PCL identified a total of 63 cars parked on the footways in this Ward. This led to 27 roads in this Ward to be classified as RED.

3.5.4 The resulting RAG classification breakdown for this Ward is shown in the figure below.

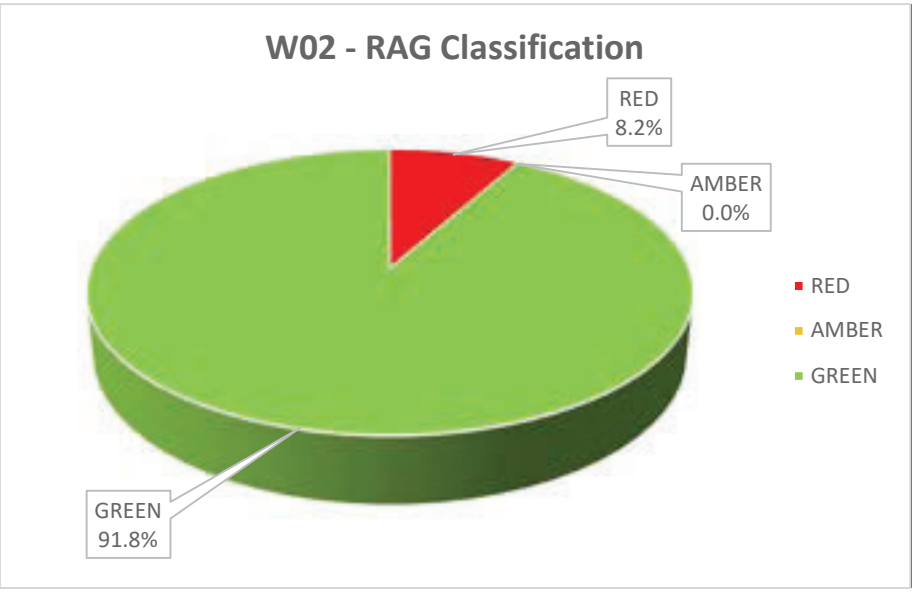

Figure 7: Ward 02- Pentland Hills- RAG Classification

3.5.5 Phase 2 of the study included a granular assessment of the 27 RED roads and the results and recommendations for each road are shown in the following sections.

3.5.6 A list of the RED roads identified for Ward 2 is included in Table 8.

3.5.7 A detailed breakdown of each road listed, including the proposed mitigation measures identified for each segment, is included in Appendix C-2.

Table 8: Ward 02- Pentland Hills- Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Baberton Avenue	Cairns Gardens	Muir Wood Grove
Baberton Crescent	Dalmahoy Road	Nether Currie Crescent
Baberton Mains Court	Glenbrook Road	Weavers Knowe Crescent
Baberton Mains Grove	Hallcroft Close	Westburn Avenue
Baberton Mains Lea	Hallcroft Crescent	Woodhall Millbrae
Baberton Mains Loan	Hallcroft Gardens	
Baberton Mains Rise	Hallcroft Neuk	
Baberton Mains Row	Hallcroft Park	
Baberton Mains Way	Hallcroft Rise	
Baberton Mains Wood	Hillview Cottages	
Bryce Road	Kings View Crescent	

Cluster analysis

3.5.8 No clusters were identified in this Ward.

3.6 Ward 3 – Drum Brae/Gyle

3.6.1 Ward 3 – Drum Brae/Gyle is located in the west area of Edinburgh (See Figure 8). This Ward has an associated area of 7.22km2. 234 roads within this Ward formed part of the study.

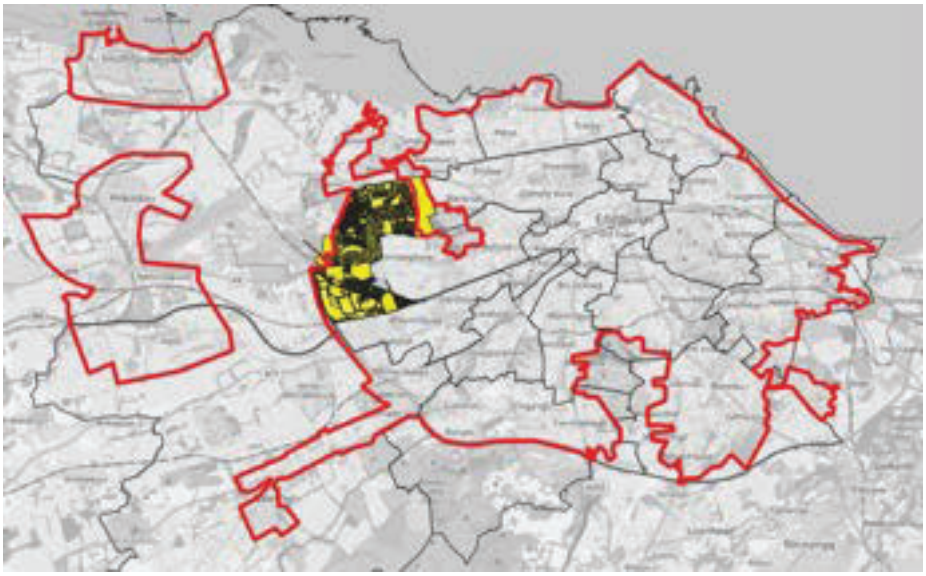

Figure 8: Ward 03- Drum Brae/ Gyle- Location

3.6.2 The 234 roads contained in this Ward were successfully RAG classified. Therefore, no road in this Ward was defined as 'Unclassified'.

3.6.3 PCL identified a total of 125 cars parked on the footways in this Ward. This led to 19 roads in this Ward to be classified as RED.

3.6.4 The resulting RAG classification breakdown for this Ward is shown in the figure below.

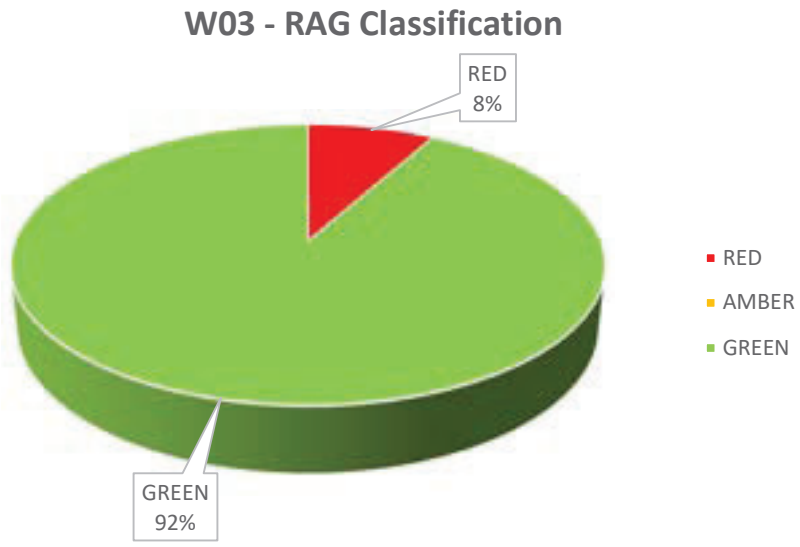

Figure 9: Ward 03- Brum Brae/ Gyle- RAG Classification

3.6.5 Phase 2 of the study included a granular assessment of the 19 RED roads and the results and recommendations for each road are shown in the following sections.

3.6.6 A list of the RED roads identified for Ward 3 is included in Table 9.

3.6.7 A detailed breakdown for each road, including the proposed mitigation measures identified for each segment, is included in Appendix C-3.

Table 9: Ward 03- Drum Brae/ Gyle- Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Almond Square	Clermiston Hill	Drum Brae South
Barntongate Avenue	Clerwood Park	East Craigs Rigg
Barntongate Drive	Clerwood Way	Hayfield
Blackthorn Court	Craigmount Hill	Marnin Way
Bramble Drive	Craigmount Loan	North Gyle Grove
Burnbrae Avenue	Drum Brae Drive	
Burnbrae Grove	Drum Brae Gardens	

Cluster analysis

3.6.8 One cluster was identified for this Ward.

Ward 03 – Cluster 1

3.6.9 This cluster is located on the north-east side of Ward 03, just west of Hillwood House, and it contains several segments of Clerwood Park.

3.6.10 The levels of footway parking identified in some of these segments was considerable with footway parking being identified taking place on both sides of the road in many of the segments.

3.6.11 The carriageway's width for the segments in this cluster is 5.2m on average. The segments in Clerwood Park have narrow footways with widths varying from 0.3m to 1m. Based on the existing layout, pedestrian movements are already difficult at these locations and accessibility for wheelchair users may be compromised. Footway parking accentuates accessibility issues.

3.6.12 Many of the properties in the vicinity have their own private driveways or garages. Therefore, it is possible that the cars parked on the footways in this cluster are second household cars. Alternatively, these cars may belong to owners for whom it is more convenient to park on the footways

next to their homes rather than in their driveways. It is not clear whether private garages are used for parking or not, but it is possible that many are used primarily for storage and not for car parking. However, it is assumed that there is some potential for cars to be accommodated within private driveways or garages.

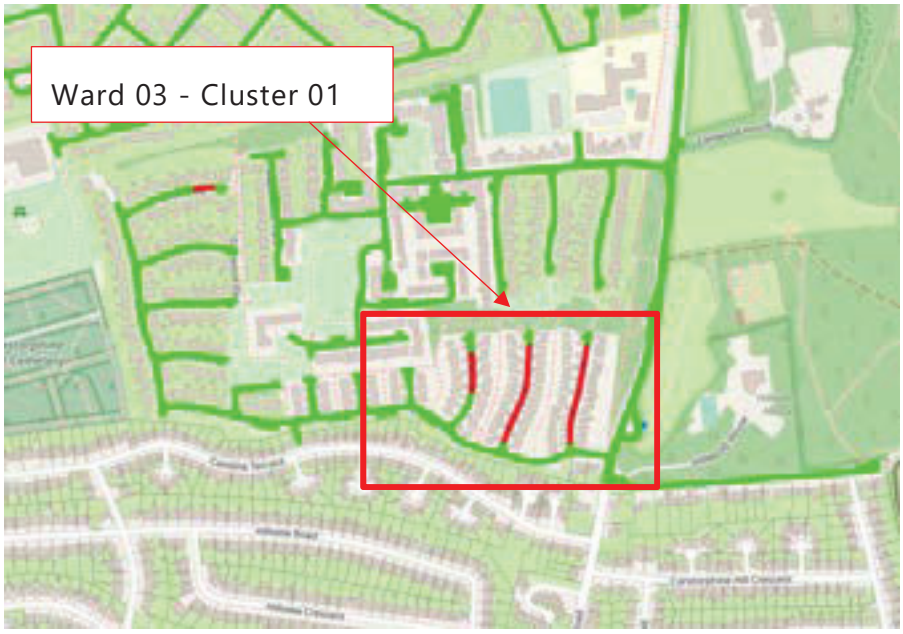

Figure 10: Ward 03- Drum Brae/ Gyle- Cluster 01 Location

3.6.13 When the legislation comes into effect, it is likely that a number of the vehicles currently parked on the footway may be displaced to the main section of Clerwood Park, south of the RED segments. However, this part of Clerwood Park has limited available parking capacity and the parking displacement expected as a result of the legislation is 'moderate'. Therefore, it is expected that parking pressures would be more noticeable in the area.

Ward 03 – Cluster 01 – On-site Assessment

3.6.14 This cluster was visited by PCL's assessor on 13/06/2022.

3.6.15 During the site visit to this cluster an on-site assessment of the current parking conditions was undertaken.

3.6.16 The same level of footway parking identified during the desktop assessment was recorded in Clerwood Park during the on-site assessment. 22 cars were observed parking on the footways during the on-site assessment, the exact same number of cars identified in the desktop study. However, these cars were distributed on different segments on this road but not far from where they were identified in the desktop study.

3.6.17 As mentioned before in this section, when the legislation comes into effect, it is likely that a number of the vehicles currently parked on the footway would be displaced to the main section of Clerwood Park. However, this part of Clerwood Park has limited available parking capacity (see Figure 11).

3.6.18 It is expected that between 25-50% of the footway parking identified will need to be displaced to nearby roads and that up to 50% of the parking displacement could be accommodated on nearby roads without the introduction of significant parking pressures. Therefore, the parking displacement expected as a result of the introduction of the legislation is 'Moderate B' (refer to Table 2). It is expected that parking pressures would be more noticeable in the area and the introduction of mitigation measures could help to alleviate these pressures.

Figure 11:Ward 03 – Drum Brae/Gyle – Clerwood Park – Available parking bays to accommodate a portion of the expected parking displacement.

Ward 03 – Cluster 01 – Potential Mitigation Measures

- Option 1 – Double yellow lines and advisory parking bays

3.6.19 The average existing carriageway width of the roads included in this cluster is 5.2m and this only allows parking on one side of the carriageway without affecting traffic flow.

3.6.20 Demand for parking places in these sections of Clerwood Park is likely to be higher at certain times of the day, such as overnight and at weekends. The introduction of double yellow lines at sections of the road, should the introduction of the legislation not achieve its desired aims, could be beneficial as it will allow vehicles to park fully on the carriageway on one side of the road while ensuring adequate carriageway width is always maintained for access of emergency vehicles.

3.6.21 Furthermore, should problems persist, introducing advisory parking bays would be recommended in sections of Clerwood Park as these would help to optimise the capacity of the remaining unrestricted parking space.

3.6.22 The estimated costs associated with the TRO, provision of double yellow line one side of each of the three legs of the road and bay markings would be circa £13,100.

- Option 2 – Double yellow lines and construction of additional bays

3.6.23 Existing parking bays on the south side of the east to west section of Clerwood Park are usually well occupied and there is limited capacity for parking displacement to these bays.

3.6.24 Construction of new parking bays on the existing verges of Clerwood Park (east to west section) could potentially alleviate some parking displacement concerns should the introduction of the legislation not achieve its desired aims. However, would require considerable construction works. In addition, this would result in the considerable loss of local amenity at the expense of green space and potentially mature trees all within the vicinity of local houses. There is also not sufficient space to create parking for each displaced vehicle, so this issue is likely to persist. Finally, building more parking places may only exacerbate problems by encouraging further parking demands.

3.6.25 The estimated construction costs associated with the proposed mitigations would be circa £40,000. This includes site clearance, excavations, carriageway construction for the proposed bays, kerbs, signage, and markings.

- Option 3 – car sharing opportunities.

Another measure which could be considered, should the introduction of the legislation not achieve its desired aims, is the introduction of greater car sharing opportunities, such as through the Council's car club partner.

The latest research available suggests that one car club vehicle has the potential to remove 17 private vehicles from the road. This area could be well suited to greater car club provision as local parking may be limited, many amenities are already within a 20-minute walk but the occasional need for a car may encourage residents to have second household cars and keep one parked nearby. Car clubs are well suited to reduce such demands for private vehicles. The closest car sharing opportunity for residents in this area is located in Station Road which is within a 15-minute walk. The introduction of greater car sharing opportunities closer to Corstorphine Hill, should problems persist, may encourage people to use the scheme. The enhanced public transport links combined with car club introduction/promotion could encourage some residents to give up their vehicle, or a second household car, making them a considerable saving while reducing parking demands in the area.

<u>Ward 03 – Cluster 01 – Final Recommendation by PCL</u>

3.6.26 Parking pressures are expected at this location when the legislation comes into effect. Some residents are expected to start using their private driveways or garages for parking, but it is expected that this may not be sufficient to accommodate the existing levels of footway parking identified at this location.

3.6.27 In order to ensure adequate carriageway widths are maintained, should the introduction of the legislation not achieve its desired aims, the implementation of mitigation measures may be beneficial especially during the times when the highest parking demand occurs in this cluster. These measures will help to optimise the functionality of Clerwood Park.

They can help to relieve some of the increased parking pressures that are expected after the start of the new legislation.

3.6.28 Therefore, should problems persist, PCL recommends the introduction of the mitigation measures previously described for this cluster which comprise of:

- Introduction of strategic double yellow lines along one side of Clerwood Park. This will ensure sufficient carriageway width is provided for the potential access of emergency vehicles.
- Strategic introduction of advisory parking bays on Clerwood Park.

3.6.29 The estimated costs associated with the TRO, provision of double yellow line one side of each of the three legs of the road and bay markings would be circa £13,100.

3.7 Ward 4 - Forth

3.7.1 Ward 4 – Forth is located in the north area of Edinburgh (See Figure 12). This Ward has an associated area of 6.13km2. 297 roads within this Ward formed part of the study.

Figure 12: Ward 04- Forth- Location

3.7.2 PCL identified one road in this Ward as 'Unclassified' (Jansch Place) as this road was under construction during the desktop study. A site visit to clarify this road was undertaken on 13/06/2022. This road was coded as 'GREEN' after the site visit as no footway parking was identified (see Figure 13).

Figure 13: Ward 04- Forth- Jansch Place- Site visit- No footway parking

3.7.3 PCL identified a total of 327 cars parked on the footways of this Ward. This led to 55 roads in this Ward to be classified as RED.

3.7.4 The resulting RAG classification breakdown for this Ward is shown in the figure below.

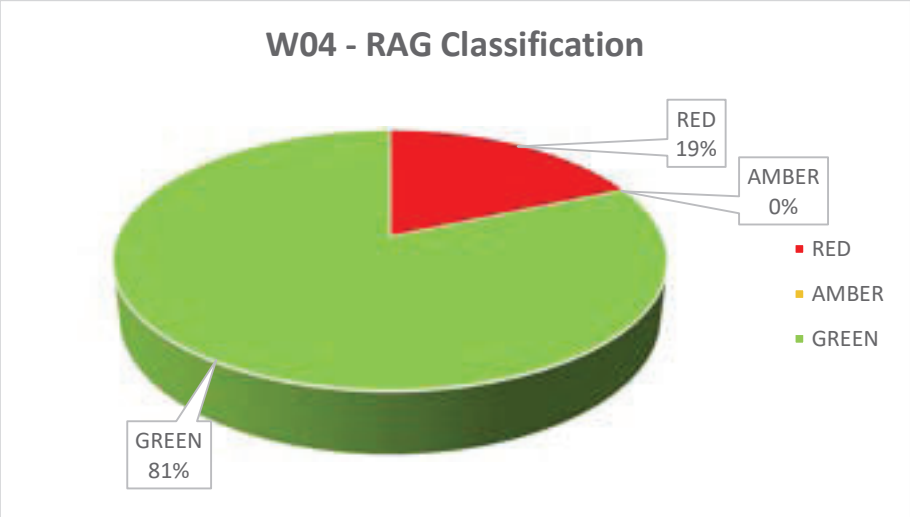

Figure 14: Ward 04 – Forth – RAG Classification

3.7.5 Phase 2 of the study included a granular assessment of the 55 RED roads and the results and recommendations for each road are shown in the following sections.

3.7.6 A list of the RED roads identified for Ward 4 is included in Table 10.

3.7.7 A detailed breakdown for each road, including the proposed mitigation measures identified for each segment, is included in Appendix C-4.

Table 10: Ward 04 – Forth – Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Annfield Street	East Pilton Farm Crossway	Park Road
Bangholm Avenue	East Pilton Farm Wynd	Pilton Drive North
Bangholm Park	Fraser Avenue	Rosebank Grove
Bangholm Place	Fraser Crescent	Roseville Gardens
Bangholm Road	Granton Mains Bank	Royston Mains Road
Beresford Place	Granton Medway	Stanley Road
Boswall Crescent	Granton Mill Crescent	Summerside Place
Boswall Green	Granton Mill Drive	Trinity Crescent
Boswall Loan	Granton Place	Wardie Avenue
Boswall Terrace	Grierson Gardens	Wardie Square
Cargil Terrace	Grierson Square	West Harbour Road
Colonsay Way	Hawthornvale	West Pilton Crescent
Craighall Bank	Heron Place	West Pilton Lea
Crewe Bank	Jessfield Terrace	West Pilton Loan
Crewe Crescent	Lapicide Place	West Pilton Terrace
Crewe Road Gardens	Laverockbank Road	
Crewe Road West	Laverockbank Terrace	
Crewe Terrace	Lochinvar Drive	
Custom House Place	Lower Granton Road	
Derby Street	Newhaven Road	

Cluster analysis

3.7.8 Two clusters were identified for this Ward.

Ward 04 – Cluster 1

3.7.9 This cluster is located on the south side of Ward 04. It is located next to the Goldenacre Playing Fields

3.7.10 The roads in this cluster containing RED segments are:

- Bangholm Avenue
- Bangholm Park
- Bangholm Place
- Bangholm Road

3.7.11 The levels of footway parking identified in these streets is 'Significant'. 11 cars were identified parking on the footway in Bangholm Avenue, 4 on Bangholm Park, 11 on Bangholm Place and 7 on Bangholm Road.

Figure 15: Ward 04 – Forth – Cluster 01 - Location

3.7.12 The width of the carriageways that form part of this cluster is 3.6m on average. These streets provide 1.5m wide footways at both sides of the road. The number of cars parked on these footways makes pedestrian movements difficult and would hinder access for wheelchair and buggy users. However, in the segments where cars were mounted on the footway, the opposite footway was clear of vehicle parking and pedestrians can make use of an unobstructed footway. As mentioned

before, these footways' width is 1.5m which is sufficient, although not ideal, for wheelchair users.

3.7.13 Many properties in the vicinity have their own private driveways. Therefore, it is possible that the cars parked on the footways in this cluster could be second household cars or they belong to owners for whom it is more convenient to park on the footways next to their properties than in their driveways. However, the second possibility may represent a minority of the footway parking cases in this cluster as most driveways in this area were used by at least one vehicle, at the time of the surveys.

3.7.14 When the legislation comes into effect, it is likely that a number of the vehicles currently parking on the footway would be displaced to streets nearby where on-carriageway parking is available. This is the case of Clark Road, Clark Avenue and Ferry Road. Although there are normally several available spaces in these streets, the volume of parking displacement expected as a result of the new legislation is 'Significant B' (refer to Table 2). These roads will not be able to accommodate all the parking displacement and it is expected that parking pressures would be more noticeable in neighbouring areas as a result.

Ward 04 – Cluster 01 – On-site Assessment

3.7.15 This cluster was visited by PCL's assessor on 13/06/2022.

3.7.16 During the site visit to this cluster an on-site assessment of the current parking conditions was undertaken.

3.7.17 Similar levels of footway parking were recorded for these roads that comprise this cluster during the desktop assessments and at the time of the on-site visit. 33 cars were identified parking on the footways during the desktop study and 31 were observed during the on-site assessment.

Figure 16: Ward 04 – Forth – Cluster 01 – On-site assessment- Bangholm Avenue

3.7.18 As mentioned before in this section, when the legislation comes into effect, it is likely that a number of the vehicles currently parked on the footway would be displaced to the surrounding streets.

3.7.19 It is expected that between 25-50% of the footway parking identified will need to be displaced to nearby roads and that up to 50% of the parking displacement may be accommodated on nearby roads (Clark Road, Clark Avenue and Ferry Road) introducing moderate parking pressures. Therefore, the parking displacement expected as a result of the introduction of the legislation is 'Significant B' (refer to Table 2). It is expected that parking pressures would be more noticeable in the area and the introduction of mitigation measures could help to alleviate these pressures.

3.7.20 A detailed breakdown for on-site assessment for this cluster, including the levels of footway parking identified during the site visit, is included in Appendix B-4.

Ward 04 – Cluster 01 – Potential Mitigation Measures

3.7.21 Several mitigation options have been identified for Ward 04 Cluster 01 and are described below:

- Option 1 – Legislation exemption

3.7.22 The roads in the vicinity of this cluster (e.g. Clark Road, Clark Avenue and Ferry Road), although they are busy roads, currently provide enough parking spaces for the existing demand. Therefore, it is not expected that the introduction of any footway parking exemption at this location would attract drivers from other areas to park on the footways of this cluster.

3.7.23 The introduction of an Exemption Order, should the introduction of the legislation not achieve its desired aims, should be clearly signed for a single footway on each street. The legislation aims to allow 1.5m of clear unobstructed footway width in each street, with an absolute minimum of 1.2m. However, there is likely to be insufficient space to accommodate all user demands appropriately in this cluster.

3.7.24 The introduction of an Exemption Order, although allowing footway parking, will ensure that one footway in each street remains clear of any parked vehicles and obstructions to pedestrians. While also allowing the passage of all vehicles, including larger refuse collection and emergency service vehicles, along the carriageway.

3.7.25 Allowing 2.6m of clear carriageway will require parking places to be marked to occupy 1.0m of the footway with only 0.5m remaining for pedestrians. This would also require 0.1m additional clearance and 0.8m of parking on the carriageway as well as the 1.0m on the footway, giving a width of 1.8m for the parking places.

3.7.26 This is not an ideal scenario for all road users, but one which is effectively currently happening given the space constraints in these streets. The introduction of double yellow lines on the opposite side of the carriageway could be beneficial to ensure adequate traffic flow should the proposed Exemption not achieve its aims.

3.7.27 The estimated construction costs associated with Option 1 mitigations would be circa £16,000. This includes completing the Exemption Order process, upright signage and road markings.

- Option 2 – Ferry Road Footway Works

3.7.28 The segment of Ferry Road located to the south of this cluster, approximately between Monmouth Terrace and Clark Avenue, is subject to footway parking on its south side. However, these are not designated parking areas, and this practice has developed itself over time. Vehicles run over a full upstand kerb to park. Furthermore, pedestrians are forced to use the remaining width of pavement to pass between parked cars and the carriageway. In addition, several bus stops are located along this footway. This introduces an accident risk at this location. As shown in Figure 17, the space available is quite wide at this location. This also shows the location is being used for the storage of caravans, motorhomes and other trailers which should not be kept on the road. Parking bays could be introduced, and a segregated footway could be constructed between the new bays and the existing wall. These bays could help to alleviate some of the parking displacement from Cluster 01 resulting from the introduction of the new legislation. However, it would require considerable construction costs.

3.7.29 The estimated construction costs associated with Option 2 mitigations would be circa £200,000. This includes site clearance, excavations, carriageway construction for the proposed bays, kerbs and signage.

Figure 17: Ward 04 – Forth – Cluster 01 – Parking Available on Ferry Road

Ward 04 – Cluster 01 – Final Recommendation by PCL

3.7.30 In order to ensure adequate carriageway widths are maintained, should the introduction of the legislation not achieve its desired aims, the implementation of mitigation measures may be beneficial. In this case, the introduction of an exemption to the legislation at these locations as described in Mitigation Option 1 appears to be a reasonable option for this cluster.

3.7.31 The roads in the vicinity of this cluster (e.g. Clark Road, Clark Avenue and Ferry Road), although they are busy roads, currently provide enough parking spaces for the existing demand. Therefore, it is not expected that the introduction of footway parking exemption at this location would attract drivers from other areas to park on the footways of this cluster.

3.7.32 The cost associated with the introduction of the mitigation measures identified in Option 2 (i.e. construction of formal bays along the south side of Ferry Road in the vicinity of Cluster 01) is excessive for the identified level of footway parking in the Cluster.

3.7.33 Therefore, should problems persist, PCL recommends the introduction of the mitigation measures identified for this cluster Option 1 in the desktop study. These comprise of:

- Promotion of an Exemption Order to allow vehicles to park partially on one footway, leaving the other side of the road totally clear for pedestrian use. This will also involve the implementation of upright signage and road markings to indicate the introduction of an exemption to the legislation.
- It may also be required to consider the introduction of double yellow lines along one side of the roads that comprise this cluster should the exemption order not achieve the expected outcomes.

3.7.34 The estimated construction costs associated with the proposed mitigations would be circa £16,000.

Ward 04 – Cluster 2

3.7.35 This cluster is located on the north-east side of Ward 04. It is located next to the North Fort Street Park.

3.7.36 The roads in this cluster where footway parking was identified are:

- Derby Street
- Hawthornvale
- Jessfield Terrace
- Newhaven Road
- Park Road
- Stanley Road

3.7.37 The levels of footway parking identified in the segments on Hawthornvale were 'Significant' whereas 'Moderate' footway parking was identified on the other roads that comprise this cluster. 23 vehicles were identified parking on the footway in Hawthornvale, 2 on Derby Street, 4 on Jessfield Terrace, Newhaven Road and Park Road, and 1 on Stanley Road.

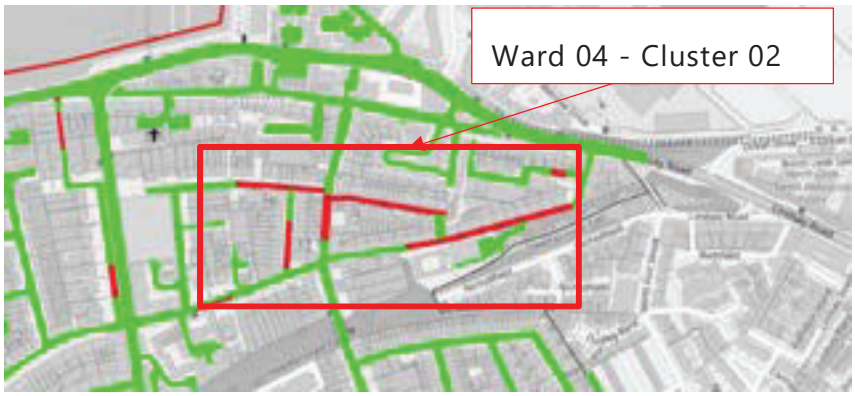

Figure 18: Ward 04 – Forth – Cluster 02 - Location

3.7.38 All the roads in this cluster are 2-way roads with carriageway widths varying from 5m (e.g. Hawthornvale) to 8.5m (e.g. Newhaven Road). These streets provide footways at both sides of the road. The number of cars parked on these footways already make pedestrian movements difficult. However, in the segments where cars were mounted on the footway, the opposite footway was clear of vehicle parking and pedestrians can make use of an unobstructed footway.

3.7.39 The properties in the vicinity are tenement flats and they do not have their own off-street parking. Therefore, it is not possible to determine the proportion of these cars that may be second household cars.

3.7.40 When the legislation comes into effect, it is likely that a number of the vehicles currently parking on the footway would be displaced to other segments on these streets with less parking pressures or to streets nearby where on-carriageway parking is available. This is the case of Jessfield Terrace, Newhaven Road and Lindsay Road. There are normally several available spaces in these streets and the volume of parking displacement expected as a result of the new legislation is 'moderate'. It is expected that these roads may be able to accommodate the parking displacement. However, parking pressures would be more noticeable in the area as a result.

3.7.41 This area is included within Phase 2 of the SRoP and proposals for controlled parking are being brought forward which will also help to address footway parking problems in these streets.

Ward 04 – Cluster 02 – On-site Assessment

3.7.42 This cluster was visited by PCL's assessor on 13/06/2022

3.7.43 During the site visit to this cluster an on-site assessment of the current parking conditions was undertaken.

3.7.44 A lower level of footway parking was recorded for the roads that comprise this cluster during the on-site assessment when compared to the level of footway parking identified during the desktop study. 38 cars were identified parking on the footways during the desktop study but only 19 during the on-site assessment. A significant decrease in the number of cars parked on Hawthornvale, Newhaven Road and Park Road's footways was identified during the site visit carried out for this cluster. However, a similar level of footway parking was identified on Jessfield Terrace and Stanley Road.

Figure 19: Ward 04 – Forth – Cluster 02 – On-site assessment- Derby Street

3.7.45 As mentioned before in this section, when the legislation comes into effect, it is likely that a number of the vehicles currently parked on the footway would be displaced to Jessfield Terrace, Newhaven Road and Lindsay Road. There are normally several available spaces in these streets and the volume of parking displacement expected as a result of the legislation commencing is 'moderate'. However, at the time of writing this report, construction of the tram line extension was taking place on Lyndsay Road and when completed, this may result in a reduction in the available parking on this road. The assessor believes that the smaller number of cars that were identified parking on this cluster's footways combined with the presence of on-carriageway parking spaces available on a further number of nearby streets, such as Park Road or Annfield Street, will likely be sufficient to accommodate the potential parking displacement. However, parking pressures would be more noticeable in the area as a result.

3.7.46 It is expected that between 25-50% of the footway parking identified will need to be displaced to nearby roads and that up to 50% of the parking displacement could be accommodated on nearby roads without the introduction of significant parking pressures. Therefore, the parking displacement expected as a result of the introduction of the legislation is 'Moderate B' (refer to Table 2). It is expected that parking pressures would

be more noticeable in the area and the introduction of mitigation measures could help to alleviate these pressures.

3.7.47 A detailed breakdown for the on-site assessment for this cluster, including the levels of footway parking identified during the site visit, is included in Appendix B-4.

Ward 04 – Cluster 02 – Potential Mitigation Measures

- Option 1 – Double yellow lines

3.7.48 The introduction of double yellow lines at locations where significant footway parking was identified in this cluster, should the introduction of the legislation not achieve its desired aims, would be beneficial to ensure adequate traffic flow and access for emergency service vehicles. The estimated construction costs associated with the introduction of these road markings would be circa £15,000.

- Option 2 – Car sharing opportunities/promotion

3.8 Another measure which could be considered, should problems persist, is the introduction or promotion of greater car sharing opportunities in the local vicinity, such as through the Council's car club partner.

3.9 The latest research available suggests that one car club vehicle has the potential to remove 17 private vehicles from the road. This area is well suited to greater car club provision due to its densely populated housing and proximity to the new tram stop being introduced on Lindsay Road. The enhanced public transport links combined with car club introduction/promotion could encourage some residents to give up their vehicle, or a second household car, making them a considerable saving while reducing parking demands in the area.

Ward 04 – Cluster 02 – Final Recommendation by PCL

3.9.1 When the legislation comes into effect, parking pressures are expected in this location on roads such as Park Road, Annfield Street, Jessfield Terrace, Newhaven Road and Lindsay Road. It is expected that these roads may be able to accommodate the parking displacement. However, this will lead to a moderate increase in parking pressures.

3.9.2 In order to ensure adequate carriageway widths are maintained, should the introduction of the legislation not achieve its desired aims, the implementation of mitigation measures identified in the desktop study would be beneficial. These comprise of:

- Introduction of double yellow lines along one side of the roads that comprise this cluster. This will ensure sufficient carriageway width is provided for the potential access of emergency vehicles.

3.9.3 The estimated construction costs associated with the proposed mitigations would be circa £15,000.

3.10 Ward 5 - Inverleith

3.10.1 Ward 5 – Inverleith is located in the north area of Edinburgh (See Figure 20). This Ward has an associated area of 7.74km2. 345 roads within this Ward formed part of the study.

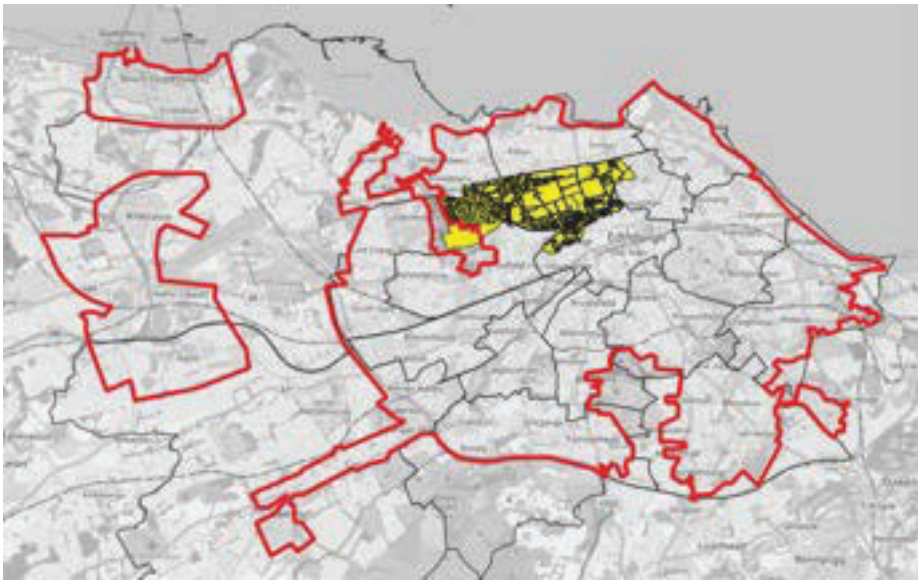

Figure 20: Ward 05- Inverleith- Location

3.10.2 The 345 roads contained in this Ward were successfully RAG classified. Therefore, no road in this Ward was defined as 'Unclassified'.

3.10.3 PCL identified a total of 82 cars parked on the footways in this Ward. This led to 18 roads in this Ward to be classified as RED.

3.10.4 The resulting RAG classification breakdown for this Ward is shown in the figure below.

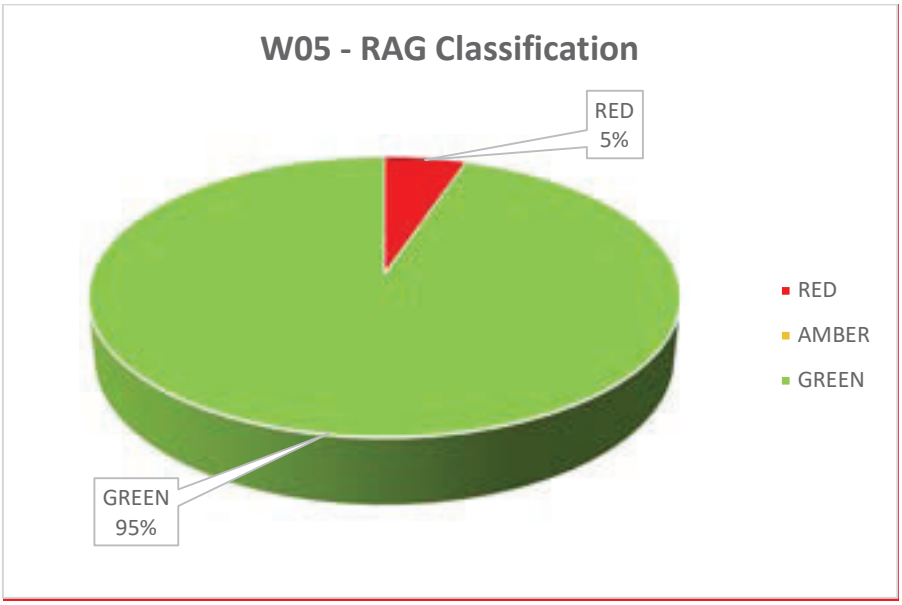

Figure 21: Ward 05- Inverleith- RAG Classification

3.10.5 Phase 2 of the study included a granular assessment of the 18 RED roads and the results and recommendations for each road are shown in the following sections.

3.10.6 A list of the RED roads identified for Ward 5 is included in Table 11.

3.10.7 A detailed breakdown of each road, including the proposed mitigation measures identified for each segment, is included in Appendix C-5.

Table 11: Ward 05- Inverleith- Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Bedford Court	Groathill Avenue	Kimmerghame Place
Carfrae Road	Groathill Loan	Telford March
Chancelot Grove	Haugh Street	
Craigcrook Grove	Hillpark Gardens	
Craigleith Hill Gardens	Hillpark Road	
Easter Warriston	House O'hill Grove	
Eyre Place Lane	House O'hill Place	
Gardiner Terrace	House O'hill Terrace	

Cluster analysis

3.10.8 No clusters were identified for this Ward.

3.11 Ward 6 – Corstorphine / Murrayfield

3.11.1 Ward 6 – Corstorphine / Murrayfield is located in the west area of Edinburgh (See Figure 22). This Ward has an area of 6.91km2. 265 roads within this Ward formed part of the study.

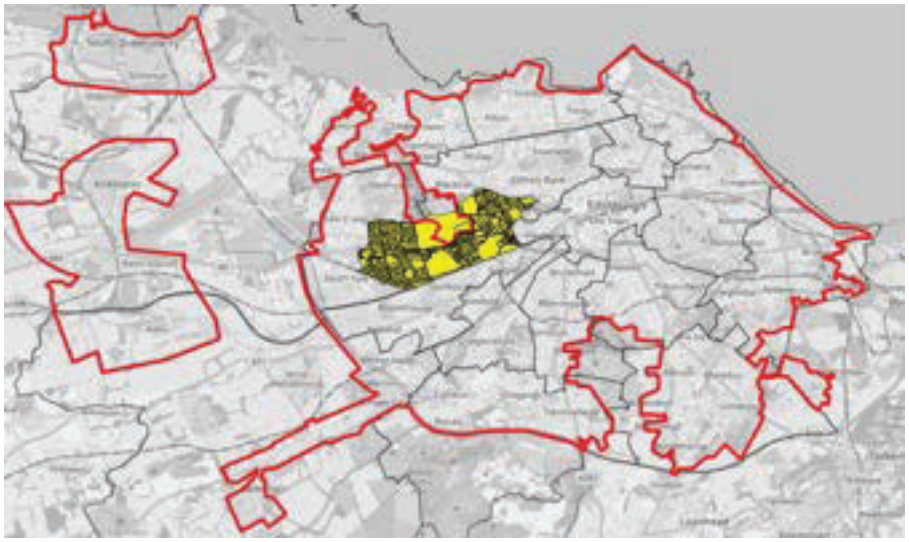

Figure 22: Ward 06- Corstorphine- Location

3.11.2 The 265 roads contained in this Ward were successfully RAG classified. Therefore, no road in this Ward was defined as 'Unclassified'.

3.11.3 PCL identified a total of 137 cars parked on the footways in this Ward. This led to 31 roads in this Ward to be classified as RED.

3.11.4 The resulting RAG classification breakdown for this Ward is shown in the figure below.

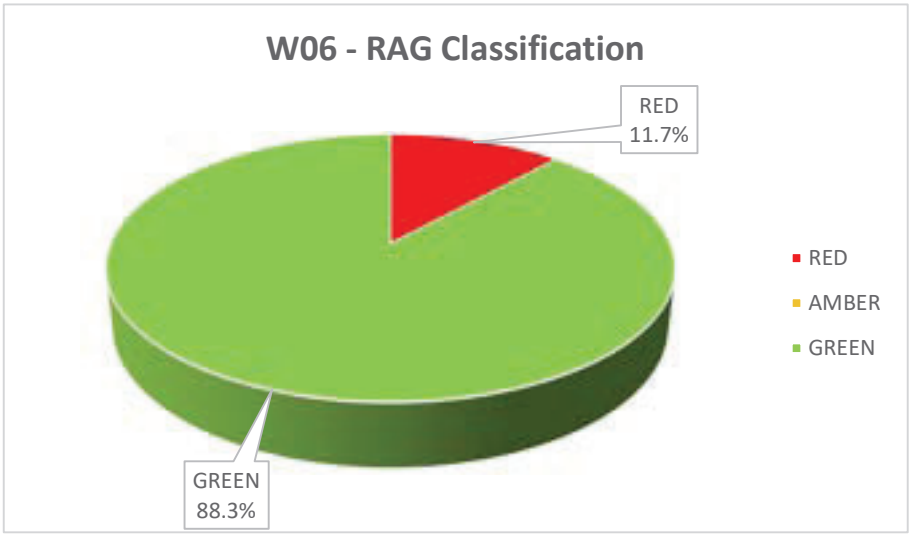

Figure 23: Ward 06- Corstorphine- RAG Classification

3.11.5 Phase 2 of the study included a granular assessment of the 31 RED roads and the results and recommendations for each road are shown in the following sections.

3.11.6 A list of the RED roads identified for Ward 6 is included in Table 12

3.11.7 A detailed breakdown for each road, including the proposed mitigation measures identified for each segment, is included in Appendix C-6.

Table 12: Ward 06- Corstorphine- Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Beechmount Park	Corstorphine Hill Gardens	St John's Gardens
Belmont Crescent	Craigleith Drive	St Ninian's Road
Belmont Gardens	Craigleith Gardens	Succoth Avenue
Belmont Park	Downie Grove	Succoth Park
Belmont Terrace	Glebe Gardens	Victor Park Terrace
Broomfield Crescent	Glendevon Road	Wallace Gardens
Broomhall Crescent	Hillview Crescent	Wester Broom Grove
Carrick Knowe Grove	Ladywell Gardens	Western Gardens
Corstorphine Bank Avenue	Lennel Avenue	Western Place
Corstorphine Hill Avenue	Riversdale Road	
Corstorphine Hill Crescent	Roull Grove	

Cluster analysis

3.11.8 Two clusters were identified in this Ward.

Ward 06 – Cluster 1

3.11.9 This cluster is located on the north side of Ward 06. It is located in the Murrayfield area.

3.11.10 The roads in this cluster containing RED segments are:

- Belmont Crescent
- Belmont Gardens
- Belmont Park
- Belmont Terrace
- Wallace Gardens
- Western Gardens
- Western Place

3.11.11 The levels of footway parking identified in the segments of Belmont Gardens and Western Gardens were 'Significant' whereas on Belmont Crescent, Belmont Park, Belmont Terrace and Wallace Gardens the levels of footway parking were considered 'Moderate'. On Belmont Gardens 21 vehicles and in Western Gardens 8 cars were identified parking on the footway. In Belmont Terrace 3 vehicles were observed parking on the footways, plus 2 in Wallace Gardens and 1 each in Belmont Place, Belmont Park and Western Place.

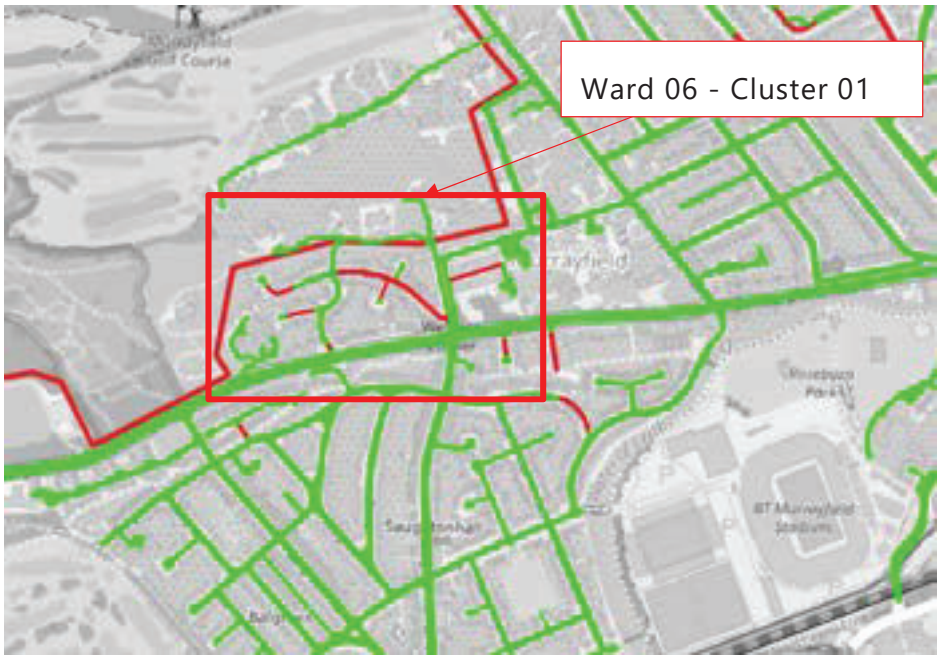

Figure 24: Ward 06 - Corstorphine- Cluster 01- Location

3.11.12 The width of the carriageways that form part of this cluster vary from around 3.8m on Belmont Park and Belmont Terrace to 4.5m and 5.5m on Wallace Gardens and Belmont Crescent respectively. The carriageway widths in Belmont Gardens, Western Gardens and Western Place are between 6 and 6.5m. These streets provide footways at both sides of the road. However, these footways are less than 1.5m wide except for those in Wallace Gardens which are 1.8m wide.

3.11.13 When the legislation comes into place, it is likely that a number of the vehicles currently parking on the footway would be displaced to streets nearby where on-carriageway parking is available, such as in the case of Western Terrace. Although there are normally several available spaces in these streets, the volume of parking displacement expected as a result of the introduction of the legislation is 'moderate'. Western Terrace will not be able to accommodate all the parking displacement and it is expected that parking pressures would be more noticeable in the area as a result.

<u>Ward 06 – Cluster 01 – On-site Assessment</u>

3.11.14 This cluster was visited by PCL's assessor on 13/06/2022.

3.11.15 During the site visit to this cluster an on-site assessment of the current parking conditions was undertaken.

3.11.16 A lower level of footway parking was recorded for the roads that comprise this cluster as part of the on-site assessment compared with the footway parking identified during the desktop study. 27 cars were identified parking on the footways during the on-site assessment while 37 vehicles were recorded during the desktop study. It is worth mentioning that no footway parking was identified on Belmont Park and Wallace Gardens during the site visit. Furthermore, a noticeably lower level of footway parking was recorded on Belmont Gardens compared to the desktop study (13 cars compared to 21 cars). However, a similar level of footway parking was identified on the rest of the roads included in this cluster.

Figure 25: Ward 06- Corstorphine- Cluster 01- On-site assessment- Western Place

3.11.17 When the legislation comes into effect, it is likely that a number of the vehicles currently parking on the footways could be accommodated within private parking spaces which are not being occupied to their full potential. There are also normally several available spaces in these streets and the volume of parking displacement expected as a result of the legislation coming into effect is generally 'moderate'. For Western Gardens in particular, the parking displacement would be 'Significant B', meaning that an important portion of the current footway parking would be displaced (25-50%). However, as the number of cars parked on the footway in this road is not high (7 cars identified during on-site assessment), and given that there is available private parking nearby, it is not expected that nearby roads may be affected greatly by additional parking pressures.

3.11.18 A 'Significant' level of footway parking was identified on Belmont Terrace during the site visit. In addition, the narrow carriageways do not allow parking fully on the carriageway without obstructing other traffic. Therefore, footway parking on Belmont Terrace would likely be displaced after the legislation commences. However, 'Significant C' impact of parking displacement is expected, as the unused private driveways in the vicinity could potentially accommodate most of the displaced parking.

3.11.19 Despite a lower number of vehicles being observed parking on the footway in Belmont Gardens during the on-site visit, there is always a high demand for on-street parking in this road and measures may be needed to ensure the free flow of traffic along the road.

A detailed breakdown for the on-site assessment for this cluster, including the levels of footway parking identified during the site visit, is included in Appendix B-6.

Ward 06 – Cluster 01 – Potential Mitigation Measures

3.11.20 The mitigation measures identified for Ward 06 Cluster 01 are described below:

3.11.21 The number of cars parked on the footway makes pedestrian movements difficult. However, private driveways are not being fully utilised in the Belmont area north of Western Terrace. Most of these driveways could accommodate two cars. Therefore, residents in this area who are currently parking on the road could potentially use their driveways, improving the accessibility for pedestrians and wheelchair users, and others could park on one side of the carriageway without blocking access for emergency vehicles. The introduction of double yellow lines on one side of the road next to the boundary wall shown in Figure 26, should the introduction of the legislation not achieve its desired aims, could contribute to ensuring adequate traffic flow. In addition, advisory parking bays could be introduced on Belmont Gardens as they would contribute to the optimal use of the remaining available parking space.

Figure 26: Ward 06- Corstorphine- Cluster 01- Belmont Gardens

3.11.22 Similarly, there is a private parking area for residents on the south end of Western Gardens and available evidence suggests that this parking area is not always fully utilised. Therefore, it is possible that parking on the footways in Western Gardens is done for convenience or to park second household cars. As mentioned before in this section and as shown in Figure 27, carriageway width on Western Gardens and Western Place is limited. Therefore, should problems persist, the introduction of double yellow lines along one side of the road could be beneficial to ensure adequate vehicle flow and access for emergency vehicles.

Figure 27: Ward 06- Corstorphine- Cluster 01- Western Gardens

3.11.23 The estimated construction costs associated with these mitigations would be circa £12,000. This includes the introduction of road markings.

Ward 01 – Cluster 01 – Final Recommendation by PCL

3.11.24 It is expected that when the legislation comes into effect, a moderate increase in parking pressures may be evident in the roads included in this cluster. In order to ensure adequate carriageway widths are maintained, should the introduction of the legislation not achieve its desired aims, the implementation of mitigation measures such as the introduction of double yellow lines at roads within this cluster could be considered. Moreover, advisory parking bays on Belmont Gardens would be beneficial.

3.11.25 Therefore, should problems persist, PCL recommends the introduction of double yellow lines on both sides of Belmont Terrace, on one side of Western Gardens and Western Place and on suitable locations of Belmont Gardens, where advisory parking bays are recommended as well.

3.11.26 The estimated construction costs associated with the proposed mitigations would be circa £12,000.

Ward 06 – Cluster 2

3.11.27 This cluster is located on the north side of Ward 06. It is located in the Corstorphine Hill area.

3.11.28 The roads in this cluster containing RED segments are:

- Corstorphine Hill Avenue
- Corstorphine Hill Crescent
- Corstorphine Hill Gardens

3.11.29 The levels of footway parking identified in the segments of the above streets were 'Significant'. 17, 15 and 23 cars were identified parking on the footways on Corstorphine Hill Avenue, Corstorphine Hill Crescent and Corstorphine Hill Gardens respectively.

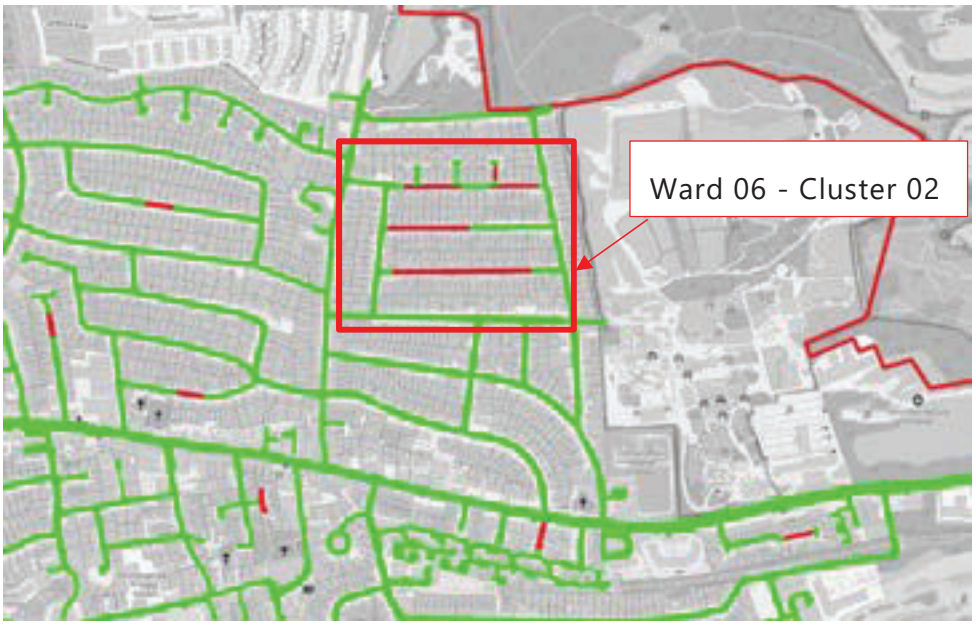

Figure 28: Ward 06- Corstorphine- Cluster 02- Location

3.11.30 The width of the carriageways that form part of this cluster varies from circa 5m to 6m. These streets are residential streets and provide footways on both sides of the road. However, these footways are less than 1.5m wide. The footway width at these locations varies from 1.2 to 1.4m.

3.11.31 The new legislation is not expected to create additional parking pressures in this area, as the roads included in this cluster have adequate carriageway width for on-carriageway parking on one side without blocking access for refuse collection or emergency service vehicles. In addition, there is a limited number of unused private driveways which could accommodate a portion of the cars currently parking on the road. However, it is possible that the roads in this cluster are busier at certain times, such as overnight, when there is likely to be a higher demand for on-street parking. For this reason, potential mitigation measures could be considered and introduced should there be problems arising from the start of the footway parking prohibition.

3.11.32 This location is included within Phase 1 of the SRoP and proposals for controlled parking are being brought forward which will also help to address footway parking problems in these streets.

<u>Ward 06 – Cluster 02 – On-site Assessment</u>

3.11.33 This cluster was visited by PCL's assessor on 13/06/2022

3.11.34 During the site visit to this cluster an on-site assessment of the current parking conditions was undertaken.

3.11.35 During the site visit, 15 and 25 cars were recorded parking on footways in Corstorphine Hill Avenue and Corstorphine Hill Gardens respectively. These figures are similar to the footway parking identified during the desktop study. On the other hand, only 4 cars were recorded parking on footways of Corstorphine Hill Crescent, compared to 15 cars identified during the desktop study. In addition, a number of unused private driveways and garages were noted, and it is believed that those could potentially accommodate a portion of the current footway parking.

Figure 29: Ward 06- Corstorphine- Cluster 02- On-site assessment- Corstorphine Hill Gardens

3.11.36 Based on the lower number of vehicle parking on the footway of this cluster during the on-site visit, (44 instead of 55), it is not expected that the introduction of the legislation would contribute towards additional parking pressures in the area. No Impact is expected from parking displacement on these roads. However, at times when roads in this cluster may be busier than at the observed levels, issues might appear as the carriageway widths do not allow on-carriageway parking on both sides. In this case, measures may be needed to ensure the free flow of traffic along the road.

3.11.37 A detailed breakdown for the on-site assessment for this cluster, including the levels of footway parking identified during the site visit, is included in Appendix B-6.

Ward 06 – Cluster 02 – Potential Mitigation Measures

3.11.38 Several mitigation options have been identified for Ward 06 Cluster 02 and are described below:

- Option 1 – Strategic introduction of double yellow lines

3.11.39 The number of cars parked on the footway make pedestrian movements difficult. However, private driveways are not being occupied to their full potential and this is clearer evident in Corstorphine Hill Avenue and Corstorphine Hill Gardens. Yet, the driveways, as shown in Figure 30, are located on a considerable slope from the road and some are also considerably narrow, this may explain why residents choose to park on the road and thus on the footways in this area. Therefore, when the legislation comes into place, it is expected that, where possible, some residents who currently park on the road will start to park in their driveways, improving the accessibility for pedestrians and wheelchair users on the footway. While others will continue to park on carriageway along these roads, the introduction of double yellow lines, should the introduction of the legislation not achieve its desired aims, may be beneficial to ensure adequate traffic flow is maintained.

Figure 30: Ward 06- Corstorphine- Cluster 02- Corstorphine Hill driveways

3.11.40 The estimated costs associated with this mitigation option would be circa £12,000. This includes the introduction of road markings.

- Option 2 – Introduction of advisory bays and one-way traffic

3.11.41 Alternatively, should problems persist, it could be possible to introduce advisory bay markings. However, this would lead to a reduction in the effective carriageway width. These bays could be staggered to discourage excessive speeds. Nonetheless, the remaining carriageway width resulting from the introduction of the advisory bays would not be enough to accommodate two-way traffic. Therefore, the introduction of one-way restrictions traffic could be useful. (see Figure 31). The alternate direction of traffic would contribute to minimising the distance people would need to travel to access the start of the road when looking for available parking spaces. However, traffic modelling to assess the potential impact on the road network resulting from this change is recommended first. In accordance with Council policy, two-way cycle travel should continue to be accommodated.

Figure 31: Ward 06- Corstorphine- Cluster 02- Corstorphine Hill- Introduction of one-way traffic

3.11.42 The estimated construction costs associated with these mitigations would be circa £20,000. This includes the introduction of road markings and upright signage.

- Option 3 – Introduction of advisory bays and one-way traffic and footway widening

3.11.43 This option includes, in addition to the proposal described in Option 2, the completion of footway works to increase the footways width to 2m reducing the carriageway width. However, the works required for the provision of the mitigation associated with this option are excessive for the volumes of footway parking that were identified at these locations and the presence of empty driveways which use could help to alleviate parking pressures.

3.11.44 The estimated construction costs associated with these mitigations would be circa £200,000. This includes the introduction of road markings, upright signage and footway works.

Ward 06 – Cluster 02 – Final Recommendation by PCL

3.11.45 Based on both the desktop study and the on-site assessment conclusions, this cluster is not expected to receive additional parking pressures due to the introduction of the legislation, apart from times during peak parking demand. In order to ensure adequate carriageway widths are maintained should the introduction of the legislation not achieve its desired aims, PCL recommends the implementation of Option 1 of the Potential Mitigation Measures previously described.

3.11.46 Therefore, should problems persist, PCL recommends the following mitigation measures:

- Introduction of double yellow lines along one side of Corstorphine Hill Avenue, Corstorphine Hill Gardens and Corstorphine Hill Crescent. This will ensure sufficient carriageway width is provided for the potential access of emergency vehicles.

3.11.47 The estimated construction costs associated with the proposed mitigations would be circa £12,000.

3.12 Ward 7 – Sighthill/Gorgie

3.12.1 Ward 7 – Sighthill/Gorgie is located in the west area of Edinburgh (See Figure 33). This Ward has an associated area of 6.01km2. 259 roads within this Ward formed part of the study.

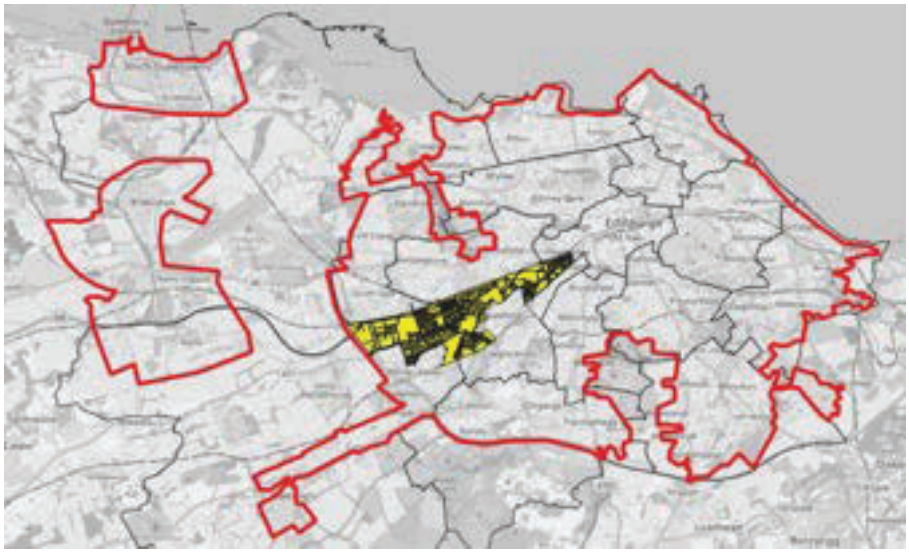

Figure 33: Ward 07- Sighthill/ Gorgie- Location

3.12.2 PCL identified 12 roads in this Ward as 'Unclassified' as these roads were under construction during the desktop assessment. A site visit to code these roads was undertaken on 17/06/2022. The resulting RAG classification of these roads is shown below.

Table 13: Ward 07- Sighthill/Gorgie- Unclassified Roads

Street Name	RAG Classification
Armstrong Road	GREEN
Bankhead Loan	GREEN
Gaskell Street	GREEN
Hadley Terrace	GREEN
Hermiston Gait	GREEN
Kempsel Grove	GREEN
Lairdship Drive	GREEN
Lerbar Way	GREEN
Michaelmas Grove	GREEN
Sighthill Bank	GREEN
Sighthill Wynd	GREEN
Weir Street	UNCLASSIFIED

3.12.3 Weir Street remained Unclassified after the site visit as significant construction works were still being carried out at the time the assessor visited this location. See Figure 32 below.

Figure 32: Ward 07- Sighthill/ Gorgie- Weir Street- Unclassified Road

3.12.4 PCL identified a total of 149 cars parked on the footways of this Ward. This led to 24 roads in this Ward to be classified as RED.

3.12.5 The resulting RAG classification breakdown for this Ward is shown in the figure below.

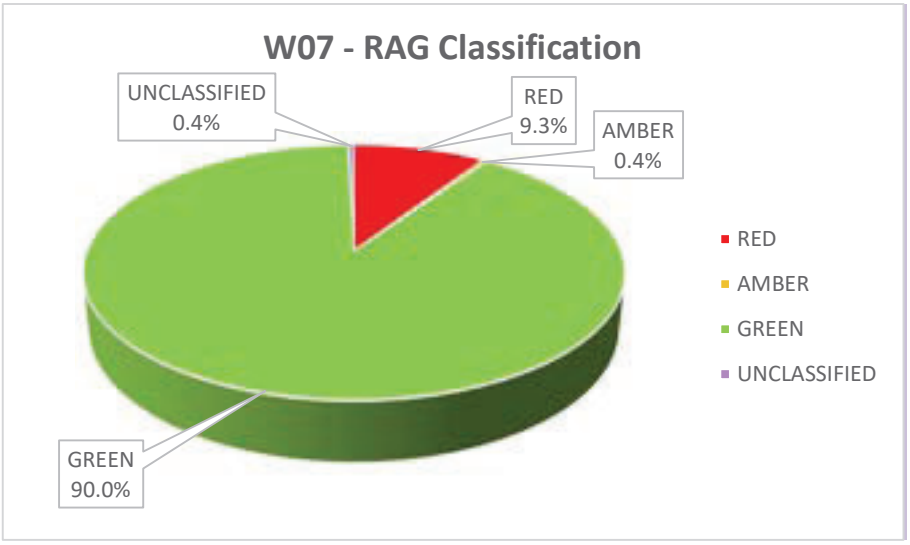

Figure 33: Ward 07- Sighthill/ Gorgie- RAG Classification

3.12.6 Phase 2 of the study included a granular assessment of the 24 RED roads and the results and recommendations for each road are shown in the following sections.

3.12.7 A list of the RED roads identified for Ward 7 is included in Table 14.

3.12.8 A detailed breakdown of each road, including the proposed mitigation measures identified for each segment, is included in Appendix C-7.

Table 14: Ward 07 Gorgie/ Sighthill- Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Alexander Drive	Longstone Street	Sighthill Grove
Bankhead Drive	Oaklands Square	Stenhouse Mill Wynd
West Fairbrae Crescent	Parkhead Avenue	Stenhouse Place East
Broomhouse Place North	Parkhead Crescent	Stenhouse Place West
Broomhouse Row	Parkhead Loan	Stevenson Avenue
Calder Road -SR Bankhead Ave-Bankhead Dr	Parkhead View	Westfield Court
Calder Road SR Nos 21-29	Peatville Terrace	
Longstone Avenue	Redhall Place	
Longstone Crescent	Richmond Terrace	

Cluster analysis

3.12.9 One cluster was identified in this Ward.

Ward 07 – Cluster 1

3.12.10 This cluster is located on the south side of Ward 07. It is located next to Gorgie Road.

3.12.11 The roads in this cluster containing RED segments are:

- Alexander Drive
- Stevenson Avenue

- Westfield Court

3.12.12 The levels of footway parking identified in the segments of Alexander Drive and Stevenson Avenue were 'Significant' whereas on Westfield court the levels of footway parking were 'Moderate'. 17 cars were identified were parking on Alexander Drive's footway, 46 cars on Stevenson Avenue's, and 4 cars on Westfield Court.

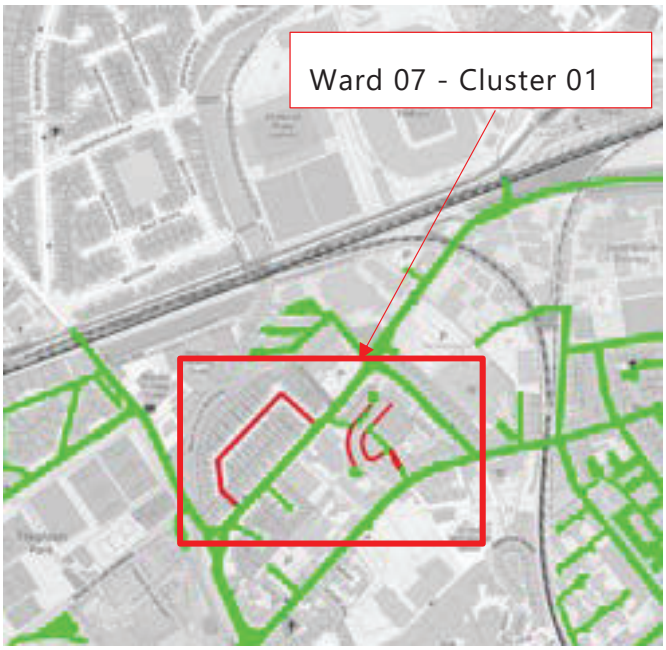

Figure 34: Ward 07- Gorgie/ Sighthill- Cluster 01-Location

3.12.13 The width of the carriageways that form part of this cluster varies from 3.8m on the narrowest segments of Alexander Drive to 3.5m on Westfield Court and 6.2m on Stevenson Avenue. Alexander Drive and Stevenson Avenue have footway at both sides of the carriageway. However, it is worth highlighting that the 0.8m wide footway provided next to the grassed area on Alexander Drive is not likely to be used by pedestrians. It provides some clearance between moving vehicles and the existing fence (see Figure 35). On Westfield Court, there is footway only on the west side, with a maximum width of 1.5m.

Figure 35: Ward 07 Gorgie/ Sighthill- Cluster 01- Alexander Drive

3.12.14 The properties at both sides of Stevenson Drive have their own private driveways. Therefore, it is believed that the cars parked on the footways at Stevenson Drive are likely to belong to owners for whom is more convenient to park on the footways next to their properties than in their driveways, second household cars or they belong to people who do not live in the street, such as visitors or commuters. It was noted that many of the driveways in the street were empty at the time of the assessment. On the other side of the cluster, the properties next to Alexander Drive and Westfield Court are tenement flats with no private driveways.

3.12.15 When the legislation comes into effect, it is likely that some of the cars parked on the footways of Stevenson Drive will move to the private driveways and some of the vehicles would be able to park on carriageway on segments of the road without blocking the flow of vehicles. Some vehicles would likely move from segments on Alexander Drive or Westfield Court to the end segments of Westfield Court (see Figure 36).

Figure 36: Ward 07- Gorgie/ Sighthill- Cluster 01- Westfield Court End Segment

A number of the vehicles currently parking on the footway on Alexander Drive, Westfield Court and Stevenson Drive would be displaced to streets nearby where on-carriageway parking is available. This is the case of Stevenson Road. Although there are normally several available spaces in this street, the volume of parking displacement expected as a result of the introduction of the legislation is 'significant'. This road will not be able to accommodate all the parking displacement and it is expected that parking pressures would be more noticeable in the area as a result.

3.12.16 This area is included within Phase 1 of the SRoP and proposals for controlled parking are being brought forward which will also help to address footway parking problems in these streets.

Ward 07 – Cluster 01 – On-site Assessment

3.12.17 This cluster was visited by PCL's assessor on 17/06/2022.

3.12.18 During the site visit to this cluster an on-site assessment of the current parking conditions was undertaken. While similar levels of footway parking were recorded for Alexander Drive and Westfield Court (21 cars and 10 cars respectively), a lower level of footway parking was identified on Stevenson Avenue (11 cars).

3.12.19 Based on the number of unused private driveways on Stevenson Avenue, where the main portion of footway parking can be displaced, and the lower total parking demand that was recorded on-site the parking pressures in this area could possibly be lower than initially expected. However, several issues will still be in place for this area, and it is expected that measures would be required.

3.12.20 The parking displacement expected from the introduction of the legislation at Alexander Drive was assessed as 'Significant C' (refer to Table 2). More than 50% of identified footway parking may be likely displaced to nearby roads.

3.12.21 The parking displacement expected from the introduction of the legislation at Stevenson Avenue and Westfield Court was assessed as 'Significant B' (refer to Table 2). It is expected that between 25-50% of the footway parking identified will need to be displaced to nearby roads and that up to 50% of the parking displacement may be accommodated on nearby roads introducing moderate parking pressures. Therefore, it is expected that parking pressures would be more noticeable in the area as a result of the legislation and the introduction of mitigation measures could help to alleviate these pressures.

Ward 07 – Cluster 01 – Potential Mitigation Measures

3.12.22 Several mitigation options have been identified for Ward 07 Cluster 01 and are described below:

- Option 1 – No mitigation measures to be introduced (Do nothing scenario)

3.12.23 The parking pressures in this area may be challenging to mitigate against as it is already subject to a high level of demand for parking with few parking spaces available when compared to the number of households in the area, specifically flats in Westfield Court. There are also few areas where parking could be arranged better or new parking spaces created. There is a high likelihood that even if mitigation measures were to be implemented, they would not be able to accommodate even a small proportion of the existing parking demands or materially improve parking conditions for all residents in the area, after the introduction of the legislation. For this reason, a do-nothing scenario is included as an option of the mitigation measures as this may present best value for this cluster.

- Option 2 – Footway works on Alexander Drive

3.12.24 Should the introduction of the legislation not achieve its desired aims, new bays could be introduced on Alexander Drive by reducing the width

of the footways at both sides of the road while maintaining adequate width for pedestrian use.

3.12.25 There are currently 9 formal bays on the west side of Alexander Drive (perpendicular to the kerb line) and 6 bays on the east side (parallel to the kerb line).

3.12.26 6 additional bays could be introduced on the west side, formalising the existing footway parking. The existing 6 bays on the east side of Alexander Drive could be replaced with 12 bays perpendicular to the kerb line. Therefore, the parking capacity at this location could potentially be increased by a maximum of 12 bays.

3.12.27 This would contribute towards accommodating a portion of the vehicles that would be displaced as a consequence of the legislation. However, the levels of footway parking identified would not be heavily impacted by this solution. Furthermore, there is a utilities cabinet and a number of bike stands on the east footway of Alexander Drive that would require relocation.

Figure 37: Ward 07- Gorgie/ Sighthill- Cluster 01-Alexander Drive

3.12.28 The estimated construction costs associated with Option 2 mitigation would be circa £80,000. However, this estimate could easily increase if diversions of existing underground services are required for the construction of these bays.

- Option 3 – Verge works on Alexander Drive

3.12.29 The existing grassed area in Alexander Drive (see Figure 35) could be reduced to accommodate a line of parking bays. This would require considerable construction works and some existing trees would have to be felled to accommodate the proposed bays. The completion of these works would allow the introduction of 20-25 new bays that would help to alleviate the potential parking pressures associated with the legislation. The estimated construction costs associated with Option 3 mitigation would be circa £150,000. This includes site clearance, removal of trees, excavations, carriageway construction for the proposed bays, kerbs and signage.

Option 4 – car sharing opportunities

Another measure which could be considered, should the introduction of the legislation not achieve its desired aims, is the introduction of greater car sharing opportunities, such as through the Council's car club partner.

The latest research available suggests that one car club vehicle has the potential to remove 17 private vehicles from the road. This area currently benefits from car sharing opportunities. The Council's car club partner provides 1 car on Alexander Drive. However, the next closest location for one of these cars is located on Primrose Terrace which is within a 20-min walk. Greater car club provision could be studied to assess the current demand of the car club's car and monitor this demand once the legislation is introduced. This will help to assess if greater car club provision could help to alleviate parking pressures at this location.

Ward 07 – Cluster 01 – Final Recommendation by PCL

3.12.30 It is expected that current parking demands in the area would not be accommodated after the introduction of the legislation. While a portion of the recorded footway parking can potentially be displaced to unused private driveways and adjacent roads with on-carriageway parking space available, a remaining portion will still require additional parking space to be accommodated. Therefore, the Do-Nothing scenario described in 'Option 1' above is recommended.

3.12.31 The cost and environmental impact of the construction works associated with the implementation of the mitigation measures identified in Options 2 and 3 (i.e. construction of additional parking bays at the south end of Alexander Drive and on part of the grassed area in Alexander Drive) is considered to be unreasonable for the identified level of footway parking and the expected low benefits that these options would provide. These options could be explored further if the parking pressures resulting from the legislation are greater than anticipated, but this could make these options even less beneficial.

3.12.32 Therefore, PCL recommends the close monitoring of this area (including the use of the current car sharing opportunities) following the introduction of the legislation to have a better understanding of the resulting parking pressures and parking displacement. This would help to identify if the completion of costly construction works could ever be justified.

3.13 Ward 8 – Colinton / Fairmilehead

3.13.1 Ward 8 – Colinton / Fairmilehead is located in the south of Edinburgh (See Figure 38), including Bonaly and Fairmilehead. This Ward has an area of 19.99km2. 265 roads within this Ward formed part of the study.

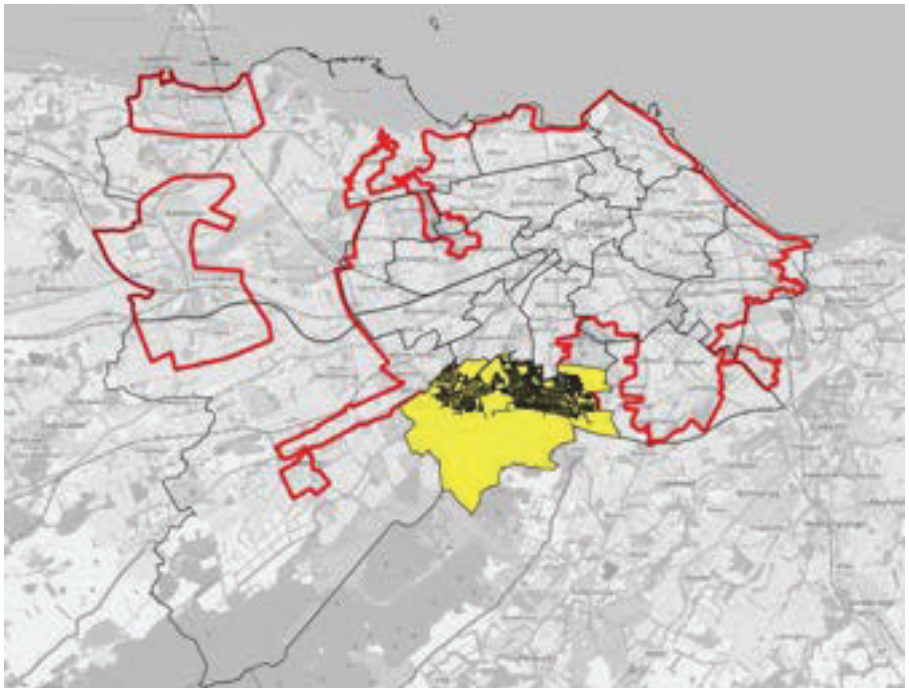

Figure 38: Ward 08- Colinton- Location

3.13.2 The 265 roads contained in this Ward were successfully RAG classified. Therefore, no road in this Ward was defined as 'Unclassified'.

3.13.3 PCL identified a total of 152 cars parked on the footways of this Ward. This led to 41 roads in this Ward to be classified as RED.

3.13.4 The resulting RAG classification breakdown for this Ward is shown in the figure below.

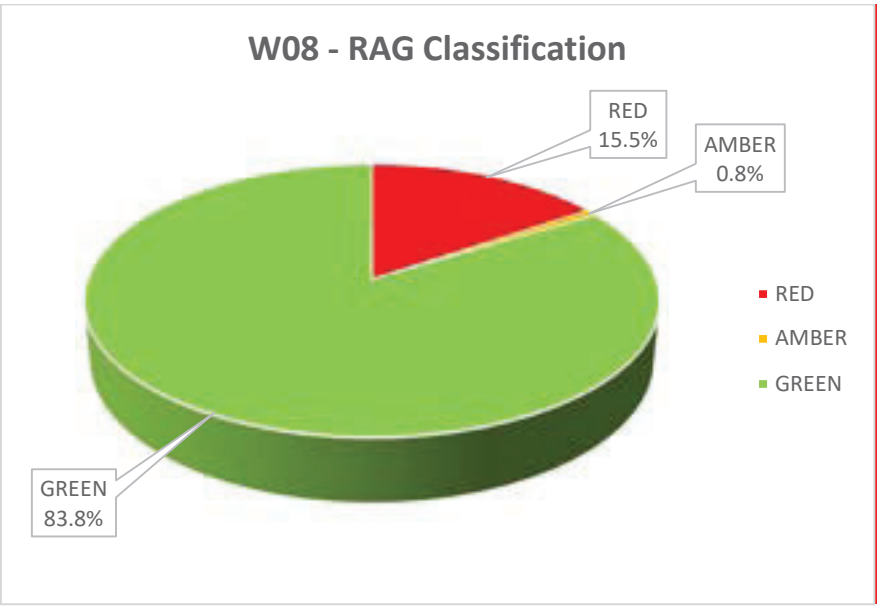

Figure 39: Ward 08- Colinton- RAG Classification

3.13.5 Phase 2 of the study included a granular assessment of the 41 RED roads and the results and recommendations for each road are shown in the following sections.

3.13.6 A list of the RED roads identified for Ward 3 is included in Table 15.

3.13.7 A detailed breakdown for each road, including the proposed mitigation measures identified for each segment, is included in Appendix C-8.

Table 15: Ward 08- Colinton- Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Bonaly Grove	Firrhill Crescent	Spylaw Bank Road
Buckstone Crescent	Hailes Gardens	Swan Spring Avenue
Buckstone Crook	Hailes Park	Swanston Avenue
Buckstone Drive	Howe Park	Swanston Gardens
Buckstone Green	Latch Park	Swanston Green
Buckstone Lea	Margaret Rose Crescent	Swanston Grove
Buckstone Loan	Oxgangs Farm Grove	Swanston Loan
Buckstone Place	Oxgangs Farm Loan	Swanston View
Buckstone Wynd	Oxgangs Loan	Torphin Bank
Caiyside	Oxgangs Road	Woodfield Avenue
Caiystane Avenue	Redford Gardens	Woodhall Grove
Colinton Mains Gardens	Redford Grove	
Colinton Mains Loan	Redford Neuk	
Dreghorn Avenue	Redford Terrace	
Dreghorn Park	Scald Law Drive	

Cluster analysis

3.13.8 One cluster was identified in this Ward.

Ward 08 – Cluster 1

3.13.9 This cluster is located on the north side of Ward 08, just north-east of Dreghorn Woods, and it contains several segments of Dreghorn Park.

3.13.10 The levels of footway parking identified in these segments vary from 'Moderate' to 'Significant', while footway parking has been identified only on one side of the roads for all the segments.

3.13.11 The carriageway's width for the segments in this cluster is 4.5m on average with a minimum of 4.2m. The segments in Dreghorn Park have footways only on one side with an average width of 1.8m. Based on the existing carriageway width, there is no available space for on-carriageway parking in these segments. In addition, footway parking results in a remaining unobstructed footway width of less than 1.5m, impeding accessibility for pedestrians and especially wheelchair users.

3.13.12 Many properties in the vicinity have their own private driveways and garages and a number of them were observed as being unused. Therefore, it is believed that the cars parked on the footways in this cluster are likely to be second household cars. Alternatively, these cars may belong to owners for whom is more convenient to park on the footways next to their properties than in their driveways. Vehicles are unlikely to belong to visitor to Dreghorn Barracks and there are no other trip generators nearby. It is also unclear whether the private garages are used or not. However, it is assumed that there is some availability for parking in private spaces.

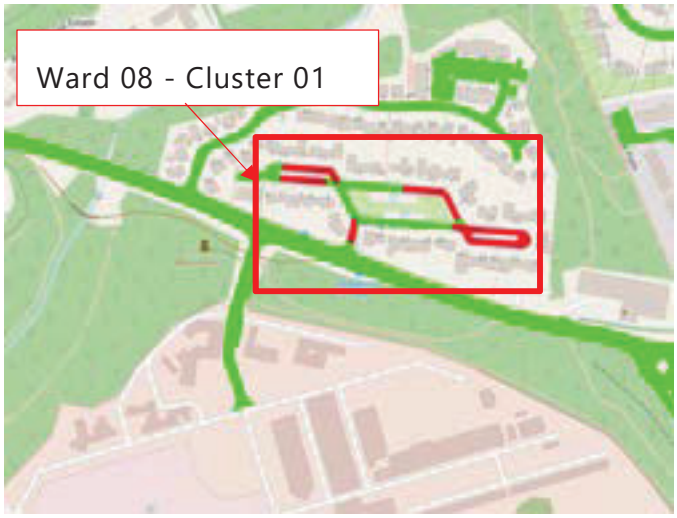

Figure 40: Ward 08- Colinton- Cluster 01- Location

3.13.13 When the legislation comes into effect, it is likely that a volume of the vehicles currently parked on the footway would be accommodated by the private driveway and garages that were observed as unused. Another portion of the footway parking will likely be displaced to other parts of the street or into adjacent roads with available on-carriageway parking capacity, such as The Gallolee, which is located north-west of Dreghorn Park. Therefore, it is expected that parking pressures would be more noticeable in the area as a result of the legislation due to the 'Moderate B' parking displacement to nearby roads (refer to Table 2).

Ward 08 – Cluster 01 – On-site Assessment

3.13.14 This cluster was visited by PCL's assessor on 13/06/2022.

3.13.15 During the site visit to this cluster an on-site assessment of the current parking conditions was undertaken. Similar levels of footway parking were recorded for different segments of Dreghorn Park. 16 cars were identified parking on footways during the site visit and 14 in the desktop study.

3.13.16 During the site visit, a number of private driveways were observed as unoccupied. In addition, the parking areas at the west end and the central island of the development were not fully utilised. It is assumed that most of the cars currently parking on footways are doing so due to owners' convenience and these could be displaced to the available parking spaces within the area.

3.13.17 The parking displacement expected as a result of the new legislation in Dreghorn Park was assessed as 'Moderate B' (refer to Table 2) as most of the current footway parking could be accommodated by the existing parking spaces on the same road. The remaining portion of the footway parking will potentially be displaced to nearby roads without resulting to additional considerable parking pressures to the area.

Ward 08 – Cluster 01 – Potential Mitigation Measures

- Option 1 – Introduction of additional parking bays

3.13.18 It is assumed that a number of the existing private garages and driveways are unused and could accommodate some of the footway parking.

3.13.19 Existing parking bays on the west extent of Dreghorn Park were not fully occupied and they could accommodate some of the vehicles parking on the footway. On the other hand, the existing parking bays at the central island of Dreghorn Park were almost fully occupied and only offer limited spaces for parking displacement. Improvements to the marking and signing for the existing parking bays can be applied, should problems persist, to ensure that the available parking space is fully utilised.

3.13.20 Introduction of additional bays (circa 10 additional bays) on the existing central island of Dreghorn Park from both sides (Figure 41) could alleviate potential parking displacement, should the introduction of the legislation not achieve its desired aims, but would require considerable construction works.

Figure 41; Existing parking bays on central island of Dreghorn Park and available verge for extension

3.13.21 The estimated construction costs associated with proposed mitigations would be circa £50,000. This includes site clearance, excavations, carriageway construction, kerbs, signage, and markings.

- Option 2 – Introduction of Double Yellow Lines

3.13.22 14 cars were identified parking on footways of different segments of Dreghorn Park during the desktop study. As previously described, these cars are potentially second household cars whose owners chose to park on the footway rather than in private parking spaces for convenience. It is estimated that the existing parking spaces identified during the desktop

study could accommodate most of the footway parking recorded. However, at times when there is high demand for parking in Dreghorn Park, the available parking spaces might not be sufficient to satisfy the demand. In this case, the pressures within the area as a result of potential parking displacement could be higher, and additional mitigation measures may need to be considered.

3.13.23 As previously mentioned, the carriageway width throughout Dreghorn Park is between 4.2 and 4.5m, so allowing on-carriageway parking may obstruct traffic flow, especially for larger vehicles such as waste collection trucks. The introduction of double yellow lines on both sides of this road, should problems persist, could be beneficial as it will ensure adequate carriageway width is maintained at all times. In addition, this measure would have an advisory sense, guiding drivers to fully utilise the available parking spaces.

3.13.24 The estimated construction costs associated with proposed mitigations would be circa £13,500. This includes the introduction of road markings.

- Option 3 – Partial exemption from the legislation with advisory bays

3.13.25 The existing carriageway width is inadequate to accommodate on-carriageway parking as this would create issues of accessibility for emergency vehicles. In addition, the footways within the area have an average width of approximately 1.8m. While footway parking would compromise accessibility for pedestrians, advisory parking bays could be introduced which would take a narrow strip from the existing footway in section where footways are more than 1.5m. The rest of the proposed bays would be on carriageway allowing adequate space for emergency vehicle access.

3.13.26 The estimated construction costs associated with proposed mitigations would be circa £16,500. This includes the introduction of road markings and upright signage.

Ward 08 – Cluster 01 – Final Recommendation by PCL

3.13.27 It is expected that the current parking demand in the area would mostly be accommodated within the existing parking spaces in Dreghorn Park.

3.13.28 No considerable parking pressures are anticipated as a result of the legislation in this particular area, based on the records from the desktop study and the site visit. However, it is believed that residents of this area may park on footways for convenience and not utilise the available parking space.

3.13.29 PCL recommends to regularly monitor this location once the legislation comes into effect to assess whether the proposed mitigation may be adequate or additional measures should be considered.

3.13.30 PCL recommends, should problems persist, the introduction of the mitigation measures described for this cluster in Option 2 of the desktop study. These comprise of:

- Introduction of strategic double yellow lines along both sides of Dreghorn Park. This will ensure sufficient carriageway width is provided for the potential access of emergency vehicles.

3.13.31 The estimated construction costs associated with the proposed mitigations would be circa £13,500.

3.14 Ward 9 – Fountainbridge / Craiglockhart

3.14.1 Ward 9 – Fountainbridge is located in the south-west of Edinburgh (See Figure 42). This Ward has an area of 5.11km2. 220 roads within this Ward formed part of the study.

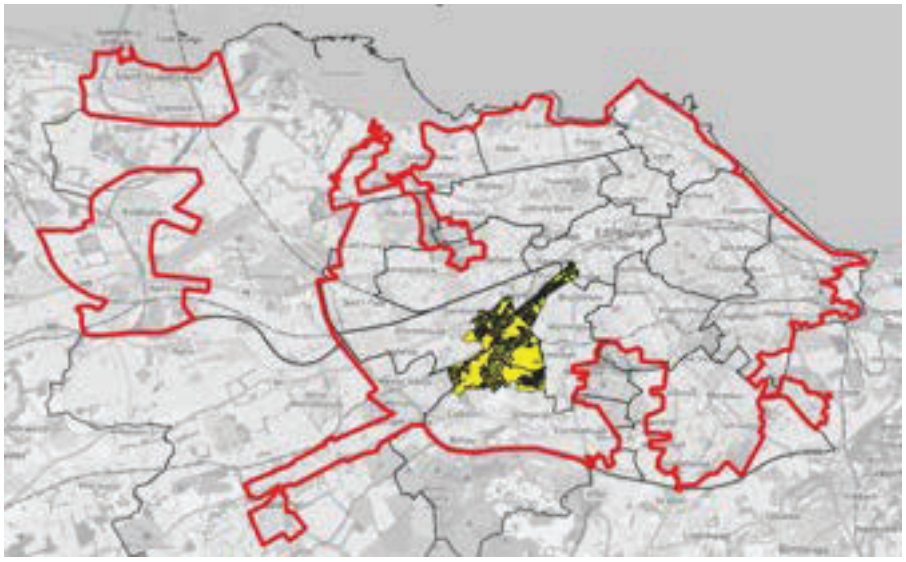

Figure 42: Ward 09- Fountainbridge- Location

3.14.2 The 220 roads contained in this Ward were successfully RAG classified. Therefore, no road in this Ward was defined as 'Unclassified'.

3.14.3 PCL identified a total of 154 cars parked on the footways of this Ward. This led to 19 roads in this Ward to be classified as RED.

3.14.4 The resulting RAG classification breakdown for this Ward is shown in the figure below.

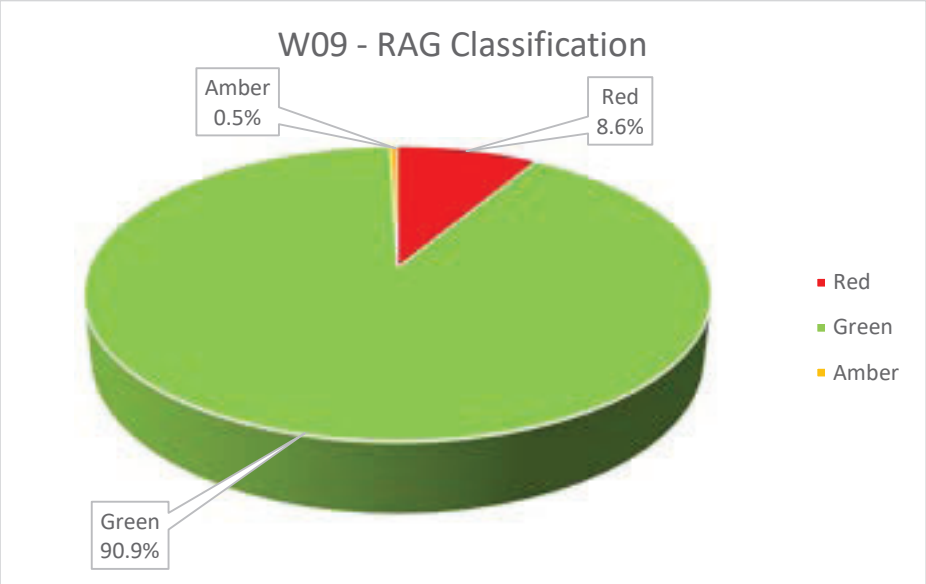

Figure 43: Ward 09- Fountainbridge- RAG Classification

3.14.5 Phase 2 of the study included a granular assessment of the 19 RED roads and the results and recommendations for each road are shown in the following sections.

3.14.6 A list of the RED roads identified for Ward 9 is included in Table 16.

3.14.7 A detailed breakdown, including the proposed mitigation measures identified for each segment, is included in Appendix C-9.

Table 16: Ward 09- Fountainbridge- Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Allan Park Crescent	Craiglockhart Dell Road	Eltringham Terrace
Allan Park Drive	Craiglockhart Grove	Hutchison Gardens
Allan Park Gardens	Craiglockhart Place	Kingsknowe Avenue
Ashley Drive	Craiglockhart Terrace	Kingsknowe Crescent
Ashley Gardens	Dovecot Loan	Meggetland Terrace
Broomyknowe	Dovecot Park	
Craiglockhart Bank	Elliot Road	

Cluster analysis

3.14.8 One cluster was identified in this Ward.

Ward 09 – Cluster 1

3.14.9 This cluster is located on the south side of Ward 09. It is located south of Harrison Park and next to the Union Canal.

3.14.10 The roads in this cluster containing RED segments are:

- Ashley Drive
- Ashley Gardens

3.14.11 The levels of footway parking identified in the segments of Ashley Drive and Ashley Gardens were 'Significant'. 31 and 28 cars were identified parking on Ashley Drive and Ashley Gardens' footways respectively.

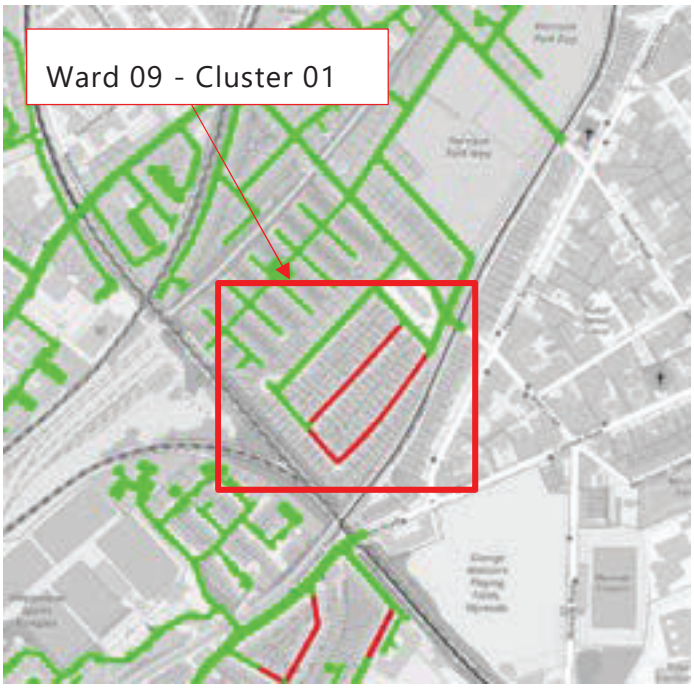

Figure 44: Ward 09-Fountainbridge- Cluster 01- Location

The average carriageway width of the roads that form part of this cluster is 5.4m for both Ashley Drive and Ashley Gardens. Both roads have footways on both sides with average width of 1.6m. Due to the 'significant' levels of footway parking identified on both sides of the roads, accessibility of pedestrians and especially wheelchair users is impeded.

Figure 45:Ward 09- Fountainbridge- Cluster 01- Ashley Drive

3.14.12 The properties at both sides of Ashley Drive and Ashley Gardens have their own private driveways and garages. Therefore, it is believed that

some of the cars parked on the footways are likely to be second household cars or they might belong to owners for whom it is more convenient to park on the footways next to their properties than in their driveways. In addition, there is likely to be an element of commuter and non-residential parking in this area, given its close proximity to the boundary of the CPZ. However, due to the high demand for parking in these two roads, it is expected that only a limited portion of the footway parking could be accommodated within existing private parking spaces. The existing carriageway width of 5.4m only allows on-carriageway parking on one side of the road only without blocking access to emergency vehicles.

3.14.13 When the legislation comes into effect, it is likely that a number of the cars parked on the footways of Ashley Drive and Ashley Gardens will move to the private driveways and some of the vehicles would be able to park fully on the carriageway without blocking the flow of vehicles. The remaining portion of footway parking would likely be displaced to nearby roads. Cowan Road is an adjacent road that could accommodate a number of the cars. When the legislation is introduced, parking pressures would likely be more noticeable in surrounding areas.

Ward 09 – Cluster 01 – On-site Assessment

3.14.14 This cluster was visited by PCL's assessor on 13/06/2022.

3.14.15 During the site visit to this cluster an on-site assessment of the current parking conditions was undertaken. The overall footway parking within this cluster was at a similar level between the desktop study and the on-site assessment. More specifically, during the site visit 21 and 34 cars were recorded parking on footways of Ashley Drive and Ashley Gardens respectively, whereas 31 and 28 cars were identified during the desktop study.

3.14.16 During the site visit, a number of private driveways were observed to be unoccupied. However, it is expected that these private driveways would only accommodate a limited number of the current footway parking.

3.14.17 The on-site assessment concluded that the parking displacement expected as a result of the legislation in this cluster will potentially have a

'Significant D' (refer to Table 2) impact to nearby roads with Cowan Road being the most likely road to receive those parking pressures. Moreover, the assessor noted that the introduction of parking restrictions on these roads may be essential as they have high parking demands, and they cannot accommodate parking on both sides of the road while maintaining adequate carriageway width for safe traffic flow.

3.14.18 This area is included within Phase 2 of the SRoP and proposals for controlled parking are being brought forward which will also help to address footway parking problems in these streets.

3.14.19 A detailed breakdown for the on-site assessment for this cluster, including the levels of footway parking identified during the site visit, is included in Appendix B-9.

Ward 09 – Cluster 01 – Potential Mitigation Measures

- Option 1 – Introduction of double yellow lines

3.14.20 The existing carriageway width of Ashley Drive and Ashley Gardens allows on-carriageway parking on one side of the road without affecting traffic flow. However, the demand for parking in these roads is high and the introduction of double yellow lines on one side of the roads in this cluster, should the introduction of the legislation not achieve its desired aims, could be beneficial to ensure adequate carriageway width is maintained for access of emergency vehicles at all times. In addition, the introduction of advisory parking bays will contribute to the optimal use or remaining parking space.

3.14.21 The estimated construction costs associated with the introduction of these road markings would be circa £11,000.

- Option 2 – Introduction of advisory bays and one-way traffic

3.14.22 Alternatively, should problems persist, it may be possible to introduce a line of advisory bays. However, this would lead to a reduction in the effective carriageway width. These bays could be staggered to discourage excessive speeds. Nonetheless, the remaining carriageway width resulting from the introduction of the advisory bays would not be enough to accommodate 2-way traffic. Therefore, the introduction of 1-way traffic

would likely be recommended. The alternate direction of traffic would contribute to minimise the distance people would need to travel to access the start of the road when looking for available parking spaces. However, traffic modelling to assess the potential impact on the road network resulting from this change is suggested.

3.14.23 The estimated construction costs associated with the introduction of these road markings and upright traffic signs would be circa £18,000.

Ward 09 – Cluster 01 – Final Recommendation by PCL

3.14.24 Parking demand in this cluster is usually high and the footway parking levels identified during both the desktop study and the site visit were 'significant'.

3.14.25 It is expected that 'Significant' parking pressures may be displaced to roads nearby this cluster after the introduction of the legislation. It is also likely that Ashley Gardens and Ashley Drive have cars parked on both sides of the road due to the high parking demand. This will result to inadequate remaining carriageway width for emergency vehicles access.

3.14.26 PCL recommends monitoring this area and wait for the outcome of the SRoP before introducing mitigation measures.

3.14.27 PCL recommends, should problems persist, the implementation of Option 1 of the Potential Mitigation Measures previously described.

3.14.28 These comprise of:

- Introduction of strategic double yellow lines along one side of Ashley Gardens and Ashley Drive. This will ensure sufficient carriageway width is provided for the potential access of emergency vehicles.

3.14.29 The estimated construction costs associated with the proposed mitigations would be circa £11,000.

3.15 Ward 10 – Morningside

3.15.1 Ward 10 – Morningside is located just south of central Edinburgh (See Figure 46). This Ward has an associated area of 6.2km2. 242 roads within this Ward formed part of the study.

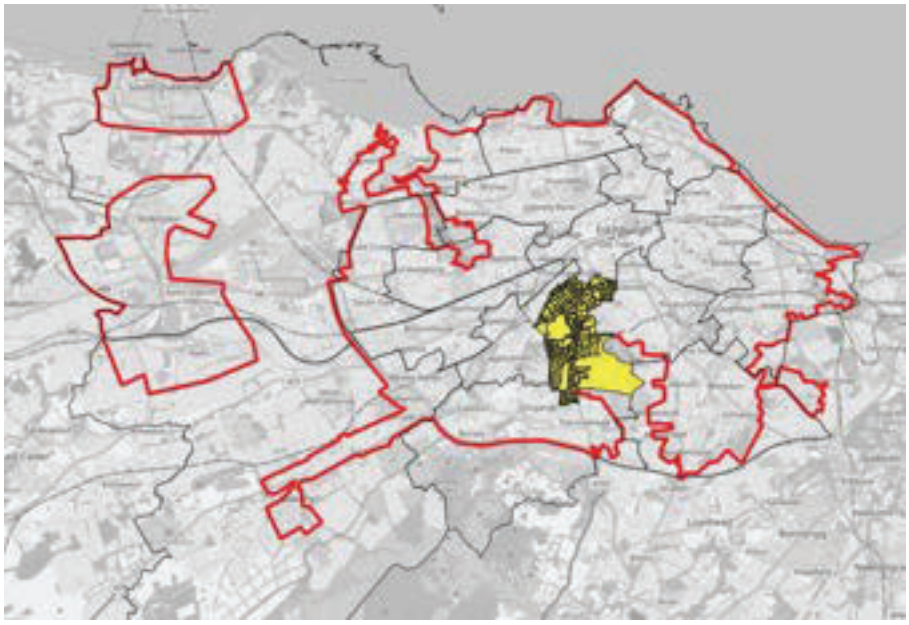

Figure 46: Ward 10- Morningside- Location

3.15.2 The 242 roads contained in this Ward were successfully RAG classified. Therefore, no road in this Ward was defined as 'Unclassified'.

3.15.3 PCL identified a total of 26 cars parked on the footways in this Ward. This led to 9 roads in this Ward to be classified as RED.

3.15.4 The resulting RAG classification breakdown for this Ward is shown in the figure below.

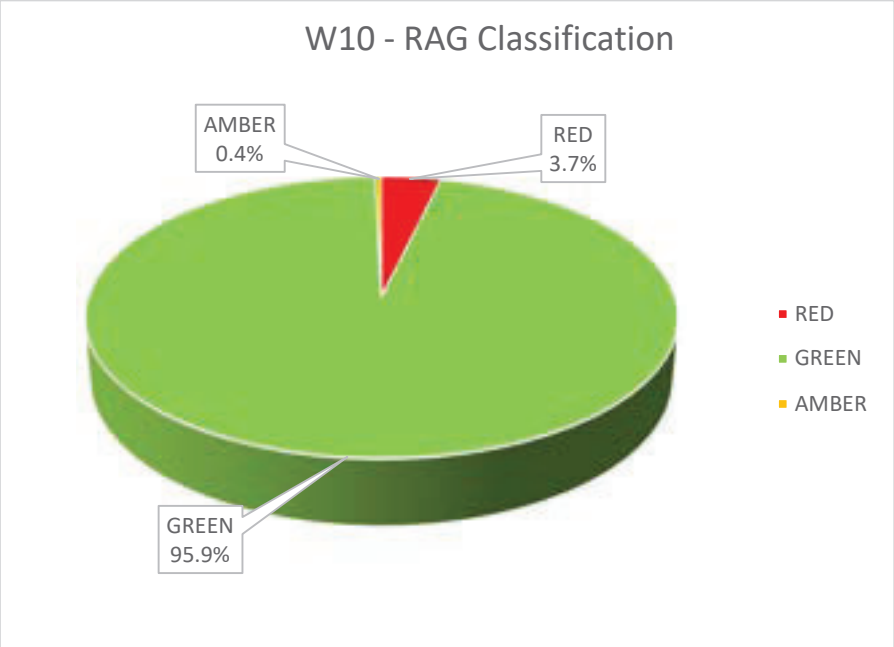

Figure 47: Ward 10- Morningside- RAG Classification

3.15.5 Phase 2 of the study included a granular assessment of the 9 RED roads and the results and recommendations for each road are shown in the following sections.

3.15.6 A list of the RED roads identified for Ward 10 is included in Table 17.

3.15.7 A detailed breakdown, including the proposed mitigation measures identified for each segment, is included in Appendix C-10.

Table 17: Ward 10- Morningside- Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Braid Mount Crest	Pentland Gardens	Swan Spring Avenue
Braid Mount Rise	Pentland Grove	
Buckstane Park	Plewlands Gardens	
Pentland Crescent	Riselaw Terrace	

Cluster analysis

3.15.8 No clusters were identified in this Ward.

3.16 Ward 11 – City Centre

3.16.1 Ward 11 – includes the city centre of Edinburgh (see Figure 48). This Ward has an associated area of 4.98km2. 456 roads within this Ward formed part of the study.

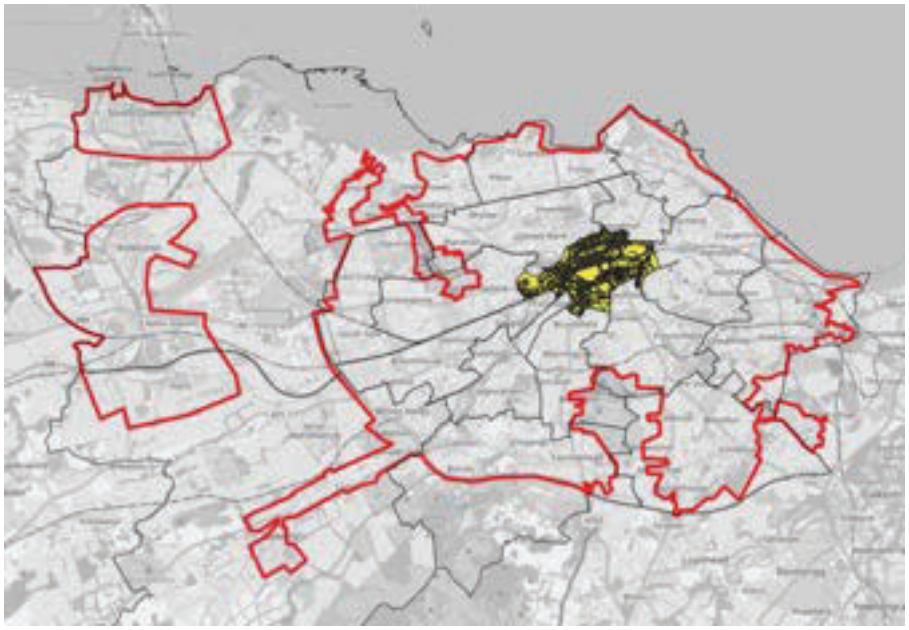

Figure 48: Ward 11- City Centre- Location

3.16.2 PCL identified 3 roads in this Ward as 'Site Visit Required' as the assessors believed the completion of a site visit would aid coding these particular roads. PCL completed a site visit of these roads on 15/06/2022. 2 out of three of these roads were classified based on the site visit records, while Meadow Walk remained 'Unclassified', as this road is still under construction (Figure 49). The resulting RAG classification of these roads is shown below.

Table 18: Ward 11- City Centre- Unclassified Roads

Street Name	RAG Classification
Greenside End	GREEN
Greenside	GREEN
Meadow Walk	UNCLASSIFIED

Figure 49: Ward 11- City Centre- Meadow Walk under construction

3.16.3 PCL identified a total of 24 cars parked on the footways of this Ward. This led to 5 roads in this Ward to be classified as RED.

3.16.4 The resulting RAG classification breakdown for this Ward is shown in the figure below.

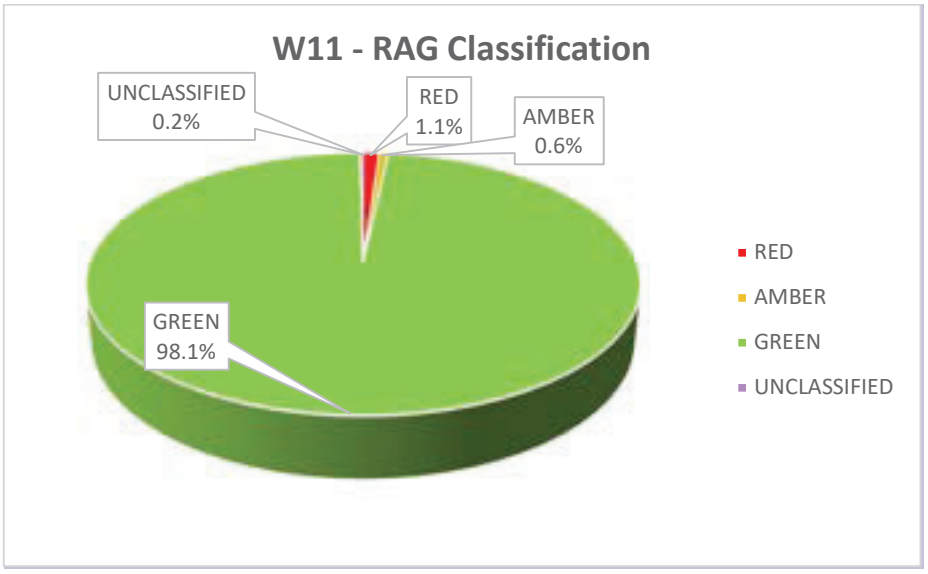

Figure 50: Ward 11- City Centre- RAG Classification

3.16.5 Phase 2 of the study included a granular assessment of the 5 RED roads and the results and recommendations for each road are shown in the following sections.

3.16.6 A list of the RED roads identified for Ward 11 is included in Table 19.

3.16.7 A detailed breakdown of each road listed, including the proposed mitigation measures identified for each segment, is included in Appendix C-11.

Table 19: Ward 11- City Centre- Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Douglas Gardens Mews	Queensferry Street Lane	West Register Street
Meuse Lane	St James Place	

Cluster analysis

3.16.8 No clusters were identified in this Ward.

3.17 Ward 12 – Leith Walk

3.17.1 Ward 12 – Leith Walk is located just north of the city centre of Edinburgh (See Figure 51). This Ward has an associated area of 2.66km2. 207 roads within this Ward formed part of the study.

Figure 51: Ward 12- Leith Walk- Location

3.17.2 The 207 roads contained in this Ward were successfully RAG classified. Therefore, no road in this Ward was defined as 'Unclassified'.

3.17.3 PCL identified a total of 96 cars parked on the footways in this Ward. This led to 24 roads in this Ward to be classified as RED.

3.17.4 The resulting RAG classification breakdown for this Ward is shown in the figure below.

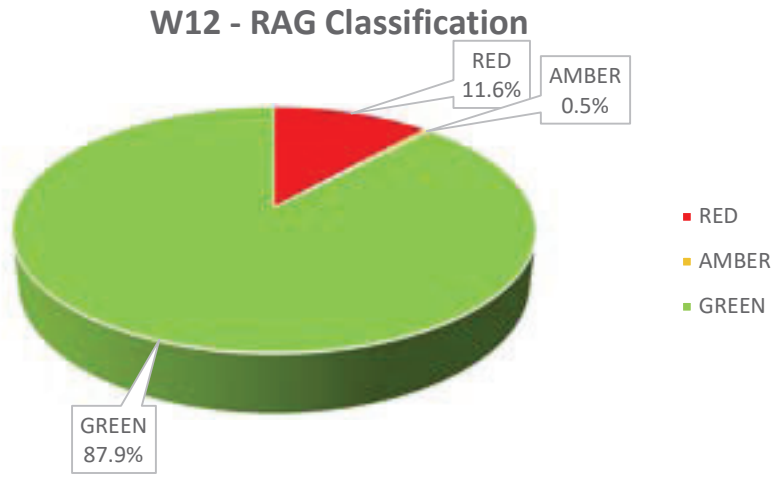

Figure 52: Ward 12- Leith Walk- RAG Classification

3.17.5 Phase 2 of the study included a granular assessment of the 24 RED roads and the results and recommendations for each road are shown in the following sections.

3.17.6 A list of the RED roads identified for Ward 12 is included in Table 20.

3.17.7 A detailed breakdown of each road, including the proposed mitigation measures identified for each segment, is included in Appendix C-12.

Table 20: Ward 12- Leith Walk- Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Allanfield	Dicksonfield	Springfield Lane
Anderson Place	Dryden Street	Springfield Street
Arthur Street	Dunedin Street	Stead's Place
Bangor Road	Edina Place	Sunnyside
Barnton Park View	Elliot Street	The Quilts
Blandfield	Jane Street	Tinto Place
Bonnington Gait	Newhaven Road	Trafalgar Lane
Cambridge Gardens	Spey Street Lane	West Bowling Green Street

Cluster analysis

3.17.8 No clusters were identified for this Ward.

3.18 Ward 13 – Leith

3.18.1 Ward 13 – Leith is located in the north of Edinburgh (See Figure 53). This Ward has an associated area of 5.59km2. 240 roads within this Ward formed part of the study.

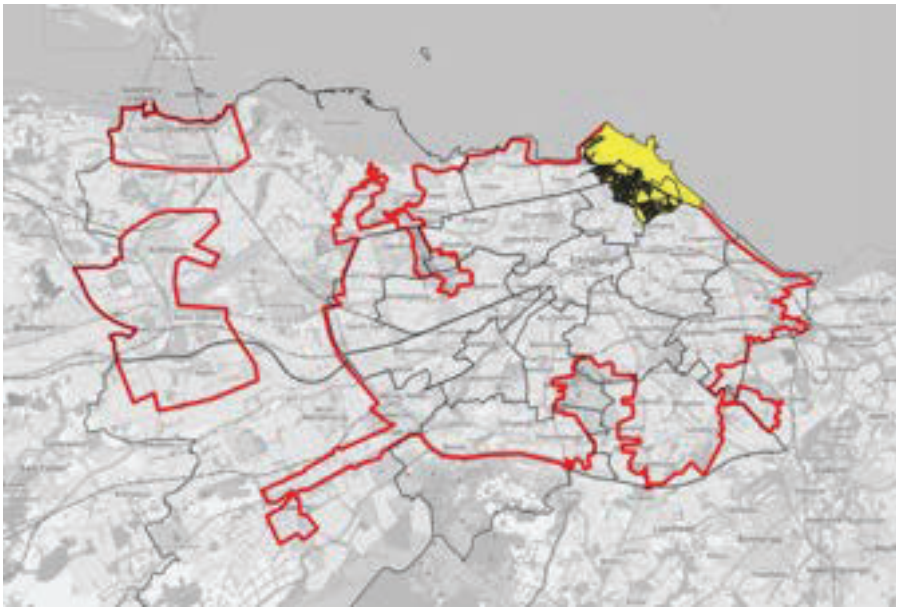

Figure 53: Ward 13- Leith- Location

3.18.2 PCL identified 2 roads in this Ward as 'Unclassified' as these roads were still under construction during the desktop study. A site visit to code these roads was undertaken on 14/06/2022. The resulting RAG classification of these roads is shown below.

Table 21: Ward 13- Unclassified Roads

Street Name	RAG Classification
Pillans Walk	RED
Ropemaker Street	GREEN

3.18.3 PCL identified a total of 284 cars parked on the footways of this Ward. This led to 48 roads in this Ward to be classified as RED.

3.18.4 The resulting RAG classification breakdown for this Ward is shown in the figure below.

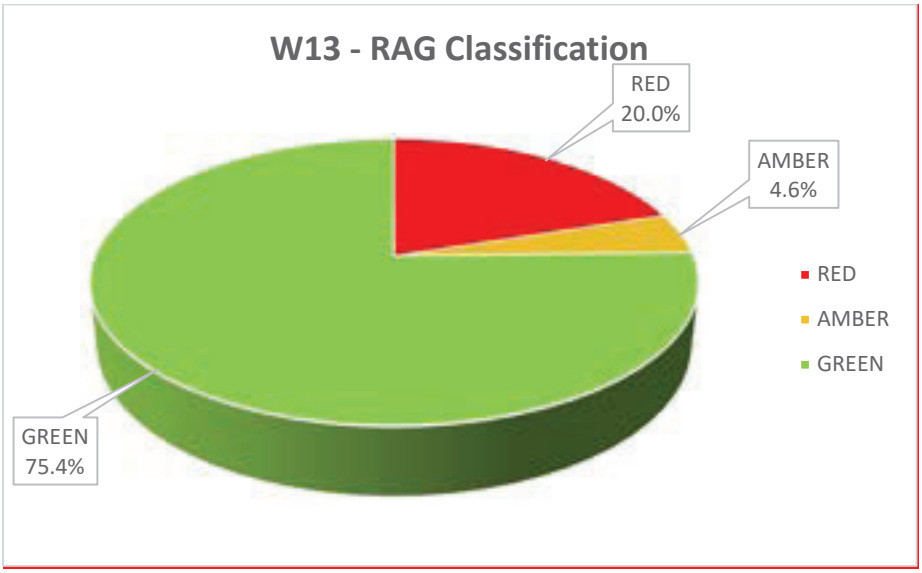

Figure 54: Ward 13- Leith- RAG Classification

3.18.5 Phase 2 of the study included a granular assessment of the 48 RED roads and the results and recommendations for each road are shown in the following sections.

3.18.6 A list of the RED roads identified for Ward 13 is included in Table 22.

3.18.7 A detailed breakdown of each road, including the proposed mitigation measures identified for each segment, is included in Appendix C-13.

Table 22: Ward 13- Leith- Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Argyle Street	Largo Place	Restalrig Terrace
Bangor Road	Laurie Street	Sailmaker Road
Cadiz Street	Links Gardens Lane	Salamander Court
Cassel's Lane	Lochend Road	Salamander Street
Cornhill Terrace	Maritime Street	Sandport Street
Crown Street	Oakville Terrace	Sandport Way
Duke Street	Pillans Walk	Seafield Place
East Cromwell Street	Pirniefield Bank	Seafield Road
East Restalrig Terrace	Pirniefield Gardens	Spier's Place
Giles Street	Pirniefield Place	Summerfield Gardens
Goosander Street	Pirrie Street	Summerfield Place
Hawthornbank Place	Poplar Lane	Tolbooth Wynd
Hawthornvale Path	Portland Gardens	Water Street
Hermitage Park South	Prospect Bank Crescent	Western Harbour Terrace
Jane Street	Prospect Bank Place	
John Paul Jones View	Prospect Bank Road	
Lapicide Place	Prospect Bank Terrace	

Cluster analysis

3.18.8 Three clusters were identified in this Ward.

Ward 13 – Cluster 1

3.18.9 This cluster is located on the south-east of Ward 13. It is located just south of Seafield Cemetery.

3.18.10 The roads in this cluster containing RED segments are:

- Pirniefield Bank
- Pirniefield Gardens
- Pirniefield Place
- Prospect Bank Crescent
- Prospect Bank Place
- Prospect Bank Road

3.18.11 The levels of footway parking identified in the segments of Pirniefield Bank, Pirniefield Gardens, Pirniefield Place and Prospect Bank Road varied from 'Moderate' to 'Significant' with 6, 6, 11 and 12 cars recorded parking on footways in these roads respectively. Footway parking on both sides of the road was identified in some segments of this cluster. 'Moderate' levels of footway parking were identified on Prospect Bank Crescent and Prospect Bank Place. However, footway parking was identified only on one side of the road. 2 cars were identified parking on the footway in both Prospect Bank Crescent and Prospect Bank Place.

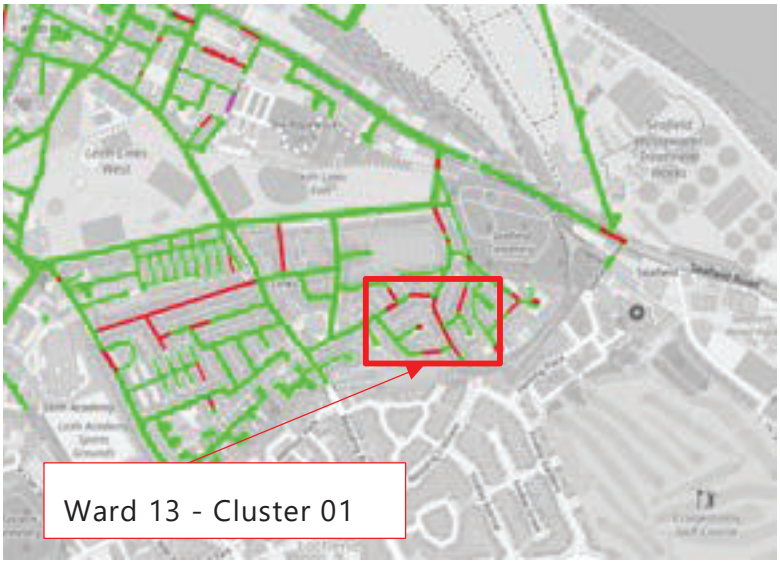

Figure 55: Ward 13- Leith- Cluster 01- Location

3.18.12 The width of the carriageways that form part of this cluster varies from 4.6m on the narrowest segment of Pirniefield Bank to 16m on its widest segment. This segment is located at the south end of the road where it

widens to form a parking area. Across all segments of the roads within this cluster, the average carriageway width is larger than 5.2m allowing on-carriageway kerbside parking on one side of the road without affecting traffic flows. However, as previously noted, footway parking on both sides was identified on some of the roads included in this cluster, although not always in the same segments. In addition, the average footway width for the roads of this cluster is 1.5m. Therefore, footway parking results in less than the minimum space required by legislation to allow access for pedestrians and especially wheelchair users.

Figure 56: Ward 13 – Leith – Cluster 01 – Pirniefield Gardens

3.18.13 While footway parking was identified at both sides on Pirniefield Gardens, many unused private driveways were observed. In addition, some of the parked cars were blocking the access to private driveways and garages. Therefore, it is believed that the cars parked on the footways at Pirniefield Gardens are likely to be second household cars or they belong to owners who choose to park on the footway for convenience next to their properties rather than in their driveways. The second is believed to represent the majority of footway parking instances in this cluster as most driveways in this area were unused at the time the assessment took place. In addition, while footway parking was recorded on Pirniefield Bank, Prospect Bank Crescent and Prospect Bank Place, the existing carriageway width on these roads would allow on-carriageway parking on one side without blocking traffic flow. On the other side, the high demand for parking on Pirniefield Place and Prospect Bank Road would potentially create pressures in the area once the legislation comes into effect.

3.18.14 With the introduction of the legislation it is likely that many of the cars parked on the footways of Pirniefield Gardens will move to private driveways and others may be able to park on the road without blocking the flow of traffic. Some vehicles would likely be displaced to nearby roads such as Pirniefield Place or Prospect Bank Road, causing a 'Significant A' impact (refer to Table 2) as these roads have limited spare parking capacity. A portion of the cars parked on Prospect Bank Road could park on-carriageway instead, while the remaining portion could be displaced to adjacent roads, such as Pirniefield Place creating additional parking pressures within the area.

Ward 13 – Cluster 01 – On-site Assessment

3.18.15 This cluster was visited by PCL's assessor on 14/06/2022.

3.18.16 During the site visit to this cluster an on-site assessment of the current parking conditions was undertaken. The overall footway parking within this cluster was at a lower level compared to that recorded during the desktop study. More specifically, during the site visit 26 cars were recorded on footways of the roads included in this cluster, compared to 39 noted during the desktop assessment.

3.18.17 During the site visit, a number of private driveways were observed to be unoccupied on most of the roads of this cluster such as Pirniefield Gardens and Pirniefield Place (Figure 56 and Figure 57). However, it is expected that these private driveways would only accommodate a limited portion of the current footway parking.

3.18.18 The on-site assessment concluded that the parking displacement expected as a result of the introduction of the legislation in this cluster will potentially have a 'Significant A' (refer to Table 2) impact to nearby roads as the area is already saturated by parking. Moreover, the assessor noted that the introduction of parking restrictions on these roads may be recommended as these roads have high parking demand, and they cannot accommodate parking on both sides of the road while maintaining adequate carriageway width for continuous traffic flow.

3.18.19 A detailed breakdown for the on-site assessment for this cluster, including the levels of footway parking identified during the site visit, is included in Appendix B-13.

Ward 13 – Cluster 01 – Potential Mitigation Measures

3.18.20 The existing carriageway width of the roads comprising this cluster allows on-carriageway parking on one side of the road without affecting traffic flow. However, the demand of parking in some of these roads, such as Pirniefield Place and Prospect Bank Road, is high. The introduction of double yellow lines at one side of the roads in this cluster, should the introduction of the legislation not achieve its desired aims, would be beneficial to ensure adequate traffic flow and the access of emergency vehicles at all times. The estimated construction costs associated with the introduction of these road markings would be circa £7,500.

Figure 57: Ward 13- Leith- Cluster 01- Pirniefield Place (left), Prospect Bank Road (right)

Ward 13 – Cluster 01 – Final Recommendation by PCL

3.18.21 The parking demand in this cluster is usually high and the footway parking levels identified during both the desktop study and the site visit were between 'moderate' and 'significant'. However, fewer cars observed during the on-site assessment.

3.18.22 It is expected that parking pressures may be introduced to the nearby roads of this cluster after the introduction of the legislation. Nonetheless, it appears to be sufficient capacity to accommodate most vehicles on the

carriageway albeit in some places drivers will have to walk further to their home. It is also likely that in the absence of parking restrictions and formal parking spaces in the area, cars might park on both sides of the road due to the high parking demand. This may result to inadequate remaining carriageway width for emergency vehicles access.

3.18.23 PCL recommends monitoring of this area and, should the introduction of the legislation not achieve its desired aims, the implementation of the mitigation measures described for this cluster could be beneficial. These comprise of:

- Introduction of strategic double yellow lines along one side of Pirniefield Bank, Pirniefield Gardens, Pirniefield Place, Prospect Bank Crescent, Prospect Bank Place and Prospect Bank Road.

3.18.24 This will ensure sufficient carriageway width is provided for the potential access of emergency vehicles.

3.18.25 The estimated construction costs associated with the proposed mitigations would be circa £7,500.

Ward 13 – Cluster 2

3.18.26 This cluster is located to the south-east of Ward 13, to the east of Leith Academy.

3.18.27 The roads in this cluster containing RED segments are:

- East Restalrig Terrace
- Lochend Road
- Restalrig Terrace

3.18.28 The levels of footway parking identified in segments of the roads included in this cluster were between 'Moderate' and 'Significant'. While footway parking was recorded only on one side of the road for Lochend Road, on East Restalrig Terrace and Restalrig Terrace there were cars parked on the footways on both sides of the road. During the desktop study, 29 cars were identified parking on the footways in East Restalrig Terrace, whilst at Lochend Road and Restalrig Terrace 4 and 25 vehicles were identified parking on footways respectively.

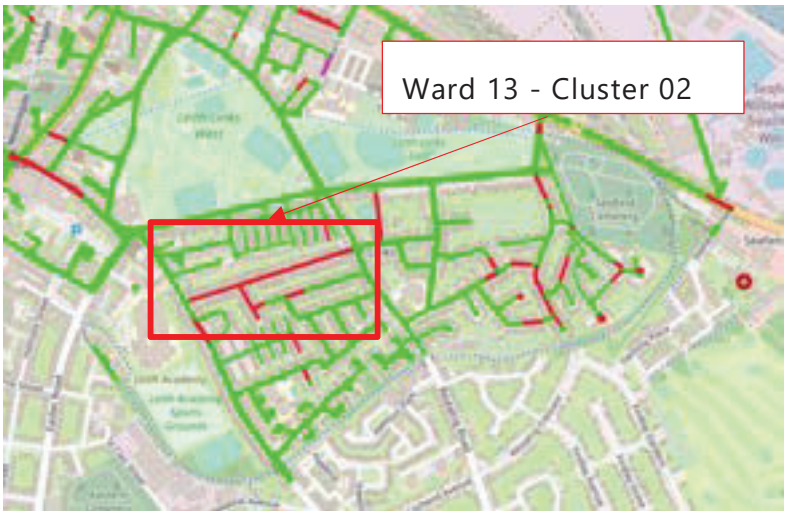

Figure 58: Ward 13- Leith- Cluster 02- Location

3.18.29 The width of the carriageways that form part of this cluster varies from 5.5m on the narrowest segments of Restalrig Terrace to 11.2m on the widest segment of Lochend road. Across all segments of the roads within this cluster, the average carriageway width is approximately 6m allowing on-carriageway kerbside parking on one side of the road without affecting traffic flows. However, as previously noted, footway parking on both sides was identified on East Restalrig Terrace and Restalrig Terrace. Considering that the average footway width for the footways of these roads is 1.4m, the occurrence of footway parking would lead to the remaining unobstructed footway width being less than 1.5m, affecting accessibility for pedestrians and especially wheelchair users.

Figure 59: Ward 13- Leith- Cluster 02- East Restalrig Terrace

3.18.30 PCL's assessor believes that that a number of the cars parked on East Restalrig's footways might belong to owners of properties with driveways for whom it is more convenient to park on the footway. Alternatively, these cars might be second household cars or too large to fit within driveways. Only a small portion of the current footway parking could be accommodated by the unoccupied driveways identified in the area. On the other hand, there weren't any unoccupied private driveways noted in the rest of the roads of this cluster. Thus, at times when the demand for parking in this area is higher, increased parking pressures are expected.

3.18.31 When the legislation comes into effect, it is likely that the cars parking on the footways of Lochend Road could park fully on the carriageway at those same locations. A large proportion of the current parking demand at Restalrig Terrace is expected to be displaced to nearby roads such as Cornhill Terrace, Ryehill Terrace and Restalrig Road, resulting in 'Significant D' impact to the area in terms of parking pressures.

Ward 13 – Cluster 02 – On-site Assessment

3.18.32 This cluster was visited by PCL's assessor on 14/06/2022.

3.18.33 During the site visit to this cluster an on-site assessment of the current parking conditions was undertaken. The overall footway parking within this cluster was less significant than the footway parking identified during the desktop study. More specifically, during the site visit 31 cars were recorded on footways of the roads included in this cluster, compared to 58 noted during the desktop assessment. It is worth mentioning that there was no footway parking identified on Restalrig Terrace during the site visit.

3.18.34 PCL's assessor expects that the footway parking identified on Lochend Road would be fully accommodated on the same road and will not impact the surrounding area (see Figure 60).

Figure 60: Ward 13- Leith- Cluster 02- Lochend Road

3.18.35 The on-site assessment concluded that the parking displacement expected as a result of the introduction of the legislation in this cluster will potentially have a 'Significant B' (refer to Table 2) impact to nearby roads as the area is already saturated by parking. For this reason, the assessor noted that the introduction of parking restrictions on these roads could be beneficial as these roads have high parking demands, and both East Restalrig Terrace and Restalrig Terrace cannot accommodate parking on both sides of the road while maintaining adequate carriageway width for traffic flow.

3.18.36 A detailed breakdown for the on-site assessment for this cluster, including the levels of footway parking identified during the site visit, is included in Appendix B-13.

Ward 13 – Cluster 02 – Potential Mitigation Measures

3.18.37 The existing carriageway width of East Restalrig Terrace and Restalrig Terrace allows on-carriageway parking only on one side of the road without affecting traffic flow.

3.18.38 It is believed that the introduction of advisory parking bays on these two roads, should the introduction of the legislation not achieve its desired aims, could help to optimise the utilisation of available parking space and accommodate some of the expected parking displacement. As far as Lochend Road is concerned, the level of footway parking identified was

'Moderate' and it is expected that these cars may be able to park fully on carriageway in the same or adjacent location of the road after the introduction of the legislation without adding additional parking pressures to the area.

3.18.39 The estimated construction costs associated with the introduction of these road markings described in this section would be circa £6,500.

Ward 13 – Cluster 02 – Final Recommendation by PCL

3.18.40 Parking demand in this cluster is high and the footway parking levels identified during both the desktop study and the site visit were between 'moderate' and 'significant'.

3.18.41 It is expected that 'Significant' parking pressures will continue in the area after the introduction of the legislation due to the parking displacement expected from East Restalrig Terrace and Restalrig Terrace. It is also likely that in the absence of parking restrictions and formal parking spaces in the area, cars might park on both sides of the road due to the high parking demand. This may result in insufficient carriageway width to allow access for emergency service vehicles.

3.18.42 PCL recommends, should problems persist, the implementation of the mitigation measures previously described for this cluster which comprise of:

- Introduction of advisory parking bays on East Restalrig Terrace and Restalrig Terrace.

3.18.43 The estimated construction costs associated with the proposed mitigations would be circa £6,500.

Ward 13 – Cluster 3

3.18.44 This cluster is located in the centre of Ward 13 to the north of South Leith Parish Church.

3.18.45 The roads in this cluster containing RED segments are:

- Giles Street
- Maritime Street
- Spier's Place
- Tolbooth Wynd
- Water Street

3.18.46 The levels of footway parking identified in segments of this cluster were between 'Moderate' and 'Significant'. Footway parking was recorded only on one side of the road for most of the 'RED' segments apart from Spier's Place and one segment of Giles Street where there was footway parking on both sides. During the desktop study, 14 cars were identified parking on footways of Giles Street, 9 cars on Maritime Street, 8 cars on Spier's Place, 3 cars on Tolbooth Wynd and just one car on Water Street.

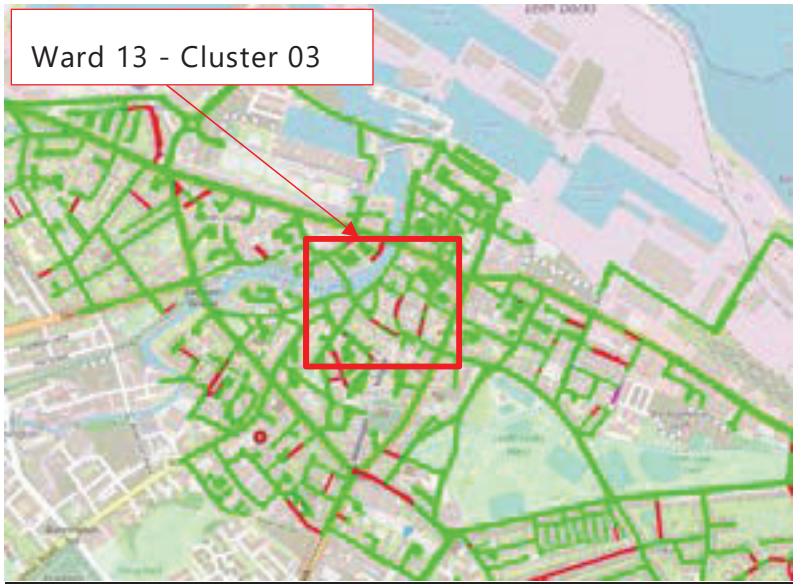

Figure 61: Ward 13- Leith- Cluster 03- Location

3.18.47 The width of the carriageways that form part of this cluster varies from 5.1m on the narrowest segment of Tolbooth Wynd to 7.7m on the widest segment of Giles Street. Across all segments of the roads within this cluster, the average carriageway width is approximately 5.5m allowing on-carriageway kerbside parking on one side of the road without affecting traffic flow. The roads included in this cluster have footways from both sides with an average width of 1.5m. Based on the existing layout, the occurrence of footway parking on these roads significantly affects accessibility for pedestrians and wheelchair users especially at sections of the roads where footway parking is recorded from both sides (Giles Street and Spier's Place). However, as previously noted, footway parking on both sides was identified on Giles Street and Spier's Place and considering that the average footway width for the footways of these roads is 1.4m, the occurrence of footway parking would result in the remaining unobstructed footway width being less than 1.5m.

Figure 62: Ward 13- Leith- Cluster 03- Giles Street

3.18.48 Giles Street has a number of private garages belonging to a car repair business. There is likely to be some parking demand on this street related to the businesses activities and may include some of the vehicles parking on the footways. The carriageway width of Giles Street would allow kerbside parking only on one side of the road to maintain adequate road width for traffic flow and access for emergency vehicles.

3.18.49 Similarly, the rest of the roads included in this cluster can only allow kerbside parking on one side of the road based on existing carriageway widths. It is worth noting that parking restrictions (double yellow lines) are already in place in many segments of these roads and some incorrect parking was observed adjacent to these restrictions.

3.18.50 When the legislation comes into effect, it is likely that a portion of the cars parking on the footway in Giles Street may be moved into private parking spaces available nearby. A number of the remaining cars may be able to park fully on the carriageway on one side of the road, whilst the remaining cars will likely be displaced to other sections of Giles Street or nearby roads such as Cables Wynd. This is likely to result in a 'Moderate B' impact to the surrounding area. Maritime Street can only accommodate a portion of the current footway parking and the remaining cars will need to be displace to adjacent roads, such as Assembly Street, Cadiz Street or to the eastern section of Giles Street. 'Moderate B' impact from parking displacement of footway parking on Maritime Street is expected (refer to Table 2). In addition, 'Significant B' impact from parking displacement of

footway parking on Spier's Place is expected. On the other hand, footway parking identified on Tolbooth Wynd and Water Street will only have a 'Minor' impact in terms of parking displacement as the levels of footway parking identified on these two roads were 'Moderate' and they could be accommodated on the same road. In general, increased parking pressures are expected in this cluster after the implementation of the new legislation and potential mitigation measures could be beneficial.

Ward 13 – Cluster 03 – On-site Assessment

3.18.51 This cluster was visited by PCL's assessor on 14/06/2022.

3.18.52 During the site visit to this cluster an on-site assessment of the current parking conditions was undertaken. The overall footway parking within this cluster was less significant than the footway parking identified during the desktop study. More specifically, during the site visit 18 cars were recorded on footways of the roads included in this cluster, compared to 35 noted during the desktop assessment. It is worth mentioning that there was no footway parking identified on Tolbooth Wynd and Spier's Place during the site visit. The footway parking identified on Tolbooth Wynd during the desktop study was 'Moderate' and the introduction of the legislation is only expected to lead to a 'Minor' impact to the area resulting from the envisaged parking displacement. It is believed that at peak times Spier's Place can be saturated with parking and drivers tend to partly use footways on both sides, as recorded during the desktop study.

3.18.53 During the site visit, construction work for tram extension was ongoing and various roads within the area were closed. These works may have a significant impact on the existing parking capacity. PCL recommends that this area is monitored after the new legislation comes into force and the tram works have concluded, to develop a better understanding of potential parking pressures.

3.18.54 The on-site assessment concluded that various roads in this cluster would be affected by the introduction of the legislation and some mitigation measures may need to be considered. These measures could include waiting restrictions and advisory marked parking spaces on specific segments of the roads within the area.

3.18.55 A detailed breakdown for the on-site assessment for this cluster, including the levels of footway parking identified during the site visit, is included in Appendix B-13.

Ward 13 – Cluster 03 – Potential Mitigation Measures

3.18.56 As previously described, the carriageway widths for the roads in this cluster only allow on-carriageway parking on one side of the road without affecting traffic flow. However, demand for parking in some of these roads can be high at times with footway parking on both sides identified in several segments. This could compromise the functionality of these roads. It is considered that parking restrictions on strategic sections and roads in this cluster could be beneficial, with Giles Street, Maritime Street and Spier's Place being the roads with highest parking demands. In addition, advisory parking bays could be introduced in Maritime Street and Spier's Place to maximise the use of the available parking space, without adding additional parking pressures to the area. The estimated construction costs associated with the introduction of these road markings described in this section would be circa £9,000.

Figure 63: Ward 13- Leith- Cluster 03- Maritime Street

Ward 13 – Cluster 03 – Final Recommendation by PCL

3.18.57 The demand for parking in this cluster is usually high, especially on Giles Street and Maritime Street. The footway parking levels identified during both the desktop study and the site visit were between 'Moderate' and 'Significant'.

3.18.58 It is expected that increased parking pressures may be evident after the introduction of the legislation due to the displacement of parking from Spier's Place, Maritime Street and potentially Giles Street. It is also likely that in the absence of parking restrictions and formal parking spaces in the area, cars might park on both sides of the road due to the high parking demand. This may result to inadequate remaining carriageway width for emergency vehicles access.

3.18.59 PCL recommends, should the introduction of the legislation not achieve its desired aims, the introduction of the mitigation measures previously described for this cluster which comprise of:

- Introduction of strategic double yellow lines along one side of Giles Street, Maritime Street and Spier's Place. This will ensure sufficient carriageway width is maintained for emergency vehicle access.
- Introduction of advisory parking bays on Maritime Street and Spier's Place.

The estimated construction costs associated with the proposed mitigations would be circa £9,000.

3.19 Ward 14 – Craigentinny / Duddingston

3.19.1 Ward 14 – Craigentinny is located in the north-east area of Edinburgh (See Figure 64). This Ward has an associated area of 8.85km2. 252 roads within this Ward formed part of the study.

Figure 64: Ward 14- Craigentinny- Location

3.19.2 PCL identified 3 roads in this Ward as 'Unclassified' as these roads were under construction during the desktop study. A site visit to code these roads was undertaken on 13/06/2022. The resulting RAG classification of these roads is shown below.

Table 23: Ward 14- Craigentinny- Unclassified Roads

Street Name	RAG Classification
Darvel Gait	GREEN
Elsie Inglis Way	RED
Lawrie Reilly Place	GREEN

3.19.3 PCL identified a total of 283 cars parked on the footways in this Ward. This led to 41 roads in this Ward to be classified as RED.

3.19.4 The resulting RAG classification breakdown for this Ward is shown in the figure below.

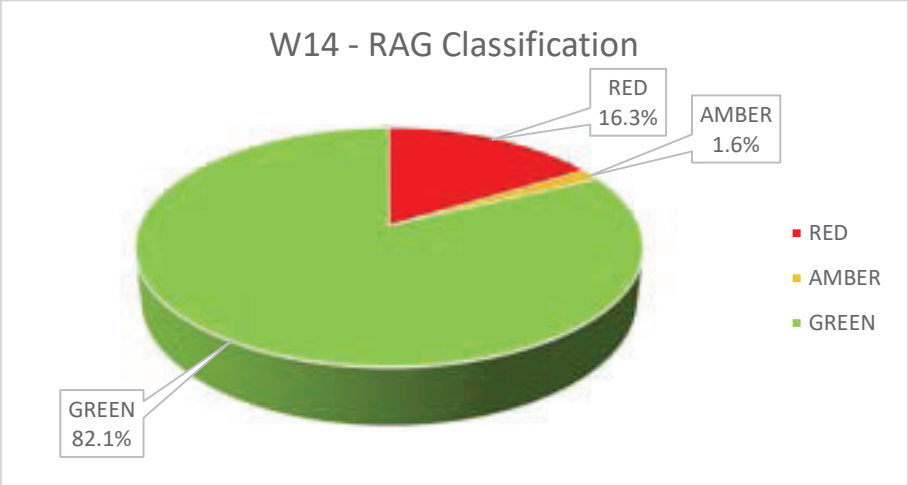

Figure 65: Ward 14- Craigentinny- RAG Classification

3.19.5 Phase 2 of the study included a granular assessment of the 41 RED roads and the results and recommendations for each road are shown in the following sections.

3.19.6 A list of the RED roads identified for Ward 14 is included in Table 24.

3.19.7 A detailed breakdown of each road, including the proposed mitigation measures identified for each segment, is included in Appendix C-14.

Table 24: Ward 14 – Craigentinny – Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Abercorn Crescent	Loganlea Gardens	Northfield Road
Alemoor Park	Loganlea Place	Paisley Gardens
Considine Terrace	Loganlea Road	Queen's Park Avenue
Craigentinny Crescent	Loganlea Terrace	Southfield Terrace
Dalgety Road	Lower London Road	Stapeley Avenue
Elsie Inglis Way	Marionville Crescent	Taylor Place
Findlay Gardens	Marionville Park	Ulster Crescent
Findlay Grove Pathway	Montrose Terrace	Ulster Gardens
Glenlee Avenue	Mountcastle Drive North	Ulster Grove
Lady Nairne Grove	Mountcastle Gardens	Ulster Terrace
Lady Nairne Place	Mountcastle Grove	Wishaw Terrace
Loaning Crescent	Northfield Circus	Woodlands Grove
Lochend Drive	Northfield Farm Avenue	
Lochend Park View	Northfield Park Grove	
Lochend Quadrant		

Cluster analysis

3.19.8 One cluster was identified for this Ward.

Ward 14 – Cluster 1

3.19.9 This cluster is located at the centre of Ward 14 around Craigentinny Primary School.

3.19.10 The roads in this cluster containing RED segments are:

- Loaning Crescent
- Loganlea Gardens
- Loganlea Place
- Loganlea Road
- Loganlea Terrace

3.19.11 The levels of footway parking identified in the segments of road within this cluster are generally 'Moderate', with some particular segments also recorded to have 'Significant' footway parking. While footway parking was generally identified only on one side of the road, in specific segments of Loganlea Gardens and Loganlea Place footway parking was taking place on either side. More specifically, 12 cars were recorded parking on footways in Loganlea Gardens, 15 cars in Loganlea Place and 9 in Loganlea Terrace. In addition, 6 and 1 cars were identified in Loaning Crescent and Loganlea Road respectively.

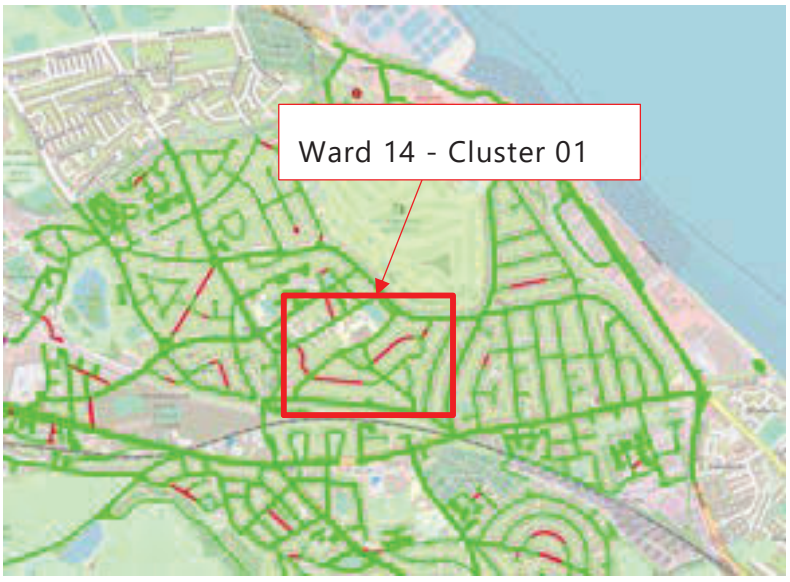

Figure 66: Ward 14- Craigentinny- Cluster 01- Location

3.19.12 The width of the carriageways in this cluster are generally 6.2m with a minimum of 6m at the narrowest segments of Loaning Crescent and Loganlea Gardens. The footways in this cluster have an average width of 1.5m. Therefore, cars parked on footways are likely to impede accessibility for pedestrians.

3.19.13 While 'Moderate' to 'Significant' levels of footway parking were recorded in this area, it is believed that the majority of the footway parking can be accommodated fully on the carriageway in the same roads or those nearby. In particular, 'Moderate A' and 'Moderate B' impact from parking displacement is expected from Loganlea Terrace and Loaning Crescent respectively (refer to Table 2). Only a small portion of the current footway parking may need to be displaced to adjacent roads such as Loganlea Road and Loganlea Avenue. However, it is unlikely that this will lead to an increase in parking pressures in these streets. The rest of the roads within this cluster are expected to have 'No Impact' or 'Minor' impact on parking displacement as they can be accommodated within the on-carriageway space available.

3.19.14 When the legislation comes into effect, it is likely that only a small number of vehicles parked on the footways of Loaning Crescent, Loganlea Terrace and potentially Loganlea Gardens may be displaced to adjacent roads, such as Loganlea Road and Loganlea Avenue. The rest of the current footway parking is expected to be moved onto on-carriageway available parking space on the same roads. However, the roads in this cluster are too narrow to accommodate parking on both sides and at busy periods there might be a need for mitigation measures to ensure access for emergency service vehicles is maintained.

Figure 67: Ward 14- Craigentinny- Cluster 01- Loganlea Gardens

Ward 14 – Cluster 01 – On-site Assessment

3.19.15 This cluster was visited by PCL's assessor on 13/06/2022.

3.19.16 During the site visit to this cluster an on-site assessment of the current parking conditions was undertaken. The overall footway parking within this cluster was considerably less significant than that identified during the desktop study. 28 cars were identified parking on footways during the site visit while 43 were identified during the desktop study. More specifically, during the site visit there was no footway parking identified on Loaning Crescent and Loganlea Road. The exact same number of cars were recorded on Loganlea Place (15 cars) and slightly lower levels of footway parking were noted on Loganlea Gardens and Loganlea Terrace, 5 and 8 cars respectively.

3.19.17 Despite the lower level of footway parking identified during the site visit, the assessor noted that on-carriageway parking can only be accommodated on one side of the road. Therefore, the absence of parking restrictions and formal parking spaces could impede the accessibility of emergency vehicles on these roads.

3.19.18 The on-site assessment concluded that the parking displacement expected from Loganlea Road and Loganlea Avenue after the introduction of the legislation may have a 'Minor' to 'Moderate' (refer to Table 2) impact on nearby roads. However, the assessor noted that potential mitigation

measures could be beneficial to maintain adequate carriageway width for continuous traffic flow.

3.19.19 A detailed breakdown of the on-site assessment for this cluster, including the levels of footway parking identified during the site visit, is included in Appendix B-14.

Ward 14 – Cluster 01 – Potential Mitigation Measures

3.19.20 As previously described, the average carriageway width of roads in this cluster is 6.2m and they can only accommodate carriageway parking on one side of the road without affecting traffic flow.

3.19.21 The demand for parking in this cluster may be higher at certain times and the introduction of double yellow lines at key sections may be beneficial in maintaining access for emergency service vehicles.

3.19.22 Loganlea Gardens, Loganlea Place and Loganlea Terrace had the highest levels of footway parking within the area. However, should the introduction of the legislation not achieve its desired aims the introduction of double yellow lines is recommended in all the roads in this cluster as parking demands may move between these roads.

3.19.23 In addition, advisory parking bays in sections of this cluster may help to optimise the available parking space. The estimated construction costs associated with the introduction of these road markings would be circa £9,000.

Ward 14 – Cluster 01 – Final Recommendation by PCL

3.19.24 Parking demand in this cluster is usually high and the footway parking levels identified during both the desktop study and the site visit were between 'moderate' and 'significant'.

3.19.25 It is expected that the available on-carriageway parking space could accommodate most of the current footway parking taking place. However, should the introduction of the legislation not achieve its desired aims, additional measures could be beneficial especially during times when there higher parking demands.

3.19.26 PCL recommends, should problems persist, the introduction of the mitigation measures previously described for this cluster. These measures

will ensure the functionality of the roads included in this cluster and especially the roads where the highest level of footway parking was identified, such as Loganlea Gardens, Loganlea Place and Loganlea Terrace.

- Introduction of double yellow lines along one side of all roads within this cluster, apart from Loganlea Road. This will ensure access is maintained for emergency service vehicles.
- Introduction of advisory parking bays on all the roads within this cluster.

3.19.27 The estimated construction costs associated with the proposed mitigations would be circa £9,000.

3.20 Ward 15 – Southside / Newington

3.20.1 Ward 15 – Southside / Newington is located just south of the city centre (See Figure 68). This Ward has an area of 4.98km2. 327 roads within this Ward formed part of the study.

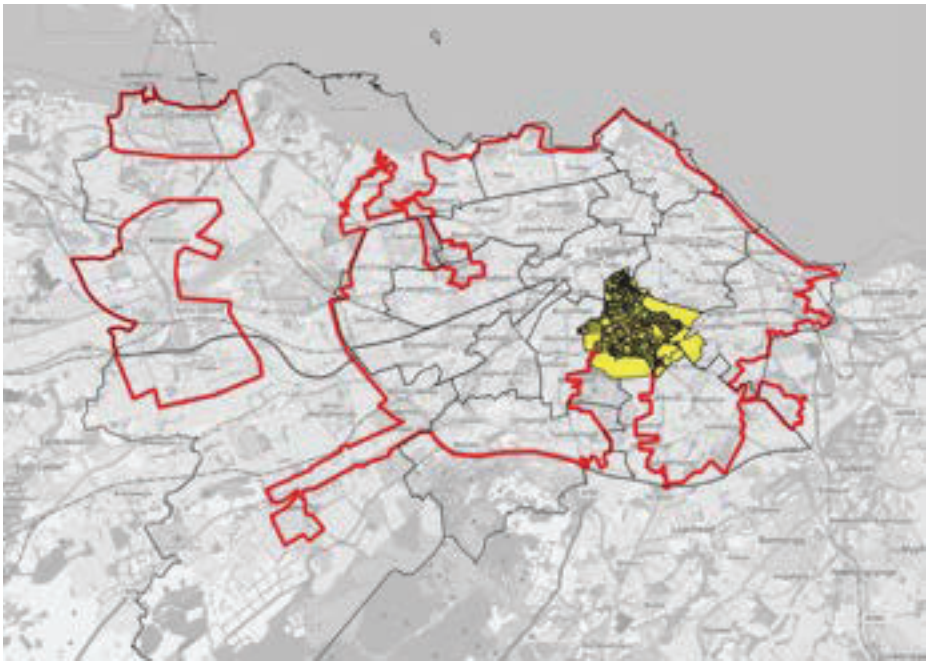

Figure 68: Ward 15 – Southside - Location

3.20.2 The 327 roads contained in this Ward were successfully RAG classified. Therefore, no road in this Ward was defined as 'Unclassified'.

3.20.3 PCL identified a total of 55 cars parked on the footways in this Ward. This led to 9 roads in this Ward to be classified as RED.

3.20.4 The resulting RAG classification breakdown for this Ward is shown in the figure below.

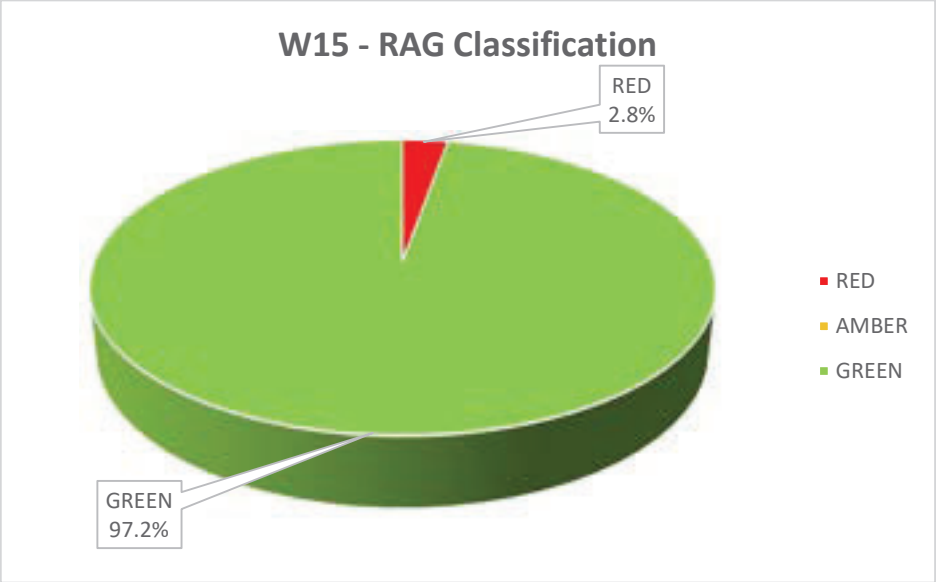

Figure 69: Ward 15 – Southside – RAG Classification

3.20.5 Phase 2 of the study included a granular assessment of the 9 RED roads and the results and recommendations for each road are shown in the following sections.

3.20.6 A list of the RED roads identified for Ward 15 is included in Table 25

3.20.7 A detailed breakdown of each road, including the proposed mitigation measures identified for each segment, is included in Appendix C-15.

Table 25: Ward 15 – Southside – Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Blackford Hill Grove	Macdowall Road	Rankin Road
Blackford Hill View	Orrok Park	Ross Gardens
King's Meadow	Rankin Drive	Savile Terrace

Cluster analysis

3.20.8 No clusters were identified for this Ward.

3.21 Ward 16 – Liberton / Gilmerton

3.21.1 Ward 16 – Liberton / Gilmerton is located in the south-east of Edinburgh (See Figure 70). This Ward has an associated area of 14.74km2. 368 roads within this Ward formed part of the study.

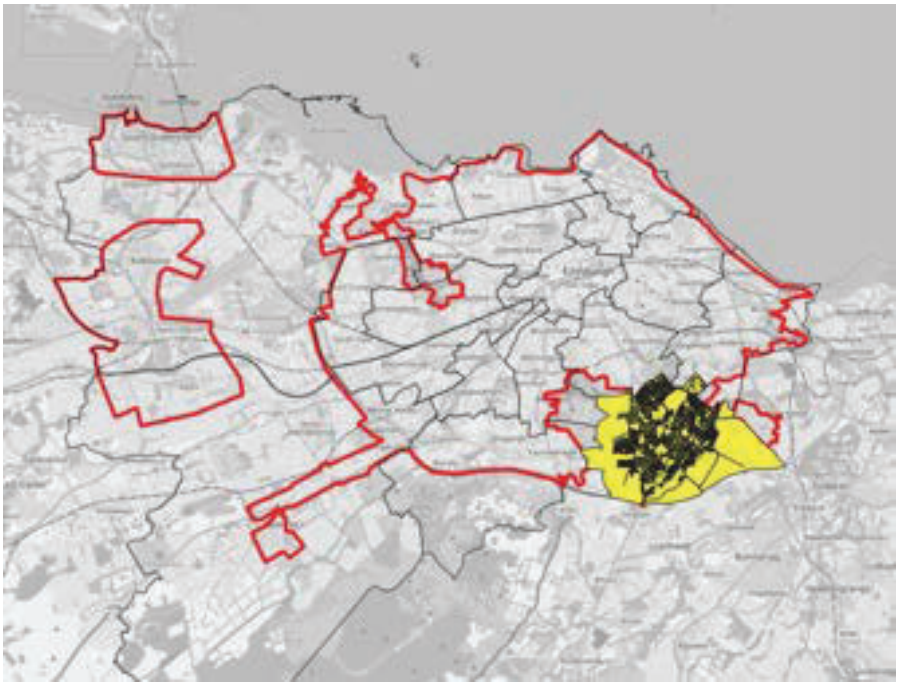

Figure 70: Ward 16 – Liberton Gilmerton - Location

3.21.2 PCL identified 18 roads in this Ward as 'Site Visit Required' as the assessors believed the completion of a site visit would aid coding these particular roads. PCL completed a site visit of these roads on 13/06/2022. The resulting RAG classification of these roads is shown below.

Table 26: Ward 16- Liberton / Gilmerton- Unclassified Roads

Street Name	RAG Classification
Adit Place	GREEN
Badger Way	GREEN
Bullfinch Row	GREEN
Bullfinch Way	RED
Catchilraw Drive	GREEN
Cowgill Gardens	GREEN
Damselfly Road	GREEN
Dunnikier Way	GREEN
Ellis Street	GREEN
Fisher Place	GREEN
Francis Place	GREEN
Goldeneye Gait	GREEN
Hapland Bow	GREEN
Hawthorn Place	GREEN
Hepburn Crescent	GREEN
Marden Place	GREEN
Printonan Crescent	GREEN
Tweedsmuir Drive	GREEN

3.21.3 PCL identified a total of 288 cars parked on the footways of this Ward. This led to 70 roads in this Ward to be classified as RED.

3.21.4 The resulting RAG classification breakdown for this Ward is shown in the figure below.

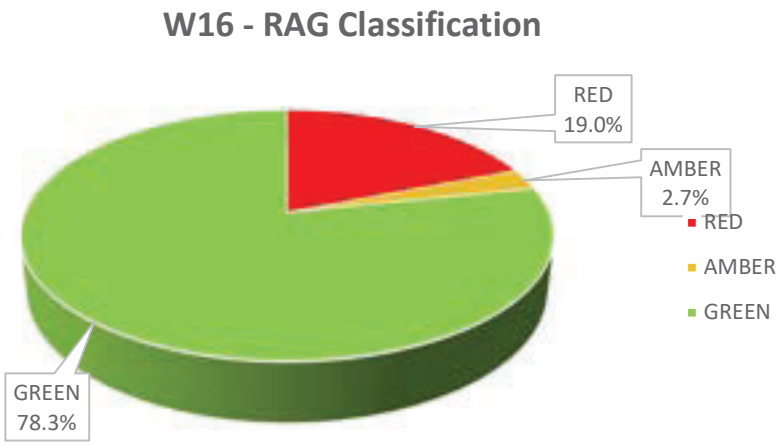

Figure 71: Ward 16- Liberton Gilmerton- RAG Classification

3.21.5 Phase 2 of the study included a granular assessment of the 70 RED roads and the results and recommendations for each road are shown in the following sections.

3.21.6 A list of the RED roads identified for Ward 16 is included in

3.21.7 Table 27.

3.21.8 A detailed breakdown of each road listed, including the proposed mitigation measures identified for each segment, is included in Appendix C-16.

Table 27: Ward 16 – Liberton Gilmerton – Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Achnacarry Street	Gilmerton Dykes Street	Kidlaw Close
Alnwickhill Terrace	Gilmerton Dykes Terrace	Kilngate Brae
Balmwell Grove	Gilmerton Place	Leadervale Road
Beauchamp Grove	Goodtrees Gardens	Liberton Brae
Brackenridge View	Gracemount House Drive	Liberton Place
Bullfinch Way	Greenend Drive	Martin Street
Burdiehouse Drive	Greenend Gardens	Moredun Dell
Burdiehouse Street	Guardwell Glen	Moredun Dykes Road
Candlemaker's Crescent	Hawkhead Crescent	Moredun Park Grove
Carnbee Crescent	Headrigg Row	Moredun Park View
Carnbee End	Howden Hall Crescent	Moredunvale Park
Clackmae Grove	Howden Hall Park	Mortonhall Park Avenue
Clackmae Road	Howden Hall Road	Mortonhall Park Grove
Clippens Drive	Hyvot Avenue	Ravenscroft Gardens
Craigour Grove	Hyvot Bank Avenue	Ravenscroft Street

Road Name	Road Name	Road Name
Drum Cottages	Hyvot Court	Redgauntlet Terrace
Drum Street	Hyvot Gardens	Southhouse Crescent
East Clapperfield	Hyvot Grove	Southhouse Drive
East Farm Of Gilmerton	Hyvot Loan	Southhouse Road
East Kilngate Place	Hyvot Mill Drive	Southhouse Square
East Kilngate Wynd	Hyvot Mill Road	Southhouse Walk
Fernieside Place	Hyvot Park	St Katharine's Crescent
Garvald Street	Hyvot Terrace	
Gilmerton Dykes Road	Kedslie Place	

Cluster analysis

3.21.9 No clusters were identified in this Ward.

3.22 Ward 17 – Portobello / Craigmillar

3.22.1 Ward 17 – Portobello is located in the east of Edinburgh (See Figure 72). This Ward has an associated area of 11.28km2. 407 roads within this Ward formed part of the study.

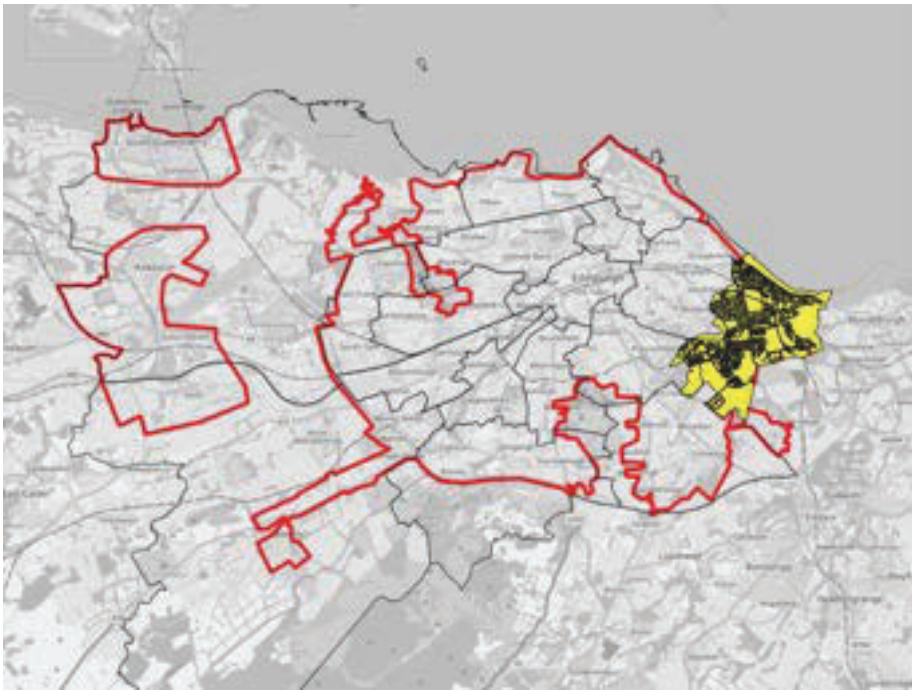

Figure 72: Ward 17 – Portobello - Location

3.22.2 PCL identified 24 roads in this Ward as 'Unclassified' as these roads were still under construction during the desktop study. A site visit to code these roads was undertaken on 16/06/2022. The resulting RAG classification of these roads is shown below.

Table 28: Ward 17- Portobello- Unclassified Roads

Street Name	RAG Classification
Adamslaw Place	GREEN
Bill Douglas Grove	GREEN
Capella Gardens	GREEN
Corrigan Street	GREEN
Darnley Terrace	GREEN
Ferguson Rigg	GREEN
Glennie Road	GREEN
Grassie Avenue	RED
Hopper Gardens	GREEN
Kilgours Bow	GREEN
Longwall Crescent	GREEN
Maingait Medway	RED
Maltman Street	GREEN
McCartney Road	GREEN
Methvin Walk	GREEN
Nealands Road	UNCLASSIFIED
Paton Place	GREEN
Paxton Wynd	GREEN
Scanlan Street	GREEN
Shavelin Drive	GREEN
Skylark Place	GREEN
Tweedsmuir Drive	UNCLASSIFIED
Wantonwalls View	UNCLASSIFIED
Waterson Avenue	GREEN

3.22.3 Nealands Road, Tweedsmuir Drive and Wantonwalls View remained Unclassified after the site visit as significant construction works were still ongoing at the time of the site visit. See figure below as an example.

Figure 73: Ward 17 – Portobello - Nealands Road – Under construction

3.22.4 PCL identified a total of 388 cars parked on the footways of this Ward. This led to 59 roads in this Ward to be classified as RED.

3.22.5 The resulting RAG classification breakdown for this Ward is shown in the figure below.

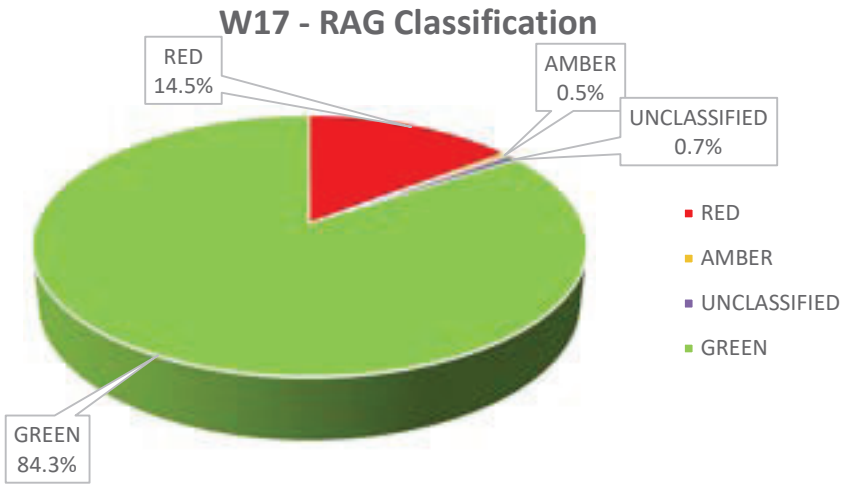

Figure 74: Ward 17 – Portobello – RAG Classification

3.22.6 Phase 2 of the study included a granular assessment of the 59 RED roads and the results and recommendations for each road are shown in the following sections.

3.22.7 A list of the RED roads identified for Ward 17 is included in Table 29.

3.22.8 A detailed breakdown of each road, including the proposed mitigation measures identified for each segment, is included in Appendix C-17.

Table 29: Ward 17 – Portobello – Roads with Significant Footway Parking

Road Name	Road Name	Road Name
Ashton Villas	Castleview Drive	Newcraighall Road
Bailie Terrace	Castleview Grove	Niddrie House Park
Bingham Avenue	Cleekim Road	Niddrie Mains Terrace
Bingham Crossway	Craigmillar Castle Loan	Niddrie Marischal Crescent
Bingham Place	Duddingston Loan	Niddrie Marischal Grove
Blackchapel Close	Duddingston View	Niddrie Marischal Road
Brand Drive	Durham Gardens North	Niddrie Mill Drive
Bridge Street	Figgate Street	North Greens
Brunstane Bank	Gilberstoun Loan	Regent Street
Brunstane Crescent	Great Carleton Place	Rosefield Place
Brunstane Gardens	Hamilton Drive	Rosefield Street
Brunstane Road	Hamilton Grove	Seafield Road East
Castlebrae Glebe	Hay Drive	Southfield Gardens East
Castlebrae Grove	Hay Gardens	Southfield Square
Castlebrae Place	Joppa Park	Southfield Terrace
Castlepark Gait	Lurie Place	Tudsbery Avenue
Castlepark Glade	Marlborough Street	Vexhim Park
Castlepark Green	Milton Crescent	Westbank Street
Castleview Avenue	Mount Lodge Place	Woodside Terrace
Grassie Avenue	Maingait Medway	

Cluster analysis

3.22.9 Three clusters were identified for this Ward.

Ward 17 – Cluster 1

3.22.10 This cluster is located on the northeast side of Ward 17. It is located north of Milton Road and west of Joppa Quarry Park.

3.22.11 The roads in this cluster containing RED segments are:

- Ashton Villas
- Brunstane Crescent
- Brunstane Gardens
- Brunstane Road

3.22.12 The levels of footway parking identified in the segments of Ashton Villas, Brunstane Crescent and Brunstane Road were between 'Moderate' and 'Significant' whereas on Brunstane Gardens the level of footway parking was considered 'Moderate'. 6 cars were identified parking on Ashton Villas' footway, 14 on Brunstane Crescent's, 1 on Brunstane Gardens' and 29 on Brunstane Road.

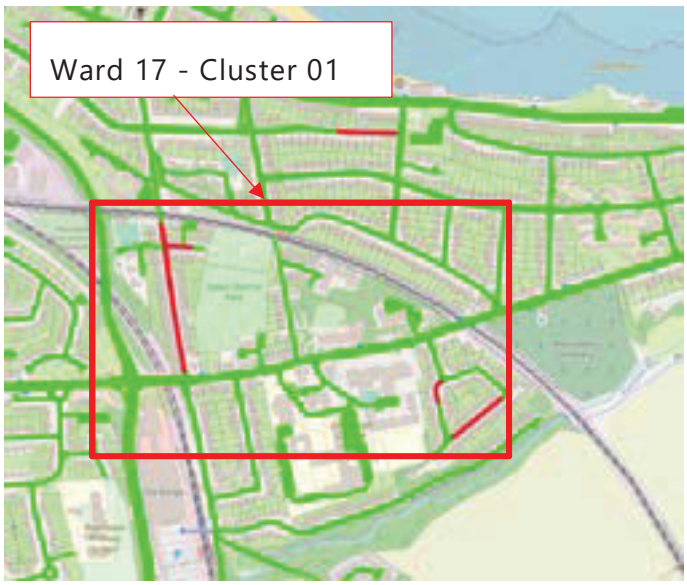

Figure 75: Ward 17 – Portobello – Cluster 01 - Location

3.22.13 The width of the carriageways that form part of this cluster varies from 6.0m on the narrowest segments of Brunstane Gardens to 6.5m on Brunstane Crescent, 7.7m on Ashton Villas and 6.2m on Brunstane Road. All roads in this cluster have footway parking on both sides of the

carriageway. Brunstane Crescent has the narrowest footways in this cluster, measuring 1.3m. The average footway width for the other roads is approximately 1.5m.

Figure 76: Ward 17 – Portobello – Cluster 01 – Brunstane Crescent

3.22.14 Many properties on both sides of Brunstane Crescent have their own private driveways. Therefore, it is believed that a number of the cars parked on the footways at Brunstane Crescent are likely to be second household cars or they may belong to owners for whom it is more convenient to park on the footways next to their properties than in their driveways. There may also be an element of parking associated with the local college and other trip generators in the vicinity. It was noted that most of the driveways in this area were empty at the time of the on-site assessment.

3.22.15 When the legislation comes into effect, it is likely that most of the cars parked on the footways of Brunstane Crescent will move to the private driveways and others may be able to park fully on the carriageway without obstructing the road. However, the introduction of double yellow lines on one side of the road could ensure access is maintained for emergency vehicles.

3.22.16 A number of vehicles currently parking on the footway in Ashton Villas would be displaced to streets nearby where on-carriageway parking is available. Furthermore, while many unused private driveways were observed on Brunstane Crescent, a portion of the footway parking identified on this road could potentially be displaced to nearby roads such as Brunstane Bank causing a 'Moderate A' impact (refer to Table 2). It is

expected that for the rest of the roads in this cluster there will be no or little impact on adjacent roads in terms of parking displacement. As a result, increased but not significant parking pressures are anticipated for this area after the introduction of the legislation.

Ward 17 – Cluster 01 – On-site Assessment

3.22.17 This cluster was visited by PCL's assessor on 16/06/2022.

3.22.18 During the site visit to this cluster an on-site assessment of the current parking conditions was undertaken. Overall, footway parking within this cluster was considerably less significant than that identified during the desktop study. 15 cars were parking on footways during the site visit when 50 were identified during the desktop study. More specifically, during the site visit there was no footway parking identified on Brunstane Road and Brunstane Gardens. In addition, while a lower number of cars were recorded parking on Brunstane Crescent's footways (8 cars) and higher levels of footway parking were noted on Ashton Villas (8 cars).

3.22.19 Despite the lower level of footway parking identified during the site visit, the roads included in this cluster can only accommodate on-carriageway parking on one side of the road. Therefore, the absence of parking restrictions and advisory spaces in the area could result in problems after the introduction of the legislation which may impede access for emergency service vehicles.

3.22.20 The on-site assessment concluded that the parking displacement expected after the introduction of the legislation may potentially have 'No impact' or a 'Moderate A' (refer to Table 2) impact on nearby roads. However, mitigation measures may be beneficial to maintain adequate carriageway width for continuous traffic flow.

3.22.21 A detailed breakdown for the on-site assessment for this cluster, including the levels of footway parking identified during the site visit, is included in Appendix B-17.

Ward 17 – Cluster 01 – Potential Mitigation Measures

3.22.22 The average carriageway width of the roads within this cluster is 6.7m and this only allows on-carriageway parking on one side of the road without affecting traffic flow.

3.22.23 The demand for parking in these roads may be higher at certain times and the introduction of some double yellow lines, should the introduction of the legislation not achieve its desired aims, could be beneficial to ensure adequate carriageway width is maintained for access of emergency vehicles.

3.22.24 Brunstane Crescent, Brunstane Road and Ashton Villas had the highest levels of footway parking within the area. However, should problems persist, the introduction of double yellow lines is recommended in all the roads included in this cluster as parking displacement may take place across the area. In addition, advisory marked parking bays would be recommended in some sections to optimise the available parking space.

3.22.25 The estimated construction costs associated with the introduction of these road markings would be circa £9,000.

Ward 17 – Cluster 01 – Final Recommendation by PCL

3.22.26 The parking demand in this cluster is usually high and the footway parking levels identified during both the desktop study and the site visit were between 'Moderate' and 'Significant' for different segments of the roads.

3.22.27 On the other hand, it is expected that the available on-carriageway parking space within the area will accommodate the majority of the current footway parking. However, should the introduction of the legislation not achieve its desired aims, additional measures could be introduced to maximise parking opportunities, especially during periods of high demand.

3.22.28 PCL recommends, should problems persist, the introduction of the mitigation measures previously described for this cluster. These measures will ensure the free flow of traffic along these roads, especially those with the highest level of footway parking, such as Brunstane Crescent.

- Introduction of double yellow lines along one side of all the roads within this cluster, to ensure sufficient carriageway width is provided for the access of emergency vehicles.
- Introduction of advisory parking bays on all roads to maximise parking opportunities.

3.22.29 The estimated construction costs associated with the proposed mitigations would be circa £9,000.

Ward 17 – Cluster 2

3.22.30 This cluster is located on the north side of Ward 17, north of Portobello High Street.

3.22.31 The roads in this cluster containing RED segments are:

- Marlborough Street
- Regent Street

3.22.32 The levels of footway parking identified in the segments of both roads in this cluster were 'Significant'. 60 cars were identified parking on the footways in Marlborough Street and 72 in Regent Street.

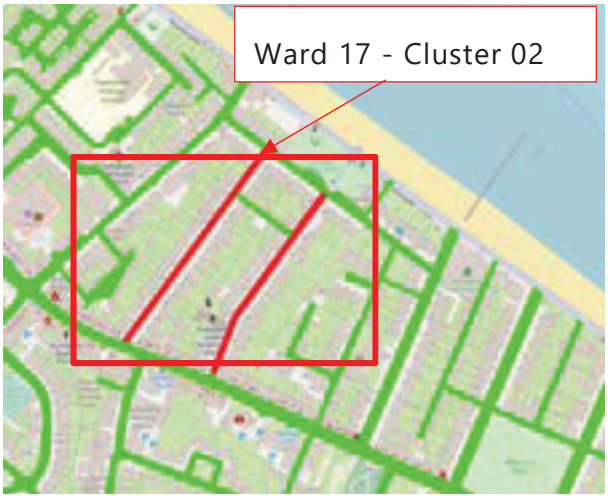

Figure 77: Ward 17 – Portobello – Cluster 02 - Location

3.22.33 The width of the carriageway varies from 5.7m on the narrowest segments of Regent Street to 5.9m on Marlborough Street. Both have footway parking on both sides of the carriageway and have an average footway width of 1.4m. Marlborough Street has the narrowest footway, measuring just 1.2m at some points.

Figure 78: Ward 17 – Portobello – Cluster 02 – Marlborough Street

Both roads are narrow and over saturated with vehicles parking on footways on both sides. When the legislation comes into effect, it is likely that most of the cars parked on the footways of Marlborough Street and Regent Street may be displaced to other roads nearby. However, double yellow lines should be implemented on one side of the carriageway, in each road, to ensure access is maintained for emergency vehicles.

Ward 17 – Cluster 02– On-site Assessment

3.22.34 This cluster was visited by PCL's assessor on 16/06/2022.

3.22.35 During the site visit, an assessment of the current parking conditions was undertaken. The overall number of vehicles parking on the footways in this cluster was lower during the on-site assessment than the desktop study. However, there were still 105 vehicles observed parking on footways during the site visit compared to 132 identified during the desktop study. More specifically, the number of vehicles parking on footways in Marlborough Street was 41 and 66 in Regent Street.

3.22.36 Despite the lower level of footway parking identified during the site visit, this was no less significant as the roads can only accommodate on-carriageway parking on one side of the road. Therefore, the absence of waiting restrictions and marked parking spaces may lead to a continuation of parking problems after the introduction of the new legislation, affecting access for emergency service vehicles and safe passage for pedestrians along the footways.

3.22.37 The on-site assessment concluded that the parking displacement expected after the introduction of the legislation is likely to have a 'Significant D' (refer to Table 2) impact on nearby roads. Therefore, the assessor noted that potential mitigation measures may be beneficial to maintain adequate carriageway width for continuous traffic flow.

3.22.38 A detailed breakdown for the on-site assessment for this cluster, including the levels of footway parking identified during the site visit, is included in Appendix B-17.

Ward 17 – Cluster 02 – Potential Mitigation Measures

3.22.39 The average carriageway width of the roads included in this cluster is 5.8m and this only allows on-carriageway parking on one side of the road.

3.22.40 Demand for parking in these roads usually always exceeds capacity and the introduction of double yellow lines, should problems persist, could be beneficial as it will ensure adequate carriageway width is maintained for emergency vehicle access.

3.22.41 Furthermore, the introduction of advisory parking bays may help to maximise parking opportunities for residents in the remaining kerbside space.

3.22.42 The estimated construction costs associated with the introduction of these road markings would be circa £9,000.

Ward 17 – Cluster 02 – Final Recommendation by PCL

3.22.43 Parking demand in this cluster is extremely high and the footway parking levels identified during both the desktop study and the site visit were 'Significant' in both streets.

3.22.44 The introduction of mitigation measures, should the introduction of the legislation not achieve its desired aims, may be beneficial especially during the times when the highest parking demand occurs in this cluster. These measures will help to ensure access is maintained for emergency service vehicles, keep footways free of obstructions for pedestrians and maximise the remaining parking opportunities for residents.

3.22.45 PCL recommends, should problems persist, the introduction of the mitigation measures previously described for this cluster which comprise of:

- Introduction of double yellow lines along one side of Marlborough Street and Regent Street, ensuring sufficient carriageway width is provided for the access of emergency vehicles.
- Introduction of advisory parking bays on Marlborough Street and Regent Street to maximise parking space for residents.

3.22.46 The estimated construction costs associated with the proposed mitigations would be circa £9,000.

Ward 17 – Cluster 3

3.22.47 This cluster is located on the southwest side of Ward 17, south of Niddrie Mains Road.

3.22.48 The roads in this cluster containing RED segments are:

- Castlebrae Glebe
- Castlebrae Grove
- Castlebrae Place
- Castlepark Gait
- Castlepark Glade
- Castlepark Green
- Castleview Avenue
- Castleview Drive
- Castleview Grove

3.22.49 The levels of footway parking identified in the roads within this cluster ranged between 'Moderate' and 'Significant'. There were 4 vehicles parking on the footway in Castlebrae Glebe, 1 in Castlebrae Grove, 2 in Castlebrae Place, 3 in Castlepark Gait, 1 in Castlepark Glade, 4 in Castlepark Green, 1 in Castleview Avenue, 1 in Castleview Drive and 9 in Castleview Grove.

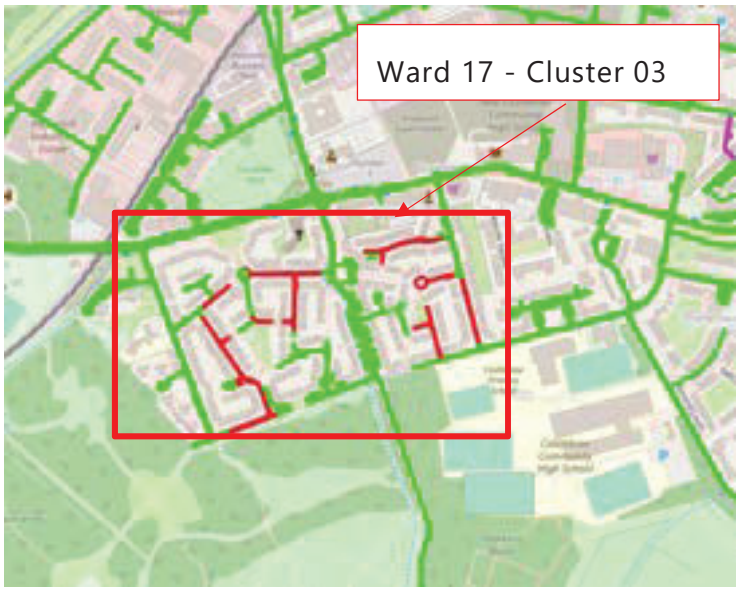

Figure 79: Ward 17 – Portobello – Cluster 03 - Location

3.22.50 The width of the carriageways in this cluster varies from 5.4m on the narrowest segments of Castlebrae Grove, Castlebrew Place, Castleview Drive and Castleview Grove to 7.0m on Castleview Avenue. All roads in this cluster have footway at both sides of the carriageway. Castleview Avenue have the narrowest footway in this cluster, measuring 1.7m wide.

Figure 80: Ward 17 – Portobello – Cluster 03 – Castlebrae Glebe

3.22.51 All roads are suitable for carriageway parking on one side of the road, while implementing double yellow lines on one side could be beneficial. When the legislation comes into effect, it is likely that most of the cars parked on the footways of all the roads in the cluster will still be able to park on the same road or move to other roads nearby. A high number of

empty driveways were identified in the roads of this cluster. Therefore, it is expected that some of the cars identified parking on the footways could be accommodated within these driveways. The remaining cars are expected to be able to park fully on the carriageway or on other sections of the same roads. The number of vehicles parking on the footways in this cluster is not expected to be significant or lead to additional parking pressures. However, double yellow lines could be implemented on one side of the carriageway at key locations where the carriageway width may not be sufficient to allow the access for emergency vehicles if cars are parked on both sides of the road.

Ward 17 – Cluster 03– On-site Assessment

3.22.52 This cluster was visited by PCL's assessor on 16/06/2022.

3.22.53 During the site visit to this cluster an on-site assessment of the current parking conditions was undertaken. Overall, footway parking was more evident during the on-site assessment than that identified during the desktop study. 39 vehicles were observed parking on footways during the site visit when only 26 were during the desktop study. An additional road was also identified forming part of this cluster, Craigmillar Castle Loan with 2 cars parked on footways.

3.22.54 Despite the higher level of footway parking identified during the site visit, roads within this cluster can accommodate on-carriageway parking on one side and most of the driveways in the area were not being used.

3.22.55 The on-site assessment concluded that the parking displacement expected because of the new legislation will likely have 'No Impact', 'Minor' or a 'Moderate A' impact (refer to Table 2) on nearby roads. However, potential mitigation measures may be beneficial to maintain adequate carriageway width for continuous traffic flow.

3.22.56 A detailed breakdown of the on-site assessment for this cluster, including the levels of footway parking identified during the site visit, is included in Appendix B-17.

Ward 17 – Cluster 03 – Potential Mitigation Measures

3.22.57 The average carriageway width of the roads included in this cluster is 5.6m and on-carriageway parking is only possible on one side of the road without affecting traffic flow.

3.22.58 A high number of empty driveways were identified within this cluster. Therefore, it is expected that some of the cars parking on the footways could be accommodated within the empty driveways. The remaining cars are expected to be able to park fully on carriageway or on other sections of the same road.

3.22.59 However, should the introduction of the legislation not achieve its desired aims, double yellow lines could be implemented on one side of the carriageway at certain locations where the carriageway width may not allow access for emergency vehicles if cars are parked on both sides of the road.

3.22.60 The estimated construction costs associated with the introduction of these road markings would be circa £7,000.

Ward 17 – Cluster 03 – Final Recommendation by PCL

3.22.61 The footway parking levels identified in this cluster were moderate and the likely parking displacement resulting from the new legislation is 'No Impact', 'Minor' or 'Moderate A' for the different roads in this cluster.

3.22.62 The recorded levels of footway parking and likely low impact of parking displacement do not justify the inclusion of exhaustive mitigation measures at these locations.

3.22.63 Should problems persist, double yellow lines could be implemented on one side of the carriageway at certain locations where the carriageway width may not be sufficient to allow the access of emergency vehicles if cars are parked on both sides of the road.

3.22.64 The estimated construction costs associated with the proposed mitigations would be circa £7,000.