LCA7: DRUMCHAPEL, STAGE 1

Glasgow City Development Plan 2017 Glasgow Open Space Strategy 2018



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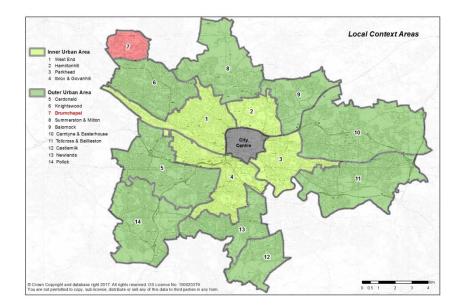
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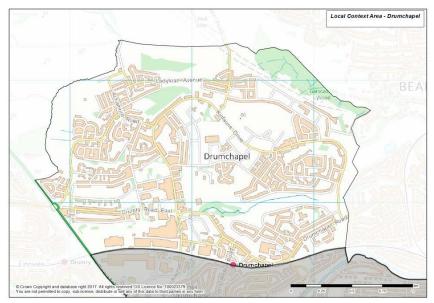
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1 Introduction

- 1.1 Drumchapel is one of 15 Local Context Analysis (LCA) areas that have been identified to help inform the Council's understanding of open space and green network issues at the local level and inform the development of the Council's Open Space Strategy:
 - a City Centre LCA area;
 - 4 LCA areas in the higher density "Inner Urban Area"; and
 - 10 LCA areas in the lower density "Outer Urban Area".
- 1.2 The LCA is being undertaken in two stages:

The **Stage 1 LCA** provides an initial analysis of the amount, distribution and quality of open space in this area, together with other important characteristics. It identifies the key matters that the Council thinks should be addressed to improve access to, and the quality of, open space in order to create a better place for people and nature. **Consultation on this LCA is your opportunity to inform the Council of the open space issues that you think are important to your local area**. It is part of a wider engagement on the City's draft Open Space Strategy, which is also being made available for consultation. Comments on either should be made via the <u>Glasgow Consultation Hub</u>. Figure 1 sets out the relationship between the OSS, Stage 1 LCA, the City Development Plan and other documents.

The **Stage 2 LCA process** will build on the Stage 1 analysis and the public response to it. It will draw on work and budgets of services across the council, and of council partners, to ensure a coherent approach to investment and try to ensure new investment delivers on as many of the City's green network and community ambitions as possible. The process is being funded through the

EU Horizon 2020 Connecting Nature project. The Stage 2 LCAs will bring forward a "green network masterplan" for each area and for the City, informed by consideration of **current and future need** for open space in each area.

- 1.3 The Stage 2 LCA process will clarify the future role of the City's open spaces. In particular, it is likely to mean:
 - A. the retention of many open spaces for their existing purpose – it is anticipated that many existing open spaces will continue to be used and managed for their existing purpose – eg as public park, football pitch or natural/seminatural greenspace;
 - B. the creation of new open spaces eg where necessary to meet gaps in accessibility to good quality, multifunctional open space of that serves the community or to meet demand for growing spaces;
 - C. the use of some open spaces for a different open space purpose – some open spaces may require to be used differently to meet current and future needs – eg where a former playing pitch is no longer required for outdoor sport but is well-located to meet demand for growing space; and
 - D. **the use of some open spaces for a non-open space purpose** – where Stage 2 LCAs have identified spaces that will not have a role in meeting current or future need, then there is an opportunity to release them for development, with the potential to free-up resources for investment in the City's other open spaces.

1.4 This LCA analyses the current extent and quality of the open space and green network in Drumchapel in the context of the draft Open Space Strategy's 3 key themes of A Liveable Glasgow, A Healthy Glasgow and A Resilient Glasgow:

Glasgow's Vision for Open Space:

By 2050, there will be network of good quality, well-distributed, multi-functional open spaces, and connecting infrastructure, that contributes positively to :

- Outcome 1: the City's LIVEABILITY, increasing its
 attractiveness as a place in which to live, work, study and invest;
- Outcome 2: the **HEALTH AND WELLBEING** of the City's human population and of its flora and fauna; and
- Outcome 3: the long term **RESILIENCE** of the City in relation to the threats, and potential opportunities, arising from climate change and other external factors such as reducing budgets.

Communities will have access to good quality, multi-functional open spaces, that are used by all sectors of society, within a short walk of the home and to a wider, better integrated, network of green, blue (water) and grey (civic) spaces that provide multiple benefits for people and the environment.

The value of Glasgow's Open Spaces in helping address many of the critical issues facing the City will be widely understood and reflected in the decisions made by the Council and its partners.

Figure 1: Suite of Open Space Documents

LAND USE POLICY & GUIDANCE

Glasgow City Development Plan

a vision for the development and regeneration of the City, including the role of open space and green networks. The CDP focusses on the role of the planning system in protecting, enhancing and delivering open space and the green network, complementing the Open Space Strategy and helping deliver many of its ambitions

CDP Supplementary Guidance

SG6 - prepared to support the CDP and provide further detail on how it is to be interpreted and used. Sets out a detailed approach to the protection of open space, its enhancement and requirements for new/enhanced open space to support new development. Forms part of the statutory development plan against which planning applications require to be assessed.

Strategic Development Frameworks & Local Development Frameworks

6 SDFs and 3 LDFs are being prepared as spatial SG to help guide future development in 9 key areas of the City. Their preparation will be informed by the CDP, OSS and SG and the open space issues and solutions identified in the Stage 1 and Stage 2 LCAs.

STRATEGY

The Open Space Strategy (OSS)

sets out a strategic approach, across all Council services, to open space issues in Glasgow. It highlights the vital roles played by open space and wider green network in delivering a variety of benefits for people, the environment and the economy and, with a view to maximising these benefits, provides a strategic approach to:

- where investment in new open space is required;
- where and how existing open space requires to be enhanced;
- how open space might be used more flexibly and multi-functionally;
- when it is appropriate to use open space for other purposes; and
- how this will be paid for.

JOINING UP DECISIONS

Local Context Analyses (LCAs)

to identify how policy, guidance and strategy can be delivered on the ground.

Stage 1 LCAs illustrate the key open space and green network priorities in 15 areas, covering the City, to help meet strategy/policy objectives and facilitate engagement.

Stage 2 LCAs will identify a "green network masterplan" for the enhancement and management of open space. Production is being funded through the EU's Horizon 2020 Connecting Nature Programme.

City Centre Regeneration Frameworks will help inform the approach to be taken in the City Centre

INFORMING DECISIONS

The Glasgow Open Space Map

identifies the categories of open space protected by policy CDP6 of the City Development Plan. SG6 provides further detail on how this is to be done. Also forms the basis for the work undertaken to better understand the distribution, quality and accessibility of the City's Open Spaces.

The Open Space Map will be kept up-todate by utilising open space mapping being undertaken, on an ongoing basis, by the Ordnance Survey.

OPEN SPACE MANAGEMENT

The Parks & Greenspace Vision

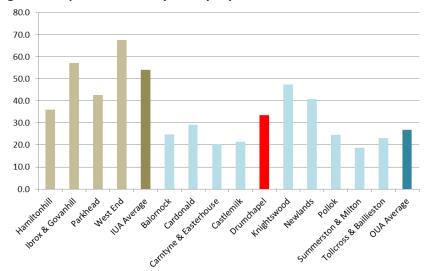
sets out how the Council will manage the City's parks and greenspaces to deliver the objectives of the OSS and the ambitions of Glasgow's communities. It been subject to extensive community engagement.

It envisages well-managed spaces, developed and managed in partnership/shared responsibility with communities, that help meet the commitments of Glasgow's Strategic Plan.

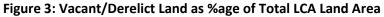
2 The LCA Area

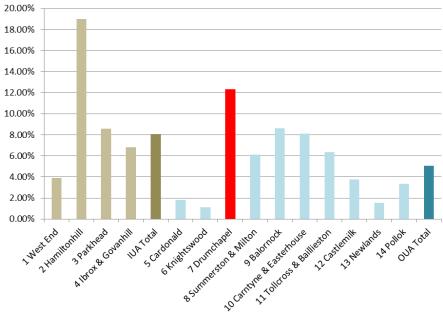
2.1 The LCA covers the Drumchapel area, most of which originated as one of the City's four main post-war council housing schemes, constructed on greenfield land in the 4 corners of the City. In terms of housing, a significant amount remains higher density post-war stock, however there have been a number of demolitions, resulting in large areas of vacant/derelict land. There has also been construction of housing in recent years. Tenure is still primarily social rented, however there are also privately owned homes in the area. With a population density of 34 people to the hectare (Fig 2), it is one of the more densely populated of the Outer Urban Area LCAs. This is mostly attributable to higher density housing types in much of the area, including modern tenements and high-rise flats.

Figure 2: Population Density – People per Hectare



2.2 Perhaps surprisingly, given this relatively high population density, Drumchapel includes a relatively high percentage of vacant and/or derelict land, the highest in the Outer Urban Area and the second highest in the City, after Hamiltonhill (Fig 3 and Annex 6). Much of this is formed of land previously occupied by tenemental housing that had become difficult to let and that was subsequently demolished. It is concentrated, to a large degree, in the northern parts of Drumchapel.





2.3 Drumchapel is bounded on the south by the Singer rail line, and contains numerous medium sized roads, but generally movement within the area is relatively unrestricted. Some linear features in the area, such as the Garscadden Burn, form valuable open

spaces, and the railway line provides green network linkages for species.

2.4 The Drumchapel LCA contains a large volume of open space, as shown on the <u>Open Space Map</u>. Much of this is peripheral natural or semi-natural green belt, though there are also large areas of amenity greenspace.

Map 1: LCA Area



2.5 **Drumchapel Park** is centrally located immediately to the north of Drumchapel Shopping Centre, contains amenity grassland, a play area, tennis courts and bowling greens. **Garscadden Burn Park** cuts across the south-east of Drumchapel and is a Site of Importance for Nature Conservation (SINC). It contains valuable fen habitat and a mosaic of other habitats, with water voles along the burn. The majority of the park is also a proposed Local Nature Reserve (LNR). There is good public access and paths, and a play area, skate-park and MUGAs in the west of the park. Immediately to its east, and forming the eastern edge of Drumchapel, is the large area of amenity greenspace at **Kinfauns Drive**. It consists mainly of open grassland and woodland and contains paths the provide connections to Garscadden wood, to the north.

- 2.6 **Garscadden Wood** wraps round the north and north-east of Drumchapel and contains woodland trails and paths. It is a SINC and Local NR. The majority is woodland – ancient and long established but there are also wildflower meadow and open grassland areas and ponds. It contains a large variety of plants, including bluebells, old oaks, birch, rowan and ash. Animals present include roe deer, speckle-breasted song thrushes and tawny owls, and the locally rare Purple Hairstreak butterfly. Public access is very good. It is currently managed under lease to the Forestry Commission Scotland (FCS).
- 2.7 Substantial areas of amenity grassland can also be found in the south west of Drumchapel. The southernmost area is at **Heathcot Avenue**, a large south-facing slope of grassland and trees. **Abbotshall Avenue** lies slightly further to the north and includes relatively flat amenity grassland, woodland planting and a full-size grass playing pitch. To the north again, the area to the south of **Inchfad Drive** is a steep, south facing slope that is mainly inaccessible and consists of scrub woodland. A further large area of flat amenity open space lies to the north east of Drumchapel Park, enclosed by tenements on **Kinfauns Drive**.
- 2.8 **Cleddans Burn/Drumry Woods** is a SINC composed of the woodlands and adjacent grassland and wetland. It contains a

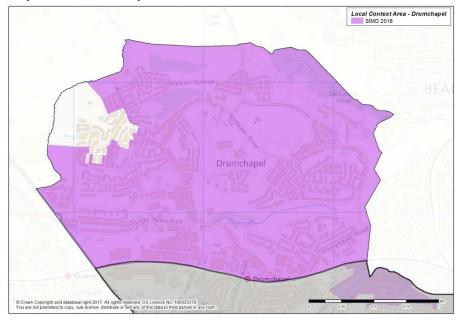
surfaced path leading to views of the city and Kilpatrick Hills, and the burn also provides habitat for water voles. It is currently managed under lease to Forestry Commission Scotland.

2.9 The large development site in central Drumchapel that is dissected by Kinfauns Drive, and bounded by Summerhill Drive and Linkwood Drive, includes an area of woodland with paths intersecting alongside its eastern edge. The site is shown as "development site containing open space" on the <u>Open Space</u> <u>Map</u> and provision will need to be made for the safeguarding of this woodland in any development proposal.

3 A Liveable Glasgow

- 3.1 Good quality, well-designed and well located open space can make the City a more attractive and pleasant place for people who currently live, work or invest in Glasgow and for people from elsewhere who are considering doing so, generating economic, environmental and societal benefits.
- 3.2 Practically all of Drumchapel lies within an area that the Scottish Index of Multiple Deprivation has ranked as being amongst the 15% most deprived datazones in Scotland (Map 2). The <u>Understanding Glasgow</u> website indicates that Drumchapel has a very high proportion of children (at 25% of the population) and one of the highest rates of children in poverty (48%) in the City. Single parent households make up 56% of all households with dependent children, again significantly above the city average. Easy access to open space for children within the local area will be particularly important in this part of the City.

Map 2 – 15% most deprived datazones



Thriving Places

- 3.3 <u>Thriving Places</u> is Glasgow Community Planning Partnerships' neighbourhood approach which targets specific areas of the city with a view to making better use of existing assets and resources and creating more effective working across partners.
- 3.4 Thriving Places are neighbourhoods and communities which have been identified as needing further support to tackle complicated local issues. Across the city there are nine Thriving Places that have been identified as having consistent levels of inequality relative to other parts of the city, including when looking at child poverty, health indictors and levels of unemployment. Drumchapel is one of these.

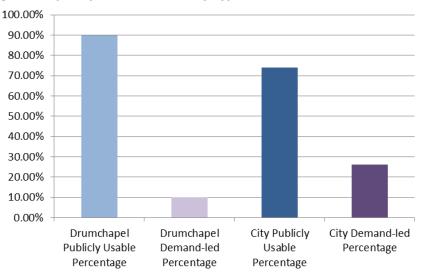
3.5 A <u>Locality Plan</u> for Drumchapel has been produced and sets out how community groups, organisations and local services can work together to make a difference to the area.

Publicly Usable and Demand-led Open Space

- 3.6 Access to well-designed and maintained open spaces is vital to improving people's quality of life and encouraging more active lifestyles. Such spaces provide opportunities for formal and informal play, rest and relaxation, meeting others and to engage with nature, helping improve both physical and mental health.
- 3.7 The draft Open Space Strategy differentiates between **publicly usable** and "**demand-led**" open spaces. Publicly usable open spaces are those that the public have relatively unrestricted access to – eg public parks (where access may only be restricted at night), amenity space, natural open space, etc. Demand-led open spaces generally have more restrictions on access and use – eg allotments, sports pitches or cemeteries.
- 3.8 Using this distinction, the draft OSS aims to ensure that:
 - there is enough good quality open space across the City to satisfy demand for formal sport and for growing, in particular; and
 - all homes in the City have access to a good quality publicly usable space of a size that can meet the needs of the residential population, particularly in relation to play, informal sport and recreation and general relaxation.
- 3.9 A very low percentage of the open space in the Drumchapel LCA is of the demand-led categories (see <u>open space map</u>), in comparison to the City as a whole (Fig 4). The Council is

undertaking a city-wide assessment of the supply of, and demand for, the most popular types of outdoor sports provision (including pitch sports, bowls and tennis) in conjunction with Glasgow Life and Sportscotland. This will inform a sports pitch strategy that will consider how best to meet any unmet demand in terms of quantity or quality across the City, help inform decisions on planning applications and ensure a better understanding of the area's need for outdoor sports provision. A similar assessment of demand/supply in relation to growing space is being undertaken as part of the Council's food-growing Strategy. It will inform how any unmet demand for food-growing can be accommodated in the area.

Figure 4: Open Space Breakdown by Type



3.10 Drumchapel has a relatively good amount of publicly useable open space per head of population (9.6 has per 1000 people – Fig 5), due to some particularly large spaces in the area. This is

significantly higher than the OUA Quantity Standard (Annex 10) of 5.5 ha per 1000 people set out in the draft OSS (Fig 5).

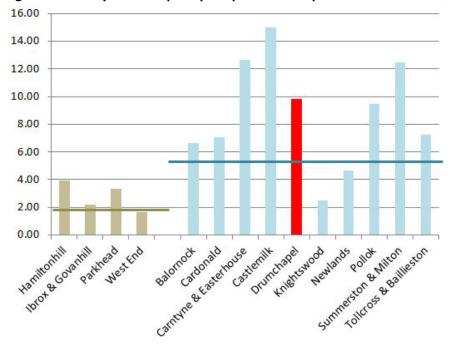


Figure 5: Publicly Usable Open Space per 1000 People

3.11 The high amount of publicly useable open space per head of population is a result of both the nature of Drumchapel as a peripheral housing scheme, designed with large areas of amenity open space and with access to open space in the Green Belt, and also of the significant housing demolition that has taken place in the area in recent years. Whilst population density is still above the outer urban area average, the housing sites in the area mean that population density is likely to increase further and the ratio of publicly usable open space to population is likely to decrease.

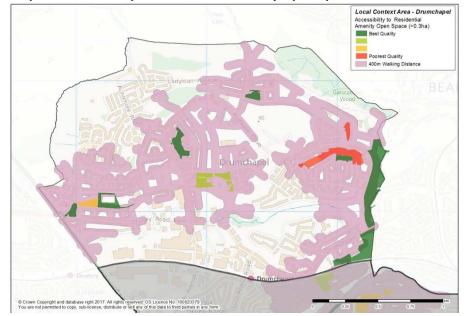
However, even with the expected population increase from new house building (Section 7), publicly usable open space would still be well above the quantity standard, at 9.2 ha per 1000 people.

- 3.12 Given the environmental roles of many of the existing spaces, particularly those in the Green Belt, it will be important to protect the vast majority of these spaces in the future. The <u>Green Belt</u> <u>Review</u>, undertaken for the Local Development Plan, highlighted that there was little scope for the release of more Green Belt land for development. However, the degree to which the Quantity Standard is exceeded suggests it may be possible to use some open space in the area for other purposes, with a view to freeing up maintenance resources and reinvesting any compensation for the loss of the open space back into the remaining open space resource. The Stage 2 LCA process should consider this in more detail.
- 3.13 In comparison to many parts of the City, there are relatively few private sports grounds, such as bowling greens or tennis courts, in Drumchapel, with the exception of those found in Drumchapel Park. There are sports pitches at the centrally located Donald Dewar Leisure Centre. A city-wide assessment of supply and demand is to be undertaken for outdoor sports provision.

Quality and Accessibility

3.14 The draft Open Space Strategy sets out standards for *accessibility* to publicly usable open space and for the *quality* of those spaces. The Accessibility Standard states that "all homes (including purpose-built student accommodation), outwith the City Centre, should be within a 400m actual walking distance of a good quality, publicly usable open space of 0.3 ha or more". The draft OSS refers to spaces that will be used to meet the Accessibility

Standard as "Community Spaces". The Quality Standard seeks to ensure that these spaces are publicly usable, of a reasonable size and of good quality, including providing for a variety of functions, including children's play, informal sport/recreation and relaxation.



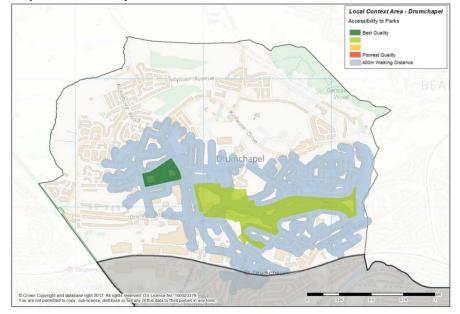
Map 3 – Accessibility to Residential Amenity Open Space

3.15 A Quality Assessment of the City's most publicly usable open spaces was undertaken between 2012 and 2014. The spaces surveyed included amenity open spaces over 0.3 ha in size and public parks and gardens. The Quality Assessment was an initial assessment of the quality of those spaces, relative to one another, and does not reflect whether they would meet the quality standard or not. Nevertheless, it is valuable in helping understand the relative quality of usable open space across Glasgow and its distribution. It should, however, be noted that some of the spaces were surveyed as much as 6 years ago and the passage of time may have seen an improvement, or deterioration, in their quality.

- 3.16 Map 3/Annex 1 shows the amenity open spaces over 0.3ha in size and their relative quality. It also shows how accessible they are from the surrounding communities, by using a network analyst tool to mark out those areas within a 400m walk, using footpaths and other pedestrian routes, of a point of entry to the space. It illustrates that many of the residential amenity spaces over 0.3ha in the area are of relatively good quality, but that some of those in the north east of Drumchapel are of much poorer quality. In addition, some of the spaces appear to be of a shape and slope that may affect their ability to meet the quality standard. The Council intends to look at these spaces in greater detail with a view to producing a map of the open spaces that are considered capable of meeting the quality standard. This will be done to inform use of SG6 as an interim approach prior to the Stage 2 Local Contexts being completed.
- 3.17 As can be seen, access to amenity open space is best in the central western parts of the LCA and, assuming the quality standard can be met, along the eastern edge. Accessibility is poorer in the north western and south eastern parts of the LCA. A similar analysis of access to public parks and gardens is shown on Map 4/Annex 2.
- 3.18 Map 4/Annex 2 illustrates those parts of Drumchapel that are within a 400m walk of open spaces that are identified as public parks and gardens on the Open Space Map, or are maintained as such by the Council. Only two open spaces are categorised as such in Drumchapel Drumchapel Park (good quality) and

Garscadden Burn Park, which is shown to be of slightly poorer quality. This will, in part, be a reflection of the fact that it is not all "traditional" parkland – much of the park is a Site of Importance for Nature Conservation, and includes wetland, wet woodland and heathland habitats. Together, these two spaces provide for access to open space for much of southern Drumchapel.

Map 4: Accessibility to Parkland



3.19 Map 5/Annex 3 combines both maps and shows those parts of the LCA area which currently meet the accessibility standard by falling within a 400m walk of a publicly usable, and potentially multifunctional open space of an appropriate size (over 0.3 ha).

3.20 These indicative deficiencies in access can be combined with a map of population distribution to identify the major gaps in accessibility from people's homes, and where the priorities might be in terms of addressing the accessibility standard set out in SG6. Maps 6/7 and Annexes 4/5 illustrate population distribution and access deficiencies respectively.

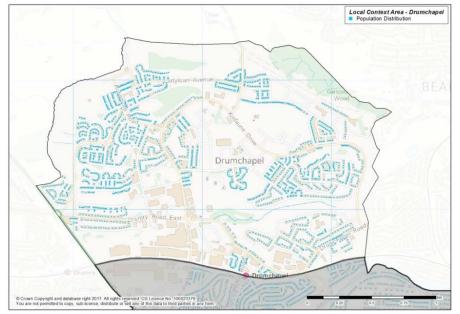


Map 5: Access to potentially multifunctional open space > 0.3 ha

3.21 Map 7/Annex 5 illustrates that the main gap in access to the two key categories of publicly usable open space, considered to have the greatest potential to meet the Quality Standard, is in northwest Drumchapel. Much of this area has been redeveloped with lower density housing but many of the surrounding open spaces are generally too small, or on too severe a slope, to meet the Quality Standard. The Stage 2 Local Context should consider, as a

priority, how to provide enhanced access to multifunctional and publicly usable open space, capable of meeting the quality standard, in this area. Access gaps may also emerge in central Drumchapel should vacant land there be developed for housing in future years and should the existing poor quality open spaces be considered incapable of meeting the Quality Standard. The Stage 2 LCA process should consider options for using the vacant land resource to help address prospective deficiencies in this area.

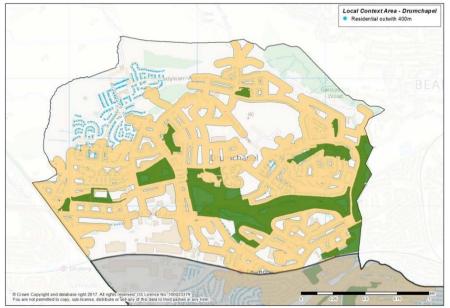
Map 6: Population Distribution



3.22 Further work has been undertaken to highlight some of the possibilities for addressing these deficiencies in accessibility. Opportunities exist in a number of forms, including:

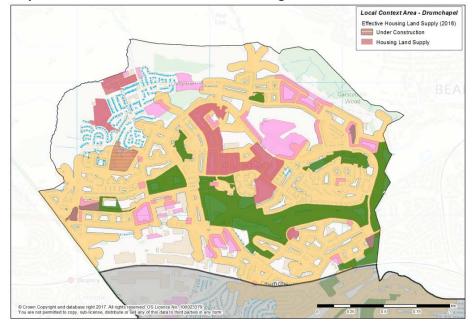
- making use of other types of open space (ie not public parks and gardens or amenity residential) that have the potential to meet the Quality Standard;
- enhancing means of access to existing open spaces, eg shortening actual walking distances through infrastructure interventions or by creating new points of access;
- utilising open spaces that currently function separately but could meet the size and multi-functionality required by the quality standard if combined; and
- making use of the potential offered for delivering new spaces on vacant and/or derelict land or as an integral part of new housing developments to help address deficiencies – especially in this area where regeneration is proposed on a significant scale.

Map 7: Potential Accessibility Standard Deficiencies



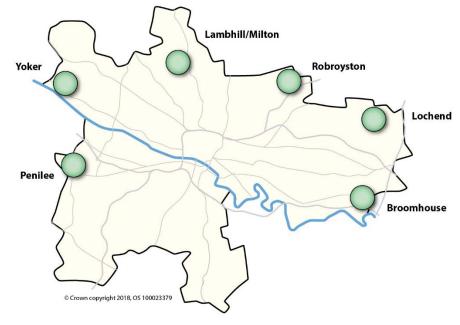
3.23 Map 8 shows vacant/derelict land (also in Annex 6) and key housing sites (shown in Annex 7) together with the accessibility analysis set out above. It identifies a number of large housing sites and areas of vacant/derelict land in and around northwestern Drumchapel that could offer opportunities to provide new open space(s) that would meet the Quality Standard and that would serve the needs of the existing and proposed residential population. Opportunities for doing so should be considered through the Stage 2 LCA process.

Map 8: Vacant and Derelict Land and Housing Sites



3.24 Further analysis of accessibility to larger open spaces has been undertaken for the Open Space Strategy. Whilst it is recognised that access to a multifunctional, publicly usable space of 0.3 ha or more might meet "everyday" requirements, access to larger multifunctional open spaces will be desired on occasion. As such, an additional measure of accessibility to the City Parks (eg Kelvingrove) and District Parks (eg Tollcross) that serve a strategic function, and to the Local Parks that serve more discrete localities (eg Rosshall Park or Maxwell Park) has been developed. It reflects the distances people might be expected to travel to access both the larger City/District Parks (1500m or a 15-20 minute walk) and the smaller Local Parks, over 1 ha in size (800m or a 10 minute walk).

3.25 Map 9/Annex 8 illustrates that there are no notable gaps in strategic accessibility in the Drumchapel LCA area.

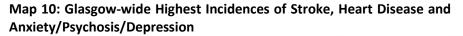


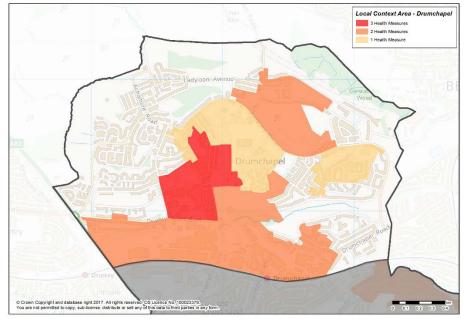
Map 9: Access to Larger Open Spaces

3.26 Other considerations that the Open Space Strategy identifies as important in informing the current and future need for open space to enhance the City's **Liveability** include consideration of the setting and amenity it can provide, as part of a placemaking approach, and the views of the public on open space in their area. Responses to this LCA will be important in establishing the latter.

4 A Healthy Glasgow

- 4.1 Good quality open spaces can have a significant bearing on peoples' health. In addition to the obvious opportunities for exercise, active travel, play and food growing, open spaces can also enhance mental health and well-being through the creation of more attractive urban environments; the provision of better opportunities to socialise; and opportunities to interact and engage with nature.
- 4.2 Using three indicators of health, it is possible to identify the areas in the City that might benefit most from enhancement of open space. Data relating to three health indicators has been obtained that shows the number of night's stay in hospital for stroke and heart disease (that can be taken as indicative of physical health) and for anxiety, psychosis and depression (a proxy for mental health) for each of the City's census data zones.
- 4.3 Each indicator has been ranked across the City and mapped. Map 10 illustrates those zones with the most stays (the top 15%) for one or more of the three indicators. A datazone that is in the top 15% of one indicator is shown in yellow, one in the top 15% of two indicators is shown in orange and one in all three is shown in red.



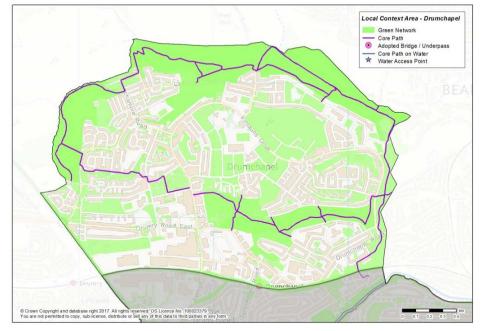


4.4 There are no obvious correlations between these indicators of poor health and accessibility to open space. However, further development in the area may result in deficiencies in future, particularly in central Drumchapel. The Stage 2 LCA process should consider this further.

Walking and Cycling

4.5 There are no National Cycle Network routes in the area but NCN 754, along the Forth & Clyde Canal, passes close by, to the south east of Drumchapel. Core paths C5 and C6 provide a link from the large area of amenity space at Kinfauns Drive that forms the eastern boundary of Drumchapel. The link to the canal towpath, via the lock at Blairdardie Drive, is via Moraine Drive but there may be scope to enhance off-road access via the large amenity space (just outside the LCA area) at the west end of Moraine Avenue. This would require a crossing of the railway but could be considered further in the Stage 2 LCA process.

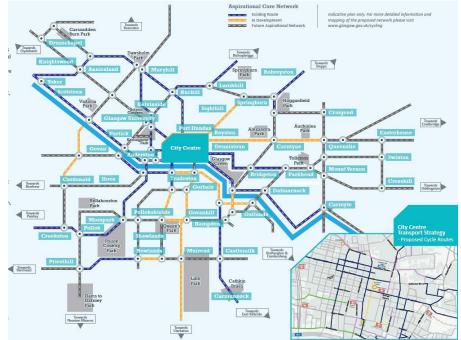
Map 11: Green Network and Core Paths



4.6 The eastern Kinfauns Drive amenity space is one of many open spaces that include off-road walking and cycling routes in the area. The ones around the periphery of Drumchapel form a, mostly off-road, loop around the area, as shown on the Core Paths Plan (see Map 11). It illustrates that the LCA has good core path connectivity on the east-west alignment, as well as north-

south along the eastern and western sides of the area. There is, however, a lack of north-south connectivity through the centre of the LCA. The significant amount of vacant and derelict land in central Drumchapel, particularly to the east of Airgold Drive, provides an opportunity to deliver a green network enhancement that will help link the core paths and the green network cores of Garscadden Burn Park and Drumchapel Park in the south with Garscadden Wood in the north. A more formal connection, perhaps including a toucan crossing of Kinfauns Drive, could also be investigated to link the core paths C8 (east of Kinfauns) with C1A (through Drumchapel Park). These possibilities should be investigated further through the Stage 2 LCA process.

Figure 6: SPC Network Aspirations (from SPC)



- 4.7 Glasgow's <u>Strategic Plan for Cycling</u> (Fig 6) sets out a diagrammatic representation of Glasgow's aspirations to improve cycling infrastructure in this part of the City. It identifies future aspirational routes through Drumchapel at Garscadden Burn Park and also from Drumchapel, north-east towards Bearsden. The opportunities for doing so, and delivering associated environmental and placemaking improvements, should be investigated in the context of the above opportunities.
- 4.8 Other considerations that the draft Open Space Strategy identifies as important in informing the current and future need for open space to enhance the City's **Health** include consideration of:
 - opportunities to encourage play;
 - provision of an appropriate quantity and quality of open space to meet demand for formal outdoor sports;
 - provision of an appropriate quantity of open space to meet demand for food growing; and
 - how open space can help address issues such as air quality and pollution

5 A Resilient Glasgow

5.1 People, nature and infrastructure can all be vulnerable to a changing climate. More of the City will be exposed to flood risk associated with an increased intensity of rainfall, people can be vulnerable to heat waves and flood events and changes in warmth and precipitation can have significant impacts on habitats and the species they sustain. An increase in heat, rainfall and winds can impact on building fabric, ground conditions, road surfaces and rail lines, with implications for the transport network

and other utilities. City Centre temperatures could increase as the built fabric absorbs and retain more of the sun's heat. Our open spaces provide opportunities to help the City adapt to inevitable climate change.

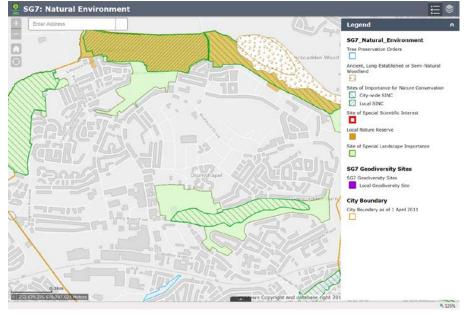
Natural Environment

5.2 Drumchapel contains several <u>environmental designations</u> (Fig 7), some of which cover large areas. The most significant of these is Garscadden Wood Local Nature Reserve, which stretches round the north of the area and straddles the boundary with East Dunbartonshire Council. In the eastern part of the larger LNR lies an area of Ancient, Long-Established or Semi-Natural Woodland. Sites of Importance for Nature Conservation exist at Garscadden Wood, at Cleddans Burn (on the western edge of the LCA) and at Garscadden Burn, Garscadden Wood, Garscadden Burn Park and Cleddans Burn are also Sites of Special Landscape Importance.

Green Network

5.3 Map 11 (above) shows the key elements of the Green Network (as defined in SG6) in the Drumchapel Area. The map shows an extensive green network, however some of the spaces shown as green network (included because of their identification on the <u>Open Space Map</u>) are categorised as "Development Sites Containing Open Space". This means that the Council recognises that development is likely to proceed on these sites but that they contain some open space that will either require to be protected, or its loss compensated for, through the new development. As such, they should not, in their entirety, be considered a permanent part of the green network. 5.4 With that caveat, it can be seen that the green network is prominent throughout most of Drumchapel, but that it is concentrated around the area's periphery and that central Drumchapel, which contains most of the Development Sites Containing Open Space, appears most deficient. These development sites provide an opportunity to extend the green network into Central Drumchapel as part of a placemaking approach, and how best to do this should be considered through the Stage 2 Local Contexts.

Figure 7: Environmental Designations



Surface Water Management

5.5 The <u>Metropolitan Glasgow Strategic Drainage Partnership</u> is a partnership between the City Council, Scottish Water, Scottish

Environment Protection Agency, Scottish Canals, surrounding Councils, the Scottish Government and other interested parties to:

- reduce flood risk;
- improve water quality;
- enable economic development;
- improve habitats; and
- co-ordinate and integrate investment planning.
- 5.6 SEPA has <u>modelled</u> the extent of potential flooding from rivers, surface water and coastal sources. The modelling illustrates the area around Kinfauns Drive and Duntreath Avenue in the south, as well as a substantial area to the north of Kinfauns Drive, just to the south of Garscadden Wood, as being potentially susceptible to flooding from water courses. In addition, it indicates that parts of north western and north eastern Drumchapel are potentially susceptible to flooding form surface water.
- 5.7 As required by The Flood Risk Management (Scotland) Act 2009, the Council has published the Local Flood Risk Management Plan for the Clyde and Loch Lomond Local Plan District (LPD). The Plan identifies the need to undertake a study to investigate the feasibility of a flood protection scheme on the Yoker Burn and Garscadden Burn, focusing on the benefit of direct defences along both banks, the potential benefit for runoff control using natural flood management and the benefits of a property level protection scheme to reduce residual risk.
- 5.8 A Surface Water Management Plan is also being undertaken for Drumchapel. Feasibility/concept design is currently underway with Scottish Water and East Dunbartonshire Council. Rather than taking a 'traditional' approach to flood management, the

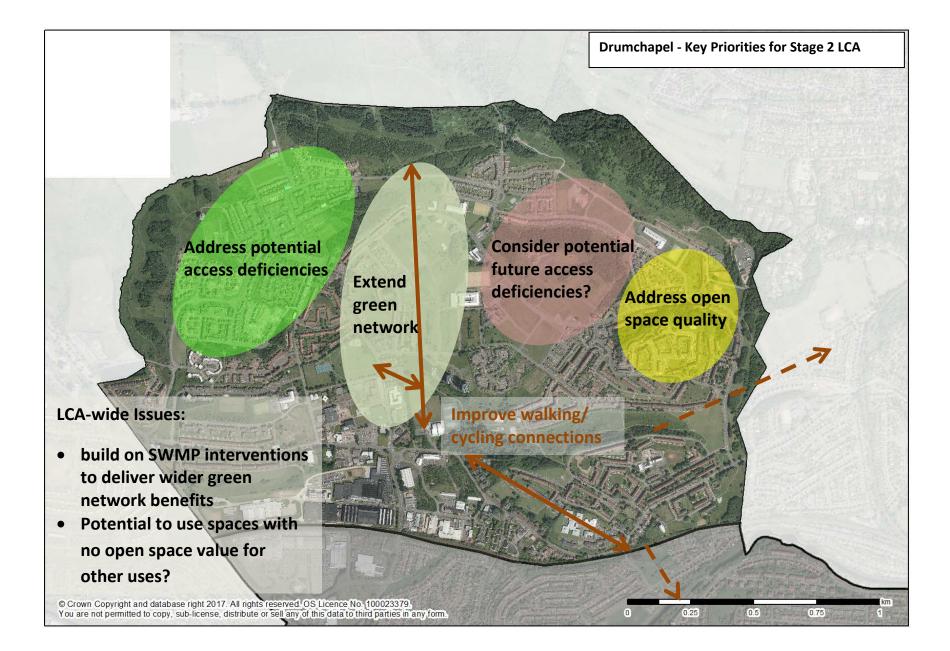
SWMP will endeavour to deliver interventions that align with the MGSDP Vision of:

- enhancing urban biodiversity and landscape;
- reconnecting waterways;
- designing for the severity of the rain;
- keeping surface water on the surface;
- creating integrated blue green networks;
- integrating urban master planning and design;
- providing sustainable and affordable drainage solutions; and
- being climate-change ready
- 5.9 This approach provides opportunities to enhance the green network and these should be considered further though the Stage 2 Local Context Analysis.
- 5.10 Other considerations that the draft Open Space Strategy identifies as important in informing the current and future need for open space to enhance the City's **Resilience** include consideration of:
 - how to improve habitat connectivity;
 - the city's blue spaces; and
 - how open space can be used to help mitigate climate change, eg by capturing and removing CO2 from the atmosphere.

6 Open Space Priorities

- 6.1 In undertaking the Stage 2 LCA process, consideration will require to be given to how best to address the deficiencies in accessibility, quality and quantity identified above. The Council will attempt to address these matters through a placemaking approach – one that delivers multiple benefits for the people of the area, for flood water management and for nature and the green network. In this way, the Council and its partners will aim to maximise the benefit of investment undertaken to deliver multifunctional solutions, helping address issues such as access, connectivity, water management and biodiversity wherever possible.
- 6.2 The analysis set out above is intended to highlight the key issues that the Stage 2 LCA process will need to address as a priority. Other priorities to be addressed in the Stage 2 process will include:
 - 1. identification of potential opportunities to address accessibility deficiencies in north-western Drumchapel;
 - 2. consider whether, and if so how, the poorer quality open spaces in eastern Drumchapel can be adapted to meet the quality standard;
 - 3. whether future accessibility gaps are likely to arise should housing development take place on the large gaps sites in central Drumchapel and, if so, how they could be met;
 - 4. potential options for enhanced off-road walking and cycling access to the Forth and Clyde Canal;
 - 5. how to deliver better north-south off-road walking and cycling provision through central Drumchapel;

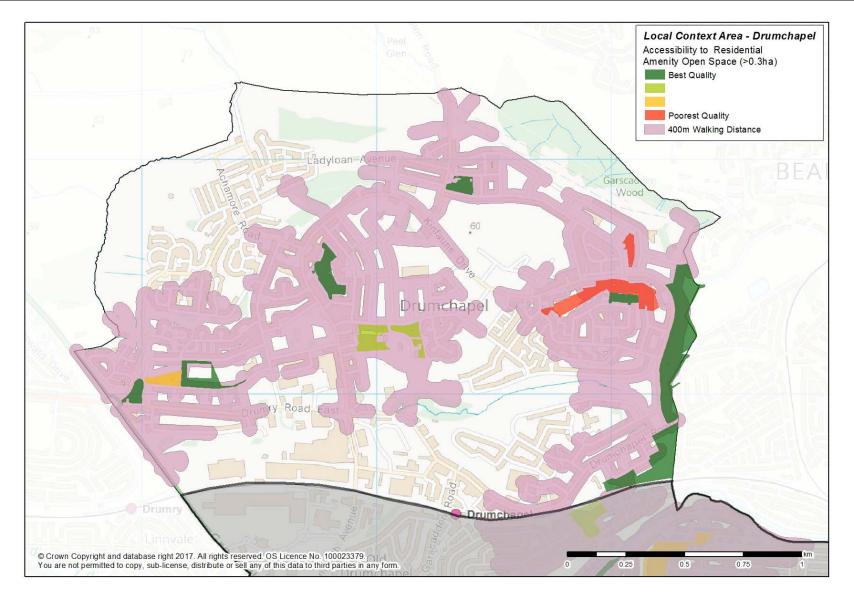
- 6. whether there is scope to use some spaces for other, nonopen space uses given the degree to which the quantity standard is exceeded;
- 7. where best to deliver any improvements in demand-led provision identified through studies of outdoors sports provision and growing space;
- 8. identification of opportunities to extend the green network into Central Drumchapel as part of a placemaking approach; and
- 9. opportunities to build on SWMP interventions to deliver wider green network benefits



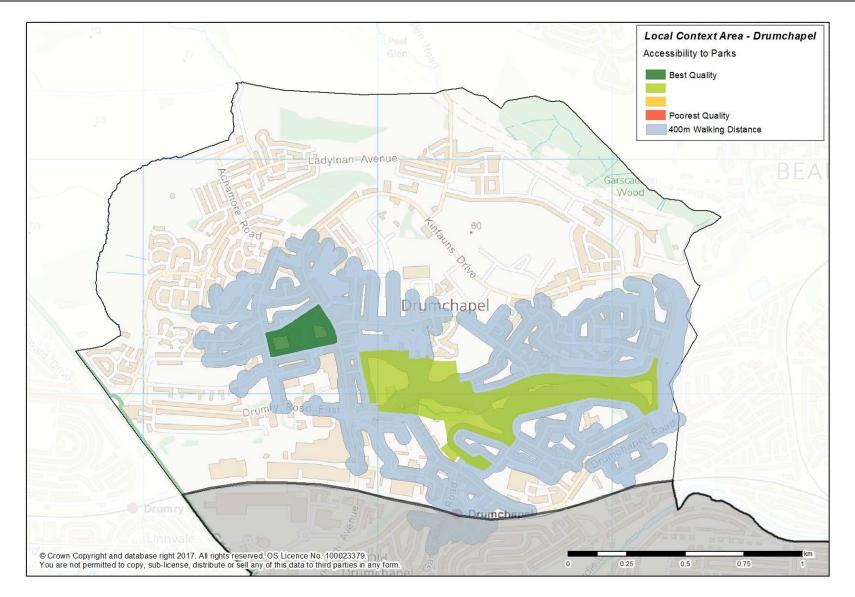
7 Key Statistics

а	Population	13,060
b	Land Area	389 has
с	Population Density	34 people per ha
d	Functionally Useful Publicly Usable Open Space (see Glossary)	128 has
е	Vacant/Derelict Land	48 has
f	Planned housing output from housing land to 2023	407 Units
g	Estimated population increase from housing land to 2023	887 population
h	Prospective new Population Density at 2023	36 people per ha
i	Existing Functionally Useful Publicly Usable Open Space per 1000 people (d/(a/1000))	9.8 has per 1000 people
j	Prospective functionally useful publicly usable open space per 1000 people (d/((a+g)/1000))	9.2 has per 1000 people
k	Vacant land (e) as percentage of total land area (b)	12.4%

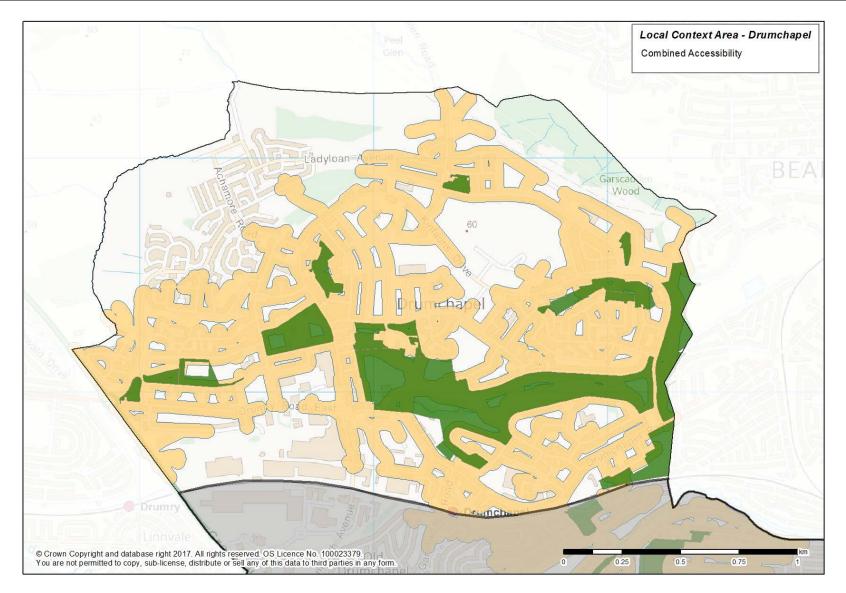




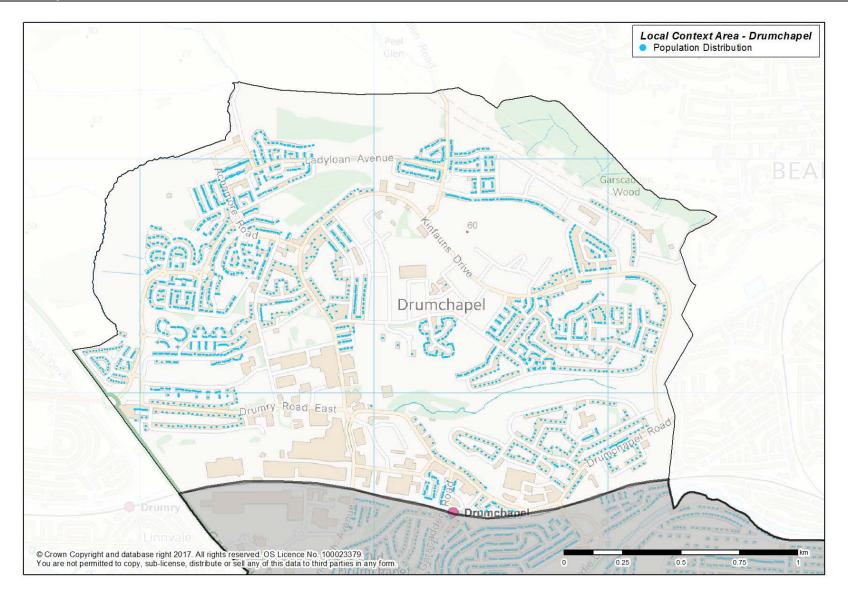
ANNEX 2: Access to Public Parks and Gardens



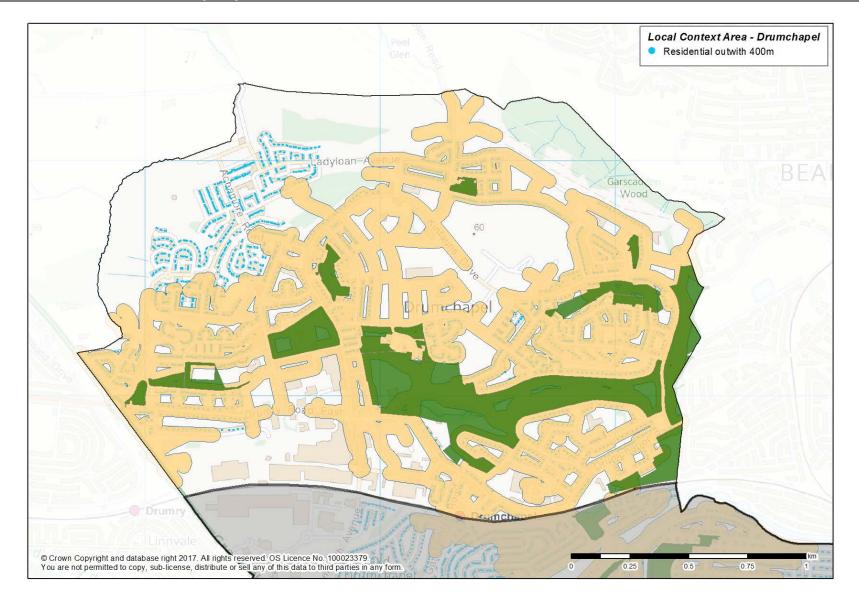




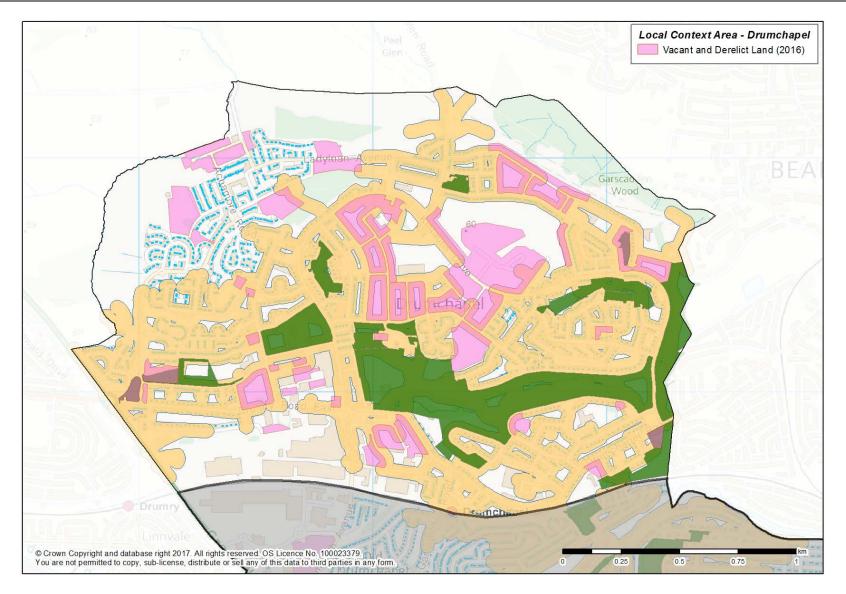
ANNEX 4: Population Distribution



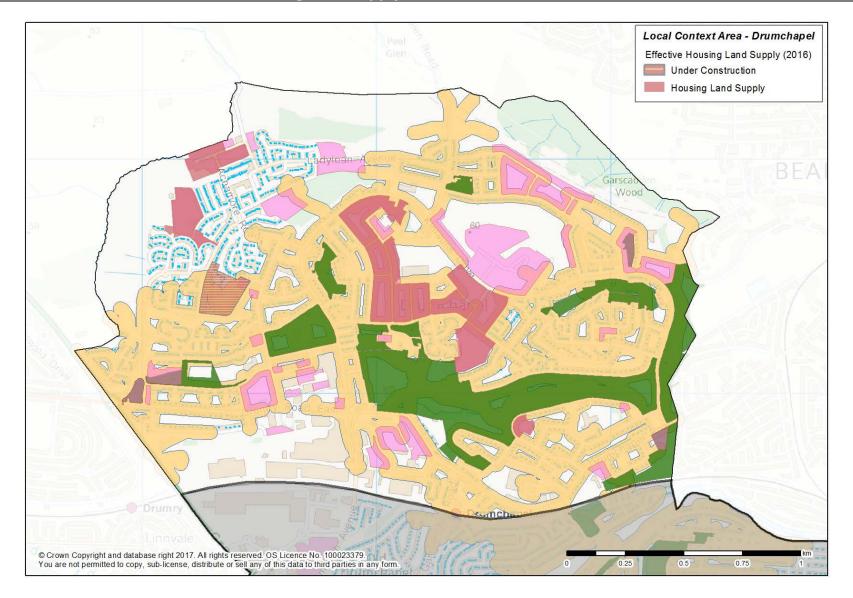
ANNEX 5: Potential Accessibility Deficiencies



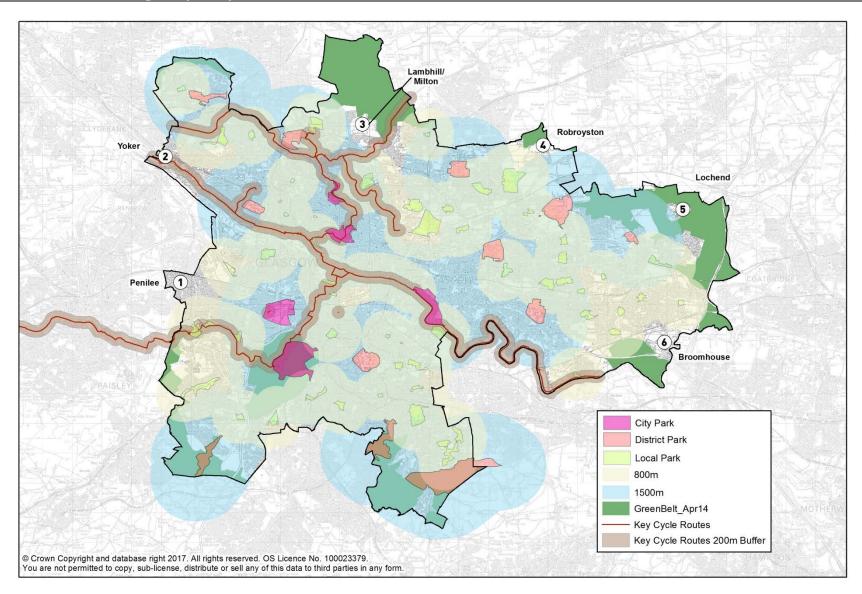
ANNEX 6: Vacant/Derelict Land



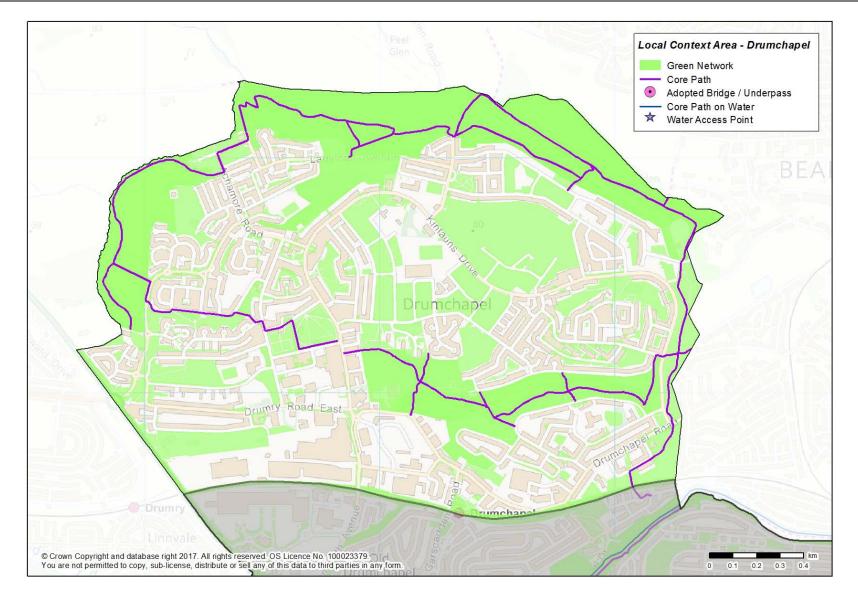
ANNEX 7: Vacant/Derelict Land and Housing Land Supply



ANNEX 8: Access to Larger Open Spaces



ANNEX 9: Green Network and Core Paths



Accessibility Standard

All homes (including purpose-built student accommodation), outwith the City Centre, should be within a 400m actual walking distance of a good quality, publicly usable open space of 0.3 ha or more [a "Community Space"].

Quality Standard

Community Spaces, whether existing or proposed, should, when considered against the Quality Assessment Matrix, achieve a minimum overall score of 75% of the total possible score of the applicable criteria and the minimum required score specified in the matrix for each of the applicable criteria.

Quantity Standard

There should be 1.9 ha of publicly usable open space per 1000 people in the Inner Urban Area and 5.5 ha of publicly usable open space per 1000 people in the Outer Urban Area.

GLOSSARY

Accessibility Standard: a standard to be used by the Council to deliver access to good quality open space of an appropriate size within a 400m walk of people's homes.

Active Travel: travel by physically active, human-powered modes, most commonly walking and cycling, as opposed to motorised ones, and largely for functional reasons as opposed to recreational ones.

Biodiversity: the variety of living things on Earth, from the smallest insect to the largest mammal and tree.

City Development Plan (or Local Development Plan): the Council's land use plan which sets out a 10 year planning framework for the development of the City and policies to guide its development.

Community Spaces: spaces that the Council identify to provide for access to good quality open space in peoples' immediate environment (meeting the Accessibility Standard) and that provide a multitude of open space needs (meeting the Quality Standard).

Demand-led open space: those types of open space for which a quantifiable demand can be established (eg allotments, sports pitches) and which may have restrictions on access and use.

Functionally Useful Publicly Usable Open Space: Those categories of Publicly Usable Open Space considered to usefully help meet demand for access to open space for the population. Excludes less functionally useful space such as amenity space associated with transport infrastructure or business (eg that would form a car park boundary).

Green Network: connected areas of green infrastructure and open space that together form an integrated and multi-functional network. (Source: SPP 2014).

Green Network Masterplan: a plan for how the green network, and individual spaces within it, should be used, managed and maintained to address all aspects of open space need in the City in a co-ordinated manner.

Metropolitan Glasgow Strategic Drainage Partnership (MGSDP): a partnership of organisations working to identify and deliver measures needed to ensure that Glasgow's sewerage and drainage networks can cope with a changing climate.

Open Space: space within and on the edge of settlements comprising green space (eg parks, playing fields), grey space (eg civic space, urban realm) and blue space (eg burns, lochs).

Open Space Map: a map illustrating the extent, type and spatial distribution of the Glasgow's protected open spaces.

Open Space Strategy: a means of co-ordinating the policies of the different council departments with responsibilities for open space, and of focusing liaison and partnership working with relevant public, private and community interests. (Source: PAN 65 2008).

Publicly usable open space: those categories of protected open space which are not demand-led spaces and which, in general terms are accessible to the public with relatively few restrictions eg public parks or amenity spaces.

Quality Standard: a standard to be used by the Council to ensure that spaces used to meet the Accessibility Standard are of good quality and provide for a variety of open space needs.

Quantity Standard: a standard to be used by the Council to ensure a sufficient quantity of publicly usable open space within each part of the City.

Supplementary Guidance (SG): a document prepared to support the City Development Plan, setting out further detailed guidance on the matters contained in the CDP.