Planning Committee

10.00am, Thursday, 12 October 2017

Review of Edinburgh Design Guidance

Item number 5.2(b)

Report number

Executive/routine Executive

Wards All

Council Commitments

Executive Summary

The purpose of this report is for the Committee to consider the consultation responses to the draft revised Edinburgh Design Guidance, note the inclusion of the Edinburgh Street Design Guidance (ESDG) into the finalised Edinburgh Design Guidance, and to seek approval for the finalised Edinburgh Design Guidance.

The report also seeks approval for the referral of the finalised Edinburgh Design Guidance to the Transport and Environment Committee for information.



Report

Review of Edinburgh Design Guidance

1. Recommendations

- 1.1 It is recommended that the Planning Committee:
 - 1.1.1 agrees the response to the issues raised from the consultation on the draft revised Edinburgh Design Guidance;
 - 1.1.2 approves the revisions to parts 1, 2 and 3 of the finalised Edinburgh Design Guidance;
 - 1.1.3 notes that the Edinburgh Street Design Guidance (ESDG) will be embedded as a new part 4 of the Edinburgh Design Guidance following consideration by the Transport and Environment Committee; and
 - 1.1.4 refers this report to the Transport and Environment Committee for noting in respect of revised standards for car parking.

2. Background

- 2.1 Scottish Planning Policy (SPP, 2014) states that Planning's purpose is to create better places and Planning should take every opportunity to create high quality places by taking a design-led approach. This directly links the idea of placemaking with good design. The Edinburgh Design Guidance is the Council's key policy document which addresses placemaking and design.
- 2.2 On <u>2 March 2017</u>, Planning Committee approved the draft revised Edinburgh Design Guidance for consultation. The outcomes of the various consultation exercises and proposed amendments to the Guidance are detailed through this report.

3. Main Report

- 3.1 The Edinburgh Design Guidance (the Guidance) was approved by Planning Committee in May 2013. As detailed in the 2 March 2017 report to Planning Committee, although the Guidance is viewed has been effective in promoting good design, a revision could strengthen it through:
 - 3.1.1 a greater emphasis on placemaking;
 - 3.1.2 recognising and reflecting changes to policy and guidance nationally, <u>Placemaking (2014)</u> and <u>Low Emissions (2015)</u>, and locally, <u>Local</u> <u>Development Plan (2016)</u>;

- 3.1.3 integration and simplification of the Parking Standards for Development Management (Parking Standards) which are viewed as overly complex;
- 3.1.4 aligning the three interlinked guidance documents of the Guidance, the ESDG, and Parking Standards;
- 3.1.5 introducing new content covering Parking Standards, Build to Rent housing, views to the Forth Bridge World Heritage Site, and environmental protection; and
- 3.1.6 updating content in some sections, notably the water environment section.
- 3.2 The entire draft revised Guidance was the focus of the consultation exercise (detailed under section 9 of this report Consultation and Engagement). This included a consultation survey (see Appendix 1) focussing on the key changes proposed, namely key views to the Forth Bridge World Heritage Site¹, new guidance for Build to Rent housing, and revised Parking Standards.
- 3.3 While a diverse range of consultation feedback was received covering the broader document/topic areas, feedback tended to concentrate on the revised Parking Standards, and new Guidance for Build to Rent housing. Due, however, to the varying nature of responses received, specific feedback points (see Appendix 2) that were cited by three or more respondents are explored further.

Parking Standards for Development Management (Parking Standards)

- 3.4 The Council's Parking Standards, approved by Planning Committee in December 2009, are a tool for controlling parking numbers and managing the levels of traffic associated with new development. As the Parking Standards were developed eight years ago, a review was required to:
 - 3.4.1 build on experience ascertained through their use in practice;
 - 3.4.2 respond to National Policy developments that have subsequently arisen;
 - 3.4.3 consider the relationship of the Standards with public transport accessibility;
 - 3.4.4 consider best practice elsewhere; and
 - 3.4.5 reflect on the increased priority given to cycling and walking in Edinburgh, and the advent and growth of electric vehicles.
- 3.5 Some of the key propositions were explored through the consultation survey, which demonstrated that:
 - 3.5.1 two-thirds of respondents agreed (40% of these strongly agreed) that where a new development is well served by public transport, there is less need for car parking spaces, whilst 28% disagreed (6% of these strongly disagreed);

¹ 87% of respondents agreed with the four new protected views to the Firth Bridge from Edinburgh (47% of these strongly agreed). No new views were suggested, that are not already protected in the Guidance.

- 3.5.2 just over half (54%) agreed that the removal of a minimum level requirement for car parking in new developments will help to manage the number of parked cars (almost one-third strongly agreed: 31%), whilst over one-third disagreed (38%, 15% of these strongly disagreed);
- 3.5.3 60% agreed that the provision of a maximum level requirement for car parking in new developments will help to manage the number of parked cars (28% strongly agreed), whilst one-quarter of respondents disagreed (4% of these strongly disagreed);
- 3.5.4 over three-quarters agreed (77%, 29% of these strongly agreed) that the provision of electric charge point provision in new developments will increase the use of electric vehicles, whilst one-tenth disagreed (nobody strongly disagreed); and
- 3.5.5 57% agreed that there is less need for private parking spaces if a new development contains designated car club vehicles and spaces (just over one-quarter strongly agreed: 26%), whilst almost one-third disagreed (31%, 4% of these strongly disagreed).
- 3.6 The survey results show that there is general support for the propositions. Support ranges from over half the respondents to over three-quarters of respondents, whilst levels of those non-supportive range from one-tenth to one-third, with the exception being 38% of respondents not supporting the removal of the minimum level requirement for car parking in new developments.
- 3.7 The key points (cited by three or more respondents) relating to Parking Standards raised through the broader consultation exercise are provided in Appendix 2, and are explored as follows.
- 3.8 A relatively high level of concern was expressed at the removal of the parking minimum. The concern being is that if insufficient parking is provided by a development there will be over-spill parking onto surrounding streets. This was previously explored through the Parking Standards working group as detailed in 2 March report to Planning Committee and a clear process has been established in the Guidance to determine and address potential parking over-spill issues. Applicants must provide supporting transport information which should include walking, cycling, public transport and car club considerations, as these alternative modes can help to offset journeys by private car and, in turn, the levels of car parking requirements. Additionally, the provision of parking surveys (undertaken both day and night), will be required to provide location-specific information on parking pressures in surrounding streets. Collectively, this supporting information will help officers to determine appropriate parking levels for each development.
- 3.9 The Guidance also introduces a new parking standard for smaller format food retailer shops which have increased in prominence since the 2009 Parking Standards were created. By introducing a new standard, this provides a slightly higher level of parking provision (specifically in Zone 2) when compared with the values outlined in the 2009 Parking Standards. This slight increase will not create a situation where such shops have many more car parking spaces, as the reality over recent years was that actual

levels of parking provision often exceeded parking levels outlined in the 2009 Parking Standards, due in-part to planning permission appeals, or site-specific reasons (i.e. lack of on-street parking). Therefore, whilst the new standards themselves are slightly less stringent than previously, it is felt that they will better balance the needs of accommodating parking demand, whilst mitigating the potential issue of over-spill parking.

- 3.10 In addition to the specific points raised through the consultation exercise, a number of unrelated comments were made regarding the broader proposals to remove minimum standards, as well as the provision of maximum standards. A review of cities across the UK (and indeed overseas) that have developed Parking Standards in more recent years confirms that parking minimums are rarely proposed. Edinburgh seeks to promote better placemaking, walking, cycling and public transport and is aligning itself with current practice elsewhere.
- 3.11 For points raised relating to electric vehicles, in addition to introducing a minimum requirement for Electric Vehicle charge point provision, the Guidance provides technical details regarding charge point infrastructure.
- 3.12 With regard to cycle standards for visitors, whilst the 2009 Parking Standards asked for both visitor and employee parking spaces for the majority of developments, the two types of provision rarely materialised. The revised draft Guidance sets out the need for two types of cycle parking provision as well as the number of spaces required. For the majority of developments, this continues to be a two level requirement, covering long (employee) and short-stay (customer) parking. Another important aspect covered in the Guidance is the quality of provision, and details will be provided in the Street Design Technical Manual factsheets 'Cycle parking in new developments' later in 2017/18.
- 3.13 In terms of the provision for disabled motorists, accessible car parking spaces are supported by minimum parking requirements (as with cycling and electric vehicle provision). In most instances, the minimum requirement for accessible parking provision has increased, reflecting British Standards BS8300:2009 (Changing Places). The specific section in the Guidance has been updated to provide more detail regarding accessible parking.
- 3.14 Critically, the draft revised Guidance also emphasised that where car parking is needed its visual impact can be significantly reduced through design-led and place specific approaches. Such a design led approach which integrates parking within developments to ensure places for people and not cars, was advocated by the Edinburgh Urban Design Panel (see section 9 of this report Consultation and Engagement, and Appendix 3). Following the overall consultation, it was established, however, that more was required to demonstrate what is meant by design-led approaches. Technical guidance including diagrams has therefore now been provided to emphasise a range of parking solutions that put placemaking first.

Housing mix and size

3.15 Feedback on the housing mix and size section of the Guidance related to the residential floorspace standards.

- 3.16 A number of respondents sought amendments to the standards so that they referred to the number of persons staying within a dwelling as opposed to solely referring to bedroom numbers. However, the number of persons staying in a dwelling cannot be controlled and does not directly determine a unit size in the same way that bedroom numbers do.
- 3.17 It is considered that the range of unit sizes based on the number of bedrooms covers a wide range of options from single person dwellings to those for growing families. The Guidance therefore meets the terms of Local Development Plan Policy Hou 2 'Housing Mix' and no changes are proposed.

Build to Rent

- 3.18 A new section in the draft revised Guidance addresses recent innovations in the Private Rented Sector (PRS), and the growth in proposals by major operators for the development and long-term management of housing for rent. This is commonly referred to as Build to Rent (BTR). The draft revised Guidance acknowledged the role that BTR development can have in expanding Edinburgh's housing mix and set out the key characteristics of BTR housing, as informed by recent experiences in Scotland and England. The draft revised Guidance also emphasised that BTR is mainstream housing and therefore relevant Local Development Plan policies and guidance will apply.
- 3.19 In terms of design, the draft revised Guidance suggested that a level of flexibility against amenity standards relating to floorspace and the percentage of single aspect units may be applied in certain circumstances where evidence of the quality of the accommodation and particularly, the provision of high quality shared facilities, justifies an exception. The draft revised Guidance noted that any deviations from the Council's standards will require to be fully justified on a case by case basis.
- 3.20 The principle of BTR housing and the proposed approach to design flexibility were explored through consultation survey questions which demonstrated that:
 - 3.20.1 three quarters (75%) of respondents agreed (23% of these strongly agreed) that BTR housing can make a positive contribution to the housing mix in Edinburgh, whilst 23% disagreed (9% of these strongly disagreed). 14% of respondents neither agreed nor disagreed; and
 - 3.20.2 just over half (52%) agreed with the design approach which suggested flexibility to some amenity standards subject to the quality of the development (4% strongly agreed), whilst a quarter disagreed (25%, 7% of these strongly disagreed). 23% of respondents neither agreed nor disagreed.
- 3.21 The overall consensus from the consultation survey is that there is support for the principle that BTR can make a positive contribution to the housing mix in Edinburgh. However, the consequential flexibility in the design approach presented a number of concerns among respondents and views were less supportive on this issue.
- 3.22 When consulting the Edinburgh Urban Design Panel (see section 9 of this report Consultation and Engagement, and Appendix 3), BTR discussions centred on

- adaptability, amenity, layout, and design quality, as well as good practice examples from elsewhere.
- 3.23 The key points relating to BTR developments raised through the broader consultation exercise are provided in Appendix 2, and are explored as follows.
- 3.24 In terms of concerns raised regarding the longevity of individual tenures, this cannot be controlled through the Planning system. However, research suggests that BTR schemes will, as a norm, offer longer tenancy agreements of three years or more compared to traditional private rented sector properties where tenancies offered are usually no longer than 12 months at a time. No change to the Guidance is therefore proposed with regard to this matter.
- 3.25 With respect to maintaining BTR schemes in the private rented sector, emerging practice in England has seen local authorities enter into a covenant with developers to ensure they remain in rental use for the longer term e.g. 15 years or more. The use of a covenant would be particularly relevant where flexibility has been applied to the amenity standards in response to the delivery of the BTR model e.g. shared facilities to be professionally managed by a single landlord, as there is concern these facilities would not be available/maintained if the units were sold individually. This mechanism would be delivered through a legal agreement and can be explored further in practice on a case by case basis. Further clarification has been added to the draft revised Guidance in response to this.
- 3.26 With respect to concerns that BTR developments will be used for short stay commercial visitor accommodation, both the Council (cross-service working group of officers) and Scottish Government are exploring how this type of use can be made distinctive from mainstream housing through legislation. Currently there is limited scope to control such matters as the Planning system can only intervene where there has been a material change in use (e.g. from residential to hotel). No change to the Guidance is proposed with regard to this matter.
- 3.27 With regard to concern over BTR developments reverting to student accommodation, the Planning system has no power to control whether a student or non-student resides in a residential development once built, as student housing is classed as mainstream housing. New purpose-built student accommodation will continue to be controlled though Local Development Plan Policy Hou 8 'Student Accommodation', while the primary market for BTR developments appears to gear more towards young professionals. No change to the Guidance is therefore proposed with regard to this issue.
- 3.28 Due to concerns raised over the relaxation of amenity standards, changes to the Guidance include a statement confirming that flexibility in the standards will be applied only in exceptional circumstances; comparative floorplan diagrams to demonstrate that even if overall floorspace is reduced, it does not have to result in a reduction in habitable space or internal storage; acknowledgment that the creation of more open plan units relates in part to the removal of non-habitable space such as lobbies; and confirmation that the retention of the homes for rent for a specified time period is particularly relevant where flexibility has been applied to amenity standards.

- 3.29 Concerns raised regarding the standard of communal facilities are addressed through the emphasis that they should be high quality, accessible and safe. The Planning system, however, has no power to ensure that these facilities are maintained to a high standard throughout the lifetime of the development. Proposals will be determined based on the information presented as part of applications for planning permission. No change to the Guidance is therefore proposed in this regard.
- 3.30 In response to concerns raised regarding the delivery of affordable housing, the Guidance expects compliance with the Local Development Plan affordable housing policy (policy Hou 6), and confirms that affordable homes should be tailored to meet the greatest housing need, and should preferably be owned or managed by a Registered Social Landlord (RSL). No change to the Guidance is therefore proposed in this regard.
- 3.31 With respect to concerns associated with the provision of accessible homes to meet the needs of people with disabilities, the Guidance similarly expects compliance with Local Development Plan housing mix policy (policy Hou 2) to meet a range of housing needs. No change to the Guidance is therefore proposed in this regard.
- 3.32 Overall the consultation exercise confirms support in principle for the delivery of BTR housing as a part of the housing mix in Edinburgh. Concerns raised relating to matters of detail, particularly with regard to the application of flexibility in the amenity standards, are now addressed in the Guidance through emphasising that flexibility will only be considered in exceptional circumstances on a case by case basis. Matters which fall outwith Planning control are highlighted and relate to all forms of housing development, and not solely BTR.

Edinburgh Street Design Guidance (ESDG)

- 3.33 The committee report of 2 March 2017 regarding the draft revised Edinburgh Design Guidance, proposed the alignment of the ESDG with the finalised version of the Guidance.
- 3.34 The ESDG provides consolidated guidance on the design of projects that maintain, alter or construct streets (including urban paths) in Edinburgh, by adopting a design approach focused on placemaking and sustainable forms of transport.
- 3.35 The ESDG serves to ensure that new development proposals comply with planning policy objectives, while also ensuring the Council's responsibilities under roads and transport legislation, including the delivery of public realm, comply with government policy. For this reason, the ESDG was approved by the Transport and Environment Committee on 25 August 2015 and Planning Committee on 3 October 2015.
- 3.36 The placemaking agenda and the outcome-focused approach of the Council provides clear value in bringing together the design oriented ESDG, and the Guidance, especially since new developments and their associated street environments have critical dependencies which collectively contribute to the creation of high quality places.
- 3.37 The existing text of the ESDG will form the new section 4 entitled 'Designing places: streets' in the Edinburgh Design Guidance. Minor editorial changes will ensure

consistency with the remainder of the document but as no substantive changes from the approved ESDG are proposed, the consultation exercise did not include this subject area and committee approval is not required. This alignment will include signposting to the ESDG Technical Manual which is being developed and signed off in batches under delegated authority by the Executive Director of Place (see item 2 in section 10 of this report: 'Background reading') throughout 2017/18.

3.38 Appendix 5 contains the proposed finalised parts 1, 2 and 3 of the Edinburgh Design Guidance. The changes from the draft revised Edinburgh Design Guidance, approved for consultation by Planning Committee appended in for 2 March 2017, are marked in red text.

Next steps

- 3.39 Once approved and merged with the existing ESDG, the Guidance will be published online and the 2009 Parking Standards for Development Management document will be superseded and removed from the Council's website.
- 3.40 The remit of Transport and Environment Committee is to oversee the Council's responsibilities under roads and transport legislation, so the alignment of the ESDG into the finalised Guidance needs to be considered by that committee.
- 3.41 The approval of, and any subsequent significant changes to, the Technical Manual for streets has been delegated by the Transport and Environment Committee to the Executive Director of Place.
- 3.42 Once the Technical Manual factsheets are completed later in 2017/18 they will be published online, and once published, clear links will be established to the online version of the Guidance.

4. Measures of success

- 4.1 Measures of success will include:
 - 4.1.1 rationalisation of non-statutory guidance;
 - 4.1.2 planning guidance is kept up-to-date and relevant, and ensures that a high quality of development is delivered through the planning application process;
 - 4.1.3 planning guidance is easier to understand for applicants and other stakeholders; and
 - 4.1.4 adoption of the Finalised Edinburgh Design Guidance.

5. Financial impact

5.1 The draft revised Guidance involves no additional financial commitment, with the costs of publishing any updated guidance being met from existing budgets.

6. Risk, policy, compliance and governance impact

6.1 This report does not raise any concern in relation to risk, policy, compliance and governance. Where possible, each section of the Guidance is clearly aligned to, and explicitly states, specific Local Development Plan policies. This helps to promote adherence to the policies, and rigour in-terms of the quality of design.

7. Equalities impact

- 7.1 The impact of this report in relation to the Public Sector Equalities Duty and the ten key areas of rights has been considered. The report has no predicted negative impacts on the delivery of the Council's three equality duties.
- 7.2 The Guidance aims to raise the quality of the built environment in Edinburgh by enhancing accessibility and promoting the protection of the built and natural environment for future generations.
- 7.3 The guidance helps to enhance rights to health by supporting the creation of attractive urban environments with access to good quality private and public green space, and sustainable modes of transport. The guidance helps to enhance rights to a good standard of living, including rights to individual, family and social life through supporting the creation of attractive mixed use environments with a mix of housing types that are well designed and have reasonable levels of day/sunlight.
- 7.4 The guidance is primarily concerned with the physical environment. In this regard, the protected characteristics which are most impacted by the guidance are Age and Disability. It has the potential to impact positively on these protected characteristics by promoting adaptable housing and tenures to meet their varying needs, as well as better use of materials, layouts and legibility of public streets and spaces. The guidance has the potential to impact positively to reduce socio-economic disadvantage by promoting accessibility, provision of open space and affordable housing. The guidance helps to reduce living costs through reduced energy demands. The guidance also aims to improve personal security by ensuring natural surveillance in all new developments.

8. Sustainability impact

- 8.1 The impacts of this report in relation to the three elements of the Climate Change (Scotland) Act 2009 Public Bodies Duties have been considered, and the outcomes are summarised below:
- 8.2 The updated Guidance will help to reduce carbon emissions and other air borne pollutants (i.e. Nitrogen Dioxide) by setting a cap on parking numbers across the city, encouraging developers to provide electric vehicle charging infrastructure and car club spaces, and also through the provision of guidance covering air quality considerations as part of the building design process. The Guidance also reflects last years update to the 'Open Space 2021' strategy to reflect green network

- improvements for walking and cycling, encouraging use of green space for food growing and by reaffirming quality standards that include environmentally sustainable management practices.
- 8.3 This report's proposals will increase the city's resilience to climate change impacts through the use of natural materials and sources that are local to the area, protection of existing green space/planning of new provision as the city grows, helping to conserve soils, wildlife habitats, and by increasing tree and woodland cover to intercept and absorb rainfall.
- 8.4 The proposals in this report will also help achieve a sustainable Edinburgh by improving access to quality green space for all, reflecting a range of recreational needs that contribute to wellbeing, providing inclusive places to meet and participate in socially cohesive activities involving local decision making. In addition, improvements to streets and places are recognised as being critical to economic wellbeing.
- 8.5 The proposals in this report will assist in improving social justice by improving places to cater for all users and increasing accessibility for all.

9. Consultation and engagement

- 9.1 Between April 2017 and July 2017 consultation on the draft revised Guidance was undertaken. A consultation survey was created and hosted on the Council's Consultation Hub along with the draft revised Guidance, inviting comments between 10 April 2017 and 16 June 2017. A consultation description including the survey website link, and an invitation to attend one of two consultation workshops was sent to approximately 2000 stakeholders including community and amenity groups, Neighbourhood Partnerships, MSPs, MPs, local councillors, statutory consultees, architects, landscape architects, developers, agents, and consultants.
- 9.2 The same consultation information was advertised on Planning's Twitter account, as well as via posters that were issued to libraries across the city. Printed copies of the draft revised Guidance were also made available upon request.
- 9.3 Two 'external' consultation events were held on 15 May 2017, with one in the afternoon, and one in the evening, to provide flexibility for professionals wishing to attend. Twenty five groups or organisations were represented at the events. The focus of both was the two main changes proposed in the draft revised Guidance Build to Rent Housing and Parking Standards. Both workshops entailed a short presentation for both topics, followed by question and answer and discussion, while a practical group-work exercise explored the key principles of the new approach to Parking Standards for two indicative development proposals. Positive feedback was received in-terms of the workshop approach.
- 9.4 Two consultation events were also held at the City Chambers, on 15 May 2017 and 25 May 2017, to engage officers from a variety of Council services. The officer workshops followed the same format as the external workshops, and ascertained the views of those who regularly use the Guidance and Parking Standards).

- 9.5 Over the course of the consultation period several internal discussions were held with officers from across the Council's Place Directorate.
- 9.6 Presentations were given to, and advice received from, the Edinburgh Urban Design Panel (31 May 2017- reported in Appendix 3) and the Transport Forum (13 April 2017), both of whom were supportive of the approach the review of Guidance has taken. A presentation and discussion with the Edinburgh Civic Forum was also undertaken on 6 June 2017, focusing on the two main changes highlighted above. This was a useful opportunity to understand some of the issues, especially from the perspective of Community Councils.
- 9.7 On 7 August 2017, a design workshop was held with members of the Planning Committee and led by David Page of Page\Park Architects. Members of the Transport and Environment Committee and the Housing and Economy Committee were also invited. This provided the opportunity to discuss the principles of good design and the benefits of coordinated guidance in helping to create better places. The workshop reinforced the value of good design guidance and the role that the Committee has in helping to deliver better outcomes.
- 9.8 In addition to comments, issues and opportunities received directly through these consultation events, all attendees were also directed towards the consultation survey, or the Spatial Policy team email address, to provide specific detailed feedback. The workshops not only help to raise awareness, but they also ensure feedback, as the success of the Guidance will depend upon the extent to which the users have confidence in it.
- 9.9 In total, 51 survey responses and 21 written submissions were received in response to the consultation exercise. The groups or organisations that provided feedback are listed in Appendix 4.
- 9.10 The Guidance has therefore been subject to robust consultation in advance of Committee consideration, both in March 2017 and between April and July 2017. These processes enabled amendments and refinements to be made to the structure and content of the Guidance based on understanding the needs of a broad range of stakeholders with interests ranging from urban design, transport planning, development management, and community planning.

10. Background reading/external references

Relevant Committee Reports:

- 1. Review of Edinburgh Design Guidance for consultation, Report to Planning Committee (2 March 2017)
- Edinburgh Street Design Guidance Process for Approving Part C Detailed Design Manual, Report to Transport and Environment Committee (17 January 2017)
- 3. <u>Parking Standards Finalised for Approval, Report to Planning Committee</u> (3 December 2009)

- 4. <u>Edinburgh Street Design Guidance FINAL, Report to Transport and Environment Committee</u> (25 August 2015)
- 5. Annual Review of Guidance, Report to Planning Committee (25 February 2016)

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11. Appendices

Appendix 1 Online Survey Summary

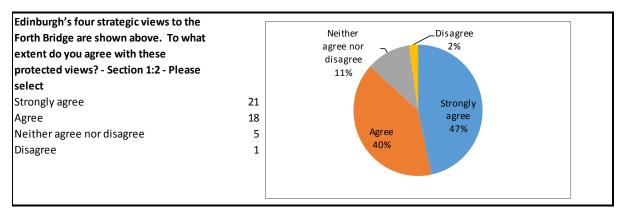
Appendix 2 Key points emerging from the consultation

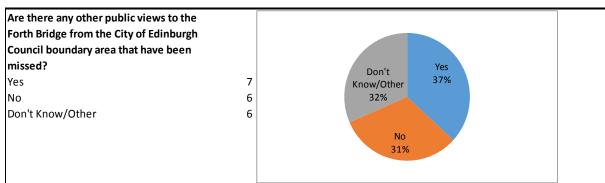
Appendix 3 Edinburgh Urban Design Panel Report

Appendix 4 Stakeholders who responded through the consultation

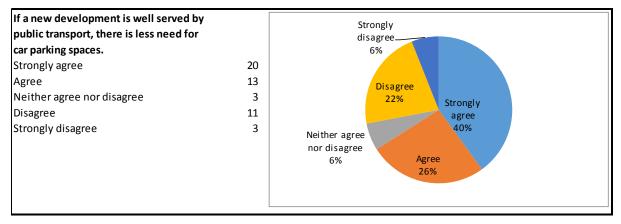
Appendix 5 Edinburgh Design Guidance

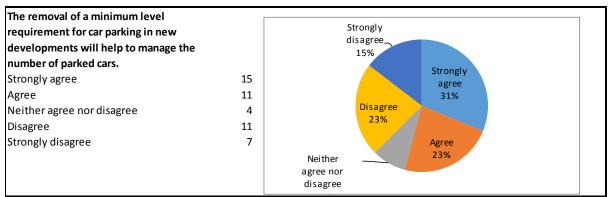
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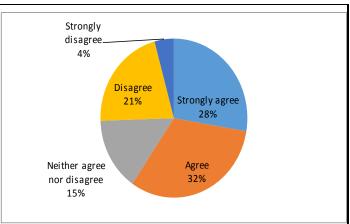


Parking

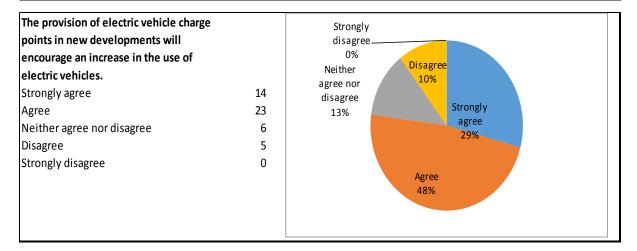




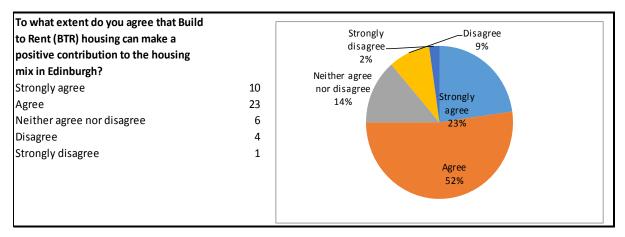
The provision of a maximum level requirement for car parking in new	
developments will help to manage the	
number of parked cars.	
Strongly agree	13
Agree	15
Neither agree nor disagree	7
Disagree	10
Strongly disagree	2

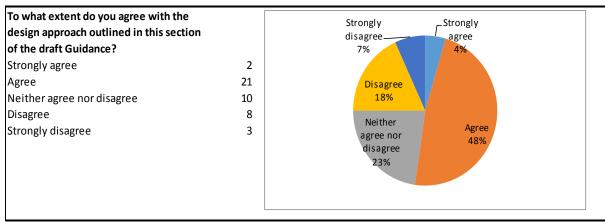


If a new development contains designated car club vehicles and spaces, there is less need for private car parking		Strongly disagree 4%
spaces		
Strongly agree	13	Discourse
Agree	15	Disagree Strongly
Neither agree nor disagree	6	agree 26%
Disagree	13	20%
Strongly disagree	2	Neither agree 31% nor disagree 12%



Build to Rent





Appendix 2 Key points emerging from the consultation

Specific 'key points' that emerged from the consultation, which were cited by three or more respondents, are detailed as follows:

Comments regarding 2.4 Design, Integration and Quantity of Parking

- **12** raised concerns in relation to the issue of potential over-spill parking or the pressure inadequate levels of parking provision may have on surrounding streets;
 - 1. Inadequate parking provision will put pressure on on-street parking in surrounding communities
 - 2. If new developments have less parking people are forced on to nearby streets causing more problems
 - 3. Vision of CEC transport department is unrealistic and contributing to choking of on street parking in suburbs
 - 4. It simply isn't so that not providing car parking spaces reduces car use, people simply park cars all over the road, causing an unattractive obstruction
 - 5. In residential areas out with the CPZ if parking is restricted in developments local streets are "awash" with overspill parking, therefore the parking standards aren't doing their job.
 - 6. Concern that the guidance does not sufficiently consider the implications for on-street parking if not enough parking spaces are provided. In many city centre streets additional parking pressures cannot be accommodated on-street.
 - 7. Provision of a maximum level of parking on new developments may also just transfer the problem onto the surrounding streets.
 - 8. Concern regarding overspill onto surrounding streets guidance needs to be clear about process of ensuring overspill will not have negative impact
 - 9. Standards need to provide for at least one car per dwelling otherwise parking on streets will continue to be out of hand
 - 10. The lack of available parking in new developments can lead to parking problems not only in adjacent streets but on other public places around the development itself
 - 11. Can be over-spill within development, diminishing place aspect
 - 12. New housing developments need to have sufficient parking included in the design, the alternatives being suggested by this questionnaire and at Monday's meeting are delusional; people will (in the main) continue to use cars whether they are catered for and will only contribute to further choking the existing road transport infrastructure system
- 4 commented on minimum parking standards, favouring their retention;
 - 1. No minimum standard leaves parking provision open to exploitation; still need a minimum standard
 - 2. No minimum provision raises concern; logic understandable but this proposed change is open to exploitation by opportunist developers seeking to maximise financial return and minimise the cost of on-site amenities and facilities, to the detriment of good place-making
 - 3. People will still have cars at home even if using public transport for city travel. Anything else is irresponsible and I urge that the removal of minimum standards does not go further.
 - 4. Still need a minimum standard
- 4 comments were made suggesting standards for electric vehicle charging infrastructure should apply to all new developments;
 - 1. At the very least all parking spaces should have provision for charge points, whatever the final ratio adopted, since by 2030 or whenever we shouldn't be running carbon fuelled vehicles anyway.
 - 2. EVC Infrastructure; should be for all new development not just individual dwellings
 - 3. All new developments should have electric charging points for public use or contribute towards them.
 - 4. It is questioned why the passive provision of EV charging infrastructure should only apply to individual dwellings, it is suggested that this should apply to all developments. Furthermore, scaleable provision of charging points (future proofing) is advisable.
- 4 comments were made in relation to the need to better specify visitor cycle standards;

- 1. The section on provision of cycle parking should be much stronger, e.g. rather than "long stay (cycle), parking is likely to be required", should be "will be required". Cycle parking long and short must be provided and the document should reflect this, e.g. why should it not be possible to provide visitor cycle parking on site? as suggested in the document, and it is not suitable to have it "in the vicinity", it must be very convenient for the place the cyclist is visiting or working.
- 2. While the text recognises the importance for both long stay and short stay bike parking, Sustrans recommends that there may be scope to specify targets for visitor bike parking to a greater degree. For residential developments, other cities require 1 visitor space per 4 units (Glasgow) or 1 short stay space per 40 units (London). Other areas that could be further developed include parking provision for scooters / buggies / special bikes and bike trailers at primary schools. Cycle parking standards could also be included for Universities and Colleges, and other public uses such as art galleries or sports stadia.
- 3. Do we differentiate between resident and visitor cycle parking? How will that work if we want resident cycle parking to be covered and secure?
- 4. Need for adequate cycle parking at small supermarkets usually run as branches of the main ones, with names like'Metro', 'Local' etc. These are rapidly increasing in number but often have no cycle parking at all. The reason given is that they arise as 'changes of use' and are therefore not subject to the regulations for cycle parking. If this is so, the regulations need to be changed so that Planning can insist on the addition of cycle parking, possibly provided by the Council (in the street) but at the developers' expense.
- **3** comments were made suggesting more detail is needed regarding the provision of accessible parking spaces;
 - 1. It's disappointing that no mention has been made of blue badge (bb) spaces. Perhaps this will come up later. The standards for minimum bb spaces must be complied with. And in new developments where there are accessible flats or houses, the bb spaces must be near them
 - 2. No minimum means no parking at all? What about disabled parking spaces (a requirement in terms of Building Standards and DDA compliance?
 - 3. Disabled car parking is insufficient, especially in resident parking zones where disabled people cannot park unless they themselves are residents. There are several one-off specialist shops located in resident parking areas and I simply cannot ever go to these. The distance disabled people can mobilise is often severely over-estimated, the guideline for the issue of a blue badge being 50m, that for PIP being only 20m, yet disabled parking is often more than 100m from any doorway. Disabled parking provision has to be enforceable and regularly enforced, otherwise it is pointless. A residential development in Leith almost always has a vehicle belonging to the letting agency parked in BOTH disabled bays, and when it's not there a cone is left saying that parking is for the lettings manager vehicle only. The bays are near to an NHS dental practice, and the road carries double hashed double yellow lines so there is nowhere else accessible to park. Developers think they own the disabled bays and can decide who gets to use them.
- 3 respondents commented on the current maximum parking standards;
 - Use of maximum parking spaces should be guide rather than requirement
 - The maximum allocation for housing is too restrictive.
 - Providing a maximum cap won't stop people having cars
- 3 raised general concerns about reduced parking provision;
 - 1. Car is still regarded as a social necessity even where public transport is available, which is why suitable capacity for car parking is important
 - 2. Have to maintain design based on normal car usage
 - 3. It simply isn't so that not providing car parking spaces reduces car use

Comments regarding 2.11 Housing mix and size

- 3 comments were made regarding the space standard provided in EDG for a two-person flat, suggesting;
 - 1. A space standard to be listed for a 3 person and a 4 person, two bedroom flat. Currently the standard is for a 3 person flat only.
 - 2. Developers at present prepare affordable proposals to comply with the Edinburgh Design Guide and as such two bed flats are designed to 66m2. Properties of this size are a 3 person flat. RSLs generally prefer a 4 person 2 bed flat as this offers greater flexibility from a letting perspective. Due to the way the design standard is presented the size of property preferred by RSLs is rarely provided by developers in their proposals. To ensure appropriate

- affordable housing is provided minimal internal floor areas should be set out in terms of number of persons per dwelling i.e. 2 apartment 2 person, 3 apartment 3 person, 3 apartment 4 person.
- 3. Do not think it is helpful to only provide one minimum floor area for all two bedroom dwellings (i.e. 66m2). Port of Leith Association has two minimum sizes for two bedroom flats, one for 3 persons (63m2) and one for 4 persons (76.5m2). The problem with having a single minimum area for all two bedroom flats is that private developers will generally only provide the minimum requirement, and will show their 66m2 flat layouts as being 4 person dwellings, with two 'double' bedrooms. Flats of this size are not Housing for Varying Needs (HfVN) compliant for 4 person households and we would not allocate them as such, as they are 10m2 below our own minimum (HfVN compliant) area. The effect of this is that, as section 75 housing takes an increasing share of the Council's affordable housing supply programme, the number of genuine four person dwellings (as opposed to private developers' interpretation of four person) will continue to reduce in number over the coming years unless the Council specifies a minimum floor area requirement for four person dwellings and requires a certain percentage of units to be of this size.

Comments regarding 2.12 Purpose Built Homes for Rent

- **10** respondent's questioned what controls there would be over security of tenure/ change of use for BTR developments;
 - 1. BTR provision should find ways to allow long-term tenancy
 - Due to the nature of these developments, the retention of the homes for rent for a specified time period is critical
 - 3. What are controls over tenure?
 - 4. As long as they are not purely more student accommodation. That type of rented accommodation is too concentrated and contributes nothing to council tax.
 - 5. What's to stop a property being built as build to rent then handed over to something like Air BnB?
 - 6. CEC has no control over short term lets
 - 7. Can these not just be turned into student housing / holiday flats / HMO?
 - 8. Far too little control of designation and enforcement has resulted in far too much short term rental and not enough long term rental. eg. too many rental flats are in fact rented by air serial BnB operators. There must be proper differentiation and enforcement between a flats rented to families etc, and those let to students and often out of term used as holiday lets
 - 9. Having large quantities of homes/flats owned by a single person or entity is not a fair way to proceed. That works well for students, and as a city with multiple universities and colleges, is probably necessary to some extent. But it isn't only students that live in Edinburgh.
 - 10. Why wouldn't developers build a development as BTR to benefit from "relaxed standards" then change use when development is complete.
- 8 concerns were raised in regards to the problems that may arise when the market/ demand for this type of
 accommodation becomes saturated or changes, causing future problems with potentially unadaptable,
 single person units;
 - Problems arise when a market becomes saturated or changes, with as a consequence applications for change of
 use to normal market housing possibly creating the slums of tomorrow. It is suggested that this emphasis on the
 acceptability of a flexible approach to standards in the draft Guidance is not itself acceptable and must be
 rejected.
 - Application should show how what is proposed could be changed to meet normal housing market standards if
 market conditions change. The planning system must be responsive to changes in housing tenure as set out in
 the draft Guidance, but additional safeguards in respect of BTR are required to protect future occupants and the
 wider community
 - 3. Longevity of the proposed single planning unit including communal services etc?
 - 4. Accepting that there is market demand for this type of development, what happens when the market reaches saturation point, the bubble bursts and demand falls away.
 - 5. The market for this type of housing in Edinburgh is untested and the build form is inflexible. It may not be attractive to potential home owners. There is a risk that, over time and as the market changes, homes can only be let as student accommodation or short term lets rather than sold or rented as permanent housing. Edinburgh needs more permanent housing
 - 6. This could fall into dilapidation when the demand for student flats projects around Edinburgh bursts like the bubble that it will be and we have a glut of single bed units with no parking

- 7. The idea of small units, little parking and shared facilities will result in enormous complexes (re dilute the cost of facilities) that may go well at first initially but will likely become a headache for future generations.
- 8. Should the bottom fall out of the BTR market in later years, Edinburgh would then be left with a legacy of a large number of small, single aspect studio flats which may require expensive adaptation to meet the needs of future generations
- **7** comments/ concerns were raised over the relaxation of standards or a flexible approach to be adopted for the BTR sector;
 - 1. The design guide space standards should not be relaxed for this sector.
 - 2. Concern over having different standards
 - 3. We do not feel that people renting privately should have to put up with lower design standards than affordable housing tenants or owner occupiers, and we would be concerned that a relaxation of standards may encourage a reduction in design quality in the BTR sector.
 - 4. While the concept [of BTR] is commendable there are dangers in allowing reduced standards.
 - 5. 3 references to the acceptability of a "flexible approach to current space and amenity standards" in BTR schemes and this acceptability could be used by developers to justify the omission of proper standards of open space, amenity for residents, parking and waste and recycling facilities. This would be to the detriment of good place-making and although the draft states that "deviations from the standards need to be fully justified" it is difficult to see how hard-pressed case officers will be able to withstand the pressure to widen the scope of this "flexibility". There is already a worrying lowering of standards of provision in the now highly speculative purpose built student housing market, compared with the normal housing market requirements. why should there be lower standards in the BTR market compared with normal housing standards?
 - 6. Relaxation on design standards concerning result in sub-standard accommodation
 - 7. Flexibility on floor space standards concerning if results in sub-standard accommodation
- 6 concerns were raised over how communal facilities will be guaranteed, managed and enforced in BTR developments;
 - 1. There should be something about the council guaranteeing that the developers maintain the properties and the shared facilities and do not charge too much for it.
 - 2. CEC must guarantee developers maintain properties and shared facilities, not charging too much to do so
 - 3. Planning approval should therefore only be agreed where high standards of communal facilities are guaranteed to prevent increased density of development being unintentionally approved.
 - 4. This section states that a range of high quality, well-managed and accessible on-site shared facilities will be provided in BTR housing. However, presumably this will be market driven, and unless these facilities are required as a planning condition, they will be omitted if market conditions (i.e. demand for private rented housing at the levels of rents that will be required to service these areas) do not favour them. We would have concerns about the planning system reducing its standards for BTR housing (i.e. allowing reduced floor areas and relaxing the rules on single aspect flats) where there is no guarantee that these additional areas will be provided, or, where they may be provided in the first instance and then designed out at a later stage when market conditions change.
 - 5. The planning system cannot ensure that "professional on-site management" will be employed over time and communal facilities properly and safely maintained, so an additional requirement has to be introduced, as is hinted at in the draft Guidance but not clarified. We suggest that for this type of housing there should also be a licensing system set up similar to that for HMO to ensure on-site management and maintenance standards are maintained and action taken if necessary.
 - 6. CEC has no power to enforce if applicant doesn't follow through with elements of a proposal (eg deciding not to provide concierge
- 5 respondents commented on affordable housing provision, advising they would prefer affordable housing to be delivered on site by a Registered Social Landlord to ensure standards required for housing association housing elsewhere/ grant funding are achieved etc;
 - 1. BTR developers appear to favour pepper potting "affordable" housing across the site managed by a company appointed by the developer/investor, with tenants required to pay for additional services such as parking, ground maintenance etc. Our preference is for affordable housing to be delivered on site by a Registered Social Landlord and at rents that are affordable to people on low to moderate incomes.

- 2. We are concerned and doubt that development of BTR would be able to provide affordable housing on site to the standards required for grant funding, or to provide housing that is flexible enough to meet peoples changing needs.
- 3. Specification requirements for the 25% affordable housing could usefully be added to the document including for example: external drying facilities, enclosed backgreen for flatted developments, wheelchair parking provision private to wheelchair adapted properties, proportion of wheelchair adapted properties, meeting grant requirement of Housing for Varying Needs.
- 4. While we welcome the fact that BTR housing will have a 25% affordable housing requirement, we would want to ensure that the standards for the design and layout of the 25% affordable element are maintained at the levels required for housing association housing elsewhere.
- 5. BTR should be delivering affordable housing as per LDP Policy preferably through RSL but recognition that midmarket rent suits the BTR model
- 4 comments made relating to the need for BTR properties to be suitable for disabled users, particularly for them to be fully accessible for occupation or able to be retrospectively adapted;
 - 1. Need to make sure there are enough fully accessible rented houses for disabled people especially homes with level access and walk in showers
 - 2. Provide mix of housing suitable for disabled people
 - 3. I'd like to see design guidance on making BTRs conducive to occupation by disabled people.
 - 4. BTR properties need to be accessible for disabled tenants. Consider: a target percentage designed for accessibility; a larger percentage designed to be conducive to retrospective adaptation for accessibility. See previous comment re accessible BTRs. This applies to housing developments in general.
- **3** comments suggested that the design and space quality of BTR developments should be compatible with buy to sell/any new build;
 - 1. The design quality of BTR should be at least compatible with new Buy to Sell developments
 - 2. Where the buildings are intended as long term lets, shouldn't the same space and layout regulations apply as for any new build?
 - 3. We would like to see minimum building standards raised to be closer to best practice

EDINBURGH URBAN DESIGN PANEL

Edinburgh Design Guidance

REPORT of meeting held at the City Chambers on 31 May 2017

> EAA EAA

> EAA

Presenters

Steven Murrell City of Edinburgh Council Greg McDougall City of Edinburgh Council

Panel

Emily Peel Yates Chair - Landscape Institute Scotland Ben Rainger Adam Thomson RTPI in Scotland Ken Lochrie Ola Uduku **ESALA** Irene Barkley Lila Angelaka

Historic Environment Scotland Secretariat - City of Edinburgh Council Susan Horner

Observer

Kofi Appial City of Edinburgh Council

1 **Summary**

This report relates to the current review of the Edinburgh Design Guidance, 2013. 1.1 The Panel welcomes the opportunity to review the approach being taken.

2 Introduction

- 2.1 This report relates to the review of the Council's Edinburgh Design Guidance. originally approved in May 2013. This guidance has set out the Council's expectations for the design of new developments in Edinburgh.
- 2.2 A report was approved by Planning Committee, 25 February 2016 outlining the requirement to review and update the Edinburgh Design Guidance. A project was initiated to take forward the review process in August 2016.
- 2.3 An updated draft of the guidance is submitted to the Planning Committee in March 2017. Following draft consultation, the final version will be submitted in 2017.
- 2.4 The Design Panel have previously considered both the Edinburgh Design Guidance (25 April 2012, 30 May 2012 and 26 October 2016) and the Street Design Guidance (27 November 2013 and 30 April 2014).
- 2.5 No declarations of interest were made by any Panel members in relation to the review of the guidance.
- 2.6 This report should be read in conjunction with the presentation material.
- 2.7 This report is the view of the Panel and is not attributable to any one individual. The report does not prejudice any of the organisations who are represented at the Panel forming a differing view about the proposed design guidance at a later stage.

3 Build to Rent Housing

- 3.1 The Panel discussed this type of housing. Several Build to Rent developments have been reviewed by the Panel. They noted that this type of housing is aimed primarily at higher education leavers and company lets. Some of the Panel members have visited examples of Build to Rent buildings in Copenhagen. It was noted that these buildings generally are designed to a high standard and often include extensive shared facilities for the residents.
- 3.2 Adaptability in the future: Given the potential volume of this type of development within the city the Panel noted the importance of these buildings being flexible and easily adaptable for other uses in the future. Therefore, adaptability should be considered as part of the design process.
- 3.3 Amenity: The Panel advocated especially if the units are single aspect and designed to the minimum area standard that good levels of daylighting should be achieved. Shared amenity areas are also very important and like the examples in Copenhagen should be designed to a high quality while offering a wide range of uses.
- 3.4 Layout: The layout of the units are generally off a central corridor arrangement like a hotel. The Panel suggested that the design of these circulation areas require careful consideration for example it was suggested that they could be designed as a street.
- 3.5 Design Quality: The Panel advocated innovated and well designed developments which integrate with the city and help to reinforce the place.
- 3.6 The Panel were supportive of this type of housing forming part of the Edinburgh housing mix. However, expressed concern at the amount of Build to Rent and student accommodation coming forward in the city centre. The Panel advocated that a balance is require which should ensure that main stream housing is also delivered within the city centre.

4 Parking Standards

- 4.1 The Panel advocated a design led approach which integrates parking within developments to ensure places for people and not cars.
- 4.2 The Panel welcomed a simplification of the parking standards.
- 4.3 Public Realm and Landscape Design: Air pollution can be reduced by the introduction of hedging, trees, ie greening elements into the design of the public realm. Therefore, the Panel suggested that a landscape design with greening elements should be considered in the designing of urban spaces.
- 4.4 Sustainability: The Panel advocated a sustainability approach to all development proposals.

- 4.5 Ground Floor Uses: The Panel noted that in most urban sites the use of the ground floor for residential is not ideal. The Panel advocated that where possible car parking should be located below ground.
- 4.6 Case Study Copenhagen: The Panel noted an example in Copenhagen where all of the car parking for a housing development has been contained within a 5 storey car park. This car park serves the entire site and has been designed as an integrated part of the site layout. This approach has allowed cars to be removed from the residential streets.
- 4.7 Slateford Green Development Edinburgh: This development, built several years ago is a 'car free' development. The Panel suggested that this could be considered by CEC as an example of a car free development in the city.

Appendix 4 Stakeholders who responded through the consultation

As well as representation received from individuals, the below tables identify organisations or groups who provided feedback via the consultation (where representation details were provided):

CONSULTATION SURVEY RESPONDENTS:	Historic Environment Scotland
Barratt Homes (East Scotland)	LGBT Youth Scotland
Broughton Spurtle (community paper/website)	Living Streets Edinburgh
Carplus Bikeplus	McGregor Bowes
Central Taxis	Morgan McDonnell Architecture Ltd
City of Edinburgh Council (various sections)	New Town & Broughton Community Council
Cockburn Association	Old Town Community Council
Community Land Advisory Service	Places for People
Corstorphine Community Council	Port of Leith Housing Association
Craiglockhart Community Council	Scotland's Garden and landscape Heritage
Dunedin Canmore Housing	Scottish Natural Heritage
Edinburgh Access Panel	Scottish Wildlife Trust
EGHT Residents' Association	Scottish Wildlife Trust Lothians Local Group
EMA Architects	Valuation Office Agency
Hackland + Dore Architects	Whiteburn Projects Ltd

WRITTEN SUBMISSIONS RECEIVED FROM:	Moda Living
City of Edinburgh Council (various sections)	Port of Leith Housing Association
Cockburn Association	Scottish Environmental Protection Agency
Edinburgh Adapts	Scottish Wildlife Trust
Grange and Prestonfield Community Council	Spokes
GVA Grimley	Sport Scotland
Historic Environment Scotland	Strange Associates
Homes for Scotland	SWECO

'EXTERNAL' WORKSHOP ATTENDEES:	GVA Grimley
Allan Murray Architects	Ironside Farrar
Car Plus	J Smart & Co (Contractors)
Charles Alexander Strang Associates	Jones Lang LaSalle
Comprehensive Design Architects	NHS Lothian
Craiglockhart Community Council	Port of Leith Housing Association
Dandara	Rettie & Co Ltd.
Dunedin Canmore Housing	Spokes
EDI Group	SWECO
ema Architects and Masterplanners	Systra
Enterprise Car Club	Transport Planning Limited
Format Design	University of Edinburgh
Graham Construction	Whiteburn Projects



Foreword

Edinburgh Design Guidance - Raising the Bar

Edinburgh is a unique city of extraordinary quality. Contained between the Pentland Hills in the south and the Firth of Forth to the north, our city has grown from the medieval form of the Old Town across the Waverley Valley to the classical layout of the New Town and beyond into the tenemented and terraced stone suburbs of the 19th and 20th century.

Over the centuries architects, builders and developers have exploited the topography and the natural environment to create the stunning city we have today: a city with two world heritage sites that consistently ranks as one of the best places in the UK to live, work and study.

The task facing us now is to ensure that future developers and builders reflect on the nature of the city and design with that enduring quality in mind. Some recent developments have failed to grasp this challenge resulting in bland, universal architecture. In the context of an expanding city, this is something we need to address – just good enough will no longer be good enough.

We need to create developments that we are proud of, and not just add another suburban extension to the last one. We need to create new city suburbs and new employment areas, places which reflect and build upon the city's rich architectural and design qualities, but are places in their own right.

To achieve this we must all work with the same ambition. Councillors, planning officers and developers must all have the same aims for the city – to raise the bar, create great places and match the quality of our predecessors.

The Edinburgh Design Guidance is a tool to help achieve this.



Councillor Lewis Ritchie Convener of Planning

It sets out the standards that must be met in the design of new buildings and spaces. The principles contained within the guidance are informed by the qualities that make Edinburgh special.

For the first time, the guidance contains advice on parking standards and merges in the Edinburgh Street Design Guidance as a new Chapter 4. This ensures a holistic approach to new development covering buildings, open space and roads.

As society changes, the city too is entering a new era of change and development. There is an opportunity for us all to play a part in creating an urban legacy for the future generations.

This document has been strengthened, reviewed and amended as a result of the time and input from several individuals, groups and partners. I would like to thank everyone who has been involved in that process.

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Edinburgh Design Guidance

How does it relate to other guidance?

This document is part of a suite of non-statutory planning guidance:







Further information

If you require any further information or clarification, please visit our website at **www.edinburgh.gov. uk/planning** or contact the Planning Helpdesk on 0131 529 3550.

How is it structured?

section.

There are chapters on Context, placemaking and design; Designing places - buildings; and Designing places - landscape, biodiversity and the water environment.

The introduction to each chapter sets out over-arching aims and expectations for new development.

Each subject area has its own section.
-Main design principles introduce each

Explanatory text is included, where relevant to provide more detail.

Technical guidance is contained in the grey pages.

Local plan policy references are included.

The payigation panel allows online users to interact.

2. Designing Buildings

The navigation panel allows online users to interact with the document.

This chapter sets out the Council's expectations for how features within the built form relate to its setting. The

overall composition of streets is shaped by how individual buildings work together, creating the unique visual

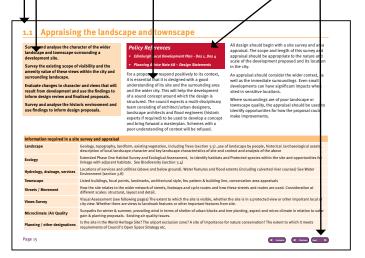
Have a positive impact on the immediate surroundings, wider environment, landscape and views through its height and form, scale and proportions, materials and detailing, positioning of the buildings on site, integration of ancillary facilities, health and anenity of occupiers.
 Repair the urban fabric, establish model forms of development and generate coherence and

· Achieve high standards of sustainability in building design, construction and use and be adaptable to

Balance the needs of pedestrians, cyclists, public transport users and motorists effectively and minimise
the impacts of car parking through a design-led and place specific approach.

. Enhance the environment, manage exposure to pollution and reduce overall em

character through repetition, variety and focal points within the street scene





Introduction

This updated guidance sets out the Council's expectations for the design of new development in Edinburgh.

Greater emphasis has now been placed on creating places that support the development of a compact, sustainable city. Support for active travel and public transport is reflected in revised parking controls in new developments. Landscape, biodiversity and green infrastructure are given greater prominence to reflect the wider contribution they make to placemaking and wellbeing. Air quality, which is fundamental to public health and quality of life, is addressed through various mechanisms, including the requirement to make provision for electric charging points to support the use of vehicles that emit lower levels of emissions.

The Council wants new development to create great places for people to live, work and enjoy. In order to do this, we need to achieve the highest quality of design that integrates successfully with the existing city.

Many recent developments have achieved this aim and some are used as examples in the guidance. These developments establish a standard for the design quality of new development. Where appropriate, the guidance includes examples from outwith Edinburgh.

This guidance is intended for all new buildings but also includes a revision to the parking standards and will ultimately sit alongside a revised Street Design Guidance. This will allow a holistic, place-based approach to design and development. The examples given show principles and concepts that apply to a range of different building types. These will also include examples of good street design, once the Street Design Guidance has been aligned with this guidance.

The guidance should be used as a point of reference, as a basis for the planning and design of new development proposals and will be a material consideration in assessing planning applications. It aims to:

- provide guidance on how to comply with the policies in local plans;
- support good placemaking by bringing together guidance for streets, spaces and buildings;
- explain the key ideas which need to be considered during the design process;
- give examples of good quality design; and
- set out the requirements for design and access statements.

Each section provides guidance on specific topics that should be used as appropriate. It is important that it is read in conjunction with statutory development plans and other planning guidance depending on the type and location of development.

The Council's design-related policies can be broadly divided into themes relating to context, built form, landscape and biodiversity. This is reflected in the structure of the guidance. Where appropriate, technical guidance is included. A fourth section, related to streets, will be appended to the finalised guidance.

Policy context

Scottish Government policy

A Review of the Planning System, a new National Transport Strategy and Cleaner Air for Scotland – the Scotlish Governments policy document on Air Quality, all reflect a changing policy context. A more co-ordinated approach with outcomes that deliver better places is a common theme.



Creating Places and **Designing Streets** are the two planning policy documents for Scotland that relate to design. They set out government aspirations for design and the role of the planning system in delivering these. They are material planning considerations.

Creating Places sets out the six qualities of successful places as:

• distinctive;

- safe and pleasant;
- easy to move around;
- welcoming;
- adaptable; and
- resource efficient.

These guiding principles underpin the approach to delivering good places.

The Society of Chief Officers for Transportation in Scotland's (SCOTS) *National Roads Development Guide* provides technical guidance to support the design aspects of Designing Streets, by focusing on how to achieve Roads Construction Consent (RCC) for all new or improved roads for a local authority to adopt.



ROADS DEVELOPMENT GUIDE





The Development Plan

The **SESplan Strategic Development Plan** and the **Edinburgh Local Development Plan** make up the Development Plan for Edinburgh. This guidance interprets and applies the policies set out in the Local Development Plan and provides more detailed advice.

The Local Development Plan, which was adopted in November 2016, provides the main basis for determining planning applications.

Relationship to other guidance

This Design Guidance is one of a number of userfocused pieces of guidance which interpret the policies set out in the Local Development Plan. It is important that, where applicable, these are read in conjunction with one another. For example, when designing a new building in a conservation area, reference should be made to this guidance and the Guidance on Listed Buildings and Conservation Areas.

Edinburgh also has a number of site/area specific planning guidance, including Development Briefs.





View to the Pentland Hills from Edinburgh Castle



Tightly packed buildings in the Old Town—Cowgate viewed from South Bridge



A New Town Street: Northumberland Street

Edinburgh

Edinburgh is a unique and beautiful city - recognised by the UNESCO inscription of its two world heritage sites: the Old and New Towns of Edinburgh and the Forth Bridge. Its distinct geography and rich and varied heritage of buildings and urban design combine to create a unique cityscape. Edinburgh is a city of startling contrast – between its landscape and buildings and in its streets and spaces.

Landscape is vitally important. Containment is provided by the Firth of Forth to the North and the Pentland Hills to the South, but it is the hills within Edinburgh that create some of the most striking aspects of its setting. Castle Hill, Arthur's Seat, Calton Hill and others create a three dimensional city. Not only do they dominate views throughout the city, but they also create vistas, allowing the city

to be seen and understood from a series of different vantage points.

The topography of hills, ridges and valleys have enabled the development of a series of distinct areas that juxtapose with one another. Nowhere is this interplay between landscape and buildings clearer than in the city centre. Both the Old and New Town are designed around their landforms. In the Old Town, the Royal Mile slopes gently down the Old Town ridge; buildings are tightly packed together off closes that run down to the Waverley and Cowgate valleys. The New Town's more undulating landscape is reflected in its spacious and geometrically ordered streets.

Throughout history, the city has evolved in response to changing needs and growth. In the 18th and 19th centuries, bridges and streets were thrust into the medieval pattern of the Old Town to create links with the wider city and improve the environment by providing more air and light. Edinburgh has also embraced change to meet current needs.

Subsequent expansion of the city have has created distinctive neighbourhoods with their own sense of place but which also contribute to the character of the city as a whole. Areas like the Grange, Marchmont and Bruntsfield, Inverleith, Leith, Gorgie and Dalry, have different building forms, but with their consistent heights, sandstone walls, slate roofs, vertical windows and architectural motifs they feel very much part of Edinburgh.



An Old Town Improvement Street: Cockburn Street

Although the later post war suburban areas of the city are less distinct, their simple layouts knit well into the wider city. Where streets align with the city's landmark features, their sense of belonging to Edinburgh is amplified.

Confident modern developments sit alongside some of the oldest buildings in the city. Ironically, this process of change means many parts of the Old Town are younger than large swathes of the New Town.

Edinburgh contains the greatest concentration of built heritage assests in Scotland, with nearly 5,000 listed items comprising over 30,000 separate buildings. These range in scale from the Forth Rail Bridge to the statue of Greyfriars Bobby, and in age from the 12th century to the late 20th century. The city accounts for about one-third of all the 'A'



Tenements in Marchmont—Warrender Park Terrace

listed buildings in Scotland and has a much higher proportion of 'A' listed buildings than the national average.

Edinburgh has a total of 49 conservation areas covering 25% of the urban area with a resident population of over 100,000. Each conservation area has its own unique character and appearance. The variation in character illustrates the history of Edinburgh. They range from the internationally famous New Town, which is the largest conservation area in Scotland, to small villages which have been absorbed as the city expanded.

The public realm of Edinburgh offers a wealth of streets, squares and spaces, gardens and pedestrian spaces, which act as gathering places for people and settings for the historic buildings making an important contribution to the



Suburban housing with view to Edinburgh Castle—Greenbank Crescent

architectural character of the area. It can be seen as the glue that binds places together.

This combination of natural and built heritage should be maintained and enhanced. The principles presented here are informed by qualities that make Edinburgh special. They seek to achieve new development that draws on and interprets the past; with an emphasis on creativity and innovation rather than prescription.

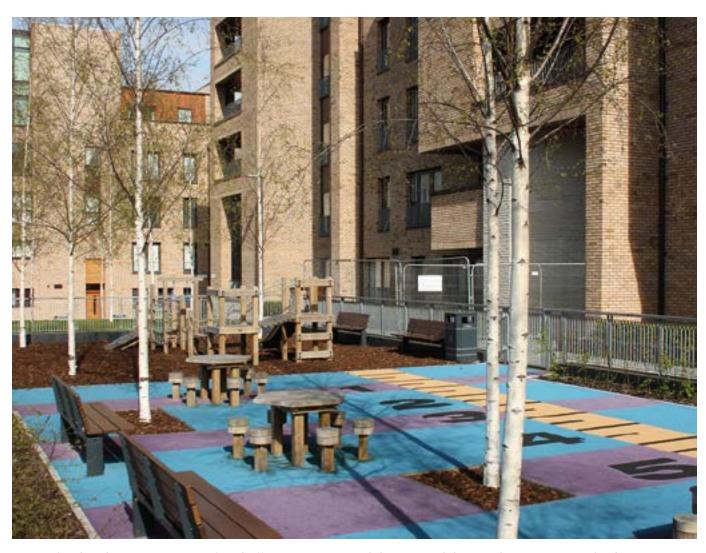
The Challenge

The quality of our environment undoubtedly contributes towards Edinburgh's success as an international city to which people and businesses are attracted. For this to remain the case, it is vitally important that we continue to respect the existing built fabric. In doing so, Edinburgh should not become a museum piece. Instead, the city must continue to embrace change so that it can adapt to its evolving needs. However, this sets up a possible tension—between preservation and change. As many of the examples used in this guidance demonstrate, design led solutions can resolve a range of competing needs.

Where surrounding development is fragmented or of poor quality the aim is to establish a new context that better reflects the inherent character of Edinburgh. The Council encourages model forms of development that generate coherence and distinctiveness. Both the historic environment and the many modern developments shown in this guidance provide context of quality that should be reflected in these situations.

We can reduce the impact of a changing climate through innovative placemaking. For example integrating greenspaces into new and existing developments can reduce the risk of flooding and act as a buffer against noise and air emissions from vehicles, whilst providing open spaces for walking, cycling and nature.

A design process that challenges conventional ways of doing things will be key to creating successful places, particularly for new and emerging suburban areas.



Air quality has become a particular challenge in cities across the world. Considered use of design and placemaking can minimise the impacts of pollution while, at the same time, promoting spaces for walking, cycling and nature.

If the aims of this guidance are met, forthcoming developments will be more successful in the longer term - meeting the needs of all who use and experience the city.

Promoting good design

It is important to achieve the highest quality of design possible. This means committing to good quality at every stage of the design process.

Well designed developments can actively enhance the environment; manage exposure to air, noise and light pollution and reduce overall emissions. In contrast, other new developments may increase the emission of pollutants that are harmful to human health and impact on the quality of life.

Pre-application advice

The Council encourages and promotes engagement on design issues through pre-application advice. Providing advice prior to the formal submission of a planning application can ensure that the quality of a development is improved and certainty in the outcome can be increased for the applicant.

This process provides an opportunity to consider the development in principle and to influence its design, so that potential problems are resolved or reduced. This will avoid the need for expensive and timeconsuming retrospective re-design.

Design review

The Council supports the process of design review. Depending on the size, complexity and sensitivity of the site, proposals may be referred to either *Architecture + Design Scotland* (the Scottish Government's advisory body on urban design matters) or the Edinburgh Urban Design Panel. This should be done at the pre-application stage.

Architectural quality and competitions

The Council's policies and guidance aim to raise the urban design quality within the city. For particularly important or sensitive sites or for some nationally important uses, architectural competitions may be the best way of ensuring the highest architectural quality.

Community and place

Good design needs to take account of community needs and community aspirations. The Review of the Planning System and the Community Empowerment Act require that the community become more involved in helping to deliver better places. Use of tools like *The Place Standard* show how local needs can be incorporated into development briefs and other planning processes.



View from Meadows of new housing

1. Context, placemaking and design

This chapter sets out the Council's expectations for how new development should relate to its context; a key theme throughout this document. High quality design supports the creation of good places and has a positive impact on health and wellbeing. The highest standards of design can be achieved through the factors set out in the Scottish Government's Creating Places and Designing Streets policies, to create new vibrant places which are distinctive, safe and pleasant, easy to move around, welcoming, adaptable and sustainable.

The key aims for new development are:

- demonstrate an understanding of the unique characteristics of the city and the context within which it is located;
- demonstrate an understanding of the historical development of the site;
- reinforce its surroundings by conserving and enhancing the character and appearance of the landscape and townscape; including protecting the city's skyline and locally important views;
- ensure that adjacent development sites are not compromised and that there is a comprehensive approach to layout;
- provide appropriate densities depending on their existing characteristics;
- incorporate and use features worthy of retention, including natural features, buildings and views; and
- demonstrate a good understanding of the existing water environment on site and provide a creative response to manage future surface water.

1.1 Appraising the site and context

Survey the site and immediate context and analyse the character of the wider landscape and townscape surrounding a development site.

Survey the existing scope of visibility and the amenity value of these views within the city and surrounding landscape.

Evaluate changes to character and views that will result from development and use the findings to inform design review and finalised proposals.

Survey and analyse the historic environment and use findings to inform design proposals.

Local Development Plan policies

- Des 1 Design Quality and Context
- Des 3 Development Design
- Des 4 Development Design
- Des 11 Tall Buildings
- Env 1 World Heritage Site
- Env 6 Conservation Areas
- Env 7 Historic Gardens and Designed Landscapes
- Env 11 Special Landscape Areas
- Env 17 Pentland Hills Regional Park

For a proposal to respond positively to its context, it is essential that it is designed with a good understanding of its site and the surrounding area and the wider city. This will help the development of a sound and sustainable concept around which the design is structured. The council expects a multidisciplinary team consisting of architect/urban designers, landscape architects, flood engineers, historic experts to be involved in developing and bringing forward a masterplan. Schemes with a poor understanding of context will be refused.

Contextual evaluation should consider the impact of the proposal in terms of its physical structure: mass, density, materials, height, as well as its function and uses. Consideration should be given to whether it has a positive impact on the local community and whether that impact is local or area-wide.

Information required in a site survey and appraisal		
Landscape	Geology, topography, landform, existing vegetation, including Trees (section 3.5), use of landscape by people, historical /archaeological assets, description of local landscape character and key landscape characteristics of site and context and analysis of the above.	
Ecology	Extended Phase One Habitat Survey and Ecological Assessment, to identify habitats and protected species within the site and opportunities for linkage with adjacent habitats. See 3.4 Biodiversity on page 95.	
Hydrology, drainage, services	Locations of services and utilities (above and below ground). Water features and flood extents (including culverted river courses). See 3.8 Water environment on page 106 .	
Townscape	Listed buildings and their setting, focal points, landmarks, architectural style, feu pattern & building line, conservation area appraisals.	
Streets / Movement	How the site relates to the wider network of streets, footways and cycle routes and how these streets and routes are used. Consideration at different scales: structural, layout and detail.	
Views Survey	Visual Assessment (see following pages) The extent to which the site is visible, whether the site is in a protected view or other important local or city view. Whether there are views to landmark features or other important features from site.	
Microclimate /Air Quality	Sunpaths for winter & summer, prevailing wind in terms of shelter of urban blocks and tree planting, aspect and micro-climate in relation to solar gain & planting proposals. Existing air quality issues.	
Planning / other designations	Is the site in the World Heritage Site? The airport exclusion zone? A site of importance for nature conservation? The extent to which it meets requirements of Council's Open Space Strategy etc.	

Much of the city's built up area is defined by a traditional townscape character that creates a high quality, sustainable and vibrant urban environment. Consideration should be given to the way new buildings are inserted into the framework of the existing townscape; respecting its scale and producing architecture of the highest quality.

Architectural form and building heights must, therefore, be appropriate to location and function. The objective is to preserve and enhance the existing townscape character, and pursue the highest architectural and urban design quality, incorporating social; environmental and economic needs.

New development should be sensitive to historic character, reflect and interpret the particular quality of its surroundings, and respond to and reinforce locally distinctive patterns of development, townscape, landscape, scale, materials and quality. New development should strengthen the context of existing conservation areas, respecting the topography, physical features, views and vistas.

There is no simple prescription for good architecture beyond the precepts of 'commodity, firmness and delight'. Good new buildings in historic settings should not merely be fashionable, but should stand the test of time. Conformity to restrictive formulae or the dressing of modern structures in traditional forms may fail to produce quality architecture. The aim is to encourage development which reflects and creatively interprets the past. Consistency and continuity is important, and new buildings should not draw attention to themselves disproportionately.

Historic environment

The historic environment includes ancient monuments, archaeological sites and landscape, historic buildings, townscapes, parks, gardens, designed landscapes and other features.

Sites within the two World Heritage Sites (WHS),
The Old and New Towns of Edinburgh and the Forth
Bridge require particular consideration. Historic
Environment Scotland's 'Managing Change in the
Historic Environment: World Heritage' provides advice.
There are management systems in place for both of
the WHS.

The proposals should explain the impact on the Outstanding Universal Values within the Environmental Impact Assessment.

It is also important to understand the setting of historic assets. Historic Environment Scotland's (HES) *Managing Change in the Historic Environment Guidance* provides advice on a range of subjects. Their guidance on *New Design in Historic Setting* explains the process of design that can help deliver exciting contemporary interventions that energise and enhance our historic areas.

Conservation Area Character Appraisals explain the special architectural and historic interest for each of the City's conservation areas. Edinburgh also has a heritage of listed buildings. If these fall within or adjacent to proposed development their significance and setting should be surveyed and appraised.

Where a site is of known or suspected archaeological significance a programme of archaeological works will need to be agreed with the Council. As the archaeology may influence the extent of development, this should be done at the site appraisal stage. On some sites, excavations may be required.

Inventory of Gardens and Designed Landscapes in Scotland describes landscapes of national importance. Proposals should assess the impact the development will have on the Gardens and their setting. Proposals that potentially will affect local and regionally important landscapes also require assessment.

Landscape character

Characterisation is a way to describe and understand the distinct patterns of elements which combine to create a 'sense of place', including geology, landform, soils, vegetation, land use, urban form, architectural style and experiential qualities.

A landscape character assessment can assist in defining objectives to protect, manage or restructure the landscape.

Edinburgh's unique and diverse landscape contributes to the city's identity and international renown. The landscape context is described in the *Lothians Landscape Character Assessment* and in more detail in the *Edinburgh Landscape Character Assessment*. *Special Landscape Areas* have been identified as being of particular quality and their Statements of Importance also provide relevant information.

These should be referred to as part of a sites landscape appraisal, helping to ensure that developments interact with their surroundings and aspire to shape high quality future landscapes. The urban edge for example should be designed to conserve and enhance the special character of the city. See **page 18** for technical information and requirements.

Visual assessment

Visual assessment is a method to help understand the changes to views that would be experienced by people in the short, medium and long term should the development go ahead.

It is an essential tool to explore design options and assess the visibility of new proposals and how they will be viewed in relation to existing built and natural features.

In some instances the use of tethered balloons or scaffolding structures will be required to allow people to understand the visual impact.

Findings should be presented in **Environmental Impact Assessments**, Design Statements or
Landscape and Visual Appraisals and follow the
approaches set out by the document 'Guidelines
for Landscape and Visual Assessment' (most recent
edition).

This process should identify all the views within the landscape or townscape from a range of distances and orientations from the proposed development and take into account how this will be viewed from particular vantage points. These include hill tops, paths and greenspaces, visual corridors along streets and roads, bridges and residential neighbourhoods. See page 22 -25 for technical information and requirements.



Site appraisal

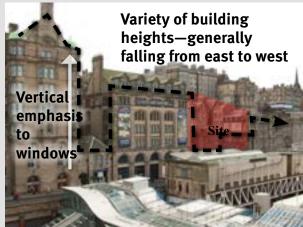
These drawings and images illustrate some of the ways a site can be be appraised—in this case the gap site next to the City Art Centre. Information like this helps build up an understanding of a site—it does not prescribe the way it should be developed.



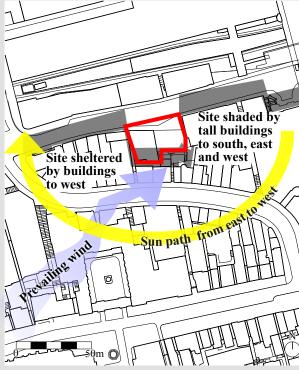


Important nearby features

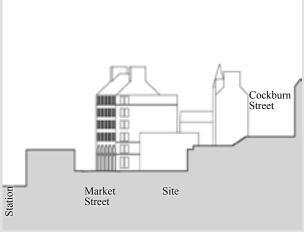




Building heights and form



Microclimate



Site section

Historic Environment

Development should relate to the historic context in terms of the following principles:

- New developments should be sensitive to historic character and attain high standards in design, construction and materials.
- New buildings should be designed for a long life and soundly constructed of durable materials chosen to suit their context. They should be capable of alteration and adaptation in response to changing needs in the future.
- Historic settlement patterns, plot boundaries, pedestrian routes and enclosures should be respected, as should the form, texture, grain and general character of the site as a whole.
- Most of Edinburgh's conservation areas have a
 predominantly consistent design, or one which is
 layered and made up of diverse components, yet
 with an overall integrity. The consistent use of a
 limited range of materials for roof coverings, walls,
 ground surfaces, and for other elements and
 details, can be vital to the integrity of an area.
- New buildings should be designed with due regard to their site and surroundings using materials that will weather and age well and settle into their place in the townscape.
- Development should remain within the range of heights of historic neighbouring properties.

- Facades should respond to the rhythm, scale and proportion of neighbouring properties.
- Development should respect the established building line.
- The density and architectural style of new development should respect the scale, form and grain of the historic context.
- Roof forms and materials should reflect the tradition of the locality.
- The use of materials should respect and strengthen local traditions, reflecting the naturally predominant material.
- Traditional means of enclosure should be provided, erecting either a wall sympathetic to the local context or railings of an appropriate design.
- Development should retain significant gaps or open spaces which contribute to the street scene or provide the setting for buildings of architectural or historic importance.
- Development should retain trees which contribute the character of the streetscape.
- In exceptional circumstances, where there is a gap in a formal scheme, for example, it may be appropriate to rebuild or build to a pre-existing or reconstructed design.

In assessing whether or not unlisted buildings make a positive contribution to the special architectural or historic interest of a conservation area, the following questions will be considered:

- Does the age, style, materials or any other characteristics of the building reflect those of a substantial number of other buildings in the conservation area?
- Does it relate in age, style, materials or any other historically significant way to adjacent historic buildings and contribute positively to their setting?
- Does it reflect the development of the conservation area?
- Does it have significant historic associations with the established features such as the road layout or traditional plot sizes?
- Does it have landmark quality?
- Does it reflect the traditional functional character of the area?
- Does it have significant historic associations with local people or past events?

Landscape Character

Technical checklist

Determine the relevant study area in relation to the proposed development. Agree with planning authority.

Describe and categorise the surrounding landscape and townscape based on the predominant topography, land use, eras of settlement and patterns of form, scale and enclosure. Refer to existing sources of information as necessary.

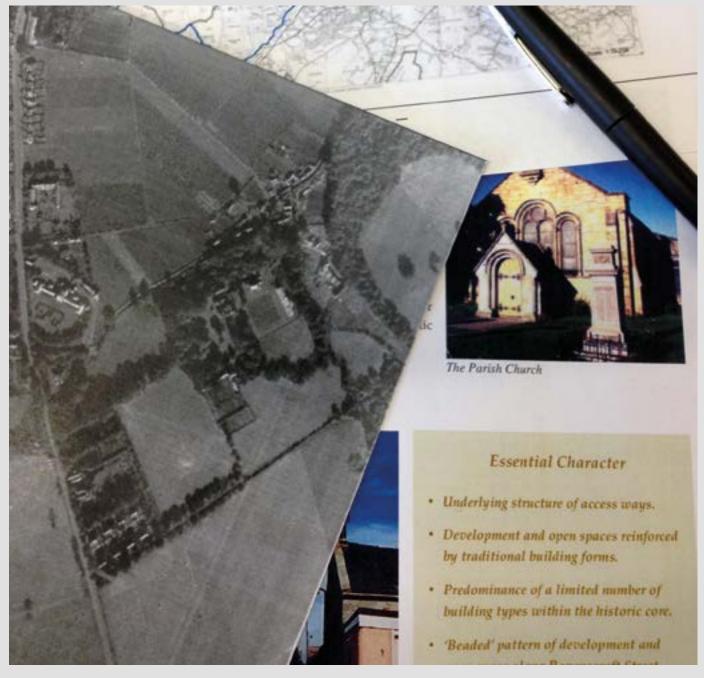
Identify sensitive receptors within the study area, such as designated sites, listed buildings and scheduled sites, existing trees and woodland and describe key characteristics of site.

Provide a succinct written appraisal assessing the landscape/townscape impact of the proposal. Describe and evaluate change to character by considering how aspects of the proposal relate to its surroundings and whether change will weaken or enhance existing character. Where relevant incorporate design mitigation measures.

Additionally, designed landscapes will require a historic landscape assessment.

Lothians Landscape Character Assessment (1998). Edinburgh Landscape Character Assessment (2010)

Historic Scotland – Conservation Plans – A Guide to the Preparation of Conservation Plans (2000)



A range of doucments and techniques can be used when preparing landscape character assessments

Visual Assessment

The Landscape Institute's 'Guidelines for Landscape and Visual Impact Assessment' sets out the recognised approach. It should be read in conjunction with the Landscape Institute Advice Note 01/11—Photography and Photomontage in Landscape and Visual Assessment and Visual Representation of Wind Farms (Scottish Natural Heritage 2014). The visual assessment should assess city and local views as well as protected views. Views within any cultural heritage assessments or assessments of setting should be to the same standard as the visual assessment. They are likely to be the same views.

The requirements set out in the technical checklist should be confirmed and agreed at an early stage.



Protecting new views

The view from Edinburgh Park Station towards Arthur's Seat & the Castle (right) has similar qualities to the view towards the Castle from Carrick Knowe railway footbridge. It should be protected.



Protecting an incidental view Although the glimpsed view to Edinburgh Castle from the West Port is not a key view, care should be taken to protect it. Limiting the height of buildings to maintain a view



Limiting the height of buildings to maintain a view

The height of buildings in the Bio-Quarter has been limited to maintain views towards the Edmonstone ridge. This helps to reinforce the landscape setting of the city by providing visual containment contributing to the sense that Edinburgh is a compact city.



Zone of theoretical visibility

Use of computer generated mapping to determine a site's zone of theoretical visibility i.e. the area across which a proposed development may have an effect on visual amenity, can inform the selection of viewpoints for visual assessment.

Technical checklist

Map the site's visual envelope or prepare a computer generated Zone of Theoretical Visibility (ZTV).

Identify viewpoints representing different visual receptors, from a range of distances and orientations from the proposed development. Any relevant protected views may be included.

Confirm viewpoint location with planning authority.

Identify night time views, if required.

Prepare baseline site photography using equivalent of a 50mm focal length, usually set at 1.8m level

It may be helpful to subsequently confirm site photography with planning authority

Present the proposals alongside baseline photography, by means of an accurately constructed 3d CAD model, including 'wire line' views and rendered photomontages.

'Before' and 'after' views should enable direct comparison in the field, and should, therefore, be printed at the appropriate perspective, resolution and size with details recorded on the title block.

Provide a written appraisal assessing the visual effects of the proposal, and where relevant

1.2 Protected views

Conserve the city's skyline, by protecting views to landmark buildings and topographical features.

Protect the setting of the Forth Bridge by protecting the characteristics of the key views.

Local Development Plan policies

- Des 4 Development Design
- Des 11 Tall Buildings
- Env 1 World Heritage Sites

The topography of Edinburgh has shaped the way the city has evolved. The setting of the city, between the open hills and the Firth of Forth, and the impact of volcanic hills and ridges which define the built form, create a very strong sense of place. This establishes views to and from many key features around the city and allows the city to be defined by its topography rather than the height of its buildings.

The way buildings have used the topography of the city also defines what is special about Edinburgh; with the distinctive and contrasting patterns of the

Old and New Town recognised through the World Heritage Site status. In order to protect this aspect of Edinburgh's character, the city's most striking visual features and views to them from a number of public vantage points are identified. The landmark features which are to be protected include:

- The Castle, Castle Rock and Tolbooth St John's Spire.
- Calton Hill.
- The Old Town spine.
- Arthur's Seat and the Crags.
- The New Town.
- Coastal backdrop and Firth of Forth.
- Open Hills.
- The Forth Bridges.
- St Mary's Cathedral Spires.
- Fettes College.
- Craigmillar Castle.

One mechanism for protecting the views has evolved from a study of views and skylines undertaken for the Council. Essential to implementing the guidance is an understanding of the concept of 'sky space'. Sky space is the space around the city's landmark features that will protect their integrity. Once the sky space is 'pierced' by a development, it has started to impact on a protected view. Although there is a general presumption against breaking the sky space, if a development can demonstrate that it adds to the city's skyline in a positive way and enhances the character of the city, it will be supported subject to it meeting other relevant policy considerations. It



Protected skyline view of Calton Hill from west escarpment of Long Row, Whinny Hill (view no. Eo5)

should also be noted that a development can have an adverse effect on the skyline, not by breaking the sky space, but through being too large in its built form or by failing to recognise the importance of rooftop detailing and modulation. Technical guidance is provided on the following page.

Forth Bridge

The Forth Bridge and its setting are also recognised as creating a very strong sense of place. The Bridge was inscribed as a World Heritage Site in July 2015, reflecting the innovation in engineering, construction and materials used to create the iconic structure, which remains in its original use. The scale and power of the Forth Bridge creates a visually dominant landmark and a number of designations around the bridge ensure that it is protected at an appropriate level.

To help further safeguard its setting, a viewshed analysis identified a total of 10 key views; four of which lie within the City of Edinburgh. The protection of these key views and their characteristics will be a key planning consideration.

In general, development in the North West and particularly in and around Queensferry and Port Edgar must take into account any possible impacts on the Forth Bridge.

The four views of the Forth Bridge from within the City of Edinburgh boundary are:

- 4 Mons Hill;
- 5 Dalmeny Water Tower;
- 6 Bankhead, Dalmeny; and
- 7 Contact and Education Centre.

Click on the map arrows to reveal further details of the viewpoint.

Other important views

It is important that other views to landmark features and important views to landscape and built features, including statues and monuments, in and around the city are also protected.

New views can be incorporated within new development.

The following pages set out the Council's expectations for incorporating existing views.



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Assessing the impact on key views

The bottom of the sky space can be measured and is calculated from Ordnance Datum, so once the height of any proposed development is known, it will be possible to assess its impact on any feature in the city by the extent to which it pierces the bottom of the sky space.

Each feature listed has different sky space around it depending on the nature of the feature. The amount of sky space around a feature will be sufficient, not just to protect a view of the feature, but to protect its context or setting. In some cases, the sky space can be accurately defined, whilst in others, it will be more of a matter of judgement. Views to the landmark features from any key view are in the form of view cones. The diagram to the right illustrates how view cones take account of topography and how proposals in different parts of the view cone might impact on a particular view.

Impacts on key views will vary depending on the nature of what needs to be protected in the key view itself, the location of the proposal and its height and form. Explaining in detail all circumstances in which the key views can be affected is beyond the scope of this guidance. However, it is possible to highlight some issues;

 Some areas are more sensitive to even small increases in height in relation to existing development due to their prominence in key views and exposure to sky space. An example of this is development in the area between Princes Street and Queen Street, where even the addition of an extra storey could impact upon views.

The concept of view cones and sky space

This diagram shows that depending on a building's position, its height and the topography surrounding, elements of a development (shown in red) can impact on the sky space around a landmark building or feature. Note that the sky space sits to the side, above and below the landmark feature.



• In other areas, there may be scope for taller buildings but care needs to be taken that impacts on key views are fully considered. For example, some parts of the Port of Leith may have the capacity for buildings that will exceed building heights typical of the immediate context. However, these areas may be very near parts of the docks within which similar development could have an adverse effect. An assessment of the suitability of these or any other proposed locations for high buildings, in terms of their contribution to the strategic development of the city, will be required.

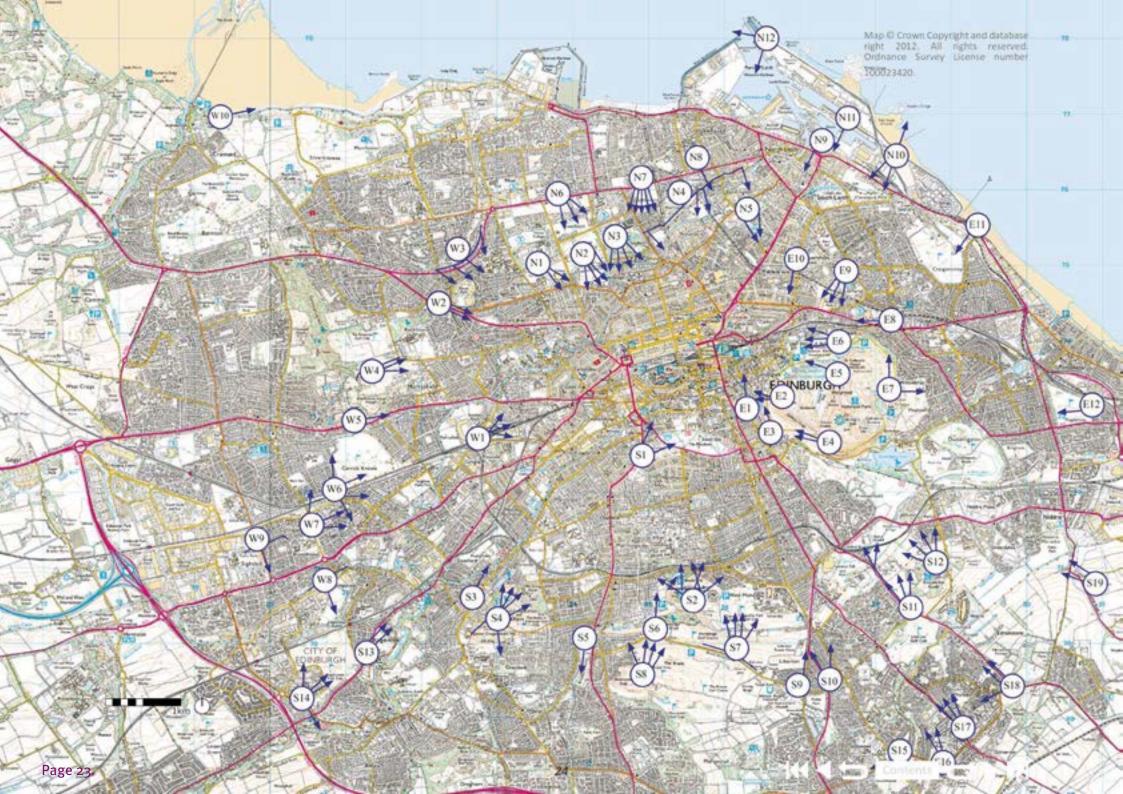
Key views that are to be protected are set out on the following pages. These are to be kept under review.

The design of any high building will be of exceptional quality and it must demonstrate an understanding of its context and impact. This should be presented in a townscape and visual impact assessment. The application should be accompanied by:

- Sight and height levels;
- An analysis of the context including a strategic justification for the proposed location;

Environmental modelling that addresses pedestrian wind safety issues related to;

- Wind force (relative velocities related to a base line study of surrounding area).
- Wind safety (turbulence, suction, lift).
- Thermal comfort (Wind chill).
- Noise level.
- Air quality.
- Streetscape aesthetics (impact of any mitigating measures).
- Photomontages showing the impact of the proposal on key views.
- A helium balloon test may be required, where the true height of the building is described by a series of markers attached to a cable suspended by a balloon filled with helium, so that a true understanding of the impact on the surrounding area can be gained.
- A statement demonstrating that there is an understanding of the impact of the development and showing how the development enhances its context.



List of Protected Skyline Views in the North, West, East and South of the City

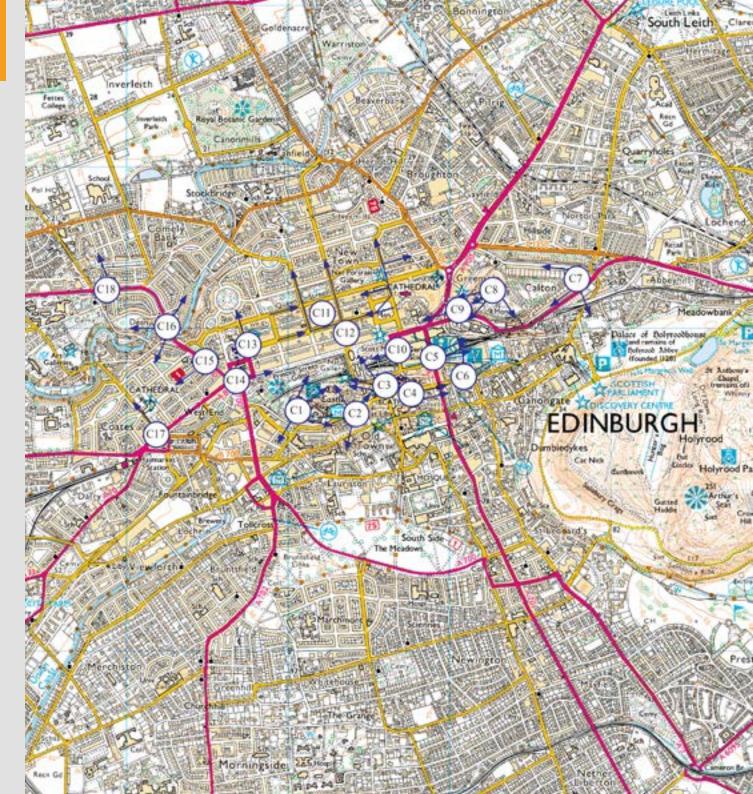
- N1a Carrington Road Arthur's Seat
- N1b Carrington Road Charlotte Square dome, Castle & Hub spire
- N2a Inverleith Park Arthur's Seat
- N2b Inverleith Park Charlotte Square dome, Castle & Hub spire
- N2c Botanic Gardens, west gate along Arboretum Place to Castle
- N2d Inverleith Park St Mary's spires and west Edinburgh skyline
- Naa Botanic Gardens Arthur's Seat
- N3b Botanic Gardens, in front of Inverleith House Castle, Hub spire and Charlotte Square dome
- Nac Botanic Gardens Pentland Hills
- N3d Botanic Gardens, in front of Inverleith House St Mary's spires
- N4a Eildon Road Arthur's Seat
- Nab South Fort Street Salisbury Craas
- N4c Newhaven Road and Warriston Path Calton Hill
- N5a Pilrig Park and Pilrig Street Arthur's Street
- N5b Pilrig Park Calton Hill
- N6a Ferry Road & Merchant Maiden Playing fields Arthur's Seat
- N6b Ferry Road at Merchant Maiden Playing Fields Castle, Hub spire and Charlotte Square dome
- N6c Ferry Road at Merchant Maiden Playing Fields St Mary's spires
- N7a Ferry Road at Goldenacre Arthur's Seat
- N7b Ferry Road at Goldenacre Salisbury Craqs
- N7c Ferry Road at Goldenacre Pentland Hills
- N7d Ferry Road at Goldenacre St Marys' spires
- N7e Ferry Road opposite Clark Road and Eildon Street Castle and Old Town skyline
- N8 Newhaven Road and Victoria Park Arthur's Seat
- N9 Constitution Street, north end Calton Hill monuments
- N10a Inchkeith Island, Arthur's Seat Arthur's Seat, Inchkeith Island
- N1ob Leith Docks Calton Hill
- N11a Leith Docks Arthur's Seat
- N11b Leith Docks Calton Hill and Hub spire
- N12a Leith Docks, west end Castle and Hub spire
- N12b Leith Docks, west end Forth Bridge
- W1a Western Approach Road raised bridge St Mary's spires
- W1b Western Approach Road raised bridge Castle
- W1c Western Approach Road raised bridge Arthur's Seat
- W2a Queensferry Road, west of Craigleith Road junction Castle and Arthur's Seat
- W2b Queensferry Road, west of Craigleith Road junction St Mary's spires
- W3a Telford Road, east of old railway bridge Arthur's Seat
- W3b Telford Road, near old railway bridge Castle and Hub spire

- W3c Telford Road, old railway bridge St Mary's spires
- W3d Telford Road Pentland Hills
- W4a Corstorphine Hill Calton Hill and New Town Monuments
- W4b Corstorphine Hill, south east end Castle and Arthur's Seat
- W5 Corstorphine Road, south of Zoo Castle & St Mary's spires
- W6a Carrick Knowe railway footbridge Corstorphine Hill
- W6b Carrick Knowe railway footbridge St Mary's spires
- W6c Carrick Knowe railway footbridge Castle
- W6d Carrick Knowe railway footbridge Arthur's Seat
- W6e Carrick Knowe Pentland Hills
- W7a Saughton Road south of railway bridge
- W7b Saughton Road, south of railway Castle and Hub spire
- W7c Playing field east of Broomhouse Community Centre Arthur's Seat
- W8 Longstone Pentland Hills
- W9 Sighthill and Broomhouse Pentland Hills
- W10 Cramond foreshore looking east
- E1a Pleasance Salisbury Crags
- E1b Pleasance Calton Hill
- E2a Salisbury Craqs, south side Pentland Hills
- E2b Salisbury Crags, Radical Road St Mary's spires, Castle, Hub
- E2c Salisbury Craqs, Radical Road Corstorphine Hill
- E2d Salisbury Craqs, Radical Road Calton Hill
- E3 Queen's Drive Calton Hill
- E4a Queen's Drive, Powderhouse Corner St Mary's spires
- E4b Queen's Drive, Powderhouse Corner Castle and Hub spire
- E5 Holyrood Park, Whinny Hill, Lonw Row Calton Hill
- E6a Holyrood Park, Meadowbank Lawn Castle and Old Town
- E6b Holyrood Park, St Anthony's Chapel Castle and Old Town
- E6c Holyrood Park, Meadowbank Lawn and St Anthony's Chapel -Calton Hill
- E7a Holyrood Park, Dunsapie Loch the sea
- E7b Holyrood Park, Dunsapie Loch Inchkeith Island
- E8 London Road, Meadowbank Calton Hill
- Ega Lochend Park, upper level and Lochend Road South Arthur's Seat
- E9b Lochend Park Arthur's Seat and Salisbury Craqs
- Egc Lochend Park, upper level Calton Hill
- E10 Easter Road Salisbury Crags
- E11 Seafield Road, Craigentinny Arthur's Seat
- E12 Magdalene Field Arthur's Seat
- S1a Bruntsfield Place Castle
- S1b Bruntsfield Links, south side Castle
- S1c Bruntsfield Links and Meadows Arthur's Seat & Salisbury
 Craqs
- S2a Blackford Hill crest Castle, spires and Firth of Forth
- S2b Blackford Hill, Royal Observatory Castle, spires & Firth of Forth
- S2c Blackford Hill the sea with Inchkeith Island
- S2d Blackford Hill Arthur's Seat and Salisbury Crags
- See Midmar Drive Arthur's Seat and Salisbury Craqs

- S2f Blackford Hill Crest Corstorphine Hill
- S₃ Colinton Road St Mary's spires
- S4a Craiglockhart Hills St Mary's spires
- S4b Wester and Easter Craiglockhart Hills Castle and Hub spire
- S4c Wester Craiglockhart Hill Salisbury Craqs
- S4d Wester Craiglockhart Hill Arthur's Seat and sea
- S4e Craiglockhart Hills Pentland Hills
- S5 Braidburn Valey Pentland Hills
- S6 Braid Hills Drive West Castle, Hub spire & Barclay Church spire
- S7a Braid Hills Drive East Castle, Hub spire & distant mountains
- S7b Braid Hills Drive, east end Calton Hill
- S7c Braid Hills Drive, east end the sea
- S7d Braid Hills Drive, east end Arthur's Seat and Salisbury Craqs
- S7e Braid Hills Drive, east end Pentland Hills
- S8a Buckstone Snab Castle, Firth of Forth and distant hills
- S8b Buckstone Snab the sea
- S8c Buckstone Snab Arthur's Seat
- S8d Buckstone Snab Corstorphine Hill
- S9 Liberton Drive along Alnwick Hill Road to Arthur's Seat
- S10a Liberton Cemetery Arthur's Seat and Salisbury Craqs
- S10b Junction of Liberton Brae and Kirkgate Castle
- S11a Old Dalkeith Road, by Craigmillar Castle Castle
- S11b Old Dalkeith Road, by Cameron Toll Salisbury Crags
- S11c Old Dalkeith Road, south of Cameron Toll Arthur's Seat and Salisbury Crags
- S12a Craigmillar Castle Inchkeith Island
- S12b Craigmillar Castle, upper battlements Castle and Hub spire
- S12c Craigmillar Castle Salisbury Crags
- S12d Craigmillar Castle Arthur's Seat
- S13a Lanark Road, Dovecot Park St Mary's spires
- S13b Lanark Road, Dovecot Park Castle and Hub spire
- 5150 Editark Roda, Dovector ark Castle and Hab spire
- S14a Clovenstone Community Woodlands Corstorphine Hill
- S14b Clovenstone Community Woodlands, west side St Mary's spires
- S14c Clovenstone Community Woodlands, west side Castle and Hub spire
- S14d Clovenstone Community Woodlands Pentland Hills
- S₁₅ Captain's Road Pentland Hills
- S16a Hyvots Bank, Gilmerton Dykes Castle and Hub spire
- S16b Gilmerton Dykes Street Arthur's Seat and Salisbury Craqs
- S17a Gilmerton Road, near junction with Ferniehill Road Castle and Hub spire
- S17b Gilmerton Road Salisbury Craqs
- S17c Gilmerton Road Arthur's Seat
- S18a Junction of Old Dalkeith Road and Ferniehill Road and Moredun Park Road - Castle and Hub spire
- S18b Moredun Park Road Arthur's Seat and Salisbury Craqs
- S18c Ferniehill Road, east end Pentland Hills
- S19 A68, near Wester Cowden Castle, Hub spire and Old Town
- S20 A68, near Wester Cowden Arthur's Seat

List of Protected Skyline Views in and around the City Centre

- C1a Castle Ramparts Calton Hill
- C1b Castle Ramparts Inchkeith Island
- C1c Castle Ramparts Arthur's Seat
- C1d Castle Ramparts Pentland Hills
- C2a Camera Obscura Calton Hill
- C2b Camera Obscura and Castle Esplanade Pentland Hills
- C2c Junction of Ramsay Lane and Castlehill Firth of Forth
- C3a North Bank Street Corstorphine Hill
- C3b Milne's Close Firth of Forth
- C4a Royal Mile, Lawnmarket the sea
- C4b Royal Mile, North/South Bridge junction the sea
- C5a North Bridge Calton Hill
- C5b North Bridge Firth of Forth
- C5c North Bridge Salisbury Crags
- C6 Jeffrey Street and Cranston Street Calton Burial Ground monuments
- C7a Waterloo Place and Regent Terrace Arthur's Seat and Salisbury Craqs
- C7b Carlton Terrace Tron spire along Regent Terrace
- C7c Royal Terrace, east end Greenside church tower
- C8a Calton Hill Arthur's Seat and Salisbury Crags
- **C8b** Calton Hill Pentlend Hills
- C8c Calton Hill Castle, Hub spire, St Giles crown and Tron spire
- C8d Calton Hill along Princes Street
- C9 Waterloo Place and Princes Street St Mary's spires
- C11a Junction of Queen Street and North Castle Street east along
 Oueen Street
- C11b Junction of Queen Street and Dublin Street west along Queen Street
- C11c Dublin Street east along Albany Street
- C11d Junction of George Street and Frederick Street east to St Andrew Square column
- C11e Junction of George Street and Frederick Street west along George Street
- C12 East half of George Street Firth of Forth Central
- C13 George Street at Charlotte Square Firth of Forth
- C14 Princes Street Calton Hill
- C15 Queensferry Street along Melville Street to St Mary's spires
- C16a Dean Bridge north to Rhema church tower
- C16b Dean Bridge Firth of Forth
- C16c Dean Bridge south-west view
- C16d Dean Bridge Corstorphine Hill and Dean Gallery towers
- C17 West Maitland Street along Palmerson Place
- C18 Queensferry Road Fettes College



1.3 Assessments and statements

Design and Access Statements are expected for all major planning applications as well as other significant or complex proposals.

Design statements are expected for some local planning applications.

An Environmental Impact Assessment (EIA) will be required for applications with significant environmental impacts.

Landscape and visual Appraisal/Assessments will be required for most applications. The extent of the assessment will be dependent on the scale and location of the development.

A Conservation Plan, Historic Landscape
Assessment and Assessment of the Setting
of Listed Buildings, or Assessment on the
Outstanding Universal Value (OUV) of a World
Heritage Site will be required when proposals
include the historic environment.

Local Development Plan policies

- Des 1 Design Quality and Context
- Env1 World Heritage Sites
- Env 6 Conservation Areas
- Env 7 Historic Gardens and Designed Landscapes
- Env 8 Protection of Important Remains

All development should communicate the visual and landscape / townscape change by the use of appraisals or assessments. The appraisal required depends on the scale and context of the change. In certain local applications this will be a stand

alone document, in other cases this assessment will be within a design statement. Where Design and Access Statements are required the landscape and visual information should normally be in a stand alone document. For development with a significant visual or landscape/environmental impact, the findings should be presented in an Environmental Impact Assessment.

The appraisal should show existing views, and existing natural and built features. Sections 1.6, 1.7 and 1.8 set out the Council's expectations for these matters.

Key townscape principles, such as height, form, scale, spatial structure and use of materials are set out in the Designing Buildings chapter.

The different appraisals include:

Design Statements

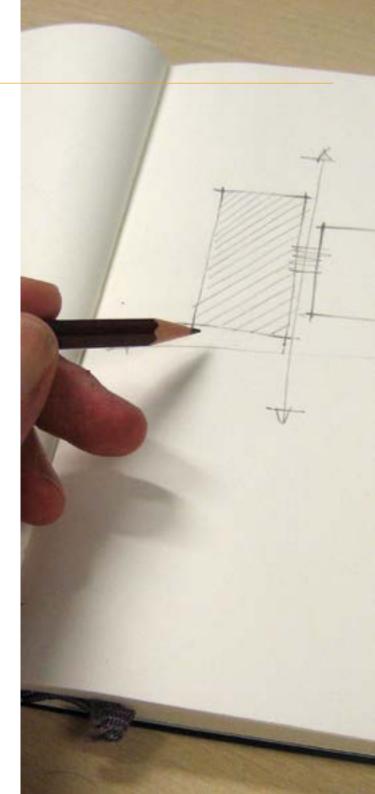
Design statements are required for local developments in the following areas:

- the World Heritage Sites;
- a conservation area;
- a historic garden or designed landscape;
- the site of a scheduled ancient monument; and
- the curtilage of a category 'A' listed building.

Design Statements are not required for:

- development of existing dwelling houses;
- changes of use; and
- applications for planning permission in principle.

Planning Advice Note (PAN) 68 - Design Statements shows how to prepare a design statement. Key headings are set out in the table overleaf.



Design and Access Statements

Design and Access Statements will be expected for all major planning applications as well as complex or significant local planning applications.

The Design and Access Statements are the same as a Design Statement except that they include a section about how issues relating to access to the development for people with disabilities have been addressed. The statement must explain the policy below sets out the requirements.

or approach in relation to adopted access. The table

Information required in a Design Statement		
Background information	Name of scheme; Name of applicant; Name of architect / developer / urban designers / etc. Description of client brief; Date.	
Site details	Location and site plan; Description; History including planning history; Ownership.	
Site and area appraisals	See section 1.1	
Policy context	Relationship of proposal to national and local planning policies and guidance.	
Public involvement	Outcome of consultation and public involvement.	
Programme	How will the project be phased?	
Concept	Diagrams illustrating key concepts and ideas that underpin the proposal.	
Design solution	An explanation of the design solution, including site layout and parking provisions, and how the solution has taken account of factors above, including, site and area appraisal, policy context, public involvement and concept.	
Information required in an Access Statement		

	policy context, public involvement and concept.	
Information required in an Access Statement		
Policies	It must explain how policies relating to access in the Local Development Plan have been taken into account.	
Specific issues	Identify specific issues which might affect access to the development for disabled people. This should explain how the applicant's policy / approach adopted in relation to access fits into the design process.	
Access to and through the site	Developers should consider setting out in the statement how access arrangements make provision both to and through the site to ensure users have equal and convenient access.	
Maintenance	It must describe how features which ensure access to the development for disabled people will be maintained. The publication Designing Places notes that the arrangements for long-term management and maintenance are as important as the actual design. Therefore, issues regarding maintenance will help inform the planning authority in coming to a view on how best, possibly through agreements or conditions, such features are to be maintained in the longterm.	
Consultation	It must state what, if any, consultation has been undertaken on issues relating to access to the development for disabled people and what account has been taken of the outcome of any such consultation.	

The **Edinburgh Access Panel** advises on how to improve accessibility for people with disabilities in the built environment. Its advice should be sought early in the design process.

Proposals within a WHS will require an assessment. The extent of this should be agreed with the planning authority, however it will usually be within an EIA for large complex developments. Views presented to explain impacts on the Outstanding Universal Values should follow the guidance in **section 1.1** visual assessment.

Sites which contain listed buildings will require an assessment of the setting of the listed building. This should include an assessment of the landscape setting if appropriate, identifying key characteristics and views that create the character and define the setting. This should be presented following Historic Environment Scotland's advice. The location of the assessment should be agreed with the Planning Authority. Section 1.1 sets out the Council's expectations for positioning new development within historic sites.

For sites listed in *Historic Scotland's national* Inventory of Gardens and Designed Landscapes in **Scotland**, or the Council's local survey records, a historic landscape assessment written by a chartered landscape architect should be submitted.

Where a Conservation Plan is required these should be written by an accredited Conservation Architect or Architectural Historian and should set out the important characteristics and evolution of the buildings and the landscape.

1.4 Coordinate development

Have a comprehensive approach to development and regeneration.

Comply with development frameworks or master plans that have been approved by the Council.

Develop masterplans with a multi-disciplinary team.

On larger sites, prepare and adhere to master plans that integrate with the surrounding network of streets, spaces and services.

On smaller sites, make connections to surrounding streets and spaces.

Local Development Plan policies

- Des 2 Co-ordinated Development
- Des 7 Layout Design

A comprehensive approach to development is important, if well designed and cohesive networks of streets and spaces (including the green network (section 3.2) are to be created. This is particularly important on sites which could be large enough to become neighbourhoods in their own right.

It is also important with smaller developments, where there is a possibility that neighbouring sites will be developed in the future. Applicants may be asked to demonstrate sketch layouts of how neighbouring sites could be developed. This will help ensure that the future development of neighbouring sites is not compromised.

It is expected that proposals will comply with the principles in this guidance and be prepared by a multidisciplinary team of consultants including architects, urban designers, landscape architects and flood engineers. It requires that streets must consider place before movement—a key part of establishing suitable urban layouts. An important aspect of this is to create streets and spaces that reflect the unique character and distinctiveness of Edinburgh. The Council wants new development to provide streets and spaces that are attractive for all potential users of them.

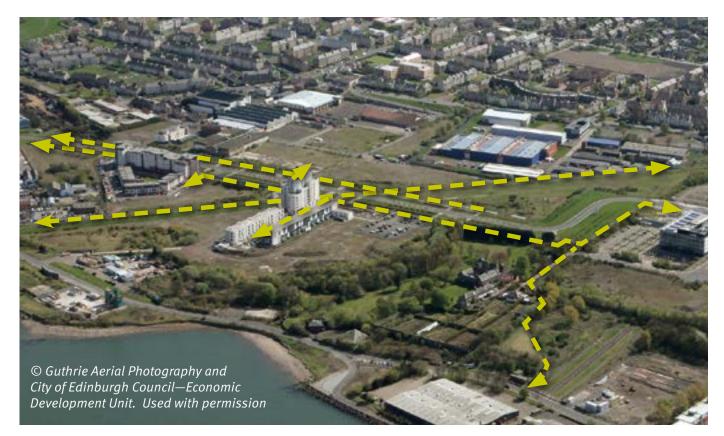
Opportunities for travel should be prioritised in the order of walking, cycling, public transport, then car, and should ensure equal access opportunities for people with disabilities. Design considerations should therefore reflect this user group hierarchy, by giving particular focus to the individual needs of pedestrians, cyclists and disabled people, while avoiding a 'one size fits all' approach to design.





Maintaining development potential

This new tenement housing development will allow the neighbouring land and buildings including the drive through restaurant to be redeveloped in a similar pattern. This will help create a cohesive network of streets.





New cycle routes

A new cycle route at West Granton Road helps connect this development into the wider area. It is designed so that in the future, new development can overlook it. This is important to help make the route safe.

Creating a masterplan and following it

A series of masterplans and frameworks were created to guide the development of the former industrial land and gas works site at Granton (pictured above). This allowed infrastructure - roads, cycle routes, avenues, parks and squares - to be put in place at the start of the project. All the new buildings that followed have fitted into this structure. This means it is likely that the aim of the masterplans to create a high quality new district for the city are more likely to be met.

In addition, this development contains a mix of uses. These include housing, a new college, supermarket, and business space. Mixing uses within new development sites helps them to become more interesting, vibrant and sustainable places. This is because people will use them throughout the day and night. A greater mix of uses also helps to create more sustainable transport options.



This new housing at Saltire Street in the masterplanned area has a view to the sea.

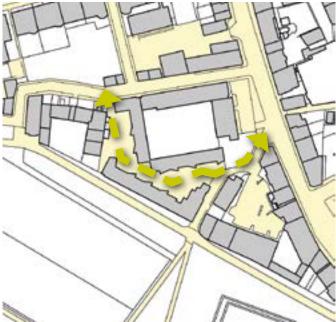


The office at Waterfront Avenue has a square in front and the space for a future public transport hub.





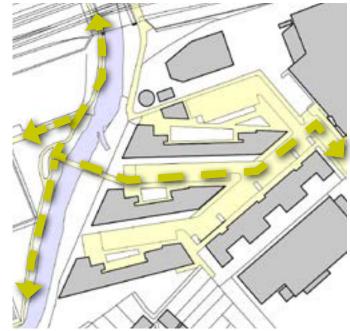




Shared surface for new student housing—Boroughloch Because there is very little need for car parking and, therefore, access for cars, this development was able to be designed around a shared surface street. Due to the limited amount of vehicles and the fact it is well overlooked, it is attractive for pedestrians and cyclists.



Making connections to roads and cycle routes This development was built on the site of a former suburban station. It makes connecdtions to the cycle route and the roads at each end of it.



Bridge for pedestrians and cyclists—Westfield Avenue This new bridge connects the development to the Water of Leith Walkway and areas beyond.

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 ${\bf Shared\ surface\ in\ housing-Cakemuir\ Gardens.}$

The houses come right up to the edge of the carriageway. The tight space that results means that motor vehicles have to move around slowly. This helps make the space safe for pedestrians and children playing.

Pedestrian route in the city centre—Multrees Walk

This shopping and office development creates an attractive street. The shops and little square within it make it an interesting space to pass through. The Council will seek to make more routes like this where opportunities arise.

Connections outside the city centre—Brandfield St.

An important new connection has been made through the former brewery site. It is made as accessible as possible by the inclusion of the ramp. Landscape and overlooking contribute to its attractiveness.

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1.5 Density

Increased density can be achieved on sites where the surrounding density is lower provided that:

- there is a strong urban design rationale for the increase in density; and
- the increased density would not have an adverse impact on neighbouring amenity or valuable natural heritage features.

Local Development Plan policies

• Hou 4 - Housing Density

High density development helps Edinburgh be a compact and vibrant city. Having higher densities allows land to be used more efficiently, helps regeneration and minimises the amount of Greenfield land being taken for development. Higher densities also help maintain the vitality and viability of local services and facilities such as schools and local shops, and encourage the effective provision of public transport.

New development should achieve a density that is appropriate to the immediate site conditions and to the neighbourhood. This is particularly important in Victorian and Edwardian villa areas. Here the form of any new building and its positioning should reflect the spatial characteristics, building forms and heights within the area. Back-land development must be designed to ensure that any proposed building is subservient to surrounding buildings and it does not have an adverse impact on spatial character.

The appropriateness of high density housing to a particular site will depend on site context and on the way in which the development addresses the issues of open space (including impacts on landscape character and trees), unit mix, daylight, sunlight, privacy, outlook, house type, car parking requirements, waste management and the design and site layout of the development itself. Density should be a product of design, rather than a determinant of design. Where there is a failure to meet the Council's expectations in relation to these factors, this would indicate that the proposed density is too high and that the quantity of development on the site should be reduced or the design re-configured.

Where appropriate, higher density low rise building types like colony housing, or terraced housing could be inserted into some low density/low rise areas without adverse impact on amenity or character.

There can be a rationale for a modest increase



in building heights (and density) at nodes such as transport intersections of arterial and other significant roads, as the change in height can help signal the importance of the location and assist navigation.

High density development is encouraged where there is, or it is proposed to be, good access to a full range of neighbourhood facilities, including immediate access to the public transport network (i.e. within 500m of development). The map on the following page illustrates where these areas are within Edinburgh.

In new suburban developments, the Council encourages the efficient use of land and a mix of housing types. Introducing housing types such as flats, colonies, four in a block, terraces, mews houses and townhouses can help to increase densities on sites that are otherwise designed for detached and semi-detached housing.



Density in suburbia

In these examples, the street layout is similar. The left hand example has fewer houses and so is less dense. The Council encourages the approach on the right hand side where there is a mix of terraced and semi detached houses. The right hand layout is more likely to help sustain services such as shops and public transport since there will be more people to use them.



Terraced housing—Wauchope TerraceTerraced housing is one way of delivering houses with front doors and back gardens that makes efficient use of land.



Mixing houses and flats—Fala Place
Having a mix of houses and flats helps to create a range of
dwelling types—which improves social sustainability—and
makes good use of land.



These flats integrate well into an existing villa area due to their scale and refined architectural design.

Stockbridge colonies

Dwellings / ha
GFA / site area
Footprint / site area
Average number of storeys
Car parking / dwelling
GFA per car parking space





Examples using some of these density measures follow. For these examples, car parking values were simply determined by establishing how many cars actually park on the relevant street. In relation to perpendicular on-street parking, a value of 2.5m is suggested, whilst for parallel parking, a length of 5m is suggested to accommodate cars.

Marchmont tenements

99 Dwellings / ha
1.32 GFA / site area
0.33 Footprint / site area
4 Average number of storeys
0.8 Car parking / dwelling
170m² GFA per car parking space

Lochrin Place tenements

164 Dwellings / ha
1.89 GFA / site area
0.35 Footprint / site area
5.3 Average number of storeys
1 Car parking / dwelling
115m² GFA per car parking space









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Westfield

172 Dwellings / ha
1.23 GFA / site area
0.24 Footprint / site area
5 Average number of storeys

o.4 Car parking / dwelling 165m² GFA per car parking space





Margaret Rose Avenue

23.6 Dwellings / ha
0.43 GFA / site area
0.20 Footprint / site area
2.1 Average number of storeys
1.7 Car parking / dwelling
106m² GFA per car parking space





21st Century Homes - Gracemount

Dwellings / ha
GFA / site area
Footprint / site area
Average number of storeys

o.8 Car parking / dwelling 119m² GFA per car parking space





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1.6 Incorporate existing views

Where views to interesting or landmark features exist, incorporate them into new development.

Local Development Plan policies

- Des 3 Development Design
- Des 4 Development Design

This is particularly important in public areas such as streets, squares and open space.

Sometimes a potential outward view of the wider landscape/townscape might not be apparent on a site, for example because there is a building in the way.

Site analysis will help establish whether a new view can be secured through redevelopment. If it can, it should be incorporated into the design.

Private views are not generally protected through the planning system.

Notwithstanding this, there are some circumstances where views can be provided in new development and will contribute positively to the amenity of the scheme. Such circumstances include sites where it is unlikely that the view can be interrupted by subsequent development and where the view is to a landmark feature.

The height and massing of buildings can have a significant impact on views. The section on height and form contains specific guidance on this matter.



View to Craigmillar Castle—Castlebrae Wynd *The street is lined up to create the view to the castle.*



Publicly accessible viewA publicly accessible view to Edinburgh Castle was created from the roof level of the Museum of Scotland.



Creating new views - Jackson's Entry off CanongateViews to Salisbury Crags are framed by the retained historic buildings and the new development that resulted from the masterplan.

1.7 Incorporate natural and landscape features

Respond to existing variations in landform.

Protect and incorporate existing trees that are worthy of retention into the design of new open spaces.

Retain and incorporate other existing natural features into the design to reinforce local identity, landscape character, amenity and optimise value of ecological networks.

Address the coastal edge and watercourses positively and protect flood plains.

De-culvert watercourses and integrate them with the site layout and function.

Define the urban edge to conserve and enhance the landscape setting and special character of the city.

Local Development Plan policies

- Des 3 Development Design
- Des 7 Layout Design
- Des 9 Urban Edge Development
- Des 10 Waterside Development
- Env 12 Trees
- Env 21 Flood Protection

Existing landscape features can contribute strongly to the quality of new development. The layout of proposals should integrate into the design. The Council will take particular interest in the retention of historic features and existing habitat.

Watercourses should be addressed positively by incorporating them into accessible green networks, and ensuring security through natural surveillance and appropriate design such as active frontages. Waterside sites can present a unique opportunity for innovative design. Flooding issues should be fully understood.

In some instances, public access is inappropriate in some areas because of the need to protect wildlife habitat. For example, the south side of the Union Canal is of particular habitat value and care should be taken to ensure protection of its biodiversity value. Similarly, the biodiversity of the Water of Leith benefits from a lack of public access to some of its banks. In the redevelopment of sites along the Water of Leith a 15m setback or substantial ecological mitigation will be required to maintain the ecological potential of this strategic blue/green network. (see also section 3.1)

The design of the urban edge should form a clear transition between the urban area and surrounding countryside. The retention, enhancement and integration of existing trees, shelterbelts and hedgerows helps integrate development with the character of the surrounding countryside and provide opportunities to extend habitat networks (see section 3.5). Existing trees should be located in open space as opposed to residential gardens.

Where suitable landscape features do not exist it may be necessary to create a substantial woodland edge. These should provide the necessary space for native woodland habitat to achieve maturity and accommodate multi-user paths and links to the wider countryside.



Retaining trees

New mature trees were planted alongside this retained tree in the Grassmarket.



Integrating trees-Glasgow Road

Trees from the former Gogarburn Hospital site were carefully integrated into the development

In some situations, where new residential and civic architecture will enhance the townscape, or the urban edge adjoins recreational facilities or greenspace, a permeable edge of parkland trees and active travel routes may be considered.

Topographical features such as ridges and valleys also combine to provide natural barriers, which can help to direct development to the most appropriate locations whilst contributing to the setting and identity of the city.



Archaeological Interpretation

The archaeological remains of the Flodden Wall are below these markings in the hard landscape of the Grassmarket. Their retention helps the understanding of the history of the city.

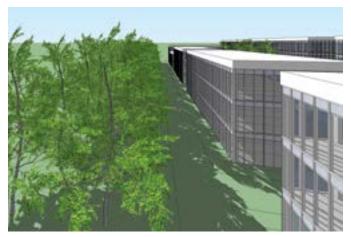


New connections—Westfield Avenue

As well as providing an attractive frontage to the Water of Leith, this development provides a new footbridge over it. This greatly improves access within the area.



By creating 'fingers' of buildings, landscape can be brought into the development, blurring the edge between the two.



A strong edge between development and landscape

Where development forms a strong urban edge it is important to create an equally robust landscape edge.



Frontage onto the Union Canal-Fountainbridge

As well as providing mooring space and so promoting the Canal's recreational use, the development at the end of the Canal provides an attractive frontage with bars and restaurants facing onto it.

1.8 Incorporate existing buildings and built features

Incorporate existing buildings and boundary elements (even if they are not listed or in a conservation area) where they will contribute positively to new development.

Re-use elements from existing buildings, particularly where there is a historical interest.

Protect and enhance existing archaeology.

The incorporation of existing built features benefits place making, sustainability and provides an identity for a development.

Local Development Plan policies

- Des 1 Design Quality and Context
- Des 3 Development Design
- Des 7 Layout Design
- Des 8 Public Realm and Landscape Design
- Env 8 Protection of Important Remains
- Env 9 Development of Sites of Archaeological Significance

There is a strong presumption in favour of retaining existing buildings which contribute to the special interest of an area. However, the replacement of individual buildings can sometimes be justified. The redevelopment of buildings, which are considered by their appearance and scale to be detrimental to the character of the area, will be encouraged. Development proposals will be assessed in relation to:

- proposed mass, scale, design and materials of the replacement building; and
- the extent to which the replacement building will enhance the character and appearance of the street scene.

Where there are known or suspected archaeological remains within the landscape surveys, evaluation and desk top studies should be carried out in consultation with the Council's Archaeological Service. The evaluations may highlight features to be considered in any design proposal and the formulation of future mitigation strategies. In some cases this should be explained by the use of interpretation or an enhanced landscape setting. (see section 3.2 - Open Space)



Reusing an existing building—East Market StreetThe shell of this building was transformed into a gallery.



Incorporating a boundary wall—Hart Street
This stone wall was re-used and incorporated into the new house.



Boundary walls in villa areas—Newbattle Terrace
Boundary walls are extremely important to the character and
appearance of villa areas. The size and number of new openings
to them should be minimised.



Transforming a building's use—Anderson Place This bond building was transformed into flats.



Reusing building materials—Holyrood Road Stone from the partially demolished Queensberry House was used in the walls on the exterior of the Scottish Parliament.

2. Designing places: buildings

This chapter sets out the Council's expectations for how features within the built form relate to its setting. The overall composition of streets is shaped by how individual buildings work together, creating the unique visual character through repetition, variety and focal points within the street scene.

The key aims are for new development to:

- Have a positive impact on the immediate surroundings; wider environment; landscape and views, through its height and form; scale and proportions; materials and detailing; positioning of the buildings on site, integration of ancillary facilities; and the health and amenity of occupiers.
- Repair the urban fabric, establish model forms of development and generate coherence and distinctiveness where the surrounding development is fragmented or of poor quality.
- Achieve high standards of sustainability in building design, construction and use
- Be adaptable to future needs and climate change.
- Support social sustainability, by designing for different types of households.
- Address the street in a positive way to create or help to reinforce a the sense of place, urban vitality and community safety.
- Balance the needs of pedestrians, cyclists, public transport users and motorists effectively and minimise the impacts of car parking through a design-led and place specific approach.
- Reduce exposure to pollution and where possible seek to reduce overall emissions.

2.1 Height and form

Match the general height and form of buildings prevailing in the surrounding area.

Where new developments exceed the height of neighbouring buildings ensure they enhance the skyline and surrounding townscape.

Ensure new high buildings conform to the section 1.2 on City skyline and views.

Local Development Plan policies

- Des 4a Development Design
- Des 11 Tall Buildings

The Council wants new development to integrate well with existing buildings and spaces. This means new buildings that are clearly higher than their neighbours should be avoided. This helps protect the visual character of areas where there are uniform building heights. It also helps protect key views.

The height of the part of the building where the external wall meets the roof (the eaves) is at least as important to the perception of height as the height of the top of the roof (the ridge). This means that new buildings should sit within the form set by the eaves and ridge of neighbouring buildings. This is particularly important in situations where there are established building heights, for example tenement streets, mews streets and villa areas.

Well designed architectural features that rise above this height, and which would contribute to the visual interest of the city's streets and skyline and not adversely affect key views, may be acceptable in exceptional circumstances.

Existing high and intrusive buildings will not be accepted as precedents for the future. They should be replaced with more sensitively scaled buildings, when their redevelopment is in prospect.

The impacts of height in relation to aerodrome safety should be considered.



The right height—Fountainbridge

The height of the modern building is very similar to its historic neighbour. This helps it integrate with its surroundings.



Too low—Pitt Street

This recent development above could have been improved if its eaves height had matched those of it neighbours. The effect is that the building appears too small.



Matching heights in villa areas

It is important that new buildings in villa areas have similar heights to their neighbours. In this example, the modern building in the middle of the image is designed so that the height of its main walls matches the eaves heights of the buildings on both sides.



Matching the height of existing mews—Circus Lane
This newly built house matches the eaves and ridge heights of
the adjacent historic mews buildings.



A landmark for the wrong reasons—Walker Street
The office tower has a negative impact on views from
surrounding streets due to its inharmonious height & form.



Villa—Merchiston ParkThe height and massing of this villa, which are similar to surrounding buildings, help to integrate it.



Integrating into a street and key view

The set back of the upper floors and the

The set back of the upper floors and the materials chosen help integrate the buildings in the centre of the image into view from the Castle Esplanade.

2.2 Scale and proportions

Harmonise the scale of buildings including their size and form, windows and doors and other features by making them a similar size to those of their neighbours.

Where the scale of proposed new development is different to that of surrounding buildings, ensure there is a compelling reasoning for the difference.

Local Development Plan policies

- Des 4b Development Design
- Des 11b Tall Buildings

A typical example of a difference in scale being problematic is where new tenements are located next to older stone built tenements. Often the windows on the new building are smaller and a different shape and because the floor-to-floor heights are lower than the older buildings there will be an extra row of windows. This creates a visual mismatch that can erode the character of the area.

In sensitive sites, floor to floor heights of new buildings should match their neighbours.

Where elevations have large projections or recesses, three dimensional views may be sought so that the scale and proportions can be assessed.



Modern development with a similar scale—Wester Coates Gardens

This villa has large windows which help to integrate it with the scale of surrounding historic villas. The proportions of stonework help also.



Matching height, proportions and form—Hopetoun Crescent The housing either side of the historic townhouses above has been designed to match the scale originally intended for this street.



Windows too small?

While five storey tenement has the same eaves height it has much smaller windows than those of neighbouring tenements. The small scale creates an inharmonious relationship.

2.3 Position of buildings on site

Position new buildings to line up with the building lines of neighbouring buildings.

Where building lines do not exist, position new development to engage positively with streets and spaces and where the surrounding townscape character of the area is good, it should be reflected in the layout.

Use the positioning of buildings to create interesting and attractive streets and spaces.

Where locating buildings in a historic landscape, ensure the essential characteristics of the landscape are protected.

When locating buildings adjacent or close to a historic building ensure the key views to and from the building and characteristics of the setting of the historic building are protected.

Position buildings carefully with a full understanding of the topography and environmental constraints of adjacent spaces and the site.

Local Development Plan policies

• Des 4c - Development Design

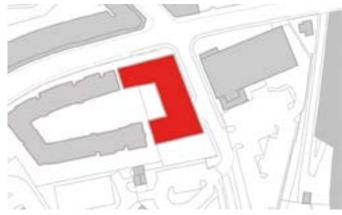
In areas of the city where buildings do not line up (for example the Old Town), plans of the wider context are extremely useful in helping to determine how well the proposed position of buildings on site is likely to make a positive contribution to the spatial character of an area.

Where back-land development would disrupt the spatial character of an area, it must be avoided.

Layouts should be designed to be attractive for all users and particularly pedestrians, cyclists and people with disabilities.

Inserting buildings into the setting of listed buildings must be done in such a way as to ensure principal elevations of the listed building remain visible from main viewpoints and the relationship of the listed building and the street is not disrupted.

Inserting buildings into a historic landscape must be done without upsetting the landscape integrity and with an understanding of the sensitive views and characteristics, and the setting of any historic buildings, in order that these can be protected. Landscape, visual and setting appraisals (section 1.1) should be used to guide the process.



Infill development in a tenement area

The proposed building completes a block of development. This will allow active frontages to be placed onto streets and allow private space for the development in the courtyard that is formed between the buildings.



The wrong position

Positioning large buildings (coloured red) in the rear of villa plots can undermine the spatial character of the area.



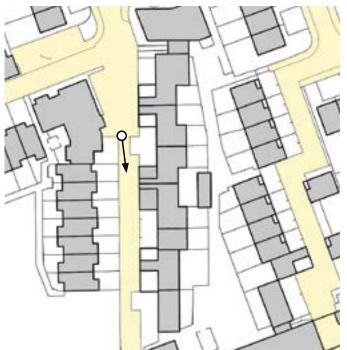
Infill development in a villa area:

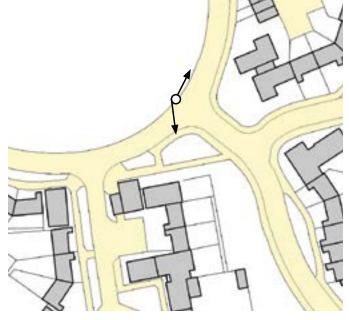
The proposed building (shown in red) is roughly the same size in plan as its neighbours and is positioned so that its frontage is the same distance from the road as its immediate neighbours.













Varied building positions—Cakemuir Gardens

Varying the positions of the buildings in relation to the street helps create an interesting sequence of streets and spaces in the development—contributing to its attractiveness as a whole.

Creating contrasting spaces

Positioning the flats and houses close together, provides space for a green in the middle of the development. This large space creates an interesting contrast with the streets around.

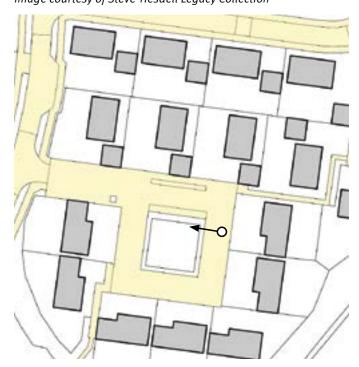
Courtyards—Brighouse Park Gait

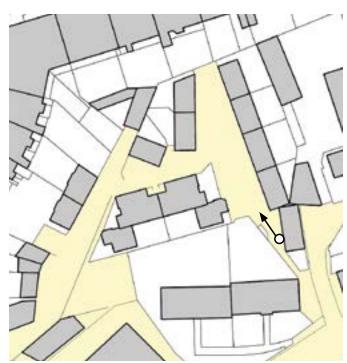
Small groups of housing can be made to form courtyards.





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15m wide street—Woolmet Place

By integrating the parking into the street and having small front gardens, the street has been made narrower than a typical suburban street.

A village green—Muirhouses Square, Bo'ness
The houses are arranged to form a space that is

The houses are arranged to form a space that is similar to a village green. This can be used by residents for a range of uses and has good visual amenity.

Space within a space—Dublin Street Lane North

The buildings are positioned to create a range of spaces that contrast with the ordered streets of the New Town surrounding the site.



Image © Tim Francey



A range of spaces—Accordia, Cambridge

In this development in Cambridge, the houses are placed 6m apart to create a mews street. Its narrowness means that cars cannot be parked in the street so garages have to be used. This helps the street be more pedestrian friendly and suitable for play. The images above right show some of the open space within the development.



Image © Tim Francey



Image © Tim Francey



Mews street—Donnybrook Quarter, London

This development provides terraces at upper levels, allowing relatively high density housing to come close together and achieve good quality outdoor space
Image courtesy of Steve Tiesdell Legacy Collection



Ordered frontage to Canal-Amsterdam

These houses are arranged to provide an attractive frontage to the Canal. The moorings provided are set out to allow a relatively continuous strip of habitat for wildlife.

Image courtesy of Steve Tiesdell Legacy Collection



Positioning trees carefully—Allerton Bywater, England Trees are an integral part of this housing development, lining the streets throughout the development.

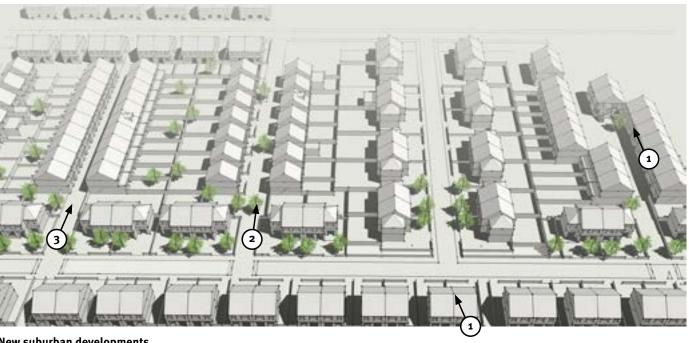
Image courtesy of Steve Tiesdell Legacy Collection



Narrow street—Amsterdam

Pedestrians, cyclists and cars are all considered in this narrow street. A key feature are the climbing plants which add visual softness.

Image courtesy of Steve Tiesdell Legacy Collection



New suburban developments

In new suburban developments it will be expected that a variety of different housing types will be provided and that these will be laid out to give a variety of different types of streets and spaces. These should integrate with the hierarchy of the streets in the surrounding area. This layout shows that a range of different streets and spaces can be created using similar housing types: squares (1), narrow streets with garages to the side (2) and mews streets (3) can all be created with standardised house types.







2.4 Design, integration and quantity of parking

Welcoming, attractive and sustainable places balance the needs of pedestrians, cyclists and motorists effectively with priority given to creating walkable and cycle friendly environments.

Proposals for parking within new developments should be design-led and reflect the positive characteristics of the place.

Car parking within new developments should not visually dominate the streetscene.

On larger developments a range of parking solutions should be explored that use land efficiently and are set within a high quality public realm.

Pedestrian desire lines within and adjacent to the site should be identified at the outset to inform proposals which prioritise safe and convenient pedestrian movement.

Safe, secure and convenient cycle and motorcycle parking facilities should be provided as part of new developments.

Electric vehicle charge points should be provided for developments where 10 or more car parking spaces are proposed.

Car club initiatives are encouraged to promote car use as a shared resource and reduce pressure for parking.

Local Development Plan policies

- Des 3 Development Design
- Des 4 Development Design
- Des 5 Development Design
- Des 6 Sustainable Buildings
- Des 7 Layout Design
- Des 8 Public Realm and Landscape Design
- Tra 1 Location of Major Development
- Tra 2 Private Car Parking
- Tra 3 Private Cycle Parking
- Tra 4 Design of Off-Street Car and Cycle Parking

The design, integration and quantity of parking associated with new development has a huge impact on the quality of our places and the way we use them.

Proposals for new development should be design-led and reflect the positive characteristics of the place with an emphasis on creating walkable and cycle friendly environments.

Car parking in new developments

Reducing the impact of the car will create more sustainable, attractive places to live and will help to address congestion, air pollution and noise.

The type, location and quantity of car parking in new developments should be informed by the positive characteristics of the place and its accessibility by foot and bicycle to amenities and services, including public transport.

Sites which are within highly accessible locations close to amenities such as within the city centre or town centres will require less, or in some cases zero, car parking provision. It should be noted, however, that this does not mean that zero car parking provision will be acceptable in all cases - see page 58 'Parking Standards' for more information.

In all new developments, car parking should be designed to have a minimal visual impact on the site and surrounding area. Large expanses of uninterrupted car parking, particularly located to the front of new developments, will not be acceptable as they have an adverse visual impact and encourage non-essential car trips.

Where car parking is required on larger developments, a range of solutions that use land efficiently and are well integrated within a high quality public realm should be delivered. A number of these options are explored in the following Technical guidance.

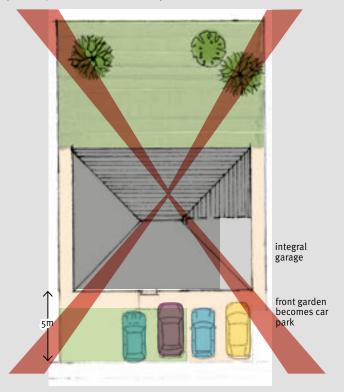


Residential development at Hopetoun Crescent respects the character of the street and incorporates underground parking to assist in minimising parking pressures on the surrounding area

Exploring options for car parking in new developments

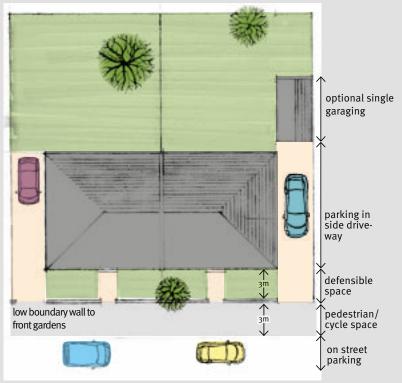
High amenity residential areas generally have car parking located on the street, set to the side or concealed from public view within the site, such as within underground or undercroft parking areas. Many modern housing developments locate the car in front of the dwelling thereby creating a streetscene which is dominated by the car. This guidance seeks to encourage sensitively located car parking and facilitate high quality places for all users.

Poor example showing the dwelling pushed back with parking to the front of the plot



Good examples of parking options within dwelling plots where dwellings are pushed forward to create defensible space and avoid parking within the front garden

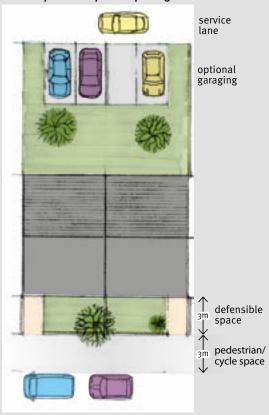
Semi detached plots example with parking to side & on street





Dwellings at Redhall House Drive pushed forward on the plot with strong boundary treatment and defensible space to the front

Terraced plots example with parking to rear and on street



Alternative approaches

Alternative approaches to accommodating car parking will be supported where hard and soft landscaping creates defensible private space and helps create high quality public realm, while minimising the visual impact of car parking.



Strong boundary treatment and landscaping define plots and reduce the visual impact of parked cars at Wallace Gardens

The use of integral garages and off-street parking to the front of buildings should generally be avoided. However, Grange Loan, Eyre Place and Wallace Gardens illustrate successful approaches which deliver high quality living environments including the use of boundary treatment to form defensible space. Where the use of integral garages is appropriate such as within mews-style developments where they are an established part of the character, they should be designed so as not to over-dominate the front elevation of the building or result in 'dead frontages'. The inclusion of windows within garage doors can also assist activating the street frontage (see example at Eyre Place).

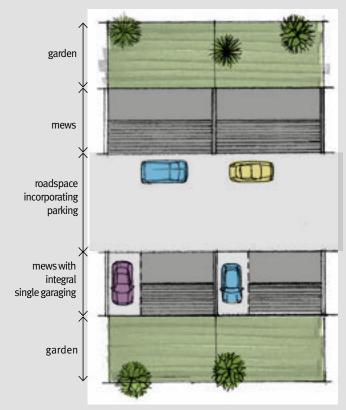


Mix of integral garages and on-street parking within the mews development at Eyre Place



Existing stone wall retained with parking area behind results in minimal visual impact of parked cars at Grange Loan

Good mews plots examples with integral garage / on street parking



Rear parking courtyards should be minimised unless they are designed to help create well overlooked and attractive amenity spaces. The position and quantity of cars should not overdominate the space or reduce its usability. The use of good quality boundary treatments, landscaping and structures such as garaging can help to avoid uninterrupted areas of parking.

Use of underground, undercroft and rooftop parking

Underground and undercroft parking should be implemented for larger developments where access ramps can be accommodated or topography permits its use. This type of parking arrangement allows buildings to be located forward on the plot creating a more active street environment and maximising space for amenity to the rear.

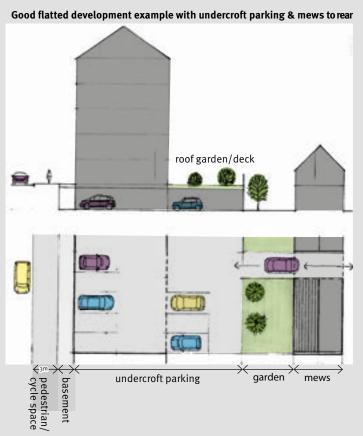
On larger developments, rooftop parking should also be explored to maximise the efficient use of space and avoid large areas of surface car parking where underground or undercroft parking cannot be delivered.

Mixed use developments

For mixed use developments, parking areas should be shared between the uses provided this works without conflict, for example, where uses are populated at different times of day. This arrangement should therefore result in a reduction in the number of total parking spaces.



Rear courtyard parking within well overlooked landscaped amenity space off Gayfield Square





Rooftop car park for supermarket uses space efficiently and the building fully activates corner position along Morningside Road



Zero parking provided within the site for this accessible town centre retail unit on Raeburn Place

Open space and landscaping

Car parking should not be provided at the expense of delivering open space required as a setting to development.

External car parking should be enhanced by a structure of tree and hedge planting arranged both within the parking area and along its boundaries. It is expected that the quantity of planting within car parks will correspond to the number of parking spaces. 50m² of planting, incorporating four trees, is required for every 20 car parking spaces, or 250m² of parking. For each 100 car spaces an additional 100m² of planting will be required.

Where proposals justify larger areas of external car parking, planting should be used to clarify pedestrian and vehicular circulation and be subdivided into compartments of 50-100 cars for ease or orientation.

Tree planting in car parks should preferably be provided in linear trenches. If tree trenches are not feasible, large treepits with underground support



Inclusion of robust landscape with trees and hedges helps to reduce the potentially negative visual impact of the car parking area

structures to ensure robust growth of trees should be incorporated. Accidental damage to planting by vehicles should be avoided through careful siting and design.

Parking spaces for people with disabilities

Under the Equality Act 2010 it is the responsibility of site occupiers to ensure that adequate provision is made for the needs of people with disabilities.

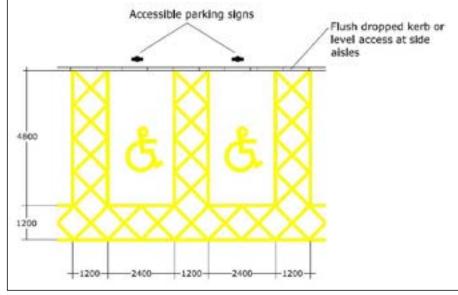
To ensure this, a proportion of all car parking areas must be accessible for people with mobility impairments, including wheelchair users (whether driver or a passenger).

This is achieved through a minimum accessible parking requirement for all developments. Accessible parking spaces should be created as part of the overall car parking provision, and not in addition to it. If it is known that there will be

a disabled employee, spaces should be provided in addition to the minimum accessible parking requirement. A larger number of spaces may be required at facilities where a high proportion of disabled users/visitors will be expected, for example health and care facilities.

Accessible parking should be designed so that drivers and passengers, either of whom may be disabled, can get in and out of the car easily and should be located close to entrances with step-free access provided between them. *Transport Scotland's Roads for All guidance* (section 4.5.8) provides design details for off and on street parking bays. All road markings must be in accordance with *Traffic Signs Regulations and General Directions*

For on-street accessible parking bays, in accordance with the Disabled Persons' Parking Places (Scotland) Act 2009, developers are required to promote a Traffic Regulation Order, so that use of such spaces can be enforced by the Council. Developers are expected to pay for the necessary road marking, signage and Traffic Regulation Order costs.



Accessible off-street parking spaces (e.g. in rest area). Source: Roads for All

Parking spaces for bicycles

The Council is committed to increasing cycling's share of travel in the city in-line with the targets set-out in the *Active Travel Action Plan*. High quality cycle parking, including secure storage, is essential in making cycling as attractive as possible.

Cycle parking should be considered in terms of two provision types – long stay and short stay.

Long-stay parking will be required in residential developments, nurseries/schools, further education centres and places of employment, as cycles are generally parked for long periods of the day. Focus should, therefore, be on the location, security and weather protection aspects of cycle parking design. It is recommended that associated facilities, including lockers, showers and changing rooms are provided at land uses where long stay cyclists require them.

Short-stay parking should, as a minimum, serve all other development types and should be available for customers and other visitors. Short-stay parking should be convenient and readily accessible, preferably with step-free access and located close to entrances.

In many cases there will be a requirement for both long and short-stay provision to accommodate the differing needs of employees, residents and students, versus the requirements of customers or visitors to a site.

Where it is not possible to provide suitable visitor parking within the curtilage of a development or in a suitable location in the vicinity agreed by the Council, the Council at their discretion may instead

accept additional long-stay provision, or as a last resort, contributions to provide cycle parking in an appropriate location in the vicinity of the site.

Where it is not possible to provide adequate cycle parking within residential dwellings, the 'Garages and Outbuildings' section of *Council's Guidance for Householders* should be referred to as it provides links to practical cycle storage advice including onstreet and garden provision.

Developers should include details of on-site cycle parking/storage on the relevant drawing(s) and early consideration of the location and type of provision is required to avoid retrofitting at the end of the design process.



Long stay cycle parking, image c/o Paul Downie, Falco

To ensure that cycle parking/storage is implemented, developers are expected to specify where the cycle parking/storage provision will be located (as agreed with the Council) and that they will be fully implemented prior to the operation or occupation of the approved development. This should be clearly stated on the relevant drawing(s) prior to the determination of the application. Developers will also be expected to set out how the facilities shall be retained throughout the lifetime of the development.

All cycle parking should be consistent with the design details set out in the forthcoming Technical Manual factsheet 'Cycle Parking in New Developments' and should also reflect section 8.3 of Cycling by Design which also details storage facilities.



Short stay cycle parking, image c/o Paul Downie, Falco

Parking spaces for motorcycles

Parking provision for motorcycles is likely to be in demand around educational establishments, workplaces, shopping and leisure destinations, and residential areas lacking in private car parking opportunities. If the demand for motorcycle parking is unmet, it may disincentivise motorcycling and will potentially result in informal motorcycle parking. This could prove hazardous to pedestrians by blocking footways, and may also inconvenience cyclists if cycle parking facilities are misused.

In terms of convenience, flexibility and security, motorcyclist requirements are akin to cyclists, with **good practice** design stating that motorcycle parking provision associated with new developments should be close by, clearly marked, secure and safe to use.

Sites should have anchor points, quality non-slip level surfacing, CCTV and/or natural surveillance. They should be located away from drain gratings and protected from the elements, as well as having good lighting. For long stay parking, such as workplaces, lockers to allow storage of clothing and equipment and changing facilities should be provided. *SCOTS* Section 3.6.5 provides further design details for motorcycle parking.

For houses, provision could be in a garage or a secure rear garden with suitable exterior access. For flatted developments, covered and secure facilities should be provided.

Electric vehicle charging infrastructure

Edinburgh has made huge progress in encouraging the adoption of electric/hybrid plug-in vehicles, through deployment of extensive charging infrastructure. As plug-in vehicles make up an increasing percentage of the vehicles on our roads, their lack of fuel emissions will contribute to improving air quality, and their quieter operation will mean that a major source of noise will decrease (see Section 2.5 - Environmental Protection).

The *Sustainable Energy Action Plan* is the main policy supporting the Council's Electric Vehicle Framework. Increasing the number of plug-in vehicles and charging infrastructure in Edinburgh will provide substantial reductions in road transport emissions.

To ensure that the infrastructure required by the growing number of electric vehicles users is delivered, one of every six spaces should include a fully connected and ready to use electric vehicle charging point, in developments where ten or more car parking spaces are proposed. Electric vehicle parking spaces should be counted as part of the overall car parking provision and not in addition to it.

Fast charging provision will be required for residential developments, whilst for all non-residential developments, rapid charging will be required (information on fast and rapid chargers is detailed in the following Technical guidance). Information on the infrastructure being provided should be included in the supporting transport submission provided with an application.

For individual dwellings with a driveway or garage, provision should be made for infrastructure to enable simple installation and activation of a charge point at a future date. This can include ducting and cabling as well as capacity in the connection to the local electricity distribution network and electricity distribution board. To further meet increasing future demand for charging points, provision for infrastructure enabling future installation should also be considered in developments where charging points are being provided.

Plans detailing who will be responsible for managing and maintaining charging infrastructure should be submitted with planning applications. Where infrastructure is installed in areas to be adopted by the Council, management and maintenance arrangements are to be aligned according to provisions detailed in the Council's Electric Vehicle framework.

Location and security of charging infrastructure needs to be carefully considered – charge points should be sited in convenient locations and CCTV or other security measures should be installed, particularly near rapid chargers.

Typical charging equipment tends to be in the form of charging posts or wall mounted charging units

Charging of an electric vehicle's drive battery can be performed in various ways by different charging equipment. The terms 'charging post', 'charge point' and 'charger' are not, strictly speaking, interchangeable but are used broadly to describe the process.



Source: Code of Practice on Electric Vehicle Charging Equipment Installation (IET Standards, 2012)





Fountain Park installation of underground car-park electric vehicle charging.

Charging infrastructure has developed greatly over the last few years. Whereas the first generation of electric vehicles could be found charging at a slow rate from a standard household socket, the current minimum standard is a dedicated 'Type 2' socket/ single phase AC supply offering outputs of up to 7kW per hour. Where a three phase AC supply is available, an otherwise identical higher powered unit can be installed offering up to 22kW per hour. Although not all electric vehicles are currently capable of accepting AC current at 22kW per hour, the trend has been for manufacturers to improve their vehicles AC charging ability. The highest power charge point should always be considered in order to future proof

an installation where possible. AC charging at the above noted power outputs is performed at units which are wall or ground mounted, typically (but not exclusively) with un-tethered cables specific to the vehicle.

'Rapid charging' is a term given to the fastest current method of charging an electric vehicle's battery and is performed by a much larger unit with tethered cables and adapters. Rapid charging can provide significantly higher power and output rates than described above. A typical rate of charge to 80% capacity of an electric vehicle's battery can be performed in around 30 minutes.

Guidance and advice on sourcing electric vehicle charging infrastructure is available from the following sources:

UK Electric Vehicle Supply Equipment Association
British Electrotechnical and Allied Manufacturers'
Association

Provision for car club vehicles



Car club spaces, Quartermile

Car clubs are well established and have been in operation in Edinburgh since 1999. Car clubs are membership based and provide access to payas-you-go cars and vans parked in clearly marked spaces in publicly accessible locations.

An increasing number of people find that using a car club is cheaper and more convenient than owning a car, and businesses may utilise this facility to provide fleet vehicles for employees. LDP Policy Tra 2 (Private Car Parking) states that where complementary measures can be put in place to make it more convenient for people not to own a car, such as access to a car club scheme, reduced car parking provision may be justified.

Early dialogue with the Council and a car club representative should take place to establish the acceptability of the location and any practicalities in implementing a car club scheme as part of a new development. Where car club spaces are considered acceptable as part of a new development the Council will require a financial contribution towards the cost

of this provision (refer to the *Council's Guidance on Developer Contributions and Affordable Housing*).

For housing developments, prospective residents should be made aware of the car club facility as part of a welcome pack associated with a Travel Plan.

Parking Standards

Parking Standards (the Standards) are a tool for managing the levels of parking associated with new developments. To encourage a shift from the private car to more sustainable modes of travel, the Standards help by setting maximum limits for general car parking to restrict excessive provision, while setting minimum levels for accessible car parking, cycle parking, motorcycle parking and electric vehicles.

The zones and parking requirements in the Standards are aligned to public transport accessibility levels, Controlled Parking Zones, and strategic development zones. The Standards for zones with good public transport accessibility will require comparatively less car parking than for zones which are less accessible by public transport (see page 60). The Standards also align with Planning Use Classes, and are shown for different classes of development on page 61.

In all developments the level of parking proposed should be lower than, or equal to the maximum limits set by the Standards. Lower provision will be justifiable in highly accessible and dense locations such as the city centre, or where detailed parking overspill mitigation measures have been proposed. In less accessible locations, low levels of parking provision may be considered where carriageway

widths are sufficiently wide to safely accommodate on-street parking (the forthcoming Technical Manual factsheet 'Carriageway Widths' provides street width details), and where it has been determined by parking surveys that there are no existing or potential parking pressures on surrounding streets.

Applications for new developments must include reasoned justification for the parking provision proposed. To enable this, comprehensive transport information is required for all developments – this should detail the impacts of the development in terms of anticipated parking levels and all forms of access to the site. Transport information provided must therefore include:

- type and scale of development (proposed use, planning use class, number of units/rooms, gross floor area);
- a detailed accommodation schedule, particularly for residential developments, listing numbers of each size of unit:
- identification of existing transport infrastructure in and around the site;
- details of proposed access to and through the site for pedestrians and cyclists, as well as links to footways, cycle paths, shared use and core paths around the site;
- details of proposed access to public transport facilities and services;
- comprehensive parking information detailing proposed parking provision (number and layout/ design of spaces, including accessible spaces, electric vehicle charging points, motorcycle and cycle parking);

- parking surveys to understand the potential impact of overspill parking in surrounding streets.
 The surveys should identify parking space capacity and utilisation on streets surrounding the development and should ideally be 24 hour surveys over a one week period; and
- mitigation measures where low parking provision is proposed – this should include measures which reduce the impact of parking in surrounding streets, including provision of car club vehicles and travel packs detailing the accessibility of public transport and walking and cycling infrastructure.

For larger developments (50+ residential units, 10,000m²+ gross floor area for business, industry, storage and distribution developments, and 5000m²+ gross floor area for other developments), detailed transport studies are required which include all of the transport information cited previously as well as more detailed examination of potential transport impacts, along with proposed transport measures. This includes:

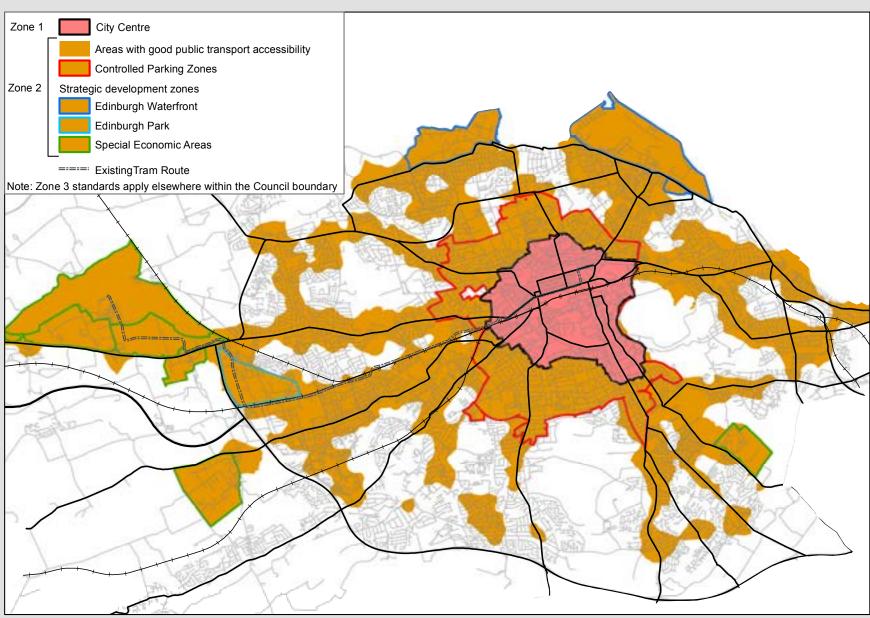
- trip generation and modal split forecasts;
- traffic analysis, to understand the transport impacts of the development;
- analysis of potential safety issues caused by transport generated by the development;
- how car use in and around the development will be managed;
- measures considered to influence travel behaviour in and around the development;
- transport planning and demand management measures including mode share targets; and

 environmental impacts caused by transport in and around the development.

Before applying for planning permission a preapplication discussion with the Council can provide an opportunity to get advice on, and agree the scope of, the parking and transport information requirements of an application. As well as discussing the detailed transport and parking information required, a pre-application meeting can explore the potential need for quality audits, road safety audits and Roads Construction Consents.

Public transport accessibility levels are measured by taking account of the distance from any point to the nearest public transport stop and the service frequency at that stop. The higher the score, the greater the level of accessibility. The parking zones map should be used to inform the provision to be applied at a specific development, in a given area of the city. The map can also help when considering opportunities for higher density developments.

In calculating requirements, the Standards generally relate to gross floor areas unless otherwise stated (i.e spaces per habitable rooms in the case of residential developments). When the measurement relates to staff numbers, this should be taken as a full time equivalent member of staff.



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Parking standards for each relevant planning use class

The table below helps to determine parking allocations, based on 1 space per xm² of Gross Floor Area unless otherwise stated

Development by planning use class	Cai	Car Parking Maximum per parking zone			Cycle Minimum		Motorcycle Minimum				
Class 1 Shops	Zone 1	Zone 2	Zone 3	Employees	Customers	Employees	Customers				
Retail Warehouse (public use)	1 per 500m²	1 per 50m²	1 per 30m²	1 per 500m²	1 per 1000m²	1 per 4000m²	1 per 2000m²				
Retail Warehouse (trade only)	1 per 3000m²	1 per 360m²	1 per 180m²	1 per 1000m²	1 per 2000m²	1 per 8000m²	1 per 4000m²				
Shops < 500m ²	1 per 100m²	1 per 50m²	1 per 25m²	1 per 250m²	1 per 500m²	1 per 2000m²	1 per 1000m²				
Shops 500m² to 2000m²	1 per 70m²	1 per 30m²	1 per 20m²								
Shops > 2000m ²	1 per 70m²	1 per 35m²	1 per 20m²								
Class 2: Financial/Professional Services	1 per 100m²	1 per 50m²	1 per 25m²								
Accessible parking - minimum provision		loyee who is a disabled motorist plus 8% of to									
Electric vehicles - minimum provision		paces are proposed, one of every six propose		an electric vehic	le charge noint						
Electric Vernoles minimum provision	Trincia 10 Car parking 5	gades are proposed, one of every six propose	a spaces stroata reatare	an electric verne	ie enarge point.						
Class 3 Food/Drink (incl. pubs & takeaways: sui generis)	1 per 20m²	1 per 14m²	1 per 11m²	1 nor	75 m ²	1 por 20	car chacos				
Accessible parking - minimum provision		1 per 20m ² 1 per 14m ² 1 per 11m ² 1 per 75m ² 1 per 20 cars One space for each employee who is a disabled motorist plus 8% of total capacity					tar spaces				
Electric vehicles - minimum provision		Where 10+ car parking spaces are proposed, one of every six proposed spaces should feature an electric vehicle charge point.									
Electric vehicles - minimum provision	Where 10+ car parking s	paces are proposed, one of every six propose	d spaces should leature	an electric venic	ie charge point.						
	2										
Class 4: Business	1 per 500m²	1 per 63m²	1 per 35m²	1 per 150m²	1 per 1000m²	1 per 1000m²	1 per 4000m²				
Class 5: General Industry	1 per 1000m²	1 per 125m²	1 per 70m²	1 per 300m²	1 per 2000m²	1 per 2000m²	1 per 8000m ²				
Class 6: Storage/Distribution	1 per 3000m²	1 per 385m²	1 per 210m²	1 per 900m²	1 per 6000m²	1 per 6000m²	1 per 16000m				
Accessible parking - minimum provision		loyee who is a disabled motorist plus 6% of to									
Electric vehicles - minimum provision	Where 10+ car parking s	paces are proposed, one of every six propose	ed spaces should feature	an electric vehic	le charge point.						
Class 7 Hotels	1 per 5 bedrooms	1 per 2 bedrooms	1 per bedroom	1per 10 l	oedrooms	1+1 per 20	O car spaces				
Coach parking	1 coach space per 50 roo	oms (need not be on-site)									
Accessible parking - minimum provision	One space for each emp	loyee who is a disabled motorist plus 8% of to	otal capacity								
Electric vehicles - minimum provision	Where 10+ car parking s	paces are proposed, one of every six propose	ed spaces should feature	an electric vehic	le charge point.						
Class 8 Residential Institutions: residential homes	1 per 10 beds	1 per 5 beds	1 per 4 beds	1 per	15 beds	1 per	25 beds				
Accessible parking - minimum provision		loyee who is a disabled motorist plus 12% of									
Electric vehicles - minimum provision		paces are proposed, one of every six propose		an electric vehic	le charge point.						
Electric verneies minimum provision	83	,,,			8- p						
Class 9 Housing (including flats: sui generis)	Zone 1 and 2	Zone 3		Cy	cle	Moto	orcycle				
Studio/ 1 room*	Zone Tana Z	Zone 3		1 per unit		Wioto	reyele				
2 rooms*		1 per unit		1 pe	i unit						
	1 per unit	4.5		2 per unit		1 per 25 units					
3 rooms*		1.5 per unit 2 per unit		2	3 per unit						
4 or more rooms*	5 11 1 11 540	•	for a firm of	3 pe	runit	<u> </u>					
Accessible parking - minimum provision		dwellings (where parking is communal): 8% (1		e 1 10 0					
Electric vehicles - minimum provision						Where 10+ car parking spaces are proposed, one of every six proposed spaces should feature an electric vehicle charge point. For dwellings with a					
*1.15.11		e provision should be made so that a charge p	point can be added in th	e future i.e. a / k	w socket.						
* habitable rooms only – excludes kitchens											
	and bathrooms										
Class 10 Non-Residential Institutions	1 per 15 staff	1 per 3 staff	1 per 2 staff	2 (+1 per 7 s	taff + 1 per 10	1(+ 1 per	r 25 staff)				
Class 10 Non-Residential Institutions Schools/nurseries	1 per 15 staff	<u> </u>	<u> </u>	2 (+1 per 7 s	taff + 1 per 10 pils)		r 25 staff)				
Class 10 Non-Residential Institutions Schools/nurseries Libraries (m² Public Floor Area)	1 per 15 staff 1 per 150m²	1 per 68m²	1 per 50m²	2 (+1 per 7 s pu ₁ 1 per 100m ² (taff + 1 per 10 bils) +1 per 7 staff)	1(+ 1 pe					
Class 10 Non-Residential Institutions Schools/nurseries Libraries (<i>m² Public Floor Area</i>) Church/community hall	1 per 15 staff 1 per 150m ² 1 per 120m ²	1 per 68m² 1 per 50m²	1 per 50m ² 1 per 40m ²	2 (+1 per 7 s pu ₁ 1 per 100m ² (taff + 1 per 10 pils)	1(+ 1 pe	r 25 staff) r 25 staff)				
Class 10 Non-Residential Institutions Schools/nurseries Libraries (m² Public Floor Area) Church/community hall Accessible parking - minimum provision	1 per 15 staff 1 per 150m² 1 per 120m² One space for each emp	1 per 68m ² 1 per 50m ² loyee who is a disabled motorist plus 8% of to	1 per 50m² 1 per 40m² otal capacity	2 (+1 per 7 s ² pu ₁ 1 per 100m ² (1 per	taff + 1 per 10 bils) +1 per 7 staff) 67m²	1(+ 1 pe	r 25 staff) r 25 staff)				
Class 10 Non-Residential Institutions Schools/nurseries Libraries (m² Public Floor Area) Church/community hall Accessible parking - minimum provision	1 per 15 staff 1 per 150m² 1 per 120m² One space for each emp	1 per 68m² 1 per 50m²	1 per 50m² 1 per 40m² otal capacity	2 (+1 per 7 s ² pu ₁ 1 per 100m ² (1 per	taff + 1 per 10 bils) +1 per 7 staff) 67m²	1(+ 1 pe	r 25 staff) r 25 staff)				
Class 10 Non-Residential Institutions Schools/nurseries Libraries (m² Public Floor Area) Church/community hall Accessible parking - minimum provision Electric vehicles - minimum provision	1 per 15 staff 1 per 150m² 1 per 120m² One space for each emp	1 per 68m ² 1 per 50m ² loyee who is a disabled motorist plus 8% of to	1 per 50m² 1 per 40m² otal capacity	2 (+1 per 7 s ² pu ₁ 1 per 100m ² (1 per	taff + 1 per 10 bils) +1 per 7 staff) 67m²	1(+ 1 pe	r 25 staff) r 25 staff)				
Class 10 Non-Residential Institutions Schools/nurseries Libraries (m² Public Floor Area) Church/community hall Accessible parking - minimum provision Electric vehicles - minimum provision Class 11 Assembly & Leisure	1 per 15 staff 1 per 150m² 1 per 120m² One space for each emp Where 10+ car parking s	1 per 68m² 1 per 50m² loyee who is a disabled motorist plus 8% of to paces are proposed, one of every six propose	1 per 50m ² 1 per 40m ² otal capacity ed spaces should feature	2 (+1 per 7 sr pul 1 per 100m² (1 per an electric vehic	taff + 1 per 10 bils) +1 per 7 staff) 67m ² le charge point.	1(+ 1 per	r 25 staff) r 25 staff) 1				
Class 10 Non-Residential Institutions Schools/nurseries Libraries (m² Public Floor Area) Church/community hall Accessible parking - minimum provision Electric vehicles - minimum provision Class 11 Assembly & Leisure Cinemas/theatres	1 per 15 staff 1 per 150m² 1 per 120m² One space for each emp Where 10+ car parking s	1 per 68m² 1 per 50m² loyee who is a disabled motorist plus 8% of to paces are proposed, one of every six propose	1 per 50m² 1 per 40m² otal capacity d spaces should feature	2 (+1 per 7 s' pui 1 per 100m² (1 per an electric vehic	taff + 1 per 10 bils) +1 per 7 staff) 67m² le charge point.	1(+ 1 per	r 25 staff) r 25 staff) 1 0 car spaces				
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2.5 Environmental protection

Development should actively help enhance the environment, manage exposure to pollution and reduce overall emissions.

Adopt good design principles that reduce emissions (noise, air and light pollution) and contribute to better pollution management.

Balconies should be avoided in locations which experience poor air quality, and where there is excessive noise.

Local Development Plan policies

• Env 2 - Pollution and Air, Water and Soil Quality

Air Quality

The location and design of a development has a direct influence on exposure to elevated air pollution levels. This is particularly relevant where developments include sensitive uses such as residential uses, hospitals, schools, open spaces and playgrounds. Developers should maximise the contribution the building's design, layout and orientation make to avoiding the increased exposure to poor air quality and these elements, therefore, need to be considered at the initial design stage.

Good practice principles in the design stage should be aligned to *Delivering Cleaner Air for Scotland*, and should consider the following:

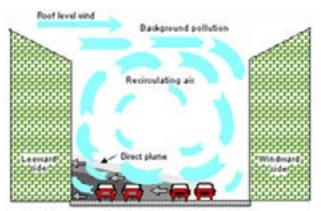
 New developments should not contravene the Council's Air Quality Action Plan, or render any of the measures unworkable;

- Wherever possible, new developments should not create a new "street canyon" or building layouts that inhibit effective dispersion of pollutants;
- Delivering sustainable development should be the key theme for the assessment of any application;
- New development should be designed to minimise public exposure to pollution sources, e.g. by locating habitable rooms away from busy roads, or directing combustion exhaust through well-sited vents or chimney stacks.

Where possible, new trafficked roads should align to prevailing winds which may help with pollutant dispersal, alternatively, the creation of a buffer zone between busy roads and buildings could be another practical solution to pollution exposure.

Other relevant national guidance and policy which should be adhered to includes *Planning Advice Note 51* (Revised 2006): Planning, Environmental Protection and Regulation, and *Cleaner Air for Scotland: The Road to a Healthier Future*, November 2015.

Air flow pattern in a street canyon – where vehicular traffic is expected street canyons should be avoided



Source: urban-air-pollution-modeling

Developers should also consider the location of outside space including gardens, balconies and roof terraces proposed in areas of particularly poor air quality. Outside spaces should be screened by planting where practical, and be appropriately designed and positioned to minimise exposure to pollutants.

Protecting internal air quality

To protect internal air quality, developers should specify environmentally sensitive (non-toxic) building materials. The use of materials or products that produce volatile organic compounds and formaldehyde which can affect human health, should be avoided. It is also important to maintain combustion plant and equipment, such as boilers, and ensure they are operating at their optimum efficiency to minimise harmful emissions.

Noise

In addition to reducing general quality of life, excessive noise can damage health and harm the environment.

The density and mix of uses within Edinburgh contribute to the vibrancy of the place. However, noise associated with this mixture of land uses can be a nuisance to sensitive occupiers.

Where a proposed development will emit noise, the site layout should be designed to minimise future noise complaints, incorporating the most appropriate mitigation measures into the scheme.

Where a proposed sensitive development is likely to be exposed to noise, developers should design the layout to minimise noise and implement the most appropriate measures to ensure amenity is protected. This could include locating noise sensitive areas/rooms away from the parts of the site most exposed to noise or designing the building so its shape and orientation reflect noise and protect the most sensitive uses.

Reference should be made to *Planning Advice Note*1/2011 *Planning and Noise* in addition to industry technical guidance and British Standards when addressing relevant issues, for example *BS4142 – Method for Rating Industrial Noise Affecting Mixed Residential & Industrial Areas* and *BS8233:2014 - Guidance on sound insulation and noise reduction for buildings*.

Lighting

Lighting is a critical component in the design of high quality public realm and it has an important role in supporting placemaking across the city. *The*



Good design for noise was used at Our Dynamic Earth to stop noise escaping from one of their function areas. Instead of installing doors they installed a triangle, zigzagged corridor.

Sustainable Lighting Strategy for Edinburgh offers lighting principles which help to encourage lighting designs that will reduce energy use and cost, and minimise light pollution.

Further guidance is contained within;

Guidance Note; Controlling Light Pollution and

Reducing Lighting Energy Consumption;

PAN 51: Planning, Environmental Protection and

Regulation; and

PAN 77: Designing Safer Places.

Contaminated Land

Early identification of land contamination issues enable the consideration of mitigation measures, phasing and the potential to implement less expensive, and more sustainable, in-situ clean up technologies. An assessment of the risks associated with developing contaminated or potentially contaminated land is essential to inform decisions

about the appropriate level of treatment, clean up or sustainable remediation that may be required. The Council holds details on potentially contaminated land based on historic land uses. Where a site is affected by contamination, it is the developer's or landowner's responsibility to develop the site safely.

Odour

Chimney or flue termination points located at low levels in relation to adjacent buildings, can cause problems for residential amenity, as well as having visual impacts. Consideration should be given when designing extraction for commercial kitchens, the flue system for a wood burning stove or when dealing with the industrial processes to the location and height of these points. It is more effective to address odour at the design and planning stage of a new plant or process than to seek to abate a statutory nuisance from odours retrospectively.

2.6 Minimise energy use

Minimise energy needs through a combination of energy efficiency and incorporate low or zero carbon equipment.

Ensure low and zero carbon equipment is sensitively integrated into the design.

Support appropriate energy generation to help meet national targets.

Local Development Plan policies

• Des 6 - Sustainable Buildings

Energy Reduction in New Buildings

All new developments will be expected to meet the carbon dioxide emissions reduction targets set out within Section 6 – Energy and Section 7 – Sustainability of the current Scottish Building Regulations through a combination of energy efficiency and low or zero carbon technology.

For all relevant applications, the sustainability statement form (S1) should be completed and submitted with the application. Development that has been independently assessed under BREEAM or equivalent is required to achieve a sustainability accreditation/award of at least very good. Achieving a Silver level certificate for Section 7 of the Building Regulations is considered by Planning to be equivalent to a very good accreditation for BREEAM.

Heat Mapping

Heat mapping is an important tool to help identify locations where heat distribution is most likely to be beneficial and economical. It can be used to identify individual buildings and groups of buildings which could benefit from heat distribution networks. Heat maps can utilise information on both demand (domestic, industrial and commercial) and supply for renewable heat. The Scottish Government has developed a heat mapping tool for local authorities based on using standard GIS methodologies.



Minimising energy use through careful design—Fala Pl This housing development achieved a BREEAM excellence award in recognition of it high standards of sustainability. It achieves this through a range of measures including insulation, airtightness and heat recovery.

A new heat map for Edinburgh will be produced and Supplementary Guidance will be prepared regarding heat mapping. The Guidance will consider the potential to establish district heating and/or cooling networks and associated opportunities for heat storage and energy centres. It will also look at how implementation of such initiatives could best be supported.

Edinburgh's **Sustainable Energy Action Plan 2015** - **2020 (SEAP)** shows Edinburgh's aims for minimising energy use and provides details of the actions supporting the introduction of heat mapping and district heating.



Integrating micro renewables—Kings BuildingsSolar Panels are integrated into the design of the elevation.

2.7 Materials and detailing

Harmonise materials on new development with the materials used on surrounding buildings.

Use sandstone where sandstone is the commonly used building material.

Where alternative materials are used, these should either harmonise or provide a striking contrast.

Keep the number of materials on new development to a minimum.

Detail buildings to ensure they have a good visual appearance that lasts over time.

Use greenroofs where appropriate and creative detailing to help manage surface water.

Protect and enhance biodiversity by incorporating habitat structures into the detailing of buildings.

Local Development Plan policies

- Des 4 d) Development Design
- Des 6 Sustainable Buildings

Materials are key to whether or not development achieves sufficient design quality, appropriate for its context.

Edinburgh's distinctive appearance and character is partly a result of the limited palette of quality traditional materials that are used in its buildings. Much of the city's built heritage is characterised by sandstone buildings and slate roofs.

Some parts of the city use a wider range of materials in addition to these. In these areas there may be more scope to use alternative high quality materials than elsewhere.

The reasoning behind the selection of materials should be set out in a design statement.

The long term visual success of building materials is dependent on how they are detailed and how they weather. Some materials are more likely to suffer from adverse weathering such as staining. Where the Council thinks this might be the case, detailed drawings may be required to fully assess the proposals. The durability of particular materials can be assessed by examaning existing examples.

Construction techniques can be used to incorporate habitat structures into the design of new buildings in order to increase biodiversity, for example, bat and swift boxes. Further information can be found in Biodiversity for Low and Zero Carbon Buildings: A Technical Guide for New Build'.

The following pages set out in more detail the Council's technical expectations for building materials.

The choice of building materials may be a condition of planning permission.

On larger or more prominent schemes, sample panels may need to be constructed for approval. This is to demonstrate how the proposed building materials fit together. This should include hard landscaping details.

Section 3.7 Hard landscape, sets out the Council's expectations for materials in hard landscaped areas.



High quality detailing and design—Circus Lane Considerable attention to detail has helped create a very refined design. This building sets the standard for mews conversions within the city.

Stone

Edinburgh's distinctive sandstone forms the basis of the city's traditional character and inherrent quality.

Much of Edinburgh's sandstone was hewn from local quarries that are now closed; most famously Craigleith but also at other quarries such as Hailes, Humbie, Ravelston, Binnie and Granton.

It is expected that natural sandstone will be used as the main external building material in development where sandstone is the dominant material on neighbouring buildings or in the surrounding area. This is particularly important on facades that can be seen from the street.

This principle applies in conservation areas but also to other areas of the city with stone buildings including prominent areas such as arterial routes.



Sandstone in a villa area—Newbattle TerraceSandstone will be sought for new buildings in villa areas where the surrounding buildings are built of sandstone.

Scottish sandstone is still available from a few quarries, such as Clashach in Moray and Cullaloe in Fife, a good match for Craigleith stone. Pennine Sandstones – Crosland Hill can also provide suitable matches.



Where sandstone would be sought—Angle Park Ter. If the white painted building were to be demolished, the Council would seek a sandstone for its replacement, given the site's context of sandstone buildings on each side.



Modern use of stone in an historic context

At the Museum of Scotland (above) rigorous and sculptural use of sandstone cladding provides the building with a striking contemporary aesthetic that responds positively to the surrounding historic context. Care needs to be taken with any proposal like this, that the detailing mitigates adverse weathering and staining.

Red sandstone, historically from the West of Scotland, contributes towards the city's character. It has been used effectively to help integrate modern buildings into historic areas where red sandstone is already used.

Granite is considered acceptable, where a contrast with surrounding buildings is appropriate (for example to emphasise important public buildings) and as a secondary element (for example on plinths where its robustness and good weathering characteristics helps maintain the appearance of buildings).

The size of stone used should match that of nearby buildings.



Informatics Forum—Charles Street
Sandstone is built into vertically proportioned panels which are used to order the design of the elevations.

Cast stone and concrete

Cast stone and concrete are acceptable where their uniform appearance is appropriate and where measures have been taken to avoid adverse weathering such as the build up of dirt, streaking and staining.

It is important that there is a strong underlying reason for using cast stone or concrete rather than stone. One reason is that the design may be based around an idea of having very large or unusual shaped panels that would be very difficult to construct in single blocks of stone.

Measures to avoid adverse weathering include:

- Architectural details which control the water run-off from a facade in ways which enhance the weathering characteristics;
- The specification of the surface finish; and
- The inclusion of sealants to the surface.

Cast stone is manufactured with aggregate and a cementitious binder. Its appearance is intended to be similar to natural stone. Unlike naturally formed stone, which tends to be visually rich, blocks of cast stone appear alike. This can look dull in comparison with natural stone. This effect is emphasised over time when typically cast stone will weather in a more uniform way than similarly detailed natural stone.

Further information about pre-cast concrete cladding can be found at **www.britishprecast.org**.



A mixture of cast stone & natural stone—Morrison St. Cast stone was used at high level on the drum shaped part of the building while natural stone was used at low level on the corners.



Concrete used sculpturally—Horse Wynd
The sculptural potential of concrete is exploited in the Parliament
wall with the patterned surface and integration of lights



In-Situ Concrete—Museum of Scotland
This concrete is used to sculptural effect on the museum building.



Textures created with concrete—Princes StreetConcrete panels with a textured surface treatment are used on this recent building on Princes Street.

Cladding

High quality metal cladding may be acceptable in some historic environments where there is already a range of building materials. It may also be acceptable where overt contrast is sought and considered appropriate. Appropriateness depends on the quality of the finish and detailing as well as the character of the surrounding environment. High quality metal cladding might be acceptable in some locations in the Old Town, it is less likely to be acceptable amongst the palatial frontages of the New Town. The surface finish of the cladding should be raw or treated metal which does not have a coating. The fixings of any cladding should be hidden.

There are a range of cladding materials and ways in which these can be constructed. Metal cladding can provide buildings with a striking contemporary appearance, however, if used inappropriately it can have a negative visual effect.

Resin and cement based panels can be used on less sensitive sites and where their use is limited or will have a minimal visual impact. Because of their poorer visual characteristics in comparison with metal claddings like anodised aluminium, stainless steel and zinc—these should be avoided in conservation areas including those with villas.

Where resin based panels are used as cladding, synthetic prints which aim to emulate wood should be avoided. These are not considered to have as positive a visual effect as natural timber.



Using zinc to provide striking contrast—Infirmary St.The zinc cladding combined with the modern building form provides a positive contemporary contrast to the historic former Infirmary Street Baths building.



Too many materialsThe cladding, blockwork and render and their detailing used at

this development would not now meet the Council's expectations for appropriate quality.



Aluminium—Simpson Loan

Multi-toned anodised aluminium cladding provides a striking and positive contrast to the historic buildings making the distinction between new and old very clear.



High quality detailing—Sighthill Court

Construction of a sample panel and approval were required by condition in order to ensure the design intent of a high quality finish was executed.

Timber

Timber should be appropriately detailed to ensure that it retains a good visual appearance over time, and that durable species should always be used. Sensitive sites include conservation areas and arterial routes into the city. Durable species include European Oak, Western Red Cedar and Sweet Chestnut. Moderately durable species can be used on smaller proposals which are not in sensitive sites. Moderately durable species include Larch, Douglas Fir and European redwood.

Tropical hardwoods should be avoided unless it can be clearly demonstrated that these are sourced sustainably. More information about timber can be found at www.trada.co.uk.

For local developments in sensitive locations and all major developments durable species should be used. Sensitive sites include conservation areas and arterial routes into the city.

Specification and architectural details at a 1:5 or 1:10 scale of the proposed timber cladding may be sought. These should set out the thickness of the timber (which should not be less than 19mm finished size) and the types of fixings, which should be specified to ensure no staining. The details should show how water will be shed clear of the ends of timber to ensure moisture absorption is prevented.



Careful detailing—Arboretum PlaceThe timber cladding overhangs cladding of

The timber cladding overhangs cladding on lower levels of the building. This helps shed water from its surface, and protects it from adverse weathering.



Durable species—Informatics Forum

The timber cladding is Oak. This is a durable species that is appropriate for use in prominent or sensitive areas.



Sculptural effect—Upton

The timber cladding is used to give these houses a striking appearance.

Image courtesy of Steve Tiesdell Legacy Collection

Brick

Brick generally has good weathering characteristics, and can be specified so that its colour and texture harmonises with surrounding buildings. In sites outwith conservation areas and where the design proposed is of a high quality, brick can be used positively.

Where brick is used in an existing context of stone buildings it is expected that the brick and mortar will be specified to harmonise with the range and tone of colours in the surrounding buildings. Note that generally, the expectation is for the use of natural stone where natural stone is the prevalent building material.

Brick can also be used to provide contrast, however, care needs to be taken with this approach to ensure that the architectural effect is not at the expense of the quality of the design of the street as a whole.

The proportions of windows play a major role in giving brick buildings an Edinburgh character.

Traditional tenements have large vertically proportioned windows. Using windows of the same size and alignment can help integrate brick buildings into their surroundings.

Although not a prevalent building material, brick has been used in certain locations within Edinburgh to positive effect. Brick is commonly used in industrial structures such as maltings and as a secondary element, for example on side and rear elevations or chimney stacks. Many traditional Edinburgh examples used locally produced Portobello brick which was produced into the early 20th Century.



Subtle variation—Telford MarchTwo different mixes of brick have been used to provide variation in colour within the elevations.

Care needs to be taken with the specification of brick and also during construction to avoid efflorescence. This is the build up of salts present in the brick material appearing on the surface of the wall as the mortar cures.



Modern use of brick in an historic environment—McEwan Square / Fountainbridge

Brick has been used to integrate this development into its historic surroundings. The development is overtly contemporary in its appearance. The colour of bricks was chosen to harmonise with the stone of the adjacent tenements. Combined with the vertical emphasis to the window and the building's scale, the material choice has helped ensure this development adds to Edinburgh's sense of place. This development sets the standard for the use of brick within Edinburgh.

Render/harl

When appropriately specified and in appropriate locations, render can be used as an external building material which can contribute towards Edinburgh's sense of place.

Appropriate specifications include:

- Ensuring it does not discolour or fade over time and it does not suffer from algae growth or lime bloom;
- Consideration of the location of all expansion and movement joints, slim vents, boiler flues, extract ducts and rain water goods etc to ensure these do not have an adverse visual impact; and
- Consideration of architectural detailing to shed water from the surface of the render. Note that details may be sought.

There is a strong tradition of rendered buildings in parts of the city area which predate the building of the New Town, for example, the Old Town and the centre of Queensferry. This use has continued and render can be used to provide contrast in locations like these on contemporary buildings. Where render would make a building stand out in longer views, this should generally be avoided.

Render also has a contemporary appearance that is appropriate in areas where the overall character is modern.

In some areas, because of levels of vehicular traffic and microclimate, pronounced weathering is evident. On rendered buildings this can look

adverse. An example area is the Cowgate, where the canyon-like form of the street contains pollution which stains external wall surfaces. Render tends to highlight these effects rather than suppress them. For this reason contextually appropriate alternative

materials with better weathering characteristics may be a better choice in areas or streets like this.

Traditional lime renders and lime harling can be used in appropriate locations.



Integrating the new with the old—High Street
The controlled use of render, combined with sandstone, create a positive modern addition to the Old Town



Positive contrast—Old Fishmarket Close, off High St *The use of render and timber contrast positively with surrounding stone buildings.*



Impacting adversely on views—Calton Hill

The rendered buildings stand out against the surrounding stone and slate buildings. Alternative materials may have allowed the buildings to integrate better into the view.

Hard roofing materials

Slate, pantiles and metals such as lead, stainless steel, zinc and copper contribute to Edinburgh's roofscape. All these materials are generally considered appropriate. Synthetic versions of these materials should be avoided in conservation areas.

The use of synthetic materials will be considered on a case by case basis in other areas of the city and their appropriateness will be assessed against:

- The extent of use;
- Their prominence on the building; and
- The prominence of the building on the setting of the city and setting of the street.

Edinburgh has a strong tradition of using slate (such as Ballachulish) as a roofing material. The palette of darker greys of slate helps to draw out the warmth of sandstone.



Metal roofing in a historic context—CanongateStainless Steel roofing has been used on the Scottish Parliament.

Synthetic materials inadequately replicate the characteristics of materials they seek to emulate and as a consequence have a poorer appearance.

The vulnerability of metal roofing to theft should be considered at the design stage.



Traditional roofing materials (right)

Slate, Lead and zinc are traditional roofing materials used in
Edinburgh—seen here from the Museum of Scotland's roof.

Green roofs

Green roofs are flat or sloping roofs with some form of vegetation placed on them. They are intensively or extensively managed; the former with a deep soil profile supporting shrubs, trees and grass, and the latter with a shallow soil profile growing drought tolerant self seeding vegetation. Both are encouraged in appropriate locations, particularly adjacent to green/blue corridors and will be encouraged in locations adjacent (within 15m) of river corridors. They have numerous benefits that include prolonging the life of the roof, attenuating water, reducing sound transmission, improving thermal efficiency, enhancing air quality, and habitat creation. Green roofs should not be regarded as an alternative to open space provision on the ground. Care should be taken to ensure that they do not have an adverse visual effect, for example, disrupting a visually cohesive existing roofscape. Green walls can also be used in certain circumstances and provide many of the benefits of green roofs.



Extensively green roof—Botanic GardensThe planting on this green roof helps integrate the building into its surroundings.

Aircraft Safety

The impacts of requirements for aircraft safety—for example the need to deter birds from roofs—should be considered at the outset to ensure any resulting features are sensitively incorporated.

Other Materials

To help the sustainability of development, uPVC should not be used as a material for windows on major planning applications unless it can be demonstrated that they are recycled and achieve a minimum rating of 'A' in the BRE 'Green Guide'. Thermally broken aluminium, aluminium / timber composites, and timber windows may provide suitable alternatives. For listed buildings and conservation areas refer to the Council's Guidance on Listed Buildings & Conservation Areas.

Timber should be from a sustainable source. The reuse and recycling of materials is encouraged. When making an application, the *Sustainability Statement Form (S1)* should be completed.

Opaque panels in glazing systems or windows should be avoided.

Consideration should be given to 'bat friendly' roof membranes to support bat populations.



Frameless glazing—Festival Theatre, Nicolson Street
The refined detailing of the frameless glazing helps create a striking modern addition to the street.



Curtain Walling—Beccleuch PlaceThe potential offered by glazing systems with variations in the window widths, patterning of the glass and mullion depths is fully taken advantage of here.



Frameless glazing—George Square LaneGlazing is used to create the effect of a floating roof on this building.

2.8 Adaptability

Ensure buildings are adaptable to the future needs of different occupiers.

Local Development Plan policies

• Des 5 b) - Development Design



Adaptable laboratory building—Old Dalkeith Road
This building was designed to allow different types and sizes of
laboratory space and all their associated services to be fitted out
and changed over time.

Adaptability

Many buildings are designed with specific uses in mind. If the design becomes too specific it can become very difficult to make changes to the building and give it a new use at a later date. Examples of making buildings more adaptable include:

- Creating level access so that buildings can be used by all;
- Ensuring there is sufficient space for changing needs;
- Making floor to ceiling heights high enough to accommodate a range of different uses;
- Providing space for extensions; and
- Designing roof spaces so that they can easily be turned into floor spaces.



Adaptability in suburbia

The houses are designed with sufficient space that extensions can be added while retaining relatively large gardens. In addition, attics have been converted.

2.9 Mix of uses

If appropriate, create a mix of uses.

Local Development Plan policies

- Des 2b Co-ordinated Development
- Des 5 b) Development Design

Mix of uses

Having a mix of uses in a development can help both its sustainability and the sustainability of an area as a whole. If the services that people use are located in close proximity to where they are, there will be less reliance on transport as people will be more likely to walk.

Making places vibrant and interesting through providing a mix of uses, will help them resilient to changes in the economy and more attractive to new development.



Mix of uses—Middle Meadow Walk
This new development incorporates a mix of uses including housing, offices, gym, shops and cafes.



Mix of uses—Newhall, England
This office integrates into this suburban development.
Image courtesy of Steve Tiesdell Legacy Collection.

2.10 Daylight, sunlight, privacy and outlook

Design the building form and windows of new development to ensure that the amenity of neighbouring developments is not adversely affected and that future occupiers have reasonable levels of amenity in relation to:

- daylight;
- sunlight; and
- · privacy and immediate outlook.

Local Development Plan policies

• Des 5 a) - Development Design

It is important that buildings are spaced far enough apart that reasonable levels of privacy, outlook, daylight and sunlight can be achieved. However, care should be taken that buildings do not become so far apart that the townscape becomes uninteresting. Therefore, achieving reasonable amenity needs to be balanced against achieving good townscape.

Trees have an effect on daylight and sunlight. This can be positive - for example, deciduous trees provide shading from the sun in summertime but let sunlight into buildings in winter. However, if buildings are too close to trees daylight can be adversely affected.

To achieve reasonable levels of daylight, windows must be big enough and interiors must be designed to a deep enough level that ensures daylight can penetrate within them. Reasonable levels of sunlight to buildings and spaces will be achieved if sufficient account is taken of orientation.

Edinburgh has a wealth of successful areas where good levels of daylighting, sunlight, privacy and outlook have been achieved. These can be used as a guide to the layout and form of new development. When comparing proposed new development against existing situations, scale drawings, showing layout including external spaces, building height and elevations should be provided along with the relevant calculations and methodology. It is the responsibility of the agent/applicant to ensure that this information is provided and that all affected properties are clearly shown and tested.

This section applies to all new development where these aspects of amenity are particularly valued including housing, schools, nurseries, hospitals and clinics.



Marchmont—Arden Street

These tenements manage to provide good levels of daylight to all the properties. This is a result of the high floor to ceiling heights and relatively large and tall windows which allow daylight to go deep into the rooms.



Gables—Haymarket Terrace

The upper floors of the modern office are set back from windows on the tenements' gable. This allows some daylight to reach the windows, but importantly maintains the street frontage.

Protecting daylight to existing buildings

New buildings should be spaced out so that reasonable levels of daylight to existing buildings are maintained. The layout of buildings in an area will be used by the Council to assess whether the proposed spacing is reasonable. When there is concern about potential levels of daylight, the Council will refer to the *BRE Guide*, *Site Layout Planning for Daylight and Sunlight – A Guide to good practice*. This shows how to measure daylight and sunlight. A copy is available to view at the Council's Planning Helpdesk.

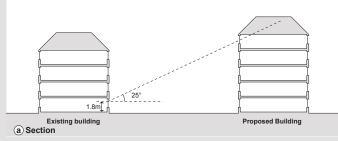
The amount of daylight reaching an external wall is measured by the Vertical Sky Component (VSC). The Council requires this to be more than 27% or 0.8 of its former value. If this is not the case, changes to the building design, including a reduction in building height may be required. 27% VSC is achieved where new development does not rise above a 25° line drawn in section from the horizontal at the mid-point of the existing window to be tested. It can be measured using more complex methods that are set out in the BRE guide.

If the townscape surrounding a development site would not meet these requirements, the Council may require information on the likely amount of daylight in affected rooms in existing buildings. This will be assessed using the Average Daylight Factor (ADF) methodology. It is expected the following criteria will be used for calculations:

1%
1.5%
2%
0.65
0.9
0.7
0.5

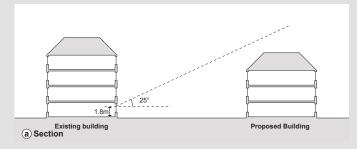
Daylight to bathrooms, stores and hallways will not be protected.

Daylight to gables and side windows is generally not protected.



25 degree method example 1

This situation may fail to provide reasonable levels of daylight to the existing building.



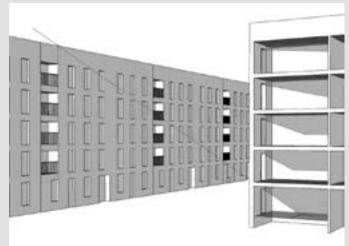
25 degree method example 2

This situation would provide reasonable levels of daylight to the existing building.

Providing daylight to new buildings

Another measure of daylight is known as the position of the "no sky line". The BRE guide explains this in detail. If drawings can be provided that show that direct skylight will penetrate at least half way into rooms within new development at the height of the working plane (o.85m above floor) and where windows make up more than 25% of the external wall area, this will ensure that adequate daylight is provided to new development.

Providing adequate daylight to new development does not guarantee that adequate daylight will be maintained to existing development. This could be the case in instances where the existing building is lower.



No sky line method

The new development to the right of the image is positioned so that the sky can be seen within the front half of the room on the ground floor. This has been achieved by providing the ground level with a higher floor to ceiling height than the floors above.

Sunlight to existing gardens and spaces

New buildings should be laid out so that reasonable levels of sunlight are maintained to existing gardens and spaces.

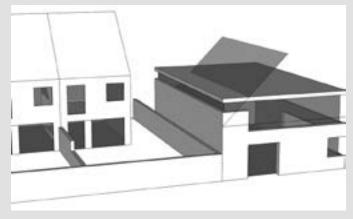
Whether sunlight to neighbouring gardens will be affected can be tested by checking whether a building rises above a 45° line drawn in section from the site boundary. If a development rises above this line, the sunlight of the neighbouring garden might be affected. To take account of orientation, draw the 45° line at the following distances above the ground level:

Orientation of boundary in relation to potentially affected garden	Height of 45° line above boundary
N	4m
NE	3.5m
E	2.8m
SE	2.3m
S	2 m
SW	2 m
W	2.4m
NW	3.3m

The use of the affected area of the garden and the size of the garden as a whole will be taken into account when assessing whether any loss of sunlight is adverse. The sunlight of spaces between gables will not be protected unless the affected space is of particular amenity value in comparison with the remainder of the garden. Such a space may include one that has been designed with the house as a patio.

Note that these heights do not indicate whether a development will be acceptable when assessed against other considerations.

Where there is an established high quality townscape which in itself would not satisfy the requirements of the 45° method for sunlight (such as the Old Town) sunlight will be assessed using before and after plans showing shadows for each hour on 21 March. The qualities of the existing space and the effects of sunlight, both before and after will inform whether any loss of sunlight is considered adverse.



45 degree method for sunlight

This sketch shows a proposed development located on the north side of an existing garden. The sunlight to the neighbouring garden might be adversely affected because it rises above the 45 degree line set from 4m above the boundary.

Sunlight to new gardens and spaces

Half the area of new garden spaces should be capable of receiving potential sunlight during the spring equinox for more than three hours. This will be assessed using hour by hour shadow plans for each hour of 21 March.

Privacy and outlook

People value privacy within their homes but they also value outlook - the ability to look outside, whether to gardens, streets or more long distance views. To achieve both, windows should be set out so that direct views between dwellings are avoided.

The rearward side of development often provides a better opportunity for privacy and outlook than the streetward side of development. This is because on the streetward side, privacy to some degree is already compromised by the fact that people in the street can come relatively close to the windows of dwellings. Privacy is generally achieved in these situations through the installation of blinds, curtains and translucent glass, etc.

The pattern of development in an area will help to define appropriate distances between buildings and consequential privacy distances. This means that there may be higher expectations for separation in suburban areas than in historic areas such as the Old Town.

On the rearward side, as well as spacing windows far apart, reasonable levels of privacy can be achieved by setting out windows on opposing buildings so that there are not direct views between them, angling windows and erecting screens between ground floor windows. In assessing this, the Council will look at each case individually and assess the practicalities of achieving privacy against the need for development.

Though private views will not be protected, immediate outlook of the foreground of what can be seen from within a building may be. Unless there are exceptional circumstances, this means that new development that blocks out the immediate outlook of an existing dwelling must be avoided.

This guidance does not seek to protect the privacy of gables of existing housing.

2.11 Housing mix and size, and supporting facilities

Ensure there is a mix of dwelling types and sizes to meet a range of housing needs including those of families, older people and people with special needs.

Make sure the size of homes are adequate for the numbers of people that could be living there.

Provide adequate storage for general needs, waste and recycling, and bicycles.

Ensure the design of new housing is "tenure blind".

Local Development Plan policies

- Hou 2 Housing Mix
- Hou 10 Community Facilities

A mix of unit sizes and housing types will have a positive impact on ensuring the delivery of varied and sustainable communities. This mix should respond to the differing needs of residents, immediate site conditions and citywide objectives. It is expected that within all developments of 12 or more units at least 20% of these units will have a minimum internal floor area of 91m² and should be designed for growing families. These will have direct access to private garden, from either ground or first floor level; enhanced storage and convenient access to play areas.

In larger development sites, the provision of facilities and services to support the existing and proposed community may be required. These may include local healthcare facilities, childcare facilities and meeting places. Commercial units may be needed, if these do not already exist in the area.

Affordable housing will be required in accordance with the policy in the Edinburgh Local Development Plan and associated guidance.



Tenure blind housing at Gracemount—Fala Place

Here the market housing and affordable housing is integrated by using the same materials for buildings and street and designing the housing to have a similar appearance.

Housing mix

In schemes with 12 units or more, 20% of the total number of homes should be designed for growing families. These types of homes should have three or more bedrooms, have good levels of storage, have direct access to private gardens (for example via patio doors or private external stairs) or safe play areas for children, and have a minimum internal floor area of 91m².

In order to ensure satisfactory amenity, dwellings should not fall below the following minimum internal floor areas:

36m² Studio dwelling;

52m² One bedroom dwelling;

66m² Two bedroom dwelling;

81m² Three bedroom dwelling; and

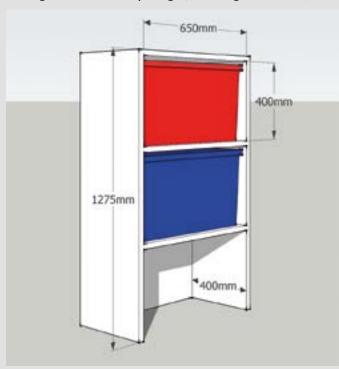
91m² Three bedrooms or more with enhanced storage designed for growing families.

The minimum floor area for studios is lower than that for one bedroom flats since the relatively larger single open plan space found in studios compensates for having a smaller space overall. It is expected that studios will be designed to be very space efficient. Imaginative solutions are encouraged for storage, the location of the bed and so on.

Internal storage

At least 5% of the net floor areas should be provided as dedicated storage cupboards in addition to any kitchen storage or wardrobes. This storage is needed to allow homes to be used by a wide range of households.

Shelving should be built into storage areas within dwellings to accommodate at least three 55 litre storage boxes for recycling, (see diagram below).



Space for internal recycling

This drawing shows a potential way of providing storage for recycling boxes.

Improving internal amenity

In order to ensure a good standard of overall amenity for new development, single aspect dwellings should not make up more than 50% of the overall dwelling numbers. Where they are incorporated, it is important they meet the requirements for daylight and sunlight.

Generous ceiling heights of 2.6m high and above are encouraged in developments as these provide a greater sense of internal spaciousness. They also allow for enhanced adaptability to other uses and with higher window heads can provide enhanced daylight penetration into dwellings. Higher floor to ceiling and window head heights are important if the requirements for daylight are to be met.

Tenure blind design

Development should be tenure blind. This means that where sites provide a range of tenures (for example market sale and affordable housing) it should not be possible to see the difference between them.

Where a site is predominantly for market housing, it is expected that affordable housing should be provided in the same housing type. If the design is for houses for sale, the affordable dwellings should also be houses. Where it is not possible to deliver the same housing type, alternative types of the same physical scale should be used. For example, colonies, four in a block and cottage flats may integrate reasonably well with two storey houses.

Building form, materials and the general design of the building elevations will all be key components in determining whether or not a tenure blind development is achieved.

The integration of ancillary facilities is important for small developments—such as those common in villa areas—as well as in larger developments. In addition to cycle parking (covered in Section 2.4), integration of facilities such as plant, including electricity substations and bins, needs to be considered from the outset of the design process.

Process for agreement with Waste and Cleansing Service

As part of the planning process, designers / developers must engage with the Council's Waste and Cleansing Service to agree a waste management strategy for the development, and ensure that their requirements can be satisfactorily incorporated within the design. This must happen as early as possible.

The officer in the *Waste and Cleansing Service* will talk you through their requirements (i.e. vehicle tracking drawings for refuse vehicles and the location and sizes of waste storage spaces) and the Instructions to Architects document. Once agreement has been made, Waste Services will issue a letter of agreement detailing this and any further requirements.

Key points for consideration:

Your waste management strategy must ensure that:

 Bins are safely accessible and the collection system is operationally viable, taking into account swept path analysis, walking and pulling distances, slopes, vehicle sizes, access to bin stores, interactions with pedestrians, etc;

- The waste management strategy is compliant with the Council's policies and the requirement of Scottish legislation so that provision is made for the full range of recycling services and that these are fully integrated into the collection system (e.g. that each bin store has sufficient space to accommodate the full range of bins);
- A decision is made regarding the use of individual or communal bins, the initial supply for these and their ongoing maintenance; and
- That arrangements are in place to allow for the ongoing maintenance and repair of bin stores, bin housings, etc.



1280 litre recycling bins.

Sizes and bin types:

Waste and Cleansing Service will advise you whether individual or communal bins should be used. A range of bin types may be employed from kerbside collection boxes for glass and some other materials right up to 3200 litre communal bins. The Waste and Cleansing Service will advise on the capacities requird to provide for each waste stream, the detailed design requirements for bin stores etc.

The specific materials which are currently collected from households, and in compliance with Scottish legislation are:

- Residual (landfill waste);
- Food;
- Glass;
- Mixed recycling; (including paper and card, cans and foil and mixed plastics)
- Garden waste (kerbside collection areas only); and
- Small electricals, batteries and textiles (collected in the glass collection box in kerbside collection areas only).

In addition to ensuring that there is sufficient space for all collection streams, and that containers are stored off-street, considerationshould also be given to arrangements for the management of bulky wastefor example where householders should present bins on collection day.



Underground bins for residual waste allow large volumes to be held with minimal impact on the street scene. It is important that the Council's Waste and Cleansing Service are involved early, as their requirements may impact on the design.

2.12 Purpose built homes for rent

The 'Build to Rent' (BTR) sector has the potential to make a positive contribution to the overall housing mix in Edinburgh.

Proposals should support regeneration and fulfil placemaking principles.

BTR developments are considered as a strand of mainstream housing and relevant Local Development Plan policies and guidance apply.

Design should be place specific, high quality, innovative and energy efficient.

Shared on-site facilities should be high quality, accessible and safe.

A flexible approach to current internal amenity standards may be acceptable depending on the quality of the accommodation and facilities provided.

Local Development Plan policies

- Des 5 Development Design
- Hou 2 Housing Mix
- Hou 6 Affordable Housing

The Private Rented Sector continues to be a key provider of homes throughout the city.

Recent innovations in this sector have seen the emergence of purpose built accommodation for rent, also referred to as Build to Rent (BTR), which offer high quality professionally managed homes

under single ownership with shared facilities that can be delivered rapidly. Private Rented Sector accommodation of this nature can also include the conversion of existing buildings where the BTR 'model' can be incorporated.

BTR developments are considered as a strand of mainstream housing and where relevant LDP policies and guidance apply including those relating to parking, open space and affordable housing.

Build To Rent model

BTR developments are generally characterised by the following key elements:

- Single ownership and professional on-site management;
- Self-contained units which are let separately;
- High quality amenities for communal use;
- Longer tenancies offered with defined in-tenancy rent reviews; and
- Property manager who is part of an accredited Ombudsman Scheme and a member of a recognised professional body.

Due to the nature of these developments and especially where flexibility has been sought against the Council's internal amenity standards (refer to 'Design Approach'), the retention of the homes for rent for the long term should be explored and secured via an appropriate method to be agreed between the Council and the developer.

Design approach

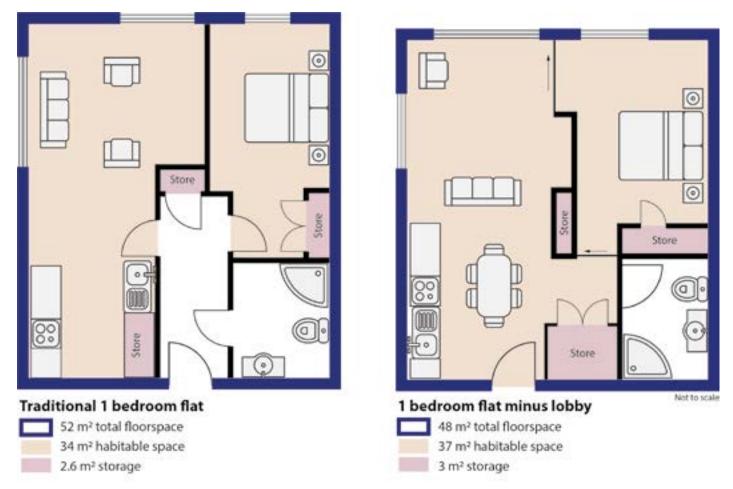
In BTR developments there tends to be key differences in their design which may justify a more flexible approach. This specifically relates to the standards for minimum internal floorspace and the quantity of single aspect units (see section 2.11.)

The key design differences with BTR developments compared to other general housing types are usually as follows:

- Provision of high quality, professionally managed accessible on-site shared facilities ie. communal gathering spaces, secure storage as well as storage within units, workspaces and gyms;
- Efficient design technologies which reduce the requirements for non-habitable space (ie. lobby areas) within units; and
- Open plan layouts, partly as a result of the reduction in non-habitable space, which increase useable space and allow light to penetrate more deeply into the units. This may justify a limited increase in single aspect units over the standard 50%. However developments should still be designed to facilitate a substantial quantity of dual aspect units.

Flexibility will only be applied to the standards in exceptional circumstances and will be dependent on the quality of the development. Any deviations from the standards needs to be fully justified and will be determined on a case by case basis. The diagram overleaf gives an example of where flexibility may be justified.

This diagram shows how flexibility may be justified against the floorspace standards subject to design efficiencies and the provision of shared facilities as part of the overall development, which may offset any loss of floorspace (both habitable and non-habitable). A 1 x bed unit should achieve a minimum internal floorspace of 52m² with at least 5% of the net floor area as storage. This example shows that with the removal of the lobby, an additional 3m² habitable space is achieved along with 0.4m²additional storage space, despite the reduction in overall floorspace of 4m².



Developer Contributions

Developer contributions will be applied towards the provision of services, works and facilities as the Council may, in its reasonable discretion, determine are required in connection with BTR developments in accordance with the Local Development Plan and associated guidance. BTR developments will be expected to provide 25% affordable housing on site. Affordable homes within BTR developments should be tailored to meet the greatest housing need and preferably should be owned or managed by a Registered Social Landlord.

The rental levels, conditions of tenure and the length of time that the units will remain affordable will be subject to agreement between the Council and the developer.

2.13 Community safety

Create active frontages directly onto important streets and publicly accessible routes and spaces.

Provide main door access to ground floor properties from street side.

Ensure all external spaces including pedestrian and cycle paths are overlooked.

Use lighting to help community safety.

Local Development Plan policies

- Des 5c Development Design
- Des 7 Layout Design

The design of development has a key role to play in community safety. If buildings overlook and provide direct access to streets people feel safer. Active frontages, where the ground floor is designed to allow visual contact and pedestrian movement between inside and out, ensure that this is achieved.

Lighting can make a very positive contribution to the security of the external environment. To ensure the overall quality of the design, lighting should be integrated into the design from the outset and considered with the Road Construction Consent application.

The Council will refer all major planning applications and local developments that have particular security issues to the *Police Architectural Liaison* service for their comments. Developers are encouraged to make early contact with the Police Architectural Liaison service.

Secured by Design is the Police's initiative to design out crime in the built environment. This has many benefits. However, sometimes there can be a conflict between the needs of Secured by Design and planning requirements. It is important that these matters are understood early in the process so that they can be addressed without compromising the design as a whole. Meeting the needs of Secured by Design should not be at the expense of the overall quality of the external space within the site.



Active frontages and housing—Forbes Road
Traditional tenements (above) have main doors directly into
ground floor flats which maximises activity on the street and
help ensure front gardens are used.



Active frontage on a supermarket—West Port

This image demonstrates that it is possible to create an active frontage for uses such as supermarkets. This has been achieved by arranging shelves and counters perpendicular to windows so allowing views into the shop.

3. Designing places: landscape, biodiversity and the water environment

This chapter sets out the Council's expectations for landscape proposals as part of new development and how biodiversity should be maintained and enhanced. In order to achieve good design, landscape architects should be engaged early in the design process. It also sets out the Council's expectation with reference to the water environment.

The key aims are for new development to:

- Create a robust landscape structure as an integral component at all scales of development, which follows green infrastructure and green network principles.
- Meet the requirements of the Council's strategy for public open space and provide residential private gardens.
- Maintain the conservation status of protected sites and species, and enhance, connect and create new habitat.
- Protect trees and woodland and provide new tree planting.
- Ensure that hard landscape and car parking are an integral part of the overall design.
- Design developments to ensure that properties are not at risk of flooding from coastal waters, rivers, culverted rivers, or surface water flooding.
- Integrate Sustainable Urban Drainage Systems into the landscape design of development to reduce flooding and pollution, provide biodiversity benefits and create beautiful places.
- Ensure a mechanism is put in place for the establishment and long term maintenance of new landscape areas.

3.1 Green infrastructure and green networks

Establish a robust framework of multifunctional green infrastructure in new developments of all scales, and connect this to the wider network of open spaces, habitats, footpaths and cycleways beyond the site boundary.

Local Development Plan policies

- Des 2 Co-ordinated Development
- Des 3 Development Design
- Des 5 Development Design
- Des 7 Layout Design
- Des 8 Public Realm and Landscape Design
- Des 9 Urban Edge Development
- Des 10 Waterside Development
- Env 10- Development in the Green Belt and Countryside
- Env 12 Trees
- Env 13 -15 Nature Conservation Sites of International/National/Local Importance
- Env 16 Species Protection
- Env 18 Open Space Protections
- Env 19 Protection of Outdoor Sports Facilities
- Env 20 Open Space in New Development

A green network is formed when green infrastructure components are linked together to give additional combined benefits. Components can include:

- Green corridors;
- Watercourses;
- Woodland;
- Tree belts;

- Habitats;
- Parks, play areas and other public open spaces;
- Sustainable Urban Drainage Systems (SUDs);
- Green roofs/walls;
- Active travel routes; and
- Street trees, hedgerows, verges.

Ideally a network of multifunctional greenspaces should run through the urban area, urban fringe and wider countryside, creating a high quality landscape and townscape. This should support new access and recreational opportunities, incorporating flood management, enhanced biodiversity and habitat linkages. Multi functional green spaces can promote healthier life styles through increased walking and cycling opportunities and creating spaces for food growing and restorative outdoor activity.

Delivery of such a network is consistent with the development of the *Central Scotland Green Network* and can support a healthy urban ecosystem based on natural processes. Green infrastructure and green networks also make an important contribution to climate change adaptation and mitigation.

The Local Development Plan identifies Edinburgh's established Green Network, comprising greenspaces distributed across the city's hills, neighbourhoods and waterfront. These are connected by wooded river valleys, disused rail corridors, the Union Canal and frequented paths.

The Local Development Plan identifies proposals to improve connections within the urban area, the surrounding countryside and neighbouring Council areas. It is complemented by *Open Space 2021*, the Council's Open Space Strategy, which defines standards and actions to improve access to good quality greenspace across the urban area.



Large public open space—Braidburn Valley Park
This public park is a major component of the green network.

The Scottish Government's *Green Infrastructure: Design and Placemaking guidance* illustrates how green infrastructure can be integrated within new developments during the design process.

An understanding of a site's current and potential contribution to the green network should inform decisions on scale, location and layout. The way in which this has been considered in the placemaking process should be explained in the Design Statement/Design and Access Statement.

Development should be carefully designed to contribute positively to the expansion of green networks. All proposals will be assessed in terms of their consideration of connectivity between green infrastructure components and their contribution to national and local green network and open space objectives.

Regard should be given to linking development sites with Edinburgh's network for nature, making links to habitats found in local nature reserves, local nature conservation sites and the *Edinburgh Living Landscape*.

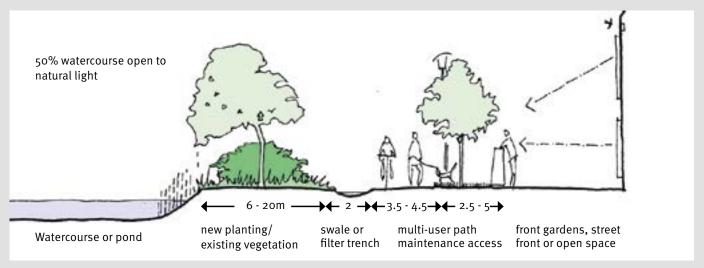
These sketches illustrate how green networks can be integrated within a range of development scenarios and at different scales.

The Council supports substantial framework planting that seeks to integrate and connect multi-functional green infrastructure features as guided by site specifics and local landscape character.

Masterplans will require adequate space for large growing native tree species to achieve maturity and form woodland habitat, provide a secure setting to multi-user paths, cater for active travel, a variety recreational uses within open space, incorporate SUDS, whilst allowing integration with the street layout and built form. In urban edge situations, a landscape edge will also be required to integrate development with the surrounding countryside and landscape setting of the city.

These provisions can vary in width depending on the development scenario but for some major developments spatial parameters of 30-50m may be necessary to accommodate a full range of green infrastructure functions.

If buildings are proposed close to a watercourse, a full appraisal of flooding scenarios is required (see section 3.8) and early discussions with the Council's Flood Risk Unit. Buildings proposed on brownfield sites, adjacent to water courses except in exceptional circumstances, require at least a 15m setback to create opportunities to reinstate natural bank sides.



Blue Networks

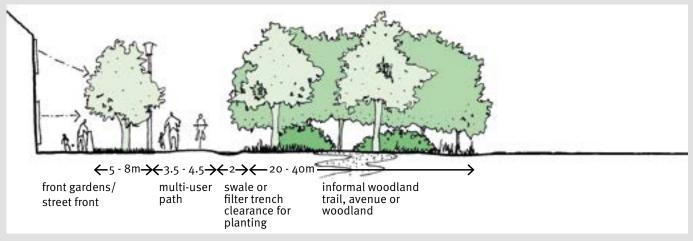
Green networks can be aligned with watercourses or permanent (retention) ponds or detention areas providing for Sustainable Urban Drainage, to enhance existing wildlife habitat, whilst providing for amenity, recreation and active travel. New development should provide active frontages to main path routes, open spaces and SUDs features.



Water of Leith Walkway

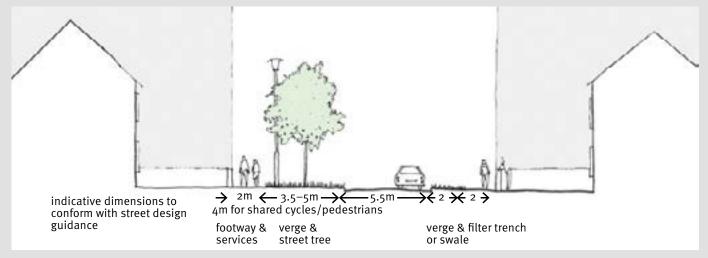
Access and amenity improvements carried out at The Dene, between Dean Terrace and Mackenzie Place, within the New Town Conservation Area.

In order to promote natural bankside conditions, only riverside walls with significant archaeological value should be retained. Other retaining walls should generally be replaced with soft engineering solution. In areas of historic importance mitigate the potential for natural banks by the use of other methods such as reducing the top part of the wall to provide a wetted bank or cladding on the retaining wall to provide some riverine habitat with tree planting to provide habitat connectivity.



Green Corridor

This density and type of planting is suited to the urban situation and parkland context. Where a rural context exists at the urban edge, native woodland may achieve a more appropriate fit with surrounding landscape character whilst providing shelter for new development.



Green Street

The incorporation of trees and other planting within street design should be considered alongside the spatial parameters for movement and access - including visibility, services, lighting, the proposed approach to sustainable urban drainage and the intended density and spatial definition of the proposed built form.



North Meadow Walk

North Meadow Walk footway and cycleway, providing for recreational use and active travel. The route is lined with large growing tree species, includes nesting boxes and is set within a broad grass verge. The path is lit and surveillance is provided from surrounding residential dwellings.



Forrest Road

This street extends the tree lined avenue of Middle Meadow Walk to George IV Bridge.

3.2 Publicly accessible open space

Ensure homes are within walking distance of good quality and well designed open space.

Provide new publicly accessible and useable open space in non-residential development.

Local Development Plan policies

- Des 5c Development Design
- Des 7 Layout Design
- Des 8 Public Realm and Landscape Design
- Env 18 Open Space Protections
- Env 19 Protection of Outdoor Sports Facilities
- Env 20 Open Space in New Development



New local greenspace, Lochend

The Council's Open Space Strategy sets standards to ensure that all communities have access to quality greenspaces, which cater for a variety of needs and ages.

Local greenspace standard:

Local greenspaces close to homes play an important role in how people feel about their neighbourhood and offer convenient spaces for everyday enjoyment of the outdoors.

They can be important places to meet neighbours, havens for wildlife, spaces to play after school or enjoy on a walk to the shops.

All homes should be within 400 metres walking distance (equivalent to a five minute walk) of a 'good' quality, accessible greenspace of at least 500 square metres.

In new housing developments, good quality local green spaces should support health and well-being by providing useable outdoor spaces as well as looking attractive.

Spaces should have surfaced paths linked to the surrounding area, provide features to attract wildlife, incorporate seating or walling, cycle parking and waste bins, fruit trees and raised beds for community growing and provide a safe and stimulating place for unequipped play.

Urban tree planting and the use of hedges and shrub planting should be considered to define spaces and create appropriate shelter and shade. Areas of open grass should be balanced with the use of herbaceous perennials and bulbs to create year round interest.



Small open space in the the Old Town—Trunk's Close
It makes good use of its constrained site and provides an
attractive green setting for surrounding buildings.

Local greenspaces can be complemented by drainage features, such as grass or planted swales and rain gardens. Where it is proposed that part of a local greenspace should be used to accommodate below ground surface water storage, there should be no impact on the quality or use of above ground space e.g. through restricting locations for tree planting or the need for inspection chambers.

Good quality local green spaces should complement the provision of private gardens for new houses, blocks of flats, garden flats and communal back greens.

Large greenspace standard:

Every neighbourhood should benefit from a large park to provide space for the whole community to enjoy their free-time. It is a place to exercise and play informal ball games; walk the dog or go for a run; come together for local events; watch wildlife and scenery through the seasons; and experience natural open space.

All homes should be within 800m walking distance of a good quality accessible greenspace of at least two hectares.

Where possible, new large greenspaces should incorporate existing built, cultural and natural features, including skyline views to celebrate distinctive local characteristics (Section 1.8). The overall size and form of parkland should, therefore, respond to the topography and the opportunities of the site.

The provision of facilities should ensure that spaces are well used, lively, safe and resource efficient by delivering multiple benefits; in particular providing an uplifting place to support daily self-management of physical health, including opportunities to participate in group activities.

Larger greenspaces should meet local greenspace needs, through the provision of sheltered community garden areas with seating and cycle parking, as well as larger scale features appropriate to their size.

New parkland provides the opportunity to create a landmark feature, including woodland and forest scale trees; provide well drained, level ground for community events, markets, informal ball games, outdoor learning and exercise activities; measured walking and running circuits, with links to the

wider green network, and integrate orchard and allotment provision. Further details can be found in the *Council's Allotment Strategy* and *Scotland's Allotment Design Guide*.

Grassland management approaches may include a mix of close mowing, naturalised grass or meadows. The use of planted swales and the location of surface water storage basins alongside and in addition to new parkland, can bring amenity and biodiversity benefits, by creating wetland habitat and introducing open water as a feature of the landscape.

Path surfaces, within greenspace, should be appropriate to context and are an important factor to encourage the use of the outdoors.

A grass edged multi-user path with Macadam wearing course will generally provide the most robust long-term solution, providing access for all including wheelchair users and pushchairs. This can be enhanced by the use of rolled stone chips. Bound gravel may be suited to local greenspaces or feature spaces. Whin dust paths will generally only be acceptable in semi-natural settings, subject to appropriate build up, drainage and ongoing maintenance.

The relationship of new parks to homes, schools, other public buildings and commercial uses can help put open space at the centre of community life and provide options for refreshment and use of conveniences. New greenspaces should be directly overlooked from key living spaces such as lounges and kitchens and never blank facades.



Aerial view of Broomhills Park (Barratt East of Scotland Ltd)

Forth Quarter Park

Forth Quarter Park was developed for National Grid Property Ltd as part of the Granton Waterfront master plan to remediate the former gas works.

This distinctive seven hectare park is bordered by a mix of uses including office accommodation to the east, Edinburgh College's Granton campus, and the established communities of Granton, Pilton and Muirhouse, together with new homes being developed at the Waterfront.

The park links the North Edinburgh paths with the promenade at Silverknowes to the west, via a meandering route through this key urban greenspace.

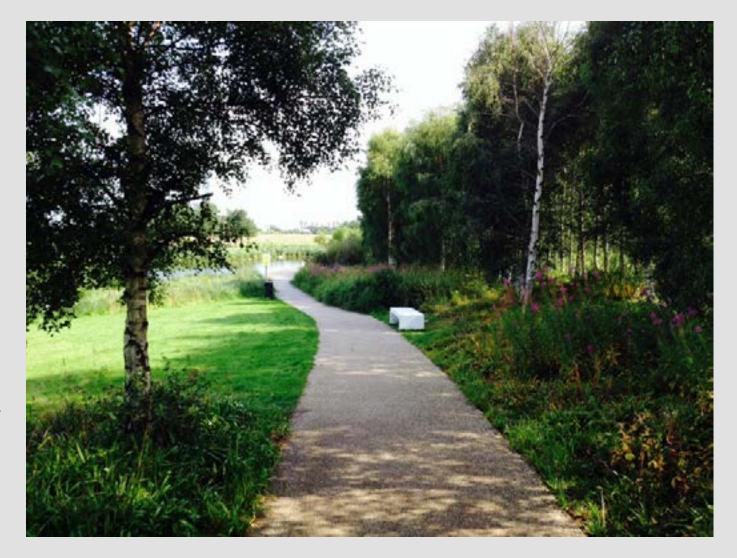
Lying close to the Firth of Forth, the park provides views from the city to the coast and a backdrop of hills within Fife.

A central water feature is crossed by bridges and a waterside walk including decking was formed by deculverting the Caroline Burn.

The east end of the park is where the water feature terminates at a new public square and terraced viewing platform in front of the Scottish Gas headquarters.

New planting including 800 birch trees, 15,000 shrubs and new grassland arranged in a series of undulating terraces, surrounding the water feature, creates wetland and marginal habitats.

The park also incorporates Lime trees, which are remnants of the grounds of Granton House.



Playspace access standard:

Edinburgh's vision is to achieve a 'play friendly city, where all children and young people can enjoy their childhood.'

Parks and other large green spaces provide the ideal setting for good quality equipped play spaces. Play is vital to help children learn how to get along with each other and keep healthy.

The Council's Open Space Strategy sets out the playspace access standard and is linked to the *Play Area Action Plan*. Houses and flats should have access to at least one of the following:

- a space of good play value within 800m walking distance;
- a play space of very good play value within 1200m walking distance; and
- a play space of excellent play value within 2000m direct distance.

Play Value measures the quality of play area design and layout, together with a range of play activities on offer to ensure children receive the right balance of risk and challenge in order to develop physical and social skills.

In addition to equipped play spaces, new green spaces and residential streets should be designed to encourage more 'free play' without equipment. Exploring woodland, meadows or running up and down slopes can provide ways for children to develop their creativity and imagination.



New play area at Burnbrae Drive meets 'good' play value.

All residential developents should contribute towards these standards by providing publicly accessible open space on site. Where this is not possible, contributions may be sought for the improvement of open space within the area.

Non-residential development will also be required to provide new open space, justified by the scale of development and the needs it gives rise to.

Quality in new greenspace and play areas should be ensured by planning for these elements of green infrastructure as an integral element of place making from the start of the planning process. New greenspace provision should be informed by an understanding of local community needs, including



Terraced slopes and shared surface 'home zone' street at Gracemount.

health and wellbeing and establish the necessary framework for new neighbourhoods to thrive.

Making provision for facilities such as community gardens, growing spaces, orchards, woodlands and allotments within new greenspaces can allow both new and existing communities to have a greater influence on how places develop over time, strengthen bonds and contributes to the sustainable management of the city's greenspace resources.

The design of new open space provision will be assessed against Local Development Plan policies relating to Design and the Environment. Play area design must achieve the play value requirements set out in the Council's Play Area Action Plan.

3.3 Private open space

Provide well defined, functional, good quality private gardens to all houses and ground floor flats.

Local Development Plan policies

- Des 5d Development Design
- Hou 3 Private Green Space in Housing Dvelopment

There should be a clear distinction between public and private spaces, defined by appropriate boundaries such as walls, railings or hedges both to the street edge and between feus.

Private and communal gardens should be designed for use by residents for a range of functions, including space for play, seating, food growing, tree planting and drying laundry. Outdoor taps and/or rainwater harvesting may be needed.

Wooden fencing can be used to separate private back gardens, but should not be used in the public realm. Consideration should be given to different heights of fencing to allow the communication between neighbours and to add some visual interest.

A key factor in ensuring space is usable is its capacity to receive sunlight. This will be affected by the position of existing and proposed buildings, as well as tree planting.

The Council wants new development to be adaptable. To help meet the changing needs of residents, it is beneficial for there to be sufficient space in gardens for houses to be extended while retaining reasonably

sized gardens. Developers should demonstrate how this can be achieved.

Ground floor flats should generally be provided with private gardens of a minimum depth of 3m, which open directly on to communal gardens. Where this is not the case, patio doors and a defined threshold space should be provided.





A clear distinction—Marchmont
It is clear what is public and private space in traditional
tenements. The buildings enclose shared gardens making them
private. At the front, the walls and hedges separate the public
street from the private gardens.

Private front gardens have an important role in softening urban environments by providing planting on streets. They also provide an intermediate space between the public realm and the privacy of dwellings. The impact of driveways on the continuity of boundary treatments and street tree planting should be considered. (Note: relationship to parking section and definition of private front gardens/thresholds).





Little private space can be successful—Lady Stair's Close
There is very little private outdoor space in the Old Town. This is
compensated by the outstanding quality of the public spaces in
the form of closes and courtyards.

Where private gardens cannot be provided or where their depth is limited (for example less than 3m), there will be a greater need for street trees to be provided.

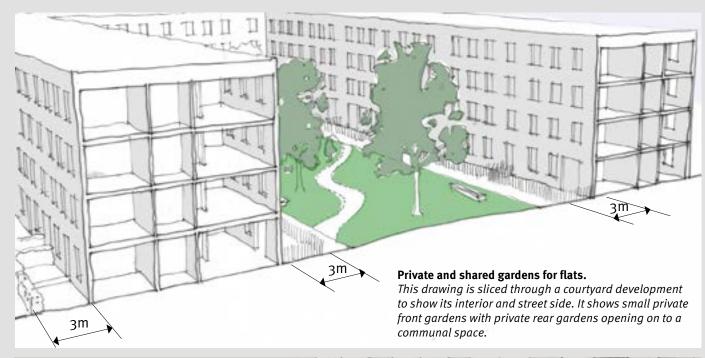
Private communal grounds should be well proportioned, well orientated and secluded from vehicles. Narrow peripheral spaces, subject to overshadowing will not be acceptable. Residents should not normally have to cross streets and car parking to access private communal greenspaces.

Where it is difficult to achieve the areas normally required for private open space - for example, because of a need to adhere to a spatial pattern in an area, the inclusion of balconies or roof terraces may be seen as a mitigating measure. Where they are included, it should be demonstrated that they will benefit from adequate sunlight or have an outstanding view, preserve reasonable privacy and have an area that is not less than 5% of the net floor area of the dwelling.

The size of gardens can contribute to the character and attractiveness of an area. This is particularly the case in villa areas. Gardens of a similar size to neighbouring gardens are likely to be required in order to preserve the character of the area.

Residential Homes and Care Homes

Particular attention should be paid to the orientation of care homes and long term residential homes. Residents should be able to access a garden space that is attractive, welcoming, well lit by natural light throughout the year, and which allows a circuitous walking route to be created.





The length of private gardens

Gardens should be designed to allow houses to be adapted and extended over time. This means that gardens longer than 9m are encouraged. Gardens in the centre of the picture are longer than 9m allowing the houses to be extended. Excessive changes in level should not be taken up across private back gardens. Where housing is set out across sloping ground, useable terraced space should be provided. Additional space is also required in gardens where there is insufficient natural sunlight. North facing gardens should be longer to compensate for this.

3.4 Biodiversity

Maintain the integrity of Sites of European, National or Local Importance for biodiversity and geodiversity.

Conserve protected species and the habitats which support them.

Survey and assess development sites in terms of biodiversity.

Design sites to allow the development of varied and robust ecosystems.

Local Development Plan policies

- Des 3 Development Design
- Des 10 Waterside Development
- Env 13 Nature Conservation Sites of International Importance
- Env 14 Nature Conservation Sites of National Importance
- Env 15 Nature Conservation Sites of Local Importance
- Env 16 Species Protections

In Scotland, it is the duty of every public body and officer, in exercising any function, to further the conservation of biodiversity so far as is consistent with the proper exercise of those functions (part 1, section 1, The Nature Conservation (Scotland) Act 2004). Every public body is now required to have regard to both the Scottish Biodiversity Strategy and the UN Convention on Biological Diversity.

Although it is important to safeguard – or enhance - Priority Species, it is often the commonplace birds and plants that are important in a local context. Nationally there is a decline in Song Thrush populations and the once-common Tree Sparrow and Starling are now rare in some locations. 'Improved habitats' can be as important as untouched ones. Urban areas offer a rich mosaic of habitats suitable for an unexpectedly large variety of wildlife. This can be continually enhanced through careful design. Buildings have replaced the original cliff-top haunts of species such as Swift and House Martins; older housing provides cave-like roofs for long-eared Bats and modern properties are ideal for Pipistrelle bats; some industrial buildings offer nesting sites for Kestrels, Barn Owls and Peregrine Falcons. Buildings themselves, plus walls and bridges, can all support Bats, Bees, Beetles and Lichens.

Sites protected for nature conservation and geodiversity are identified on the Local Development Plan Proposal Maps. These include international and national designations, such as Special Protection Areas and Sites of Special Scientific Interest and local designations such as Local Nature Reserves and Local Nature Conservation Sites.

There is a strong presumption against development that will affect protected sites. Any proposal will have to meet strict policy tests to ensure the protected site integrity is not affected. In the case of internationally protected sites such as Special Protection Areas and Special Areas of Conservation, this may include long periods of survey work to inform the 'strict policy test' and Habitats Regulations Appraisal (HRA).

See the technical guidance for a list of relevant legislation.

Protected species

European protected species (EPS) include bats. otters and great crested newts. They are legally protected and it is a criminal offence to disturb, injure or kill them; or to damage or destroy their resting or breeding sites. If we consider that a development proposal is likely to affect a EPS, then the applicant will be required to carry out a survey to identify impacts and avoid, remedy or reduce them. If impacts cannot be avoided and an offence is likely to be committed, then a protected species licence is required from Scottish Natural Heritage (SNH) to enable the proposal to proceed. Both SNH and the Planning Authority must be satisfied that the proposal will pass three tests laid out in the Habitats Regulations 1994. A license will not be issued unless planning consent is given.



Soprano pipistrelle bat (Pipistrellus pygmaeus). Image: SNH/Lorne Gill

Other species are protected by UK law. These include badgers, water voles, breeding birds and all protected species are a material consideration in the planning process.

More information on European and other protected species, survey work and relevant licenses is available from the *Scottish Natural Heritage website*

European Protected Species (EPS) and Licensing Requirements

There are three strict legal tests which must all be passed before a licence can be granted.

In summary these are:

- Test 1: that there is a licensable purpose. (i.e that the license is required for 'preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment; SNH provides more detailed guidance on Test 1 at: www.snh.gov.uk/docs/B896394.pdf.
- Test 2: that there is no satisfactory alternative; SNH provides more detailed guidance on Test 2 at: www.snh.gov.uk/docs/B896418.pdf
- Test 3: that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

Qualified ecologists should be able to provide advice on this or alternatively advice can be obtained from Scottish Natural Heritage For more information on the three species licencing tests, the Scottish Natural Heritage website provides a detailed explanatory text about these tests:

www.snh.gov.uk/protecting-scotlandsnature/ species-licensing/

Site assessment and survey requirements

Proposed development sites may include features of natural heritage interest, or protected sites and /or species. An initial assessment of value must be made to establish whether further surveys are required. The process for deciding if this is neccessary is:

- 1 A preliminary desk-based study to collect all existing ecological data about the site; and
- 2 An Extended Phase 1 Habitat Survey to understand the ecology on site and the implications of the proposed development.

This will help identify what habitats are present, the protected species that they may support, further survey requirements, site constraints and potential mitigation. This information will inform site design.

Protected species surveys must follow established best practice and must be done at the correct time of year. Applications can be delayed if a survey season is missed. For example, bat survey work should comply with the Bat Conservation Trust publication "Bat Surveys: Good Practice Guidelines".

Biodiversity Duty and the Edinburgh Biodiversity Action Plan

The Nature Conservation (Scotland) Act 2004 places a duty on all public bodies to further the conservation of biodiversity. Local planning policy requires new development to demonstrate protection and enhancement of biodiversity. The

Edinburgh Biodiversity Action Plan (LBAP) contains local actions for the conservation of habitats and species. Aligning the design of the development with LBAP objectives is one way of meeting this policy requirement.

Layout and design

It is important that the information gathered from surveys influences the final proposal. Existing natural features should be retained and enhanced. where possible, and kept in context rather than in isolated fragments. Integrated habitat networks and green corridors are encouraged to enhance biodiversity and help mitigate climate change effects. The landscape design of a scheme is expected to enhance the biodiversity value of the site and maintain species movement where possible. This should include enhancing connections between ecological features, within and across the site. It is also expected that a planting plan will maximise the structural diversity of the site and provide a scheme that allows biodiversity value to increase over time.



Edinburgh Living Landscape:
A pictorial meadow for pollinators and amenity benefit.

Statutory requirements

The Council must ensure statutory requirements relating to biodiversity are being fulfilled.

The framework for statutory sites and species protection is provided by:

- Conservation (Natural Habitats &c.) Regulations 1994, as amended ("The Habitats Regulations");
- The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017;
- Wildlife and Natural Environment Scotland Act 2011;
- Nature Conservation (Scotland) Act 2004;
- The Protection of Wild Mammals (Scotland) Act 2002;
- Protection of Badgers Act 1992; and
- Wildlife and Countryside Act 1981 (as amended).

Types of designated sites in Edinburgh see Local Development Plan map

International

Ramsar Sites - Habitats

A wetland site listed under the Convention of Wetlands adopted following an international conference in Ramsar, Iran 1971.

Special Protection Areas (SPA) - Birds.

An area designated under the Wild Birds Directive to protect important bird habitat.

National

Sites of Special Scientific Interest (SSSI).

Areas of national importance for natural heritage across the UK, including diversity of plants, animals, habitats, rocks and landform.

Local

Local Nature Reserve.

Designated for its local special natural interest and / or educational value.

Local Nature Conservation sites.

Local Biodiversity Site.

Local Geodiversity Site.

Designated for its local biodiversity, geodiversity and social educational value.

Ecological Impact Assessment

An Ecological Impact Assessment (EIA) may form part of an EIA and is required for major and some small scale developments. The principle is to identify the biodiversity features of interest and propose avoidance, mitigation or compensation to reduce all impacts to the non-significant level. An EIA should be submitted as part of a planning application and should adopt the methodology of the Chartered Institute of Ecology and Environmental Management (CIEEM).

The CIEEM maintain a directory of suitably qualified ecologists who can carry out surveys. See **www. cieem.net/members-directory.** CIEEM also maintain a list of survey guidance materials. See: **www.cieem. net/sources-of-survey-methods-sosm-**

Downlaods/Guidelines for Ecological Impact assessment 2016.pdf

Habitats Regulations Appraisal

Any development likely to have a significant effect on a Special Protection Area (SPA) will be subject to a Habitats Regulations Appraisal, in addition to other assessments. If likely significant effects cannot be ruled out then the Council will have to carry out an 'appropriate assessment' of the proposal. The developer will be required to supply data to support this appropriate assessment. More information on HRA can be found at the following link: www.snh. gov.uk/protecting-scotlands-nature/protected-areas/international-designations/natura-sites/habitats-regulations-and-hra. Firth of Forth HRA Guidance for developers and regulators www.snh. gov.uk/docs/A1979038.pdf

Timing

Project management should take into account the optimum survey period for protected species (see the survey timetable below for guidance). The findings of surveys should inform design and form part of the application. Surveys older than 12 months may be considered to be out of date and invalid in supporting an application. In some instances the timing of works may also be affected by the requirements of protected species.

The Wildlife Information Centre

Records on the presence of protected species or habitat, in or near a proposed development site, may be required from The Wildlife Information Centre. See: www.wildlifeinformation.co.uk.

Invasive Non-Native Species

Scotland has many introduced plants, some of which have been identified as being invasive by out-competing native plants for light space and nutrients. The most common invasive species in Edinburgh are:

- Japanese Knotweed (Fallopia japonica);
- Giant Hogweed (Heracleum mantegazzianum); and
- Himalayan balsam (Impatiens glandulifera).

The Wildlife and Natural Environment (Scotland) Act 2011 (Annex B) has introduced measures to deal with non-native species. If a survey shows invasive nonnative species are present on a site, the developers must remove them and ensure they are not spread from the site. Soil with Japanese Knotweed or Giant Hogweed is classified as controlled waste under the Environment Protection Act (1990).

The Scottish Government has produced a Non-Native Species Code of Practice that will help developers understand their legal responsibilities. For more information see: www.qov.scot/ Publications/2012/08/7367

www.nonnativespecies.org/home/index.cfm

Planning has a key role in supporting the UK commitment to halt the overall loss of biodiversity by 2020, in accordance with the European Biodiversity Strategy and UN Aichi targets. BS 42020 Biodiversity in planning and development – Code of practice, is a useful tool when considering biodiversity in the context of planning.



Swift Bricks—Beaverbank Place

On this development in North Edinburgh swift bricks have been designed into the external wall. These should be shown on planning drawings.



Otter (Lutra lutra)

Otters are active on several watercourses in Edinburgh and any development within 200 m of suitable water habitat should survey for this European Protected Species. Picture SNH/Lorne Gill.

Survey timetable

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Badgers												
Bats—hibernation roosts												
Bats—summer roosts												
Bats—foraging / commuting												
Birds—breeding												
Birds—over winter												
Great Crested Newts (*1)												
Invertebrates												
Otters												
Water Voles												
Habitats / Vegetation												

Survey time

Optimal

Sub Optimal



3.5 Trees

A suitably qualified Arboriculturalist should be used to survey and evaluate the existing tree and woodland resource within the site and 12m beyond.

Design development to take into account above and below ground constraints for retained trees and future planting.

Survey, assess and identify trees to be retained.

Protect retained trees and areas identified for new tree planting during construction.

Ensure trees for retention are marked on masterplans.

Local Development Plan policies

- Des 3 Development Design
- Env 12 Trees



Ancient woodland near BalernoThis ancient woodland makes an invaluable contribution to biodiversity and landscape character.

Trees and woodlands are important for the quality and character of the landscape, the townscape, biodiversity, cultural heritage, ecosystem services and our sense of well-being. Protection of trees and woodland within new development can give a sense of maturity and raise the overall quality of the setting of buildings whilst contributing to green networks. Where trees are damaged and then decline or where inappropriate design leads to conflict, these positive

benefits are lost. Successfully marrying trees and new development requires a process of survey, analysis and design which is set out in the British Standard (BS) 5837:2012. This provides a balanced approach on deciding when trees should be retained, how design considerations will be affected by existing trees and appropriate protection for trees during development.



Former City Hospital - Greenbank *Existing mature trees retained within new green corridor.*

A tree survey is required in the form specified in BS 5837:2012 for all trees with a stem diameter of 75mm or more, at 1.5m above ground on the site or within 12m of its boundary. Trees should then be categorised in accordance with their quality and suitability for retention.

In certain cases woodland may be surveyed as a whole and managed using best woodland management principles. Using this information, a Tree Constraints Plan (TCP) should be prepared to show the below and above ground issues that need to be taken into account during the design process to ensure successful survival of these trees.

Below ground, the Root Protection Area (RPA) must be identified for each tree, to be left undisturbed and protected from damage from building, road construction or service trenches and layouts of SUDS. Above ground, the physical requirements for future growth and maintenance will include, for example, the ultimate height and spread of each tree.

Input to the design layout also requires consideration of factors such as the effect trees may have on daylight, shading of buildings and open spaces, privacy, screening, wind throw and amenity issues with leaves from certain species.

Visibility splays, location of services, changes of level and allowance for construction activity will also be considered. When submitted with a planning application, the TCP should demonstrate how consideration was given to the retention of trees in the proposed site layout.

Opportunities for future planting should also be identified and plotted on the TCP to identify areas for protection from soil compaction.

Once the layout is finalised, a Tree Protection Plan should be submitted showing trees for retention and removal, and the precise location of protective barriers and ground protection forming the Construction Exclusion Zone. Fencing should be to the standard shown in Figure 2 of BS 5837:2012. These will be erected before work starts on site and maintained throughout the construction phase.

Tree Preservation Orders, as set out in the Tree Protection Charter, will be used to safeguard trees in appropriate cases.

It is a duty under Section 159 of the Planning Act (1997) that conditions must be applied to all planning applications where existing trees require protection.

Developers should be aware of the responsibility to determine the presence of bats (a European protected species) and identify potential bat roosts on site and the effect of proposals on habitat and navigation features. See section 3.4. Biodiversity.

Summary of process

- 1 Carry out a tree survey and categorisation to identify trees worthy of retention.
- 2 Prepare a Tree Constraints Plan showing physical and spatial requirements for retaining those trees. This includes a Root Protection Area for each tree and an indication of the ultimate spread of canopy.
- 3 Use Tree Constraints Plan to design an initial site layout and identify areas for new planting.
- 4 Achieve finalised site layout.
- 5 Prepare a Tree Protection Plan, including fence specification and provision of on site supervision, showing the Construction Exclusion Zone.
- 6 Submit with Planning Application.
- 7 Planning approval with tree protection conditions relating to the approved Tree Protection Plan.
- 8 Prior to start of construction, erect tree protection fencing and other identified measures to form a Construction Exclusion Zone.
- 9 Ensure site supervision to maintain tree protection fencing and measures until removal agreed.

3.6 Planting

New planting proposals should be prepared by a suitably qualified Landscape Architect or Arboriculturalist (for trees).

Species selection should be appropriate to the intended location, function and growing space, taking into account ultimate height and spread, and relationship to buildings, paths and roads.

Where possible, use native species in locations adjacent to designated nature conservation sites. In other areas use a mix of species to provide ecological diversity and resistance to disease.

Planting design should recognise Edinburgh's distinct landscape characteristics and provide an attractive, biodiverse and a long-lived landscape structure to help mitigate against climate change.

Woodland and structure planting should be carried out in advance of development to allow early establishment.

Proposals must allow for ease of maintenance and long term establishment.

Local Development Plan policies

- Des 3 Development Design
- Des 8 Public Realm and Landscape Design
- Env 12 Alterations and Extensions
- Hou 3 Private Green Space in Housing Development

An attractive and functional landscape scheme should use trees, shrubs, boundaries, herbaceous perennials, ground cover and hard landscaping imaginatively to provide an appropriate setting for buildings. It can assimilate and integrate new development into the locality.

All planting schemes should add to the biodiversity of the area by maximising structural diversity and providing for pollinators. They should provide all year round interest, and be playful landscapes that can be used by all age groups. Poisonous plants should be carefully specified and not used in housing schemes, school or nurseries. Bulb planting should be used to create early spring interest.

Trees in particular make a positive contribution to both urban and rural landscapes and new development should provide a spatial framework of new tree and woodland planting. Large stature tree species should form the basis of structure planting and adequate space allowed for their ultimate size. Housing proposals and major planning applications should provide sufficient space to accommodate at least 20% of long-lived large scale trees to provide a legacy for future generations.

Edinburgh's heritage of round crowned deciduous trees should be respected in planting schemes and the creation of wooded ridges should be included in proposals wherever practicable.



Birch Trees - Forthquarter Park

Trees should be used to create special places in housing proposals, for example using orchards and fruit trees, horse chestnut trees (conkers) etc.

Any unavoidable removal of trees should be compensated by replacement with at least extra heavy standard sized trees or semi-mature stock in locations where amenity is a key consideration.

At the site layout stage, the landscape framework should set out locations to provide suitable conditions for tree planting. This may include planting in open ground, such as greenspaces but also locations within hard surfacing, where careful site planning and detailed design will be required.

The correct species should be selected for the intended location, taking into account ultimate height and spread, the character of the local area and its environmental and climatic conditions. The siting of buildings, underground services, street lighting and drainage should reflect the intended landscape framework. Other factors such as road signs, parking and CCTV may need to be considered.

Within hard surfaces, the use of structural soils or underground cellular systems will be required to provide a load-bearing paved surface. The objective is to prevent compaction of the soil beneath hard surfaces to accommodate tree roots, soil water, air and biota.

Tree pits and trenches should be sized to reflect the nutritional and water requirements of a fully grown tree. Drainage and irrigation should also be installed to aid establishment, in particular where impermeable surfaces may limit natural rainwater percolation.

Planting specification

The following minimum standards will apply:

	Size at planting	Density / spacing	Other requirements
Woodland	60-80 cm height.	1m spacing.	Include 30% feathered trees of min height 180cm where immediate visual effect required.
Trees - green spaces	Extra heavy standard, 14-16 cm girth minimum. The Council may require larger dependent on location.		2m clear stem or multi-stem. Provide tree pit/trench detail, including means of support.
Trees - paved spaces	Semi mature, 30-35 cm girth.		2m clear stem, underground guyed. Provide tree pit/ trench detail to demonstrate adequate soil volume and load bearing support for surrounding paving.
Fruit trees	Light standard, 6-8cm girth.		Spacing and means of support to correspond with intended shape.
Hedges	60-80 cm height.	250mm spacing in two offset rows 300mm apart.	Protected by post and wire fencing. Min 400mm depth topsoil.
Shrubs/fruit bushes	Dependent on species.	500-600mm apart.	Min 3L pot grown unless bare root/root balled Min 300 mm depth site topsoil. Planted in groups of 3-5 of same species.
Herbaceous perennials/ ground cover	Dependent on species.	300 - 450mm apart.	Planted in groups of at least 7 of same species.
Amenity Grassland	Specify turf or seed mix g/m2.		Min 200 mm site topsoil spread over graded and free draining subsoil.
Meadow Grassland	Specify meadow seed mix g/m2 by type, including dry/wet meadow, pictorial, woodland and percentage of each species. Additional plug plants to be specified by species and nr/m2.		Use of graded and site subsoil free from compaction.
Bulbs	Specify by species, grade and nr/m2.		
Green roofs/ walls	Specify whether intensive or extensive in design.		Ensure sufficient structural capacity and depth of growing medium. Specify proprietary matting/wall systems including species mix and plug plants.

Shrubs, hedges and ground cover plants should be used to define spaces, provide shelter, privacy, amenity and enhance biodiversity.

Grassed areas are important for recreational spaces and bulbs and native wildflower seed mixes should be used to add seasonal interest and habitat value.

Where space is limited climbing plants and green roofs/walls should be introduced where practicable.

Proposals within the Edinburgh Airport Safeguarding Zone should seek early liaison with the Airport on their planting concepts in order to reach agreement.

Applications for Planning Permission in Principle

These applications should be accompanied by a landscape strategy setting out the proposed use and treatment of external spaces, indicating the location of services and changes in level, including preliminary drainage proposals (such as the layout and maintenance responsibilities for SUDS). The strategy should include cross sections of typical roads and streets and green/blue corridors. Key distances from natural features and a palette of planting material should also be included.

Full planning applications

Full Applications require all planting and hard landscape proposals to be specified as follows:

- Full botanical name of all plant stock;
- Minimum size of plant stock at planting as per the National Plant Specification;
- Expected height and spread of trees.

- Planting density, total numbers and/or planting locations;
- Tree pit details, including means of support and protection;
- Details of surfacing materials, including grass mixes and paving;
- Details of junctions between surfacing;
- Details of walls and fencing, including boundary treatments;
- Details of new play areas and equipment;
- Site furniture including bin and cycle stores; and
- Details of all functioning landscape elements of Sustainable Urban Drainage.

Management and maintenance

Details of the intended arrangements and proposed long-term maintenance and management operations for all landscape proposals should be submitted to demonstrate that a high standard of landscaping can be achieved, appropriate to the location of the site. This includes proposals for the adoption or otherwise of landscape features within streets.

For many landscape proposals in the city, the airport operator is required to assess proposed planting and water features against the risk of attracting birds which threaten the safety of air traffic. A Birdstrike Risk Management Plan may be required.

Care should be taken to ensure that community safety is promoted through the specification and maintenance of trees and shrubs. Within pedestrian routes, streets and public open spaces, trees should maintain good visibility with a minimum clear stem height of 2m. Shrub planting should also avoid impeding the opportunity for natural surveillance and must avoid the creation of hiding places. Where

good visibility is essential shrubs should ultimately grow no higher than 1 metre.

Hedges and planting should not obscure doors or windows, and trees should not provide climbing aids into property or obscure lights or CCTV cameras.

Use of a well composted mulch after planting and watering can aid establishment, retain soil moisture and supress weed growth.



Holyrood North - high quality public realm and planted residential courtyards.

3.7 Hard landscape

Ensure hard landscape design helps reinforce Edinburgh's distinctive character.

Co-ordinate materials used in new hardworks design with the materials used within the surrounding townscape.

Use stone walls and railings where this is the commonly used edge detail.

Keep the number of colours and materials in the hard landscape in a new development to a minimum.

Detail the hard landscape to ensure it has a good visual appearance that lasts over time.

Local Development Plan policies

• Des 8 - Public Realm and Landscape Design

Streets in new development should be designed in accordance with the Edinburgh Street Design guidance and Designing Streets.

In addition to streets and paths, new developments often include other hard landscape spaces to which this section applies.

Edinburgh's hard landscape is defined by the simple, uncomplicated use of a small palette of materials.

Materials should be chosen to define spaces of differing functions, public / private spaces and changes in level.

The materials should be suited to the character of surrounding buildings and townscape especially where the buildings are of special interest or importance. There should generally be continuity of paving materials along and on either side of the street.

Detailed design is of particular importance, ensuring the size of paving is appropriate. Features such as boundary walls, railings, seating, cycle storage or stands etc, should all be carefully specified, coordinated and integrated into the design.

There is a strong tradition of stone walls, railing on low stone walls or coping and hedges in Edinburgh. These details should be used to reinforce Edinburgh's unique characteristics. Tall boundary walls using rendering should be used sparingly and detailed very carefully to shed water.

To mitigate the impact of climate change, a balance should be struck between paved and planted areas and between permeable and impermeable paving. Drainage needs to be robust and uncomplicated.

Narrow planters should be very cautiously used as boundary elements as they generally fail over the long term. Timber fencing should not be used in the public realm unless bespoke and beautifully detailed. Proposed levels should be carefully designed to tie in with existing site levels, including on adjacent sites.

The texture and form of trees improve urban environments such as squares and contribute to the quality of the public realm. Trees in hard landscape need to be carefully specified and have adequate soil volume, water and air for healthy growth. Raised planters should generally be avoided since trees are more likely to suffer restricted growth.



Fountainbridge - Port Hamilton

A square has been formed between the new and old buildings. This simple space provides an attractive new route through the development.

The concept and vision for hard landscape design should be presented in a Landscape/Public Realm framework for Planning Permission in Principle applications.

Full planning applications and applications for approval of matters specified by conditions should fully specify all paving materials, in terms of type, finish, unit size, proposed pattern/ bond and method of laying and jointing. Attention should be paid to how changes in level are addressed, detailing of drainage and the correct specification of sub-base and materials where spaces will be subject to vehicular traffic. To avoid awkward cutting and jointing of units around existing and proposed features, appropriately sized or special paving units should be used and carefully coordinated with the layout of street furniture.



Dundee Waterfront

Use of a continuous tree trench and underground cellular system to support surrounding paving surfaces as part of advanced green infrastructure at Dundee Waterfront.



High St Old Town and other conservation areas

Traditional materials of Caithness flagstones for paving, granite and whinstone kerbs and setts have been used extensively throughout the Old Town and will be sought here and in other conservation areas around the city with the exception of the New Town.



Shared surfaces outwith conservation areas

Shared surfaces outwith conservation areas need to be kept very simple. If block paving is used, there should be no more than two tones and these should be grey.



Queen Street New Town

In the New Town, sandstone should be used as the paving material. The paving outside the Scottish National Portrait Gallery provides a model that should be used elsewhere in the New Town.



Western Corner Areas with significant footfall

In other areas with significant footfall, such as local centres outwith conservation areas, rectangular precast concrete slabs (coloured grey) should be used.

3.8 Water environment

Survey and analyse the existing and historic water environment on development sites.

Design developments, including the floor level of buildings, to ensure that properties are not at risk of surface water flooding.

Provide above ground surface water attenuation on development sites to reduce flooding, due to the development, on surrounding areas.

Local Development Plan policies

- Des 3 Development Design
- Des 6 Sustainable Buildings
- Des 7 Layout Design
- Env 21 Flood Protection

Any development will alter the way that water moves across a site in times of rainfall or flooding. Flooding can happen because of pluvial (overland) flow, fluvial (river) flow or coastal flooding in certain conditions. Culverted rivers, streams or historical springs can also be present. Understanding the history of a site and the risks and opportunities that water movement provides should be appraised very early on in the design process, in order to ensure that concept layout plans presented are realistic.

Along with increased flood risk, development can also increase pollution due to run-off over hard surfaces. New development must address these issues through the use of Sustainable Urban Drainage Systems (SUDS) systems attenuate water, treat polluted water and should be designed to maximise biodiversity benefits. They should also be designed so they are an attractive addition to the landscape. A range of SUDS features are available to designers including porous paving, green roofs, swales, bioretention trenches, detention basins and ponds.

In greenfield sites SUDS and flood attenuation methods should be designed by early discussions with water engineers and landscape architects within the design team. Above ground solutions should be provided on constrained brownfield sites. Underground solutions might be considered acceptable, however, these leave a legacy of hidden structures that have the potential to fail and should only be used in exceptional circumstances.



SUDS retention basin, Firrhill Neuk, Oxgangs

Permanent pond with wetland planting including Flag Irises adjacent to Oxgangs Neighbourhood Centre. The pond has become the focus for community life, is overlooked by surrounding streets and has its own Friends Group and wildlife information panel.

Sustainable Urban Drainage Systems

SUDS are a legal requirement under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 when discharging surface water to the water environment (except for a single dwelling house or discharge to coastal waters).

All SUDS schemes should be designed to comply with CIRIA C753 The SUDs Manual and should gain agreement from Scottish Water.

SUDS schemes should be considered at the outset of the project to ensure multiple benefits are realised. This should be presented as a strategy with plans at Planning Permission in Principle which should align with the urban design and landscape framework.

If the SUDS system and the attenuation of flood waters up to the 1:200 plus climate change is to be combined, then the 1:30-1:200 can be designed into the open space (hard or soft) or parkland areas provided the designs of the landscape/ public realm are attractive and suitable maintenance arrangements can be put in place.

SUDS schemes should be designed to maximise the benefits we can secure from surface water management which are:

- Control the quantity of runoff;
- Manage the quality of runoff and prevent pollution;
- Create and sustain better places for nature; and
- Create beautiful places for people.

Sustainable Urban Drainage Systems should also be designed by engineers and landscape architects.

The designers should propose a system that:

- is attractive and visually interesting;
- conveys water through the site above ground in swales, biorentention trenches and filter trenches as opposed to a piped system;
- integrates the attenuation areas into the landscape design attractively;
- can be maintained by grass cutting machines with a max grass slopes 1:6;

- uses hard landscape areas in suitable locations;
- achieves water quality improvements through a series of treatment and not end of pipe control using the Simple Index Approach;
- enhances biodiversity;
- is overlooked by development as opposed to located in a hidden space; and
- only requires to be fenced in exceptional circumstances, a carefully designed landscape should be able to reduce the risk to an acceptable standard.

SUDS Requirement	Why SUDS required	Checking Authority	Adoption Authority	Design Manuals	
Roads (eg infiltration, ponds).	To reduce, treat and attenuate, delay surface water on the roads reaching the sewerage system.	Roads Dept, Local Authority.	Roads Dept, Local Authority.	SUDS for Roads; Green Infrastructure - Design & Placemaking; Delivering Sustainable	
Treatment Ponds / Basins.	To treat surface water prior to discharge into a watercourse, culverted watercourse or sewerage system.	Treatment Train—SEPA. capacity—Council Flood Prevention. design—Scottish Water, Council Planning.	Scottish Water.	Flood Risk Management; SUDS manual; and SEPA guidance.	
Surface Water Attenuation.	To attenuate surface water flows up to the 200 year event.	Council Flood Prevention. Council Planning. Scottish Water.	Scottish Water; or private owner.		

Surface Water Management Plans

A Surface Water Management Plan is a document required by the Council to assess the flood risk from surface water and ensure that runoff from the development does not increase flood risk to properties elsewhere. The Surface Water Management Plan should identify a drainage strategy for events up to a 1:200 yr flood event (a 0.5% Annual Exceedance Probability [AEP]), with an allowance for climate change. It should include details of surface water flow paths, water quality treatment and discharge points for the drainage system. For further information see *Planning application guidance on flooding*.

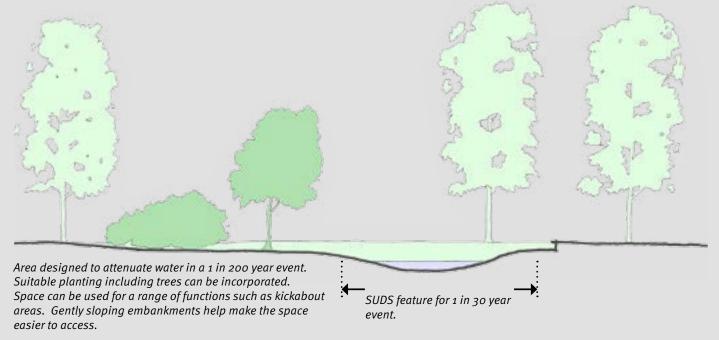


Sutcliffe Park, Greenwich, LondonThe local community enjoy the use of this well-designed and attractive parkland landscape which attenuates water in the event of a serious flood.

Required attenuation volumes and surface water flow paths should be considered at the feasibility stage as they can affect the location and layout of development. Surface water should be dealt with by analysing the existing and proposed flow paths together with potential ponding and runoff depths. This should include runoff from outwith the site, from unpaved areas within the site, and from roofs and paved area in the events which exceed the capacity of the system.

New buildings in the development must not be at risk of flooding as a result of these flow paths and depths. For example, where flow paths show that water will be directed to a level access, or towards an underground car park then possible preventative measures could include:

- Changing to the internal layout so that the door is not directly in line with the flow around the properties;
- Raising the floor level and providing a ramp.
 Floor levels to be raised to a minimum of 200mm.
 Ground levels either side of the ramp must fall away to enable water to flow around the property. In terraced situations a fall needs to be maintained across each individual ramp, either from the centre of a terrace to either side or from one end to the other.



- Use other design concepts to divert the water around the properties;
- The use of soft landscaping as a form of soakaway and the reliance on linear slot drainage channels will not be sufficient as a form of flood prevention or diversion; and
- Care must also be taken that where walls are built between gardens on the 'high' side of a slope that gaps are left to avoid trapping water.

The development should provide attenuation of surface water flows up to the 1:200yr plus climate change event on site.

Attenuation should be above ground. Underground attenuation is only acceptable in exceptional cases, for example in constrained brown field sites in urban areas. Flow to the attenuation areas should be through linear features designed into the landscape/streetscape of the site. The scheme should be designed by a team that includes an engineer and landscape architect.

Hard works details that form part of the public realm should be designed in liaison with landscape architects in the design team to provide a coordinated response that is appropriate to the context and is part of the overall design concept. In the public realm careful consideration is required regarding flows along the streets and the attenuation of the overland flows. In certain situations flows can be attenuated in hard landscaped areas provided they do not negatively impact flooding of proposed or existing properties.

On larger sites where banks are being used to create the attenuation features, these should not be steeper than 1:6 to allow for grass cutting. Steeper slopes will require planting with suitable plants that do not require cutting. It should be noted that arisings will not be picked up and may contribute to a gradual reduction in the amount of storage provided by a feature.

The maximum discharge rate to the 200yr attenuation should not exceed 4.5l/s/ha impermeable area or the greenfield runoff fate, whichever is the lower.



SUDS—Upton, EnglandThis SUDS feature is sensitively integrated into the development



locked up culvertWhere possible, culverts should be opened up.



SUDS—Malmo, Sweden
Sustainable drainage is fully integrated into the design and is a major component of this recent development.
Image courtesy of Steve Tiesdell Legacy Collection

The River Environment

Flooding

A Flood Risk Assessment (FRA) is required under planning policy and the Flood Risk Management (Scotland) Act 2009 to demonstrate that a proposed development is not at risk of flooding in a 1 in 200yr flood event (a 0.5% Annual Exceedance Probability [AEP]) from a watercourse – this includes watercourses that are open or culverted. The Scottish Planning Policy (SPP) provides a risk framework to determine the appropriate planning response for three categories of flood risk. An allowance for climate change should also be included. The assessment should be supplied in a report format utilising standard industrial software. If available, technical advice can be obtained from the Flood Prevention Unit.

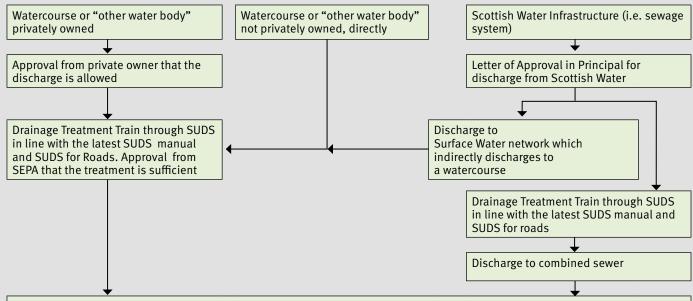
Land raising to protect the development from river flooding will not generally be acceptable within functional flood plains.

Culverts

In line with the SPP, culverted watercourses should be opened up (de-culverted), where appropriate, and a natural river environment incorporated into the development design outline. Culverts and particular screens on culvert inlets can cause flooding and are a maintenance liability for the owner and the Council.

The flowchart adjacent shows requirements for discharge points for a range of scenarios.

Discharge Points for the drainage system



200 year + climate change maximum discharge rate should not exceed 4.5 l/s/ha of impermeable area or the 2 year greenfield rate, whichever is lower. Full calculations must be supplied. Attenuation of surface water volume can be sized within the SUDS pond or separately. It is recognised that small, restricted sites may require some relaxation in respect to allowable discharge. A minimum practical discharge control should be sized above 75mm diameter





Inch Park

Removal of a straightened and modified channel along the Braid Burn at Inch Park and re-meandering to create a natural watercourse with riffles, pools and vegetation as part of flood prevention works.

Appendix A: Information required for submission with a planning application

The following information is provided as a guide to the type of technical information that may be required for submission with a planning application. The list is non exhaustive and additional information may be sought. In order to ensure planning applications can be progressed within agreed

timescales, applicants should agree with Planning the information to be submitted in advance of making a planning application.

SITE & CONTEXT APPRAISALS						
Description	What should it contain / do?	Scale	What it is required for?			
Historic/ Archeological Surveys	Initial survey & appraisals of archeology and the historic environment relevant to the site context.	N/A	For developments where there may be sensitivities with regard to archaeology and the historic environment.			
Landscape/Townscape & Visual Appraisals	See chapter 1.2 of this Guidance.	N/A	For developments which require detailed assessment of their impact on the landscape/townscape/views.			
Flood Risk Assessment and/ or Surface Water Management Plan	Refer to flooding guidance set out on the Council's website. See Chapter 3.7 of this Guidance.	N/A	Applications for development on land with a flood risk.			
Habitat and protected species surveys	Surveys in accordance with the requirements of the Biodiversity section of this guidance, set out in Chapter 3.4.	N/A	Where it has been identified that development may affect protected species or habitats.			
Tree protection information	A survey in accordance with BS 5837:2012. A tree constraints plan in accordance with BS 5837:2012.	1:200 preferred. 1:500 may be appropriate on larger sites where 1:200 would not fit onto A1 paper.	For sites where there are trees with a stem of more than 75mm in diameter at 1.5m above ground level on or within 12m of the site.			
Stage 1 quality audit	A strategic assessment of a range of issues relating to the design of streets that can include the following issues: • an audit of visual quality; • a review of how the street will be used by the community; • a road safety audit; • an inclusive access audit; • a walking audit; and • a cycle audit. Designing Streets (page 58) contains more information about Quality Audits.	N/A	For applications for planning permission in principle that involve that involve the design of streets and routes particularly where there are tensions between different objectives.			
Stage 2 quality audit	In accordance with the Transport for Scotland - Transport Assessment & Implementation: A Guide.	N/A	Applications for full planning permission and approvals of matters specified in condition that involve the design of streets and routes.			

SITE & CONTEXT APPRAISALS						
Description	What should it contain / do?	Scale	What it is required for?			
Transport information	 For all developments the following information is required: type and scale of development; detailed accommodation schedule; identification of existing transport information; details of proposed access for pedestrians and cyclists; details of proposed access to public transport facilities; comprehensive parking information; and mitigation measures (when low levels of parking proposed). 	N/A	Transport information is required for all developments.			
	For larger developments the following additional transport information will be required: trip generation and modal split forecasts; analysis of traffic levels; analysis of potential safety issues; how car use will be managed; measures considered to influence travel behaviour; demand management measures; and environmental impacts of transport.		The following are indicative of when additional transport information is required: Description Gross Floor Area Greater than: Housing more than 50 dwellings Business 10,000m2 Industry 10,000m2 Storage and distribution 10,000m2 Other developments 5,000m2			
Noise Impact Assessment	In accordance with requirements of Scottish Government's <i>Techical Advice Note—Assessment of Noise</i> .	N/A	Pre application advice will help determine whether this assessment is required.			

	INFORMATION RE	QUIRED	
Description	What should it contain / do?	Scale	What it is required for?
Location Plan	This must identify the land to which the proposal relates and its situation in relation to the locality - in particular in relation to neighbouring land (land which has a common boundary or within 20 metres of the boundary of the land for which development is proposed).	1:1250 (1:2500 acceptable in countryside).	For all planning applications.
Existing and proposed floor plans	 a) the direction of North; b) explain the proposal in detail; c) show where existing buildings or walls are to be demolished; d) show details of the existing building(s) as well as those for the proposed development; and e) show new buildings in context with adjacent buildings (including property numbers where applicable). 	1:100 (1:200 may be acceptable for very large buildings where 1:100 would not fit on an A1 sheet) (A scale bar should be shown).	For all full planning applications and where relevant for approval of matters specified in condition (AMC) applications. These may also be required for some planning permission in principle applications. Pre application advice can be provided to determine this.
Existing and proposed elevations	 a) show the proposed works in relation to what is already there; b) show all sides of the proposal; c) indicate, where possible, the proposed building materials and the style, materials and finish of windows and doors; d) include blank elevations (if only to show that this is in fact the case); and e) where a proposed elevation adjoins another building or is in close proximity, the drawings should clearly show the relationship between the buildings, and detail the positions of the openings on each property. 		
Existing and proposed site sections Roof plans	 a) show a cross section(s) through the proposed building(s); b) where a proposal involves a change in ground levels, show both existing and finished levels to include details of foundations and eaves and how encroachment onto adjoining land is to be avoided; c) include full information to demonstrate how proposed buildings relate to existing site levels and neighbouring development; and d) show existing site levels and finished floor levels (with levels related to a fixed datum point off site), and also show the proposals in relation to adjoining buildings (unless, in the case of development of an existing house, the levels are evident from floor plans and elevations). To show the shape of the roof and specifying details such as the roofing 	1:100 (1:200 may be acceptable for very large buildings where 1:100 would not fit on an A1 sheet). (A scale bar should be shown).	For all full planning applications and where relevant for approval of matters specified in condition (AMC) applications. These may also be required for some planning permission in principle applications. Pre application advice can be provided to determine this.
· ·	material, vents and their location.	,	
Topographical survey (existing & proposed)	Existing & proposed spot heights across the site and adjacent to the site.	1:500 or 1:200 (a scale bar should be shown).	For all planning applications (with exception of changes of use) where levels need to be considered in detail.

	INFORMATION REQUIRED						
Description	What should it contain / do?	Scale	What it is required for?				
Soft landscape plan	Plan that show the details of all proposed planting complete with accompanying planting schedule. This should include levels against Ordnance Survey datum. As well as the planted size, the eventual tree canopy spread should be shown on drawings.	1:200 preferred. 1:500 may be appropriate on larger sites where	For all applications where soft landscape is proposed. For applications with limited soft landscape this can be combined with a hard landscape plan.				
Hard landscape plan	Plan that shows the proposed hard landscape materials including surface finishes, street furntiture, boundary treatments. This should include levels against Ordnance Survey datum.	1:200 would not fit onto A1 paper.	For all applications where hard landscape is proposed. For applications with limited hard landscape this can be combined with a soft landscape plan.				
Tree protection plan	Plan showing trees to be protected including tree protection measures - see chapter 3.5 of this Guidance.		For all applications where existing trees require protection.				
Design Statement	See chapter 1.3 Assessments & Statements of this Guidance.	apter 1.3 Assessments & Statements of this Guidance.					
Sustainability Statement Form	A completed City of Edinburgh Council 'S1 Sustainability Statement Form'.	To determine sustainability measures for non-householder applications.					
Design and access statement	See chapter 1.3 Assessments & Statements of this Guidance.	Applications for planning permission for major developments. Not required for applications for planning permission in principle.					
Environmental protection surveys	 Noise Impact Assessment - in accordance with requirements of Scottish Go 'Technical Advice Note – Assessment of Noise'; Odour Impact Assessment - in accordance with requirements with the IAQM assessment of odour for planning'; Air Quality Impact Assessment - in accordance with requirements of Scottish 'Delivering Cleaner Air for Scotland - Development Planning and Development Guidance from Environmental Protection Scotland and the Royal Town Plant Ground contamination – in accordance with PAN 33 ' Development of Conta 	For all applications where noise, odour, air quality and ground contamination may be an issue.					
Environmental Impact Assessment (EIA)	Many of the above noted appraisals will form part of an EIA if one is deemed to Screening Opinion should be sought from the Planning Authority to determine be required as part of the EIA. Refer to Scottish Government's guidance on EIA	To assess the environmental impacts of all developments as defined under Schedule 1 and developments under Schedule 2 where they are likely to have a significant effect on the environment.					