

ENV 1 - OPEN SPACE PROTECTION

AIM

To ensure that areas of formal and informal open space are protected from inappropriate development, in order to maintain or enhance the quality of life, health, well being and amenity of the communities they serve and also promote sustainability and biodiversity.

POLICY

In accordance with policy DEV 11: Green Space, there is a strong presumption in favour of the retention of all public and private green/open space.

Protection is accorded to the following categories of open space as identified on the Council's Glasgow Open Space Map (see Definition).

1. Public parks and gardens
2. Communal private gardens (see Definition)
3. Amenity space
4. Playspace for children and teenagers
5. Sports areas
6. Allotments
7. Green corridors
8. Natural/Semi-natural greenspace
9. Other functional greenspaces
10. Civic space

Where exception is made for development on open space within categories 1 to 6, the development should:

- either be directly related to the current use(s) of the open space or better serve local community needs by the provision, in the local area, of an area of equivalent, or higher quality open space, to directly replace the type of open space that would be lost (this will require the developer to consult with the local community using consultation methods agreed with the Council);
- comply with the requirements of policy ENV 2: Open Space and Public Realm Provision;
- provide for appropriate habitat creation, landscape treatment and subsequent maintenance of the retained or newly created open space; and
- not have a negative impact on the connectivity of the green network and/or distribution of open space within the surrounding area or prejudice any site covered by an Environmental Designation (see policy ENV 7: National, Regional and Local Environmental Designations).

Exceptions may be made for development on open space within category 5 (sports pitches/areas) so long as the development complies with the requirements of both paragraphs 46 and 47 of Scottish Planning Policy (SPP) 11 - Open Space and Physical Activity and the recommendations contained within Glasgow's adopted Sports Pitch Strategy Policy and Implementation Plan.

Categories 7 to 10 (above) generally relate to open spaces that are covered by an Environmental Policy Designation (see Environmental Policy Designations Maps and policy ENV 7).

AREAS OF CHANGE

In areas of the City which are, or could be, subject to change, for example, redevelopment in the Key Regeneration Areas, New Neighbourhoods, GHA priority redevelopment areas, etc., some flexibility may be required to permit the re-arrangement of land uses in the interests of designing sustainable neighbourhoods and places. Local development strategies, masterplans, etc. for such areas, prepared in consultation with the local community and approved by the Council, will ensure that appropriate open space provision, including sports areas in accordance with SPP 11, paragraphs 46 and 47, is provided within the redeveloped areas. Any changes to open space provision will be recorded on the Council's Glasgow Open Space Map and the new spaces will be accorded the protection set out in this policy.

DEVELOPMENT IN PARKS

The potential for the development of commercial facilities (e.g. cafes and restaurants) in parks may be considered where such uses will contribute to improved customer services and increased park usage. This will require developers to consult with local communities. Such proposals, where appropriate in terms of the nature of the park and their impact upon it, should be set within the context of a Park Management Plan.

DEFINITIONS

GLASGOW OPEN SPACE MAP - Under the provisions of Planning Advice Note (PAN) 65: Planning and Open Space, local authorities are obliged to prepare an audit and map of all the areas and categories of open space within their areas. Together with other policies of the Plan, the Glasgow Open Space Map will form part of the policy protection for the City's open spaces and will be used to assess whether there would be scope to develop on any such space.

COMMUNAL PRIVATE GARDENS - Gardens in multiple private ownership, such as are found in the West End of the City.

POLICY JUSTIFICATION

The policy supports the Plan's Development Strategy to protect open spaces from inappropriate development pressure, and contains mechanisms for identifying and protecting public and private open space (see Part 2, BIODIVERSITY AND GREENSPACE, Developing the Green Network, paragraph 5.41) and conforms with Planning Advice Note (PAN) 65: Planning and Open Space.

Public and private open space provides the City with a green infrastructure that is important to the health, welfare, quality of life experience and enjoyment of residents, businesses and visitors. Under the provisions of SPP 11, the Council is required to produce an open space strategy, based on an audit of open spaces, and associated policies and standards aimed at meeting the City's open space needs.

The Glasgow Open Space Map identifies all categories of green/open space in Glasgow. The Map will be regularly updated to record any amendments arising from the development and regeneration process.

ENV 2 - OPEN SPACE AND PUBLIC REALM PROVISION

AIM

To ensure that new development contributes to improving the City's environment through the provision and maintenance of high quality open spaces and areas of public realm that are well designed, accessible, safe and available for community use.

POLICY

OPEN SPACE PROVISION

New residential development (including conversions) is required to provide access to good quality recreational open space. This includes provision for children's play areas, amenity open space/parkland, outdoor sport facilities, allotments and community gardens, in accordance with the standards set out in Table 1 below. These are interim requirements, subject to review through the Council's Open Space Strategy which is being prepared in accordance with SPP 11 – Open Space and Physical Activity. Once complete, the Strategy will be a material consideration and will inform any future review of the City Plan.

An appropriate proportion of the open space requirement must be located within the boundary of the site, as an integral element of the development scheme.

- a) Where an audit identifies a relative surplus in the quantity of any of the open space categories set out in the policy (having regard to the distance thresholds set out in DG/ENV 2: Open Space and Public Realm Provision) the developer may meet part of the policy's requirement through an equivalent financial contribution. This will be directed towards:
 - (i) improving the quality, accessibility or management of open spaces in the local area; and/or
 - (ii) enhancing open space provision and management in the same City Plan sector; and/or
 - (iii) approved Council strategies to which the development's open space requirements could contribute.

- b) Where a relative shortage (either in quantity or quality) of any of the open space categories set out in the policy has been identified through an audit (having regard to the distance thresholds set out in DG/ENV 2), or where the proposed development could lead to such a shortage, the developer will be expected to meet the policy's entire requirement for those categories within the development site. If it is demonstrated (to the satisfaction of the Council) that this is not feasible, then part (or in exceptional circumstances all) of the requirement may be met by an equivalent financial contribution. This will be directed towards:
 - (i) addressing the quantitative or qualitative deficiencies in open space provision in the local area; and/or
 - (ii) addressing City-wide deficiencies in the quantity or quality of open space provision in the same City Plan sector; and/or
 - (iii) addressing strategic deficiencies in the quantity or quality of open space provision, as identified by approved Council strategies.

CITY CENTRE PUBLIC REALM PROVISION

In the designated area of the City Centre (see Definition), new development within the following categories (including extensions, conversions, changes of use and refurbishments), that results in the creation of new or replacement floorspace in excess of the specified thresholds, is required to contribute to the extension, enhancement and maintenance of public realm areas within the City Centre, in accordance with the standards set out in Table 1 below (see Note 1).

Developments on major sites, such as those covering entire street blocks and the main shopping centres, have the opportunity to create their own outdoor public space, and will be expected to include proposals for new or enhanced public realm. These proposals should be consistent with the approach adopted in neighbouring streets and public realm areas, in terms of materials, planting, street furniture and lighting. The Council will determine whether such proposals are satisfactory (when considered against the requirements of the policy) and will also assess whether there is a requirement for an additional contribution towards provision and maintenance to be made on a pro rata basis.

In locations where new or enhanced public realm has been completed, proposals for new development will be required to contribute towards the agreed public realm programme, which will be kept under review. Where possible, these improvements will be undertaken in the same part of the designated area as the proposed development.

Table 1 - Minimum Open Space and Public Realm Standards

Location	Use Class	Thresholds	Quantity*
City Centre	Class 1 Retail	Developments greater than 2,000 sqm gross floor area	12sqm of public realm per 100sqm gross floor area
	Class 4 Business	Developments greater than 2,000 sqm gross floor area	9sqm of public realm per 100sqm gross floor area
	Class 10: Non Residential Institutions	Developments greater than 2,000 sqm gross floor area	6sqm of public realm per 100sqm gross floor area
	Class 11 Assembly and Leisure	Developments greater than 2,000 sqm gross floor area	6sqm of public realm per 100sqm gross floor area
City-wide	Class 9 Residential	All developments comprising 10 dwellings or more (including flatted developments)	<p>Non flatted development - 3 hectares of recreational open space per 1,000 people, comprising: 0.7 hectares for children's play, 1.7 hectares for outdoor sport, 0.5 hectares for amenity open space/parkland and 0.1 hectares for allotments or community gardens</p> <p>Flatted development - 1.25 hectares of recreational open space per 1,000 population, comprising 0.35 hectares for children's play, 0.35 hectares for outdoor sport and 0.55 hectares for amenity open space/parkland (including 0.05 hectares for allotments or community gardens)</p>

* subject to review through the Council's Open Space Strategy, in accordance with SPP 11 and PAN 65: Planning and Open Space.

OFF SITE OPEN SPACE AND PUBLIC REALM PROVISION

Where developers are unable to make full provision for the open space/public realm requirements for the development on land within their control, in accordance with the open space standards, they will be required to enter into a legal agreement (usually under Section 69 of the Local Government (Scotland) Act 1973) with the Council to:

- make a financial contribution towards the enhancement and maintenance of existing Council open spaces or public realm areas, or towards the provision and maintenance of such facilities on Council land; or
- transfer land to the Council, to enable it to provide a new open space or area of public realm, or to manage and maintain such a facility or space provided by the developer.

The financial contribution represents the cost of providing and maintaining open space outwith the development site, and will be calculated on a pro-rata basis using the following formula:

Table 2 - Financial Contribution Rates

Location	Use Class	Contribution Rate*
City Centre	Class 1: Retail, Class 4: Business, Class 10: Non Residential Institutions, Class 11: Assembly and Leisure	£450 per sqm of public realm provision recommended, plus £40 per sqm for 10 years maintenance (see DG/ENV 2)
City-wide	Class 9: Residential	£1,000 per bedroom (unsubsidised development) £326 per bedroom (grant assisted schemes)

* subject to review through the Council's Open Space Strategy, in accordance with SPP 11 and PAN 65.

VIABILITY

Provision of public realm/open space is considered to be an integral part of creating a good quality development environment, and the consequent land requirements or financial implications that this implies should be fully taken into account by developers when carrying out site appraisals. Meeting the terms of this policy is, therefore, considered to be a development cost that the industry is now aware of, and should be reflected in the price paid for the land. In the current market, the Council's view is that most developments are capable of providing good quality public realm/open space solutions while remaining profitable.

In exceptional cases, however, where additional abnormal costs that could not have been determined at the time of the site purchase affect the viability of a development proposal, the developer should re-examine all aspects of the proposal on an equal basis with a view to improving the viability whilst retaining public realm/open space provision.

Where it is agreed that no other solution is appropriate, the Council will consider a reduction in the financial contribution relating to the civic/open space obligation, subject to the provision of satisfactory evidence relating to the financial viability of the proposal (see development guide DG/ENV 2). The developer will, in these circumstances, be required to enter into a legal agreement that allows the Council to recover any reduction, should the development prove to be more profitable than originally anticipated.

- Note 1 This policy does not apply to extensions to existing development where the additional floorspace is less than the specified thresholds.
- Note 2 Any proposed off site solution must not conflict with other City Plan policies and will be subject to agreement with the Council.
- Note 3 New or enhanced open space and public realm created in association with new development will be incorporated into the Glasgow Open Space Map (see Definition) and will be protected by policy ENV 1: Open Space Protection.
- Note 4 For the purposes of this policy, landscaped decks, roof gardens or courtyards may contribute towards meeting an amenity open space requirement, provided that they are designed to be communally used for passive recreation or informal children's play. Private gardens, or areas of landscape whose primary function is to separate buildings for privacy or townscape reasons, will not contribute towards this requirement.
- Note 5 Leisure developments within Class 11 that encourage sport or physical activity (as described in SPP 11) will not be required to meet the terms of this policy.

DEFINITIONS

OPEN SPACE: This policy uses the typology of open space set out in PAN 65: Planning and Open Space, but emphasises the recreational use of open space by the community.

PUBLIC REALM: Corresponds with the civic space definition contained within the PAN 65 typology of open space.

GLASGOW OPEN SPACE MAP: Under the provisions of PAN 65, local authorities are obliged to prepare an audit and map of all the areas and categories of open space within their areas. Together with other policies of the Plan, the Glasgow Open Space Map will form part of the policy protection for the City's open spaces and will be used to assess whether there would be scope to develop on any such space.

OPEN SPACE STRATEGY: a strategy to be prepared by the Council using the information from the audit. In accordance with SPP 11 this should set out a vision for new and improved open space appropriate to local circumstances, safeguard valued open space and guide the allocation of resources for investment.

DESIGNATED AREA: This area comprises the Principal Office Area, the Principal Retail Area, the Merchant City, St Enoch, Strathclyde University Campus and the International Financial Services District (see Map accompanying DG/DES 5: Development and Design Guidance for the City Centre).

POLICY JUSTIFICATION

This policy supports the Plan's Development Strategy to ensure that new development contributes to the network of accessible high quality spaces within Glasgow (see Part 2, BIODIVERSITY AND GREENSPACE, Developing the Green Network, paragraph 5.42). The Council's Open Space Strategy will be a material consideration which will inform implementation of this policy and future review of the City Plan.

Access to open space is a key component of a healthy lifestyle and personal well-being, whether it is through providing opportunities for walking, cycling, participating in formal sport, or by creating areas that allow people to relax and children to play.

The importance attached to creating and preserving high quality open spaces is demonstrated in SPP 11 and PAN 65. Local authorities are advised to prepare and implement policies, in accordance with an open space strategy, designed to ensure that communities have good access to public open space, and that new development contributes to the provision and long term maintenance of these spaces.

FURTHER GUIDANCE

Developers should refer to development guide DG/ENV 2: Open Space and Public Realm Provision - Developer Contributions for further information relating to:

- requirement for on-site and off-site open space provision;
- calculation of financial contribution and annual inflation;
- developer contributions; and
- related matters (legal agreements, maintenance of open space areas, financial contributions - worked examples).

Further guidance on incorporating landscape into developments can be found in development guide DG/DES 4: Landscape in New Development.

ENV 3 - DEVELOPMENT IN THE GREEN BELT

AIM

To protect and enhance the character and landscape setting of the City and provide access to open spaces around Glasgow, as part of the wider Glasgow and Clyde Valley Green Network, and to help support regeneration and planned growth to the most appropriate locations in the City.

POLICY

In accordance with policy DEV 12: Green Belt, there is a presumption against development that would adversely affect the function and integrity of the City's Green Belt.

Development within the Green Belt, which complies with one or more of the following criteria, will be considered where the proposal:

- supports the Plan's Development Strategy and is promoted through the Glasgow and the Clyde Valley Joint Structure Plan (JSP);
- is directly associated with, and required for, agriculture, horticulture or forestry;
- is for leisure or recreational developments, of a scale and form appropriate to a countryside location, or other development previously accepted as consistent with a green belt location, such as dog or cat kennels;
- is for a dwelling house to replace an occupied or recently vacated building;
- is directly associated with telecommunications and/or required for existing approved uses (see policy IB 8: Telecommunications); and
- is related to the modest generation of renewable energy in compliance with SPP 6: Renewable Energy (see Part 2, ENVIRONMENT, paragraph 5.81).

Development, acceptable in principle, will also require to meet all of the following criteria:

- The development should not adversely affect any area covered by an Environmental Designation and must demonstrate that it will not have adverse impacts on wider biodiversity (see Environmental Policy Designations Maps and policy ENV 7: National, Regional and Local Environmental Designations);
- The development should address the criteria set out in SPP 6, paragraphs 22 to 30;
- The development should integrate with the landscape and be finished in materials appropriate to the location, without detriment to the visual amenity of the area;
- The completed conversion or redevelopment should be contained substantially within the shell of original structure(s), not exceed its existing footprint, employ a high standard of design, and not compromise the character or appearance of the green belt;
- It should have no adverse impact on the residential amenity of neighbours, landscape character, local distinctiveness, visual amenity or the enjoyment and recreational use of the countryside; and
- It should not have a negative impact on water courses, water supply, traffic and access requirements nor increase the risk of pollution.

POLICY JUSTIFICATION

This policy supports the Plan's Development Strategy to ensure that all development proposals have due regard to the protection of landscape features and habitats (see Part 2, BIODIVERSITY AND GREENSPACE, Developing the Green Network, paragraph 5.38). The policy conforms to the requirements of Scottish Planning Policy (SPP) 21: Green Belts. The policy seeks to implement the JSP Strategic Policy 1: Strategic Development Locations to secure preservation of the landscape, development of accessible outdoor recreation, promotion of biodiversity within the context of the City's wider green network.

ENV 4 - SUSTAINABLE DRAINAGE SYSTEMS (SUDS)

AIM

To ensure satisfactory sustainable measures are provided for the management and safe disposal of surface water run-off.

POLICY

All development proposals are required to make satisfactory provision for Sustainable Drainage Systems (SUDS - see Definition). The only exception to this requirement is a proposal for a single dwelling.

SUDS will be required in association with any open space requirements for a development (see policy ENV 2: Open Space and Public Realm Provision). The Council expects that the SUDS infrastructure will most likely be integrated into a development's open space requirement.

SUDS proposals should:

- incorporate, or connect to, an acceptable overland flood-routing or design exceedance solution (see Definition) agreed by the Council;
- be designed to accommodate a 1 in 30 year rainstorm event with the ability to deal with a 1 in 200 year event by safe flood routing;
- use agreed methods of surface water run-off collection, treatment, decontamination and disposal;
- not be detrimental to the effectiveness of existing SUDS schemes;
- incorporate a design appropriate to the site, particularly where contamination is present (expert advice should be sought at an early stage); and
- incorporate natural and semi-natural elements to enhance environmental amenity and biodiversity.

SURFACE WATER MANAGEMENT PLANS

The Council will require development proposals to comply with the SUDS requirements set out in any surface water management plans prepared for parts of the City (e.g. Clyde Gateway and Toryglen).

Surface water management plans may require to be prepared for larger developments where development is divided into multiple ownership (e.g. a large housing development) where no management plan has been prepared. The developer would be responsible for its preparation, in liaison with the Council and Scottish Water.

Note: In order to achieve adoption by Scottish Water, SUDS proposals should be designed in accordance with Scottish Water's 'Sewers for Scotland Working Document' (available at www.scottishwater.co.uk). If it is intended not to design SUDS proposals to these standards, the maintenance arrangements of the proposed SUDS scheme will require approval as part of the planning consent.

DEFINITIONS

DESIGN EXCEEDANCE - Management of the excess water, which will overload the SUDS when the volume of rainfall exceeds the design specification. Flow should be routed to avoid causing flooding of property or access routes.

SUSTAINABLE DRAINAGE SYSTEMS (SUDS) - A range of techniques for managing the flow of water run-off from a site by treating it on site, and so reducing the loading on conventional piped drainage systems (Source: Scottish Planning Policy (SPP) 7: Planning and Flooding).

POLICY JUSTIFICATION

This policy supports the Plan's Development Strategy to integrate sustainable surface water drainage infrastructure into new development throughout the City (see Part 2, DRAINAGE AND SEWERAGE, Glasgow Strategic Drainage Plan, paragraph 6.148). SPP 7: Planning and Flooding promotes the use of SUDS as a solution for drainage of surface water run-off and decreasing the probability of flooding. Planning Advice Note (PAN) 61: Planning and Sustainable Urban Drainage Systems, PAN 69: Planning and Building Standards Service Advice on Flooding and PAN 79: Water and Drainage give good practice advice on the integration of SUDS, water and drainage issues into the planning system.

The Water Environment (Controlled Activities) (Scotland) Regulations 2005 require surface water run-off from areas constructed, or construction sites operated, to be drained by SUDS or equivalent. SUDS surface water drainage techniques are more sustainable than some conventional approaches to drainage because they mitigate flood risk, act as a means of protecting water quality and actively enhance the local environment. SUDS development needs to be incorporated into the development design phase of a project (see policies DES 1: Development Design Principles and DES 2: Sustainable Design and Construction). The implementation of SUDS is a key component of achieving sustainable development in Glasgow.

ENV 5 - FLOOD PREVENTION AND LAND DRAINAGE

AIM

To safeguard development from the risk of flooding and to ensure new development does not have an adverse impact on the water environment, does not materially increase the probability of flooding elsewhere and does not interfere detrimentally with the storage capacity of any functional flood plain (see Definition) or associated water flows.

POLICY

1. FLOOD MANAGEMENT

Proposals should demonstrate that they:

- contribute to minimising flood risk;
- avoid any increased risk of flooding which would affect people and properties from any source (e.g. sewer, watercourse (see Definition) or surface water) either within the development site, or outwith the site as a consequence of the development giving due attention to access and egress routes; and
- address the cumulative impact on infrastructure capacity of incremental growth of impermeable surfaces by not increasing the quantity and rate of surface water run-off from any site.

2. THE FLOOD RISK FRAMEWORK

Notwithstanding the flood risk areas identified on the Scottish Environment Protection Agency's (SEPA) Indicative River and Coastal Flood Map (Scotland) (see Note), the Council expects developers to consider the:

- flood risk to their proposed development from any source, including watercourses, through a Flood Risk Assessment (FRA); and
- impact of discharging surface water from the proposed development to any watercourse, through a Drainage Impact Assessment (DIA).

DG/ENV 6: River Clyde Flood Management Strategy Development Guide will be used when assessing development proposals/applications.

Flood Risk and Drainage Impact Assessments

These must conform to the requirements set out in guidance at www.sepa.org.uk. The FRA and/or DIA must clearly assess the nature of the particular flood risk and drainage issues that the proposal needs to address, the likely effects of the proposal on flood risk and drainage impact and whether mitigation would be likely to be acceptable and effective. They should also clarify the separation between planning considerations and requirements and those of other Environmental Regulatory Regimes with regard to the water environment.

The Council, in applying the Scottish Government's flood risk framework, considers that:

- (a) **Areas of little or no flood risk** (annual probability of flooding of less than 0.1% or 1:1000) present no flood related constraints on development.
- (b) **Areas of low to medium flood risk** (annual probability 0.1% – 0.5% or 1:1000 – 1:200) are suitable for most forms of development. They are not appropriate locations, however, for essential civil infrastructure (see Definition). If the Council is satisfied that there is no viable alternative location, or that such facilities already exist and are proposed to be extended, the facilities (including access roads/paths, parking and waste storage areas) must be capable of remaining operational and accessible during extreme flooding events.

(c) **Areas of medium to high flood risk** (annual probability greater than 0.5% or >1:200) are not suitable for essential civil infrastructure, however:

(i) development within Glasgow's built-up area for residential, institutional, commercial and industrial development (including access roads/paths, parking and waste storage areas) may be acceptable provided:

- an FRA is undertaken (supplemented, where necessary, by a DIA) to address overland flow or other drainage considerations, and flood prevention measures for an event with a 0.5% annual probability already exist, are under construction or committed;
- development along the length of the River Clyde takes cognisance of any additional supplementary development guidance produced for the River Corridor; and
- proposals within the River Clyde corridor, which include land being permanently raised above the surrounding ground level, comply with the guidance on Landraising in SPP 7: Planning and Flooding; and the requirements of the Water Environment and Water Services (Scotland) Act 2003.

(ii) development within Glasgow's Green Belt should be located outwith the 0.5% (200 year) annual probability flood plain contour, (see Section 3 below).

All development within areas of medium to high flood risk must incorporate a 'freeboard allowance' height margin (see Definition) and/or the use of water resistant materials (see Definition) and forms of construction appropriate to its function, location, and planned lifetime relative to the anticipated changes in risk arising from climate change.

3. FUNCTIONAL FLOOD PLAINS

To comply with SPP 7 and to implement the emerging principles of sustainable flood management, development in a functional floodplain will be considered to be contrary to the objectives of the Plan. In exceptional circumstances, where land is required to facilitate key development strategies which come forward through the development plan process, land raising may be acceptable provided compensatory flood storage is provided and the objectives of the EU Water Framework Directive are not compromised (see policy IB 10: Minerals, Land Fill and Land Raise).

Remaining undeveloped areas of flood plain within Glasgow are covered by the development policy principle designation DEV 11: Green Space or DEV 12: Green Belt. Development on, or affecting, the functional flood plains within the City boundary should not:

- contribute to the piecemeal reduction of flood plain storage capacity; or
- interfere, detrimentally, with the flow of water in the flood plain.

Exceptionally, where a case for infrastructure, such as a bridge, etc., has been justified, it should be designed in accordance with this policy, remain operational in times of flooding and minimise its effect on flood water storage capacity.

4. CONNECTION TO THE PUBLIC SEWERAGE SYSTEM

All development proposals requiring foul drainage must be connected to the public sewerage system. The only exception to this requirement applies in areas where connection to the collection system is not permitted due to a lack of capacity and Scottish Water have agreed to address this in its SR 06 (2006/2010) and SR 10 (2010/2014) investment programmes. In such cases, the use of temporary private treatment systems will be permitted until connection to a sewer is possible. The following requirements, however, will apply:

- The sewerage network must be designed and built to a standard which will allow adoption by Scottish Water.
- The sewerage network must be designed such that they can be easily connected to a public sewer in the future.

Typically, this will mean providing a drainage line up to a likely point of connection. The developer must provide Scottish Water with the funds to allow it to complete the connection once the sewerage system has been upgraded.

However, such temporary arrangements will not be permitted on flood plains or in areas liable to flood (i.e. at an annual risk of not less than 0.5%).

5. CULVERTED WATERCOURSES

Development over an existing culvert, which includes removal of the culvert, or its diversion into parts of the site not covered by structures, should:

- benefit wildlife and improve amenity, wherever possible (see policy ENV 6: Biodiversity); and
- provide adequate access for maintenance.

Proposals for the formation of new culverts will normally not be supported.

6. FLOOD DEFENCES AND PREVENTION SCHEMES

In order to reduce the risk of flooding, there is a need to ensure that the long term maintenance of all flood defences and flood prevention schemes is addressed. To this end:

- new flood prevention schemes or measures should be compatible, on the grounds of design and safety, with those being implemented on the River Clyde and the White Cart Water;
- new schemes should be designed to allow access for management, monitoring and maintenance;
- proposals should not prejudice other existing or proposed flood prevention schemes/works; and
- proposals, involving multiple riparian ownerships (see Definition), should include a Section 75 Agreement, which:
 - alters the title to the land to give the Council rights of access for maintenance and flood risk reduction purposes; and
 - meets the Council's requirement for a legally and financially sound maintenance regime to be in place (including a detailed scheme, based on 'Whole Life Costs' to enable an appropriate bond to be calculated to cover scheme maintenance).

7. WATER RESISTANT BUILDING MATERIALS

Where approval in principle, in relation to flood risk, is acceptable, all new build developments, including extensions to buildings, should use water resistant materials and forms of construction where:

- proposals are in 'medium to high' flood risk areas;
- flooding from any source is an issue; and
- development is located in proximity to a Sustainable Drainage System (SUDS) (see Definition).

Developers should consult the detailed guidance in Planning Advice Note (PAN) 69: Planning and Building Standards Advice on Flooding.

Note 1 The Flood Risk Framework contained in SPP 7 sets out the Scottish Government's guidance on the levels of flood risk which different categories of new development must be protected against. To assist with the use of the framework, SEPA have published the Indicative River and Coastal Flood Map (Scotland). The Flood Map can be accessed at www.sepa.org.uk. The Council also has information on historical flood events and data relating to the Rivers Clyde, Cart and Kelvin and the Strategic Drainage Plans which have been prepared, that it will use to inform its implementation of the Flood Risk Framework.

Note 2 Application of this policy will be informed by the Council's most up to date mapping information and DG/ENV 6 and any subsequent updates of the development guide. This should ensure that decisions take account of any revision to climate change or other relevant assumptions.

DEFINITIONS

ESSENTIAL CIVIL INFRASTRUCTURE - Buildings, structures and facilities supporting key public services such as hospitals, fire stations, schools, telecommunications equipment, etc. which need to be available to deal with civil emergencies.

FREEBOARD ALLOWANCE - A height added to the predicted level of a flood to take account of the height of any waves or turbulence and the uncertainty in estimating the probability of flooding (Source: Scottish Planning Policy (SPP) 7: Planning and Flooding).

FUNCTIONAL FLOOD PLAIN - Areas of land where water flows in times of flood, which should be safeguarded from further development because of their function as flood storage areas (Source: SPP 7).

RIPARIAN OWNERSHIP - Ownership of the land forming the side of a river channel or watercourse, to which are attached legal and other responsibilities relating to flood prevention and land drainage.

SUSTAINABLE DRAINAGE SYSTEMS (SUDS) - A range of techniques for managing the flow of water run-off from a site by treating it on site, and so reducing the loading on conventional piped drainage systems (Source: SPP 7).

WATERCOURSE - All means of conveying water except a water main or sewer (Source: SPP 7).

WATER RESISTANT MATERIALS - Materials which are either unaffected by flood water or recover relatively undamaged after flooding.

POLICY JUSTIFICATION

This policy supports the Plan's Development Strategy to ensure that appropriate measures are taken to safeguard the City from flooding (see Part 2, DRAINAGE AND SEWERAGE, Glasgow Strategic Drainage Plan, paragraph 6.148). The policy takes account of the requirements of the Flood Prevention Scotland (Act) 1961, Flood Prevention and Land Drainage Scotland (Act) 1997 and the Water Environment and Water Services (Scotland) Act 2003. It also conforms to the guidance contained in SPP 7 and the associated advice on flood prevention, sustainable land drainage and other water infrastructure and environment considerations contained in PAN 51: Planning and Environmental Protection, PAN 61: Planning for Natural Heritage, PAN 67: Housing Quality, PAN 69 and PAN 79: Water and Drainage.

ENV 6 – BIODIVERSITY

AIM

To protect and enhance Glasgow's habitats and species.

POLICY

All development within the City shall take cognisance of, and be compatible with, the Glasgow Local Biodiversity Action Plan (LBAP) (available at www.glasgow.gov.uk/biodiversity), which sets out a number of species and habitat action plans. Many of the sites identified as important for habitats and species are also covered by Environmental Policy Designations (see Environmental Policy Designations Maps and policy ENV 7: National, Regional and Local Environmental Designations).

Development should not have any adverse effect on existing habitats or species protected in law, international conventions or agreements or which are identified as a priority in government objectives, the Glasgow LBAP or are important because of their conservation status. Proposals will require to demonstrate, to the satisfaction of the Council, that:

- there will be no fragmentation or isolation of habitats or species as a result of the development;
- the development will be sited and designed to minimise adverse impacts on the biodiversity of the site (including its environmental quality, ecological status and viability); and
- public benefits at a national, or city region wide level, will clearly outweigh the value of the habitat for biodiversity conservation.

The Council may require the developer to undertake surveys prior to planning permission being determined and site clearance/development preparation works beginning. This will be at the developers own expense and to the satisfaction of the Council. The surveys may relate to the site's environment and ecology or its wider ecological functions and should include recommendations for mitigation, restoration or enhancing the biodiversity as well as other information that the Council might require. Surveys may be required where there are grounds for believing, or there is the possibility, that:

- a protected or important natural heritage interest relating to the site (or an ecological network it is part of) could be adversely affected or suffer damage/disturbance as a result of the proposed development. Such natural heritage interests would include those habitats, species or landscape features which are of concern by virtue of their conservation status, ecological function, national and international significance/ protection by legislation and agreements or which relate to the UK Biodiversity Action Plan or Glasgow LBAP; or
- the site supports, or has suitable habitats/features present which could support, a European Protected Species (e.g. it has water courses suitable for use by otters and mature trees or old buildings suitable for bats). In this case surveys will be required.

Where planning permission is granted, planning conditions will be imposed, or agreements negotiated, to minimise disturbance, protect, enhance and promote existing habitats and/or species and/or create new habitats and put in place measures to provide for their effective future management.

POLICY JUSTIFICATION

This policy supports the Plan's Development Strategy to promote sustainability by protecting and enhancing biodiversity and greenspace (see Part 2, BIODIVERSITY AND GREENSPACE, The Glasgow Local Biodiversity Action Plan, paragraph 5.51). It conforms with EC Birds and Habitats Directives, the Nature Conservation (Scotland) Act 2004, Scottish Planning Policy (SPP) 11: Open Space and Physical Activity, SPP 14: Natural Heritage, Planning Advice Note (PAN) 60: Planning for Natural Heritage and the Glasgow Local Biodiversity Action Plan.

Biodiversity provides a valuable indicator of sustainable development. Sustainable environments with a wide variety of species and habitats contribute to the health and well-being of citizens. They also provide benefits for businesses and visitors to the City, are an integral part of sustainable drainage schemes and provide a valuable education resource.

The Nature Conservation (Scotland) Act places a duty on the Council to further the conservation of biodiversity in all areas of the City, whether or not they are covered by a formal planning designation in the City Plan. The Glasgow LBAP, and updates, recognise that Glasgow has a rich variety of both land and water based species. A Biological Audit of all species occurring in the City has been prepared, as have a number of individual species and habitat action plans. Developers require to consider the impact of their development proposals on species and habitats included in the Audit and action plans.

ENV 7 - NATIONAL, REGIONAL AND LOCAL ENVIRONMENTAL DESIGNATIONS

AIM

To maintain, protect and enhance national, regional and local sites of landscape, cultural or nature conservation importance.

POLICY

Proposals should not have an adverse effect, either directly or indirectly, on the integrity or character of one or more of the natural, or special, features covered by an Environmental Policy Designation (see Definition) listed below, or those sites which receive such a designation during the lifetime of City Plan 2:

- Sites of Special Scientific Interest (SSSI)
- Local Nature Reserves (LNR)
- Sites of City-wide Importance for Nature Conservation (C-SINC)
- Local Sites of Importance for Nature Conservation (L-SINC)
- Green Corridors (formerly Corridors of Wildlife and/or Landscape Importance)
- Sites of Special Landscape Importance (SSLI)
- Tree Preservation Orders (TPO)
- Ancient, Long Established and Semi Natural Woodlands
- Gardens and Designed Landscapes
- Water courses, lochs, ponds and wetlands

Any development proposal likely to affect an Environmental Policy Designation should also demonstrate how it will comply with the relevant guidance provided in development guide DG/ENV 4: Development Affecting Environmental Policy Designations (see Environmental Policy Designation Maps).

DEFINITIONS

ENVIRONMENTAL POLICY DESIGNATION: Areas important because of their environmental quality, geology, biodiversity and/or their historic, architectural or archaeological significance and which contribute positively to the quality of the City's environment and image.

GLASGOW OPEN SPACE MAP: Under the provisions of Planning Advice Note (PAN) 65: Planning and Open Space, local authorities are obliged to prepare an audit and map of all the areas and categories of open space within their areas. Together with other policies of the Plan, the Glasgow Open Space Map will form part of the policy protection for the City's open spaces and used to inform development proposals.

POLICY JUSTIFICATION

This policy supports the Plan's Development Strategy to protect key sites that are important for their flora and/or fauna (see Part 2, BIODIVERSITY AND GREENSPACE, Developing the Green Network, paragraph 5.37) and conforms with Draft Scottish Planning Policy (SPP) 11: Physical Activity and Open Space and SPP 14: Natural Heritage. The City contains a wide range of sites containing natural elements considered worthy of protection in their own right and/or because they contribute significantly to the quality of Glasgow's external environment. A range of Environmental Designations were identified in City Plan 1 to reflect the functions these sites fulfil, or the significant natural features they contain. Their varied qualities and distribution provide the nodes and links in Glasgow's evolving green infrastructure network. The Council values the many important natural features they contain, the wildlife they support and the benefits they offer to the health, wellbeing and enjoyment of its citizens, businesses and visitors to the City. All these designations are covered by this policy.

The boundaries of the areas protected by the designations are shown on the Environmental Policy Designation Maps. They are also shown on the Glasgow Open Space Map (see Definition) which identifies their open space land use classifications (see policy ENV 1: Open Space Protection). Together with other policies of the Plan, the Glasgow Open Space Map will be used to help inform development proposals and assess whether there would be scope to develop on any such space.

FURTHER GUIDANCE

See development guide DG/ENV 4 for further guidance and a list of affected sites, which includes.

Appendix A: Sites of Special Scientific Interest (SSSIs)

Appendix B: Local Nature Reserves (LNRs)

Appendix C: City-wide Sites of Importance for Nature Conservation (SINCs)

Appendix D: Local Sites of Importance for Nature Conservation (SINCs)

Appendix E: Green Corridors

Appendix F: Sites of Special Landscape Importance (SSLIs)

Appendix G: Tree Preservation Orders (TPOs)

Appendix H: Ancient, Long-Established and Semi-natural Woodlands

Appendix I: Gardens and Designed Landscapes

Appendix J: Scheduled Ancient Monuments

ENV 8 - TREES, WOODLANDS AND HEDGEROWS

AIM

To protect trees, woodlands and hedgerows from inappropriate development.

POLICY

Development should not cause the loss of, or serious damage to, trees, woodlands or hedgerows, which are covered by an existing tree preservation order (TPO) (see Environmental Policy Designation Maps), are on Council owned land, are of significant ecological, recreational, historical, shelter or landscape value or are in a conservation area. In these situations, trees, woodland or hedgerows protected by a TPO, or as if covered by a TPO, must not be removed without the explicit written consent of the Council.

Proposals should demonstrate, to the satisfaction of the Council, that:

- where they are in, or near, an ancient, long established or semi-natural woodland, there has been consultation with, and approval from, the Central Scotland Conservator, Forestry Commission Scotland;
- the public benefits at the local level clearly outweigh the value of the habitat;
- the development will be sited and designed to minimise adverse impacts on the biodiversity of the site, including its environmental quality, ecological status and viability;
- there will be no further fragmentation or isolation of habitats as a result of the development;
- all mature trees affected by a development proposal have been, or will be, surveyed for bats prior to the granting of planning permission (see policy ENV 6: Biodiversity)
- where any individual trees, groups of trees, woodlands or hedgerows would be lost, the applicant will provide compensatory planting (where appropriate, native species will be preferred) either as part of the overall scheme or elsewhere in the vicinity (this may require a Section 69 or 75 legal agreement); and
- appropriate legal agreements to guarantee future maintenance arrangements are in place and the details of methods to be adopted agreed.

In addition, the Council will:

- encourage new planting, particularly of native species, especially if it relates to areas of ancient, long established or semi-natural woodland that are small, isolated or in close proximity;
- encourage developers to consult the Forestry Commission Scotland on woodland establishment plans; and
- support grant applications to Forestry Commission Scotland for the management and establishment of woodland.

Trees within Conservation Areas and trees on Council owned land are protected as if covered by a TPO.

Note: The felling of trees which are not protected by a Tree Preservation Order, are not within a Conservation Area or are not on Council owned land, may, in the absence of a planning permission providing for their removal, require a felling licence. Developers should consult Forestry Commission Scotland.

POLICY JUSTIFICATION

This policy supports the Plan's Development Strategy to protect existing trees, woodlands and hedgerows and encourage new planting and good maintenance of all trees (see Part 2, BIODIVERSITY AND GREENSPACE, Trees, Gardens and Woodlands, paragraph 5.52) and supports the delivery of the Glasgow and the Clyde Valley Woodland and Forestry Framework. The policy reflects the duty placed on the Council and all public bodies by the Nature Conservation (Scotland) Act to further the conservation of biodiversity while exercising their functions as they impinge on the environment. It also conforms to Planning Advice Note (PAN) 60: Planning for Natural Heritage. Trees, woodlands and hedgerows are of great importance, both as wildlife habitats and in terms of their contribution to the visual amenity and environmental quality. The Plan aims to protect existing trees, woodlands and hedgerows and encourage new planting and good maintenance of all trees. This is particularly important in new residential areas.

In 1996, the Trees on Council Land Policy was approved by the Council. This noted that there was no legislative provision for the Council to serve TPO's on land in its ownership. The Council recognised the need to control activities affecting trees in its ownership and delegated the maintenance responsibility to Land Services.

FURTHER GUIDANCE

For further guidance on protection of existing trees, development of sites with retained trees and new tree planting see development guide DG/ENV 3: Trees and Woodlands.

ENV 9 - ALLOTMENTS

AIM

To protect and enhance allotment provision and promote its active use within the City.

POLICY

Proposals affecting existing or proposed allotment sites will require to meet the following criteria (see also policy ENV 1: Open Space Protection):

- The developer will be required to make provision for an equivalent (or better) replacement in the vicinity of the existing allotments. The Council will have to be satisfied, on behalf of the users, that all relevant matters including location, access, aspect, soil quality, services and fencing are appropriately addressed.
- In assessing any changes or improvements to allotment provision, the Council will seek to ensure that residents have reasonable, safe and easy access to the site, particularly through walking, cycling and public transport.

Policy ENV 2: Open Space and Public Realm Provision requires developments, of more than 10 dwellings, to contribute to allotment/community garden provision.

DEFINITION

GLASGOW OPEN SPACE MAP - Under the provisions of Planning Advice Note (PAN) 65: Planning and Open Space, local authorities are obliged to prepare an audit and map of all the areas and categories of open space within their areas. Together with other policies of the Plan, the Glasgow Open Space Map will form part of the policy protection for the City's open spaces and will be used to inform development proposals.

POLICY JUSTIFICATION

This policy supports the Plan's Development Strategy to protect areas used as allotment gardens and promote their active use (see Part 2, BIODIVERSITY AND GREENSPACE, Allotments, paragraph 5.57) and conforms to Scottish Planning Policy (SPP) 11: Open Space and Physical Activity. The Scottish Government supports the protection and provision of allotment gardens recognising that these facilities support national and local initiatives relating to social inclusion, physical and mental health, diet and biodiversity. Local authorities have certain statutory powers with regards to allotments.

ENV 10 - ACCESS ROUTES AND CORE PATH NETWORK

AIM

To develop a network of accessible paths for the benefit of the City's residents and visitors.

POLICY

Developers should take account of access rights when planning and undertaking new development and should design new footpaths and cycleways in line with the requirements of the Land Reform (Scotland) Act 2003, (see policies DES 1: Development Design Principles, DES 5: Development and Design Guidance for the River Clyde and Forth and Clyde Canal Corridors and TRANS 5: Providing for Pedestrians and Cycling in New Development).

Development should not:

- prejudice the continuity of Core Paths, as defined by the Glasgow Core Paths Plan (see Definition), or the existing walking/cycling network; or
- obstruct or adversely affect a public right of way (unless satisfactory provision is made for its replacement).

Development proposals should not impact adversely on public rights of way, core paths and important public access routes. Where such infrastructure is affected by a development during construction and upon completion, the developer should incorporate appropriate alternative or modified public access provision, approved by the Council. Development proposals on land where the Core Paths Plan has identified an aspirational core path will be expected to incorporate it into the overall design layout of the site and build the path to a standard agreed with the Council.

Core Paths Plans and access rights will be material considerations in considering planning applications. The Council will seek reasonable opportunities from developers to create, manage, maintain and improve access through planning conditions or legal agreements.

Where practicable, proposals for the establishment of new, or alteration of existing, pathways and access routes, should incorporate suitable measures for the collection and treatment of surface water.

DEFINITION

CORE PATHS PLAN - a plan for a system of paths sufficient for the purpose of giving the public reasonable access throughout their area. Each path within such a system is to be known as a core path (Source: Land Reform (Scotland) Act 2003, section 17).

POLICY JUSTIFICATION

This policy supports the Plan's Development Strategy to develop the City's Core Paths network (see Part 2, BIODIVERSITY AND GREENSPACE, Glasgow Core Paths Plan, paragraphs 5.54-5.56) and conforms to the Land Reform (Scotland) Act 2003, Scottish Planning Policy (SPP) 11: Open Space and Physical Activity, Planning Advice Note (PAN) 65: Planning and Open Space and the Glasgow Outdoor Access Strategy (2005).

In order to help meet the Plan's development strategy to improve the health and well being of the City's residents, there needs to be good access to the outdoors, whether this is for recreational use or as a sustainable mode of transport. The Land Reform (Scotland) Act places a duty on the Council, in consultation with the public, to prepare a Core Paths Plan which identifies an access route network and which gives the public increased access rights over land.

The existing and proposed path networks, together with rights of way, provide public access between places of residence, shopping, employment, leisure and social facilities. They form part of the City's wider green infrastructure network linking open space and water space.

ENV 11 - TREATMENT OF WASTE AND RECYCLING MATERIALS

AIM

To ensure that the City can accommodate an appropriate range of facilities and sites to treat and recycle domestic and commercial/industrial waste, without detriment to the environment.

POLICY

PROPOSED WASTE MANAGEMENT/RECYCLING FACILITIES

Waste management/recycling operations require to be accompanied by a Design and Access Statement (see policy DES 1: Development Design Principles) and may also need an Environmental Impact Assessment, where appropriate, in accordance with the Environmental Impact Assessment (Scotland) Regulations 1999 (see development guide DG/ENV 1: Environmental Impact Assessment).

They should, wherever possible, be located:

- within areas designated for Industry and Business use;
- preferably on derelict and degraded sites or existing waste management sites, where these have not been converted or are planned to be converted to other uses; and
- to accord with sustainable transport principles.

The operations should also:

- accord with the objectives of the Glasgow and Clyde Valley Area Waste Plan;
- demonstrate that the proposals represent the Best Practicable Environmental Option (BPEO) for the waste stream in question (see Note);
- be carried out from within an enclosed building to minimise visual and environmental impact, wherever possible;
- not detract from the amenity of any neighbouring occupiers as a result of noise, traffic movements and dust, particularly when outside normal business hours;
- not adversely affect the amenity of the surrounding area, including views from nearby road frontages; and
- when they are thermal treatment plants handling municipal waste, have energy recovery systems so that the embedded energy in any waste being burned is not lost.

Community waste/recycling sites should be sited where:

- they will not detract from the residential amenity of neighbours; and
- they will not result in parking or traffic congestion.

Applicants/operators are encouraged to source their waste/recycling materials locally.

The site at Kenmuir Road (Baillieston) will be safeguarded for the development of a waste management/recycling centre (see PROPOSALS MAP).

EXISTING WASTE MANAGEMENT/RECYCLING SITES

Development, such as housing, should not be located in close proximity to Polmadie, Shieldhall, Easter Queenslie and Dawsholm waste management centres as this could prejudice their continued operation as the city's principal waste treatment/recycling sites.

Note: Proposals dealing with non-municipal waste will follow the Best Practicable Environmental Option (BPEO) in accordance with the type(s) of waste streams that would be handled on site. Applicants can contact SEPA for further guidance.

POLICY JUSTIFICATION

This policy supports the Plan's development strategy to promote sustainability, by reducing waste (see Part 2, WASTE MANAGEMENT, Waste Recycling, paragraph 6.103). It also conforms to Scottish Planning Policy (SPP) 10: Planning for Waste Management and Planning Advice Note (PAN) 63: Waste Management Planning.

The City is moving from the landfilling of most of its municipal waste towards a more sustainable management and recycling of domestic waste. The four main waste management sites are already bulk treatment and recycling sites and will be the focus of any future large scale treatment facilities. It is essential that these sites are safeguarded against any development on adjacent land which could prejudice their continued operation. The majority of waste will, however, continue to be processed by the private sector, which treats and recycles a wide range of commercial waste at treatment sites across the City.

FURTHER GUIDANCE

See policy DES 12: Provision of Waste and Recycling Space for guidance on the provision and design of waste and recycling facilities for new developments.

ENV 12 - DEVELOPMENT OF BROWNFIELD LAND AND CONTAMINATED SITES

AIM

To encourage the reuse of brownfield land and ensure that redevelopment of former industrial and other potentially contaminated sites addresses any on-site contamination.

POLICY

Development on brownfield land in general, and sites formerly occupied by factories, workshops, and other industrial and associated activities, etc, will be encouraged, having regard to the development policy principles and other policy considerations.

Where the previous history of a site suggests that contamination may have occurred, developers should:

- undertake a detailed site investigation and analysis to establish whether contamination has occurred and the degree and location of the problem (in accordance with BS 10175 and associated guidance). The investigation should establish whether the presence of contamination results in significant pollution linkages and whether there is any significant pollution to the water environment;
- provide a detailed written report of survey and assessment following the advice of Planning Advice Note (PAN) 33: Development of Contaminated Land (including recommendations for treating affected ground) to the Council (the survey should assess the risks of pollution of the water environment arising from land contamination and specialists should be employed to produce the report and undertake any treatment that is required);
- remediate sites, by agreement with the Council, prior to new development works taking place (no development should take place until the Council is completely satisfied that the affected ground has been satisfactorily treated); and
- remediate sites (where possible) using technologies to minimise generation of 'wastes' requiring off-site disposal and the need for importation of replacement materials (i.e. neutral mass-balance).

Site investigation is a learning process and additional investigation may be appropriate prior to agreeing remediation strategies.

POLICY JUSTIFICATION

This policy supports the Plan's Development Strategy to reduce the amount of vacant and derelict land in the City (see Part 2, VACANT AND DERELICT LAND, Unlocking Development Potential, paragraphs 5.62 - 5.65), and conforms to PAN 33: Development of Contaminated Land, and is in line with the Council's Strategy for Inspection of Contaminated Land in Glasgow. The development of the City's brownfield sites is a priority for the Council. They have the potential to create new areas for residential, industrial and business and other uses. Many of the sites, however, were formerly used for heavy industry and may be contaminated. The redevelopment of brownfield land may require remediation works to be carried out. In seeking to safeguard against any harmful effects from contamination, the Council will have to satisfy itself that ground conditions are made safe prior to new development (in particular, housing) being implemented.

ENV 13 - ANCIENT MONUMENTS AND SCHEDULED ANCIENT MONUMENTS

AIM

To protect and enhance the City's Ancient Monuments and Scheduled Ancient Monuments and their settings.

POLICY

The Council seeks to retain, protect, preserve and enhance ancient monuments (including scheduled ancient monuments) and their settings. As a result:

- developments that have an adverse impact on scheduled ancient monuments and their settings will be strongly resisted;
- there will be a presumption in favour of retaining, protecting and enhancing any ancient monument and its setting, in particular those of international, national or local importance; and
- there will be a presumption in favour of retaining ancient monuments (including scheduled ancient monuments), and their components, in-situ.

Proposals which may impact on an ancient monument/scheduled ancient monument will:

- require to be accompanied by sufficiently detailed information to enable a full evaluation of the proposals in relation to their impact, the importance of the monument, its cultural significance and its setting. Any investigations will require a project brief to be prepared, through prior consultation, and approved by the Council and Historic Scotland;
- require to set out how any potential damaging actions will be mitigated or minimised to the satisfaction of the Council, Historic Scotland, the West of Scotland Archaeology Service (WoSAS) or the Royal Commission on the Ancient and Historic Monuments of Scotland (RCAHMS), as appropriate;
- require to be sympathetic, in design and construction, to the scheduled ancient monument and its setting and conform to any brief or design guide for the monument. Where appropriate, schemes should seek opportunities to enhance the monument for the public, such as access and interpretation; and
- be assessed against the other policies of the Plan.

Note: For any works affecting nationally important scheduled ancient monuments, there is a need to obtain scheduled monument consent in addition to planning permission. Permitted development rights do not over-ride this requirement. Developers must formally notify the RCAHMS of any proposals that involve the demolition or significant alterations to listed buildings that are monuments.

POLICY JUSTIFICATION

This policy supports the Plan's Development Strategy to protect and enhance the City's Scheduled Ancient Monuments (see Part 2, ENVIRONMENT, HERITAGE AND THE BUILT ENVIRONMENT Archaeology and World Heritage Sites, paragraphs 5.20 - 5.24) and conforms with NPPG 5: Archaeology and Planning, and the Scottish Historic Environment Policy (SHEP) : Scotland's Historic Environment. Ancient monuments are protected under the Ancient Monuments and Archaeological Areas Act 1979 and are scheduled by the Scottish Ministers. The preservation of ancient monuments and their setting is a significant consideration in determining planning applications, whether a monument is scheduled or not.

FURTHER GUIDANCE

A list of all the scheduled ancient monuments in the city is included in Appendix J to development guide DG/ENV 4: Development Affecting Environmental Policy Designations in Part 4 of the Plan.

Some ancient monuments (including scheduled ancient monuments) and their settings are the subject of other Plan policies, including ENV 16: The Antonine Wall and DES 5: Development and Design Guidance for the River Clyde and Forth and Clyde Canal Corridors.

ENV 14 - SITES OF ARCHAEOLOGICAL IMPORTANCE

AIM

To protect the City's historic environment and archaeology.

POLICY

The Council will seek to retain, protect, preserve and enhance the City's existing historic environment and archaeological heritage, including any future discoveries.

When development is proposed that would affect a site of archaeological significance:

- The developer should notify the West of Scotland Archaeology Service (WoSAS) and the Council at the earliest possible stage in the conception of the proposal.
- An assessment of the importance of the site should be provided by the developer as part of the application for planning permission, or (preferably) as part of the pre-application discussions and confirmed by WoSAS.

When development that will affect a site of archaeological significance is to be carried out:

- Developers should make provision for the protection and preservation of archaeological deposits in situ within their developments, including by designing foundations that minimise the impact of the development on the remains.
- The Council will require the developer to make appropriate and satisfactory provision for the excavation, recording, analysis and publication of the remains where it is satisfied that the protection and preservation, in-situ, is not warranted, for whatever reason.

Where archaeological remains are discovered after a development has commenced:

- The developer should notify WoSAS and the Council immediately, to enable an assessment of the importance of the remains to be made.
- Developers should make appropriate and satisfactory provision for the excavation, recording, analysis and publication of the remains (developers may see fit to insure against the unexpected discovery of archaeological remains during work).

WoSAS should be consulted for all sites in each category (www.wosas.net).

DEFINITION

ENVIRONMENTAL POLICY DESIGNATION - Areas important because of their environmental quality, biodiversity and/or their historic, architectural or archaeological significance and contribute positively to the quality of the City's environment and image.

POLICY JUSTIFICATION

The policy supports the Plan's Development Strategy to protect archaeological resources, (see Part 2, HERITAGE AND THE BUILT ENVIRONMENT, Archaeology, paragraphs 5.20 – 5.22) and conforms with Scottish Planning Policy (SPP) 5: Archaeology and Planning, Planning Advice Note (PAN) 42: Archaeology - the Planning Process and Scheduled Monument Procedures and the Glasgow and the Clyde Valley Joint Structure Plan.

The preservation of sites of archaeological significance and their setting is a significant consideration in determining planning applications. There are a large number of sites of archaeological importance and/or where artefacts have been discovered within the City. The PASTMAP website (www.pastmap.org.uk) contains details and locations on the City's archaeological sites.

ENV 15 - ENERGY

AIM

To reduce the carbon footprint of the City's buildings through energy efficient design, increased renewable energy generation and use of low and/or zero carbon technologies.

POLICY

- All new buildings are required to be designed to maximise their use of passive solar energy from the outset (see policies DES 1: Development Design Principles, DES 2: Sustainable Design and Construction and RES 2: Residential Layouts) and, thereafter, to consider the installation options available for a low and/or zero carbon decentralised energy source, including consideration of a shared resource with a neighbouring development.
- All new developments should consider the installation of micro-generating equipment (see Definition) for the small scale production of heat (less than 45 kilowatt thermal capacity) and/or electricity (less than 50 kilowatt electrical capacity) from zero or low carbon source technologies, particularly at a domestic level.
- New developments with a total cumulative floorspace of 500sqm or more are required to conform to Scottish Planning Policy (SPP) 6: Renewable Energy (supplemented by guidance contained in Planning Advice Note (PAN) 84: Reducing Carbon Emissions in New Developments). This will require the installation and use of on-site zero and low carbon equipment contributing at least an extra 15% reduction in CO₂ emissions beyond the 2007 Building Regulations carbon dioxide emissions standard.

To meet this requirement, the microgeneration technologies, outlined below, could be utilised as part of the energy solution. Developers, however, are particularly encouraged to consider the options for shared, and/or combined heat and power, or energy from waste installations, subject to the appropriate discussions with the regulators. The set up of Energy Services Companies (ESCOs) as a means of delivering stable, more localised energy production close to the area of need is also encouraged.

Applications will only be exempt from the SPP 6 target where developers are able to demonstrate that technical constraints exist. The applicant, however, will then be required to agree equivalent carbon savings elsewhere within the City boundary.

The suite of technologies included within the definition of microgeneration includes solar photovoltaics (PV) to provide electricity, solar thermal to provide hot water, micro-wind (including rooftop mounted turbines), micro-hydro, heat pumps, biomass and micro-combined heat and power (micro-CHP), including small scale fuel cells. The appropriateness of each technology will be dependent on the different local circumstances, conditions and purposes.

The Council is also keen to encourage the development of innovative buildings which are energy self sufficient/zero carbon by design as a means of tackling climate change and addressing fuel poverty.

- All micro-renewable (see Definition) proposals should not impact adversely on the local environment or the amenity of neighbouring occupiers

DEFINITIONS

MICRO-GENERATION - small scale production of heat (less than 45 kilowatt thermal capacity) and/or electricity (less than 50 kilowatt electrical capacity) from zero or low carbon source technologies. The suite of technologies covered by this definition includes solar photovoltaics (PV) to provide electricity and thermal to provide hot water, micro-wind (including rooftop mounted turbines), micro-hydro, heat pumps, biomass, micro-combined heat and power (micro-CHP) including small scale fuel cells.

MICRO-RENEWABLES - the same as micro-generation, excluding, however, those technologies which are not purely from renewable sources (e.g. small scale fuel cells, heat pumps and micro-CHP).

POLICY JUSTIFICATION

This policy supports the Plan's Development Strategy to promote renewable energy (see Part 2, ENERGY, Renewable Energy Sources, paragraph 5.81) and sustainable construction (see Part 2, Sustainable Design and Construction, paragraph 5.7) and also conforms to Scottish Planning Policy (SPP) 6: Renewable Energy. In addressing climate change, the UK Government is committed to reducing CO₂ emissions by 20% over 1990 levels by 2010, and by 60% by 2050. To assist in meeting these obligations, the Scottish Government has stated an aim of generating 50% of Scotland's electricity from renewable sources by 2020. The Council signed the Climate Change Declaration in January 2007 and participates in the Carbon Trust's Local Authority Carbon Management Programme.

To attain these targets, the Scottish Government has issued SPP 6, PAN 45: Renewable Energy (2006 Annex - Planning for Micro-Renewables), PAN 84 and an Energy Efficiency and Micro-generation Strategy for Scotland. The Government has set a clear requirement for planning authorities to take account of climate change impacts in the preparation of development plans and in the determination of planning applications.

The Council's decision to require the consideration of micro-generation on a small scale for all development is on the basis that this could make a significant contribution to tackling climate change by ensuring a reliable low and/or zero carbon energy supply which not only helps to reduce CO₂ emissions, but will also act to increase awareness and engage the public into also taking action.

FURTHER GUIDANCE

Further guidance on the fitting of solar panels and micro turbines to buildings is contained in development guide DG/DES 9: External Fittings to Buildings.

ENV 16 - THE ANTONINE WALL

AIM

To protect the archaeological remains, the line and the setting of Antonine Wall, including those sections which are not scheduled. The Antonine Wall now has World Heritage Site (WHS) status as part of the *Frontiers of the Roman Empire* WHS.

POLICY

The Council will seek to retain, protect, preserve and enhance the Antonine Wall, its associated archaeology, character and setting. Accordingly:

1. There will be a presumption against development which would have an adverse impact on the Frontiers of the Roman Empire (Antonine Wall) World Heritage Site (see ENVIRONMENTAL POLICY DESIGNATIONS MAPS North and West).
2. There will be a presumption against development within the Frontiers of the Roman Empire (Antonine Wall) World Heritage Site buffer zones (see ENVIRONMENTAL POLICY DESIGNATIONS MAPS North and West) which would have an adverse impact on the site and its setting, unless:
 - mitigating action, to the satisfaction of the Council in consultation with Historic Scotland, can be taken to redress the adverse impact; and
 - there is no conflict with other City Plan policies.

POLICY JUSTIFICATION

This policy reflects the agreed uniform planning policy approach for the Antonine Wall and supports the Plan's Development Strategy to protect and enhance the City's scheduled ancient monuments (see Part 2, ENVIRONMENT, HERITAGE AND THE BUILT ENVIRONMENT Archaeology and World Heritage Sites, paragraph 5.23) and conforms with NPPG 5: Archaeology and Planning, and the Scottish Historic Environment Policy (SHEP): Scotland's Historic Environment.

The Council will seek to retain, protect, preserve and enhance the Antonine Wall, an internationally important ancient monument and World Heritage Site under the UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage (1972).

The Council is committed to working with the other four local authorities along the line of the Antonine Wall and with the Scottish Government (in particular, Historic Scotland) in order to achieve the appropriate level of protection for the Antonine Wall. Supplementary development guidance on the criteria which will be applied in determining planning applications for development along the line, or within the setting, of the Antonine Wall as defined on the ENVIRONMENTAL POLICY DESIGNATIONS MAPS, will be prepared in liaison with the partner authorities and Historic Scotland.

ENV 17 - PROTECTING THE WATER ENVIRONMENT

AIM

To ensure new development does not have an adverse impact on the water environment by preventing the deterioration of aquatic ecosystems and enhancing their quality, including groundwater, promoting sustainable water use, reducing pollution, and mitigating against the impact of extreme weather events.

POLICY

1. PROTECTING THE WATER ENVIRONMENT

There is a strong presumption against development likely to have an adverse effect on the water environment. Developers are required to ensure that the physical characteristics of watercourses, water bodies and groundwater, as well as water quality are protected and, where possible, enhanced to achieve at least the classification of 'Good' status. Proposed measures to mitigate development impacts upon the water environment must be approved by the Council as advised by the Scottish Environment Protection Agency (SEPA) and Scottish Natural Heritage (SNH), where appropriate (see policies ENV 1: Open Space Protection, ENV 7: National, Regional and Local Environmental Designations and development guide DG/ENV 4: Development Affecting Environmental Policy Designations).

2. RIVER ENGINEERING WORKS

There is a strong presumption against river engineering works that would have a persistent adverse, up or downstream, effect upon water quality, quantity or flow rate, ecological status, riparian habitat, protected species or floodplains, apart from those works related to:

- bridges;
- flood prevention/mitigation works;
- land drainage outfalls; and
- watercourse training works (i.e. managing a watercourse by hard or soft means, such as containment of flow).

Soft engineering solutions to the provision of these structures, or works associated with them, will be encouraged. The Council will take advice from SEPA and others, as appropriate.

POLICY JUSTIFICATION

This policy supports the Plan's Development Strategy to safeguard and manage the existing network of rivers and wetlands in the City (see Part 2, STRATEGIC DRAINAGE AND FLOOD RISK, paragraphs 5.46 – 5.49) and conforms to the Water Framework Directive and the Water Environment and Water Services (Scotland) Act 2003 (WEWS), which requires statutory authorities, including Councils, SEPA and Scottish Water, to ensure water bodies are not permitted to decline in status. Under the WEWS Act, River Basin Management Plans must be prepared by 2009. Once prepared, these will be a material consideration in relation to development planning.

The Council has a duty to ensure that development which would result in a deterioration of the status of surface and groundwater is not permitted. A key aspect of this requires that water bodies have adequate protection against insensitive river engineering works. The Council, therefore, requires developers to provide an environmental impact assessment and flood risk assessment, as necessary, and it will consult Scottish Water, SEPA and SNH concerning the relevant aspects of impacts and mitigation.