

#### **Draft Sustainable Design and Construction Templates**

This document contains two draft templates and one checklist to support applicants to submit their Sustainable Design and Construction Statements (SDCS). An SDCS is now required for all development proposals and the templates and checklist provide prompts and details about the information that is needed to assess different types of minor planning applications. See the descriptions below to ensure you select the correct template

#### **SDCS Template 1**

For minor applications, including changes of use, that:

- do not involve extensions or significant refurbishment,
- do not create new residential dwellings.

#### **SDCS Template 2**

For minor applications, including changes of use, that:

- involve under 100sqm additional floorspace
- involve extensions and/or significant refurbishments
- do not create new residential dwellings

#### **SDCS Checklist 3**

For minor applications that:

- involve more than 100sqm additional floorspace,
- creation of new residential units



#### **Sustainable Design and Construction Template 01**

#### **Minor Refurbishments**

This template aims to help people preparing a Sustainable Design and Construction Statement for minor applications, including changes of use, that:
do not involve extensions or significant refurbishment,

do not create new residential dwellings.

There is a separate:

template for applications for under 100sqm additional floorspace that involve extensions and significant refurbishments but do not create new residential units; and,

checklist for minor applications that propose more than 100sqm additional floorspace.

The template includes information and links to guidance on Islington Local Plan Policy

Not all points mentioned below will be relevant to your application, and the level of detail you are required to submit will depend on the size and type of application.

Building Regulations standards may also affect your design and you should consider how you will meet these standards at this stage.

If the development is for a Listed Building or is in a Conservation Area, applications should reference the heritage statement if provided and should consider conservation requirements sensitively, while also seeking to maximise the benefits of suitable sustainable design measures.

A glossary and links to further information are included at the end of this template.

Site Address	
Click or tap here to enter text.	

#### 1. Minimising greenhouse gas emissions

The design of the proposal must demonstrate how it has maximised energy efficiency and minimised carbon emissions.

#### **Local Plan Policy requirements:**

(Policy S1, Part C and Policy S4, Part A)

 Measures must follow the Energy Hierarchy to reduce carbon emissions step-bystep, maximising 'Be Lean' energy efficiency first.

# The Energy Hierarchy Be Lean: Use less energy Be Clean: Supply energy efficiently Be Green: Renewable energy

#### Fill in the table below to demonstrate how carbon emissions have been reduced:

Emission reducing strategy	Details of the proposed	N/A
Be Lean: Use less energy	Click or tap here to enter text.	
Will the proposal lead to the		_
building losing less heat? If		
so, please describe how.		
E.g. Glazing, insulation,		
draught-proofing, Mechanical		
Ventilation with Heat Recovery.		
Be Clean: Supply energy	Click or tap here to enter text.	
efficiently		
Does the proposal involve		
use of smart meters or other		
measures to ensure		
efficiency energy supply?		
E.g. Zonal heating, using smart		
thermostatic radiator valves,		
energy monitoring.		

Emission reducing strategy	Details of the proposed	N/A
Be Green: Renewable	Click or tap here to enter text.	
energy		
Have opportunities for		
renewable energy been		
maximised?		
E.g. Air source heat pumps or		
solar PV panels.		

#### 2. Avoiding Overheating

Managing heat-risk is an important concern in Islington, particularly in the context of higher summer temperatures caused by climate change.

#### Local Plan Policy Requirements: Avoiding Overheating

#### Minimise heat risk

Policy S6, Part A

Development proposals must minimise internal heat gain and the impacts of the 'urban heat island effect' through design, layout, orientation and materials.

 Demonstrate compliance with cooling hierarchy Policy S6, Parts B and C

Design must:

- reduce potential for overheating and reliance on air conditioning systems,
   maximise incorporation of passive design measures in line with cooling hierarchy.
- minimise internal heat generation through energy efficient design.
- reduce the amount of heat entering a building through orientation, shading, surface treatment to reflect heat from the sun (albedo), fenestration, insulation and the provision of green roofs and walls.
- manage the heat within the building through exposed internal thermal mass and high ceilings.
- provide passive ventilation, such as cross ventilation.
- provide low energy mechanical ventilation.

Technologies from lower levels of the hierarchy will not be supported unless evidence is provided to demonstrate that technologies from higher levels of the hierarchy cannot deliver sufficient heat control.

#### Fill in the table below to demonstrate how overheating is avoided:

#### Strategy to reduce the amount of heat that enters the building?

E.g. insulation; shading; solar control glazing film, green roofs/walls, solar reflective paint. Click or tap here to enter text.

## 3. Circular Economy: Designed-to-last, to be reused and to minimise waste

Applications must demonstrate they have adopted a circular economy approach. Proposals should demonstrate how the length of time materials can be used for has been maximised (including reusing and/or recycling existing material where possible) and how waste can be minimised.

The <u>draft Climate Action SPD</u> contains more information on the Circular Economy requirements in Chapter 9 and Appendix 4 and 5 contain information on material selection.



Circular Economy Diagram. Source: https://www.issuesonline.co.uk

#### **Local Plan Policy Requirements:**

#### Circular economy approach

Policy S10, Part A

Demonstrate that a circular economy approach to building design has been adopted to keep products in use for as long as possible and minimise waste.

## Building component re-use/ recycle/ enables deconstruction Policy S10, Part B

Demonstrate buildings are made from components and materials that can be reused or recycled; that building design enables ease of deconstruction; and, that materials resulting from demolition to be reused/recycled.

#### • Material derived from recycled content

Policy S10, Part C

Demonstrate 10% value of materials must derive from recycled and re-used content.

#### • Flexible and adaptable to changing requirements

Policy S10, Part D

Demonstrate development is flexible and adaptable to changing requirements and circumstances over its lifetime; including changes to the physical environment, market demand and land use.

#### Adaptive Design Strategy

Policy S10, Part E

Demonstrate development:

- Adopts a circular economy approach to keep materials in use for as long as possible.
- Employs strategies to minimise waste and avoid unnecessary demolition.
- Is built in layers to allow elements to be replaced overtime, or does design support modular system
- Is designed to be flexible and adaptable to changing requirements over lifetime.
- Enables ease of deconstruction, allowing for disassembly and reuse.
- Maximises reuse and recycling of materials arising from demolition.

#### Minimise environmental impact of materials

Policy S10, Part F

Minimise environmental impact of materials

Demonstrate development minimises environmental impact of materials through sustainable sourcing, low impact materials, recycled materials and local suppliers.

#### Islington's Code of Practice for Construction Sites

Policy S10, Part G

Islington's Code of Practice for Construction Sites

Confirm development minimises the impact of construction on the environment and complies with Islington's Code of Practice for Construction Sites.

#### Fill in the table below to demonstrate how a circular economy approach has been adopted:

Circular economy measures	Details of the proposed	N/A
How have materials been selected to ensure they are durable and can be reused and recycled?	Click or tap here to enter text.	
Will 10% or more of all materials be from recycled or reused content?	Click or tap here to enter text.	

Circular economy measures	Details of the proposed	N/A
How has the proposal been designed for flexibility and adaptability?	Click or tap here to enter text.	
How has the use of sustainably sourced, low impact and recycled materials, using local suppliers been maximised?	Click or tap here to enter text.	

#### 4. Protecting Air Quality

All applications must ensure they prevent or mitigate adverse impact on air quality and implement opportunities to improve air quality. See the Climate Action SPD Chapter 7 "Protecting Air Quality" and <u>London Plan Air Quality Neutral Guidance.</u>

#### **Local Plan Policy Requirements:**

#### • Prevent or mitigate of adverse Air Quality Impacts

Policy S7, Part A

Development must prevent or mitigate adverse air quality impacts and investigate all opportunities to improve air quality. Proposals will be refused if they would:

- cause harm to air quality cumulatively or individually;
- lead to deterioration of existing poor air quality;
- reduce air quality benefits from measures to improve air quality; or
- create unacceptable levels of exposure to poor air quality.

#### • Achieve Air Quality Neutral Benchmark

Policy S7, Part C

Development must be at least Air Quality Neutral through provision of on-site measures

#### • On-site Air Quality design solutions

Policy S7, Part E

Deliver on-site design solutions, to prevent or minimise increased exposure to existing air pollution and make provision to address local air quality issues especially where development is located in an <u>Air Quality Focus Area</u>

## Fill in the table below proving details of whether the application cause harm, or worsen air quality? If so, what measure(s) have been taken to improve air quality?

Air quality measure proposed	N/A
Click or tap here to enter text.	

#### 5. Water

All applications need to consider flood risk, sustainable drainage, water efficiency, water quality and biodiversity.

Local Plan Policy Requirements

#### • Follow Sustainable Drainage Principles

Policy S9, Part A

Demonstrate proposal considers how water will be managed to deliver sustainable drainage, water efficiency, water quality and biodiversity across the site and with links to wider than site level plans.

#### • Minimise surface water run-off with drainage hierarchy

Policy S9, Part B

Demonstrate proposal ensures run-off is managed as close to source as possible in line with the London Plan drainage hierarchy:

- 1. rainwater use as a resource (for example rainwater harvesting, blue roofs).
- 2. rainwater infiltration to ground at or close to source.
- 3. rainwater attenuation in green infrastructure features for gradual release (for example green roofs, rain gardens).
- 4. rainwater discharge direct to a watercourse (unless not appropriate).
- 5. controlled rainwater discharge to a surface water sewer or drain.
- 6. controlled rainwater discharge to a combined sewer.

#### • Impermeable Paving

Policy S9, Part C

Confirm the proposal does not include impermeable paving.

#### • Maximise multiple benefits of SUDS

Policy S9, Part D

Demonstrate the proposal considers drainage that considers:

- water use efficiency
- water quality
- enhanced biodiversity
- urban greening
- amenity
- recreation
- **Demonstrate how initial rainfall run-off from site is dealt with**, run-off rates, volumes and maintenance plans.

Policy S9, Part E

- **Demonstrate appropriate SUDS have been implemented** to ensure surface water run-off rates and volumes are predictable and that water is clean and safe.
- **Demonstrate how initial run-off is dealt with** following a rainwater event.
- Demonstrate how will SUDS be maintained.
- Integrate SUDS as central to SDCS including landscaping Policy S9, Part J
- **SUDs must be designed as central to the SDCS** to maximise benefits where practical in line with the landscape strategy as required by policy G4.
- Minimise mains usage

Policy S9, Part K

Demonstrate how mains water use has been minimised through use of water efficient fittings, appliances and smart metering.

• Mains Water Optional Requirement Achieved

Policy S9, Part M

Building Regulations Optional Requirement for mains water consumption of 105 litres per person per day achieved (excluding allowance of 5 litres external consumption) required.

Fill in the tables below to demonstrate how a surface water drainage is to be managed:

Will proposals impact on how surface water will run off the site? Yes / No
Click or tap here to enter text.

**If yes,** surface water run-off must be managed according to the London Plan Drainage Hierarchy summarised below, prioritising features involving planting. Please provide details in the table below:

London Drainage Hierarchy Measure	Details	N/A
Use rainwater as a resource (e.g. water butt)	Click or tap here to enter text.	
Water infiltration to the ground (direct planting)	Click or tap here to enter text.	
Collect rainwater for gradual release using planters or rain gardens	Click or tap here to enter text.	
Discharge to a local water source if appropriate	Click or tap here to enter text.	

London Drainage Hierarchy Measure	Details	N/A
Collect rainwater in tank for gradual release into a surface water sewer	Click or tap here to enter text.	
Collect rainwater in tank for gradual release into a combined sewer	Click or tap here to enter text.	

Does the application provide impermeable paving on a surface above 5sqm such as fron	
gardens or driveways?	
Y/N	

If yes, please demonstrate that run-off from these surfaces will not worsen direct	and
cumulative flood risk.	

Click or tap here to enter text.

#### **Water Efficiency**

#### How does the proposed development maximise water-use efficiency?

E.g. efficient fittings, appliances and smart metering, water butts. See Waterwise website for tips.

Click or tap here to enter text.

#### 6. Biodiversity and landscape design and trees

Biodiversity, landscape and trees play multiple important roles within Islington's ecosystem, environmentally, socially and often supporting climate adaptation

#### **Local Plan Policy Requirements:**

#### Protect and enhance green infrastructure

Policy G4, Part A

Demonstrate development protects, enhances and contributes to the landscape, biodiversity value and growing conditions, including protecting and enhancing connectivity between habitats.

#### Protection of Sites of Importance for Nature Conservation (SINCs)

Policy G4, Part B

If site is located on or close to a SINC, harm must be avoided. If risk of harm is present apply the following mitigation hierarchy: mitigation hierarchy should be applied to minimise development impacts:

- Avoid damaging the significant ecological features of the site;
- Minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site;

• Deliver off-site compensation of better biodiversity value. Refer to Local Plan paragraph 5.30 for further detail.

#### • Protect and enhance biodiversity

Policy G4, Part D

Demonstrate development protects biodiversity or create habitats. Refurbishments must reduce impact on existing species.

#### • Ecological Survey

Policy G4, Part F

If site is in proximity to SINC or where development will impact a protected species, an ecological survey must be submitted.

 Minimise impact on existing trees and planting Policy G4, Part G

Demonstrate impact on existing trees, hedges, shrubs and other significant vegetation has been minimised.

Provide sufficient space for the crowns and root systems of existing and proposed trees and their future growth.

Existing trees must be protected during development.

Removal of trees with TPOs or in conservation area will usually result in refusal.

- Minimise loss of or damage to trees
- Policy G4, Part H
   Loss or damage will only be permitted where it is demonstrably unavoidable in order to meet other relevant Local Plan policy requirements agreed with Council.

### How does the proposed development protect, enhance and contribute to landscape and biodiversity value?

See <u>Islington Biodiversity Action Plan</u>, <u>RHS Plants for Pollinators</u>, <u>RHS Plants for Bugs</u> for specific actions applicants can take to support biodiversity in Islington.

Biodiversity action	Description of possible measures	Details	N/A
Minimise impacts on existing planting	Protecting existing trees, hedges, and shrubs, sustainable drainage, air quality and urban cooling.	Click or tap here to enter text.	
Incorporate robust planting design for biodiversity	Planting schemes that attract pollinators and do not require lots of maintenance or watering (see RHS website).	Click or tap here to enter text.	

Biodiversity action	Description of possible measures	Details	N/A
Provide suitable new habitats and microhabitats	Bird and bat boxes, particularly integrated swift bricks. Bug hotels for insects, hedgehog friendly fences and log piles for small mammals.	Click or tap here to enter text.	

Once the SDCS has been completed, please submit this template alongside your planning application.

#### 7. Further Information

#### Sources for sustainable building advice

**Green Register** 

Association for Environment Conscious Buildings (AECB)

Climate Change and Your Home

#### **Energy**

**Energy Saving Trust "Reducing home heat loss"** 

**LETI Retrofit Guide** 

#### Water

SusDrain: Rain gardens

SusDrain: Water storage

Waterwise Water efficiency

#### **Green roofs**

**Living Roofs** 

**Green Roof Organisation** 

#### **Biodiversity**

<u>Islington Biodiversity Action Plan</u>

Royal Horticultural Society: "Wildlife in the garden"

#### Sustainable design for older homes

Historic England: "How to Save Energy in an Older Home"

#### 8. Glossary

Biodiversity: The variety of plant and animal life within a habitat.

**Circular economy:** An economy that supports keeping materials in use at their highest value for as long as possible.

**Combined sewer:** A sewer that deals with both surface water and sewage.

**Drainage hierarchy:** A design tool used to show how surface water run-off has been minimised according to sustainable drainage principles.

**Energy hierarchy:** A design tool used to show how carbon emissions have been reduced at different stages, prioritising energy efficiency methods (Be Lean), reducing energy wasted through supply (Be Clean) and generating green energy (Be Green).

**Green roofs:** A roof that is covered with vegetation, growing on a growing medium (or substrate).

**Impermeable paving:** Paving that does not allow water to seep into the ground gradually, resulting in more surface water run-off.

**Mechanical ventilation with heat recovery (MVHR):** An efficient ventilation system that recovers heat from purged air to reuse inside the building.

**Pollinators:** Insects and animals that transport pollen between plants, enabling plants to fertilise each other.

**Rain garden:** A shallow area of ground featuring planting that receives water run-off from the surrounding area and allows it to be absorbed gradually.

**Run-off:** The draining away of excess water from a surface (building or land) when there is more water than the land can absorb.

**Solar control glass/filmTreated glass or film** is designed to reduce how much heat from the sun enters the building.

**Surface water sewer:** A sewer that only deals with water that has run-off buildings and surfaces.

**Surface water:** Water that collects on the ground from a variety of sources but unmanaged may result in flooding.

**Sustainable drainage:**Water is collected as close to its source as possible and is released gradually to ensure that sewers do not become overwhelmed. Water efficiency, biodiversity and water quality benefits of drainage methods are maximised.

**Walter infiltration:** The process when water travels through the soil or gravel and is then gradually released.



#### Sustainable Design and Construction Template 02

#### **Extensions and significant refurbishments**

This template aims to help people preparing a Sustainable Design and Construction Statement for minor applications, including changes of use, that: are under 100sqm additional floorspace

involve extensions and/or significant refurbishments

do not create new residential dwellings

There is a separate:

template for applications proposing less that 100sqm additional floorspace that do not involve extensions, refurbishments or create new residential units;

checklist for minor applications that are larger than 100sqm.

The template includes information and links to guidance on Islington Local Plan Policy

Not all points mentioned below will be relevant to your application, and the level of detail you are required to submit will depend on the size and type of application.

Building Regulations standards may also affect your design and you should consider how you will meet these standards at this stage.

If the development is for a Listed Building or is located in a Conservation Area, applications should reference the heritage statement if provided and should consider conservation requirements sensitively, while also seeking to maximise the benefits of suitable sustainable design measures.

A glossary and links to further information are included at the end of this template.

Site Address
Click or tap here to enter text.

#### 1. Minimising greenhouse gas emissions

Proposals must demonstrate how they have maximised energy efficiency and minimised carbon emissions.

#### **Local Plan Policy requirements:**

#### • Minimising greenhouse gas emissions

Policy S1, Part C and Policy S4, Part A

A proportionately detailed energy assessment is required, demonstrating how emissions have been minimised in accordance with the energy hierarchy to reduce carbon emissions step-by-step, maximising 'Be Lean' energy efficiency first.

## Be Lean: Use less energy Be Clean: Supply energy efficiently Be Green: Renewable energy

#### • Householder Extensions

Policy S4, Part H

Proposals for householder extensions must contribute to reducing emissions from the whole building as far as possible, in addition to the requirements for the extension itself.

Measures should apply to the whole building as far as possible.

#### Fill in the table below to demonstrate how carbon emissions have been reduced:

Emission reducing strategy	Details of the proposed	N/A
Be Lean: Use less energy Will the proposal lead to the building losing less heat? If so, please describe how. E.g. Glazing, insulation, draught-proofing, Mechanical Ventilation with Heat Recovery.	Click or tap here to enter text.	

Emission reducing strategy	Details of the proposed	N/A
Be Clean: Supply energy efficiently Does the proposal involve use of smart meters or other measures to ensure efficiency energy supply?  E.g. Zonal heating, using smart thermostatic radiator valves, energy	Click or tap here to enter text.	
monitoring.  Be Green: Renewable	Click or tap here to enter text.	
energy Have opportunities for renewable energy been maximised? E.g. Air source heat pumps or solar PV panels.	Show of tap from to different toxe.	

#### 2. Avoiding Overheating

Managing heat-risk is an important concern in Islington, particularly in the context of higher summer temperatures caused by climate change.

#### **Local Plan Policy Requirements**

#### Minimise heat risk

Policy S6, Part A

Development proposals must minimise internal heat gain and the impacts of the 'urban heat island effect' through design, layout, orientation and materials.

#### • Reduce potential for overheating through design

Policy S6, Part E

Smaller minor extensions are encouraged to reduce potential for overheating through design particularly using levels 1-3 of the cooling hierarchy described below,

- 1. minimise internal heat generation through energy efficient design.
- 2. reduce the amount of heat entering a building through orientation, shading, surface treatment to reflect heat from the sun (albedo), fenestration, insulation and the provision of green roofs and walls.
- 3. manage the heat within the building through exposed internal thermal mass and high ceilings.

Active cooling measures like air conditioning will not be accepted, unless it can be demonstrated that other methods higher up the cooling hierarchy cannot be used to deliver sufficient heat control.

#### Fill in the table below to demonstrate how overheating is avoided:

## 3. Circular Economy: Designed-to-last, to be reused and to minimise waste

#### **Local Plan Policy Requirements**

#### • Circular economy approach

Policy S10, Part A

Demonstrate a circular economy approach to building design has been adopted to keep products in use for as long as possible and minimise waste.

#### • Building materials enabling re-use/recycling/deconstruction

Policy S10, Part B

Demonstrate buildings are made from components and materials that can be reused or recycled; that building design enables ease of deconstruction; and, that materials resulting from demolition to be reused/recycled.

#### • Material derived from recycled content

Policy S10, Part C

Demonstrate 10% value of materials must derive from recycled and re-used content.

#### • Flexible and adaptable to changing requirements

Policy S10, Part D

Demonstrate development is flexible and adaptable to changing requirements and circumstances over its lifetime; including changes to the physical environment, market demand and land use.

#### • Minimise environmental impact of materials

Policy S10, Part F

Demonstrate development minimises environmental impact of materials through sustainable sourcing, low impact materials, recycled materials and local suppliers.

#### • Islington's Code of Practice for Construction Sites

Policy S10, Part G

Confirm development minimises impact of construction on environment and complies with Islington's Code of Practice for Construction Sites.

Applications must demonstrate they have adopted a circular economy approach. Proposals should show how the length of time materials can be used for has been maximised (including reusing and/or recycling existing material where possible) and how waste can be minimised.



Circular Economy Diagram, Source: https://www.issuesonline.co.uk/

#### Fill in the table below to demonstrate how a circular economy approach has been adopted:

Measure	Details	N/A
How have materials	Click or tap here to enter text.	
been selected to		
ensure they are		
durable and can be		
reused and		
recycled?		
Will 10% or more of	Click or tap here to enter text.	
all materials be		
from recycled or		
reused content?		
How has the	Click or tap here to enter text.	
proposal been		
designed for		
flexibility and		
adaptability?		
How has the use of	Click or tap here to enter text.	
sustainably		
sourced, low		
impact and		
recycled materials,		
using local		
suppliers been		
maximised?		

#### 4. Protecting Air Quality

All applications must ensure they prevent or mitigate adverse impact on air quality and implement opportunities to improve air quality. See the Climate Action SPD Chapter 7 "Protecting Air Quality" and London Plan Air Quality Neutral Guidance.

#### **Local Plan Policy Requirements:**

#### • Prevent or mitigate of adverse Air Quality Impacts

Policy S7, Part A

Development must prevent or mitigate adverse air quality impacts and investigate all opportunities to improve air quality. Proposals will be refused if they would:

- cause harm to air quality cumulatively or individually;
- lead to deterioration of existing poor air quality;
- reduce air quality benefits from measures to improve air quality; or
- create unacceptable levels of exposure to poor air quality.

#### • Achieve Air Quality Neutral Benchmark

Policy S7, Part A

Development must be at least Air Quality Neutral through provision of on-site measures

#### • On-site Air Quality design solutions

Policy S7, Part E

Deliver on-site design solutions, to prevent or minimise increased exposure to existing air pollution and make provision to address local air quality issues especially where development is located in an <u>Air Quality Focus Area</u>

#### Fill in the tables below to demonstrate how air quality has been protected:

Will the application cause harm, or worsen air quality? If so, what measure(s) have been taken to improve air quality?
Click or tap here to enter text.

Is the application located in an Air Quality Focus Area? If yes, how does the application take care to prevent worsening of air quality and to minimise exposure to existing poor air quality?

Click or tap here to enter text.

Developments are encouraged to be "Air Quality Neutral" as defined by London Plan Guidance. Please tick which measure is most appropriate.			
Air Quality Neutral measure	N	Y	N/A
The new heating system is a heat pump or other zero-emission heat source			
The new heating system includes one or more individual gas boilers with NOx emissions rated at less than 40 mg/kWh			
The development is connecting to an existing heat network			

#### 5. Water

All applications need to consider flood risk, sustainable drainage, water efficiency, water quality and biodiversity.

Local Plan Policy Requirements

#### • Follow Sustainable Drainage Principles

Policy S9, Part A

Demonstrate proposal considers how water will be managed to deliver sustainable drainage, water efficiency, water quality and biodiversity across the site and with links to wider than site level plans.

#### • Minimise surface water run-off with drainage hierarchy

Policy S9, Part B

Demonstrate proposal ensures run-off is managed as close to source as possible in line with the London Plan drainage hierarchy:

- 7. rainwater use as a resource (for example rainwater harvesting, blue roofs).
- 8. rainwater infiltration to ground at or close to source.
- 9. rainwater attenuation in green infrastructure features for gradual release (for example green roofs, rain gardens).
- 10. rainwater discharge direct to a watercourse (unless not appropriate).
- 11. controlled rainwater discharge to a surface water sewer or drain.
- 12. controlled rainwater discharge to a combined sewer.

#### • Impermeable Paving

Policy S9, Part C

Confirm the proposal does not include impermeable paving.

#### • Maximise multiple benefits of SUDS

Policy S9, Part D

Demonstrate the proposal considers drainage that considers:

- water use efficiency
- water quality
- enhanced biodiversity
- urban greening
- amenity
- recreation

 Demonstrate how initial rainfall run-off from site is dealt with, run-off rates, volumes and maintenance plans.

Policy S9, Part E

- Development must demonstrate appropriate SUDS have been implemented to ensure surface water run-off rates and volumes are predictable and that water is clean and safe.
- Demonstrate how initial run-off is dealt with following a rainwater event.
- Demonstrate how will SUDS be maintained.
- Integrate SUDS as central to SDCS incl. landscaping Policy S9, Part J
- SUDs must be designed as central to the SDCS to maximise benefits where practical in line with the landscape strategy as required by policy G4.
- Minimise mains usage

Policy S9, Part K

Demonstrate how mains water use has been minimised through use of water efficient fittings, appliances and smart metering.

• Mains Water Optional Requirement Achieved

Policy S9, Part M

Building Regulations Optional Requirement for mains water consumption of 105 litres per person per day achieved (excluding allowance of 5 litres external consumption) required.

Fill in the tables below to demonstrate how a surface water drainage is to be managed:

Will proposals impact on how surface water will run off the site? Yes / No
Click or tap here to enter text.

**If yes,** surface water run-off must be managed according to the London Plan Drainage Hierarchy summarised below, prioritising features involving planting. Please provide details in the table below:

London Drainage Hierarchy Measure	Details	N/A
Use rainwater as a resource (e.g. water butt)	Click or tap here to enter text.	
Water infiltration to the ground (direct planting)	Click or tap here to enter text.	
Collect rainwater for gradual release using planters or rain gardens	Click or tap here to enter text.	

London Drainage Hierarchy Measure	Details	N/A
Discharge to a local water source if appropriate	Click or tap here to enter text.	
Collect rainwater in tank for gradual release into a surface water sewer	Click or tap here to enter text.	
Collect rainwater in tank for gradual release into a combined sewer	Click or tap here to enter text.	

Does the application provide impermeable paving on a surface above 5sqm such as front gardens or driveways?
Y/N
If yes, please demonstrate that run-off from these surfaces will not worsen direct and cumulative flood risk.
Click or tap here to enter text.

#### **Water Efficiency**

#### How does the proposed development maximise water-use efficiency?

E.g. efficient fittings, appliances and smart metering, water butts. See Waterwise website for tips.

Click or tap here to enter text.

#### 6. Biodiversity and landscape design and trees

Biodiversity, landscape and trees play multiple important roles within Islington's ecosystem, environmentally, socially and often supporting climate adaptation

#### **Local Plan Policy Requirements:**

• Protect and enhance green infrastructure

Policy G4, Part A

Demonstrate development protects, enhances and contributes to the landscape, biodiversity value and growing conditions, including protecting and enhancing connectivity between habitats.

Protection of Sites of Importance for Nature Conservation (SINCs)

Policy G4, Part B

If site is located on or close to a SINC, harm must be avoided. If risk of harm is present

apply the following mitigation hierarchy: mitigation hierarchy should be applied to minimise development impacts:

Avoid damaging the significant ecological features of the site;

Minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site;

Deliver off-site compensation of better biodiversity value. Refer to Local Plan paragraph 5.30 for further detail.

#### • Protect and enhance biodiversity

Policy G4, Part D

Demonstrate development protects biodiversity or create habitats.

All development that involves external works on buildings to the first storey and above, or where trees are located on site, should include bird and bat bricks or boxes. See the "Bird and Bat Bricks and Boxes" policy guidance in the <u>draft Climate Action</u>
SPD for more details.

• Refurbishments must reduce impact on existing species.

#### • Ecological Survey

Policy G4, Part F

If site is in proximity to SINC or where development will impact a protected species, an ecological survey must be submitted.

 Minimise impact on existing trees and planting Policy G4, Part G

Demonstrate impact on existing trees, hedges, shrubs and other significant vegetation has been minimised.

Provide sufficient space for the crowns and root systems of existing and proposed trees and their future growth.

Existing trees must be protected during development.

Removal of trees with TPOs or in conservation area will usually result in refusal.

- Minimise loss of or damage to trees
- Policy G4, Part H

Loss or damage will only be permitted where it is demonstrably unavoidable in order to meet other relevant Local Plan policy requirements agreed with Council.

## Fill in the table below to demonstrate how the proposed development protects, enhances and contributes to landscape and biodiversity value.

Biodiversity action	Description of possible measures	Details
Minimise impacts on existing planting	Protecting existing trees, hedges and shrubs, sustainable drainage, air quality and urban cooling.	Click or tap here to enter text.

Biodiversity action	Description of possible measures	Details
Incorporate robust planting design for biodiversity	Planting schemes that attract pollinators and that do not require lots of maintenance or watering (see RHS website)	Click or tap here to enter text.
Provide suitable new habitats and microhabitats	Bird and bat boxes, particularly integrated swift bricks. Bug hotels for insects, hedgehog friendly fences and log piles for small mammals.	Click or tap here to enter text.

See Islington Biodiversity Action Plan, RHS Plants for Pollinators, RHS Plants for Bugs for specific actions applicants can take to support biodiversity in Islington.

Your application may require delivery of 10% Biodiversity Net Gain in addition to complying with Islington's Planning Policy requirements below. Please see Islington council's BNG Form for further details.

#### 7. Green Roofs

#### **Local Plan Policy Requirements**

#### Maximise green roofs

Policy G5, Part A

Demonstrate all available roof space incorporates biodiversity-based extensive green roofs. Developments involving extensions must seek to retrofit on existing roof areas where feasible.

• The following considerations and features are required for green roofs: Policy G5, Part B

consider at earliest stage possible,

maximise benefits for biodiversity, sustainable drainage and cooling;

promote ecological diversity including planting based on wildflowers and a maximum of 25% sedum planting;

have a varied substrate depth of average 80-150mm, unless it can be demonstrated that this is not reasonably possible; and

be easily monitored, allowing for an ongoing effective process to inspect and monitor the quality of the green roof.

Bio-solar roofs
 Policy G5, Part D

• If proposing solar panels, development is required to include panels over a green roof, where biodiversity and drainage functions are not affected.

Has all available roof space been used to incorporate biodiversity-based extensive green roofs, including the retrofit of exiting roofs? Y/N

Click or tap here to enter text.

Once completed, please submit this template alongside your planning application.

#### 8. Further Information

#### Sources for sustainable building advice

**Green Register** 

<u>Association for Environment Conscious Buildings (AECB)</u>

Climate Change and Your Home

#### **Energy**

Energy Saving Trust "Reducing home heat loss"

**LETI Retrofit Guide** 

#### Water

SusDrain: Rain gardens

SusDrain: Water storage

**Waterwise Water efficiency** 

#### **Green roofs**

**Living Roofs** 

**Green Roof Organisation** 

#### **Biodiversity**

<u>Islington Biodiversity Action Plan</u>

Royal Horticultural Society: "Wildlife in the garden"

#### Sustainable design for older homes

Historic England: "How to Save Energy in an Older Home"

#### Glossary

Biodiversity: The variety of plant and animal life within a habitat.

**Circular economy:** An economy that supports keeping materials in use at their highest value for as long as possible.

**Combined sewer:** A sewer that deals with both surface water and sewage.

**Drainage hierarchy:**A design tool used to show how surface water run-off has been minimised according to sustainable drainage principles.

**Energy hierarchy:** A design tool used to show how carbon emissions have been reduced at different stages, prioritising energy efficiency methods (Be Lean), reducing energy wasted through supply (Be Clean) and generating green energy (Be Green).

**Green roofs:** A roof that is covered with vegetation, growing on a growing medium (or substrate).

**Impermeable paving:** Paving that does not allow water to seep into the ground gradually, resulting in more surface water run-off.

**Mechanical ventilation with heat recovery (MVHR):** An efficient ventilation system that recovers heat from purged air to reuse inside the building.

**Pollinators:** Insects and animals that transport pollen between plants, enabling plants to fertilise each other.

**Rain garden:** A shallow area of ground featuring planting that receives water run-off from the surrounding area and allows it to be absorbed gradually.

**Run-off:** The draining away of excess water from a surface (building or land) when there is more water than the land can absorb.

**Solar control glass/filmTreated glass or film** is designed to reduce how much heat from the sun enters the building.

**Surface water sewer:** A sewer that only deals with water that has run-off buildings and surfaces.

**Surface water:** Water that collects on the ground from a variety of sources but unmanaged may result in flooding.

**Sustainable drainage:**Water is collected as close to its source as possible and is released gradually to ensure that sewers do not become overwhelmed. Water efficiency, biodiversity and water quality benefits of drainage methods are maximised.

**Walter infiltration:** The process when water travels through the soil or gravel and is then gradually released.

#### Sustainable Design and Construction Statements Policy Checklist

#### Minor applications involving more than 100sqm additional floorspace, new residential units

A checklist is presented in the table below which aims to support preparation of Sustainable Design and Construction Statements for minor applications creating additional floorspace of 100sqm or more, referencing the required <u>Islington Local Plan sustainable design planning policies.</u>

**Development for Listed Buildings or proposals located in Conservation Areas** should reference the heritage statement if provided and should consider conservation requirements sensitively, while seeking to maximise the benefits of suitable sustainable design measures.

#### **Development Types**

Policies are presented alongside four different types of development in the columns to the right.

A tick in the "Development Type" column indicates that the policy is applicable.

Development Type	Development Type Number
Residential development over 100sqm NOT creating new residential dwellings;	1
Creation of new residential dwellings (including subdivisions);	2
Commercial applications between 100sqm and 500sqm;	3
Commercial applications between 500sqm and 1,000sqm.	4

Policy Area	Policy	Policy requirement	1	2	3	4
Sustainable Design and Construction Statement Policy S2	Policy S2, Part A	Sustainable Design and Construction Statement Demonstrate proposal meets relevant sustainable design policies and show holistic and integrated consideration of sustainability measures within construction and operation of development.	<b>✓</b>	1	1	<b>√</b>
	Policy S2, Parts A and B	Sustainable Design and Construction Statement is required to include the following: Energy Strategy Adaptive Design Strategy Landscape Design Strategy Integrated Water Management Operational Sustainability Air Quality		~		✓
Sustainable Design Standards Policy S3	7BPolicy S3, Part A	Applies to residential extensions or refurbishments of over 500sqm (gross) or 5 residential dwellings (gross):  9BBREEAM Domestic Refurbishment 2014  10BSubmit a pre-assessment demonstrating development will achieve a final (post-refurbishment) rating of Excellent and how reasonable endeavours have been made to achieve an Outstanding rating.	<b>√</b>	1		
	Policy S3, Part B	BRE Home Quality Mark (HQM) Submit a HQM pre-assessment demonstrating that the development will achieve at least a four-star rating.		✓		

Policy Area	Policy	Policy requirement	1	2	3	4
	Policy S3,	BREEAM New Construction 2018 Requirement				✓
	Part C	Submit a pre-assessment for certified rating of Excellent as part of a fully fitted				
		assessment within BREEAM New Construction 2018 (or equivalent scheme), and				
		make reasonable endeavours to achieve an Outstanding rating.				
		A final post-construction stage certified rating of Excellent will be required.				
		A 'verification stage' certification at post-occupancy stage must also be				
		achieved, unless it can be demonstrated that this is not feasible.				
	Policy S3,	Specific BREEAM New Construction 2018 credits requirement				✓
	Part E	Developments assessed under the above BREEAM scheme must achieve				
		following credits:				
		At least 50% of credits on Environmental impacts from construction products				
		(Mat 01);				
		At least 1 credit on Responsible sourcing of materials (Mat 03), in addition to				
		Criterion E(i);				
		At least 50% of credits on Construction waste management (Wst 01);				
		All credits on Water consumption (Wat 01), or a minimum of 3 credits where				
		rainwater and/or greywater recycling is demonstrated not to be feasible;				
		The second credit on energy monitoring (Ene 02 – Sub-metering of high				
		energy load and tenancy areas), where feasible;				
		Reasonable endeavours must be made to achieve two credits under the Ene 01				
		exemplary level criteria, in order to demonstrate zero carbon development;				
		and				
		BREEAM New Construction only - all 4 credits for Energy modelling and				
		reporting as part of Reduction of energy use and carbon emissions (Ene 01).				

Policy Area	Policy	Policy requirement	1	2	3	4
	Policy S3, Part G	BREEAM New Construction 2018 Water Consumption credits Demonstrate all credits for Water Consumption (Wat 01) would be achieved. A minimum of 3 credits must be achieved where rainwater and/or greywater recycling is demonstrated not to be feasible, in order to achieve water credits equivalent to an Excellent standard.			<b>V</b>	
Energy Policy S4	Policy S1, Part C and Policy S4, Part A	Minimising greenhouse gas emissions Proportionately detailed energy assessment, demonstrating how emissions have been minimised in accordance with energy hierarchy. This should address the other requirements of Policy S4 listed below:	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>
	Policy S4, Part B	Fabric Energy Efficiency Standards (FEES) must be achieved Mid-terrace or flat = 39 kWh/m2/yr Semi-detached, end of terrace and detached houses = 46 kWh/m2/yr		✓		
	Policy S1, Part C and Policy S4, Part C	Net zero carbon target  Demonstrate development meets the net-zero carbon target within the framework of the energy hierarchy.		<b>√</b>		
	Policy S4, Part D (iii)	Onsite reduction in regulated emissions  Minimum on-site reduction in regulated emissions of at least 19% beyond Part L  of the Building Regulations 2013 (modelling against Part L of the Building  Regulations 2021 is also currently requested in line with Local Plan paragraph 6.37). See Appendix 1.		<b>√</b>		
	Policy S4, Part F	Reduce energy demand through efficiency All developments are required to reduce energy demand through energy efficiency measures in the first instance, in accordance with the energy hierarchy.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

Policy Area	Policy	Policy requirement	1	2	3	4
	Policy S4, Part G	Offset payment if net-zero is not met If demonstrated that net-zero target is not feasible, shortfall must be provided via cash in lieu £1,000 per new flat or £1,500 per new house (see Local Plan paragraph 6.54).		<b>✓</b>		
Energy Infrastructure Policy S5	Policy S5, Part C	Residential developments involving more than 5 new dwellings: Communal Heating Systems Larger minor new-build developments should have a communal heating system where feasible and select the heat source for the system in accordance with the heating hierarchy connect to local existing or planned heat networks (subject to Parts F and G below).  use zero-emission or local secondary heat sources (in conjunction with heat pump, if required).  use low-emission CHP (only where there is a case for CHP to enable the delivery of an area-wide heat network).  use ultra-low NOx gas boilers		•		
	Policy S5, Part D	Low carbon heating systems priority  Minor new-build developments with an individual heating system are required to prioritise low carbon heating systems.		<b>√</b>		
	Policy S5, Part F	Residential developments involving more than 5 new dwellings:  Costs of supplying heat  Provide an estimate of the anticipated heat unit supply price (£/kWh), annual standing charge and estimated annual maintenance costs of their proposed heating system.		<b>√</b>		

Policy Area	Policy	Policy requirement	1	2	3	4
	Policy S5, Part G	Residential developments involving more than 5 new dwellings within 50m of a Heat Network:  Connection to heat network  Must be designed to connect to that network at the time of construction, including provision of the means to connect to that network and a reasonable financial contribution to the connection charge, unless a feasibility assessment demonstrates that connection is not reasonably possible. An existing heat network includes a planned network that will be in existence by the anticipated time of practical completion.				
	Policy S5, Part L	Future-proof plan to achieve zero carbon by 2050  The SDCS should set out a strategy for how development will be future-proofed to achieve zero carbon emissions on-site by 2050. Where the development is able to connect to a heat network, the SDCS must demonstrate how the heat network will be future-proofed to achieve zero carbon and the timeline for achieving this.	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>
Managing Heat Risk Policy S6	Policy S6, Part A	Minimise heat risk  Development proposals must minimise internal heat gain and the impacts of the 'urban heat island effect' through design, layout, orientation and materials.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>

Policy Area	Policy	Policy requirement	1	2	3	4
	Policy S6, Parts B and C	Demonstrate compliance with cooling hierarchy Design must reduce potential for overheating and reliance on air conditioning systems, maximise incorporation of passive design measures in line with cooling hierarchy. minimise internal heat generation through energy efficient design. reduce the amount of heat entering a building through orientation, shading, surface treatment to reflect heat from the sun (albedo), fenestration, insulation and the provision of green roofs and walls. manage the heat within the building through exposed internal thermal mass and high ceilings. provide passive ventilation, such as cross ventilation.  Technologies from lower levels of the hierarchy will not be supported unless evidence is provided to demonstrate that technologies from higher levels of	<b>✓</b>			
Air Quality Policy S7	Policy S7, Part A	the hierarchy cannot deliver sufficient heat control.  Prevent or mitigate of adverse Air Quality Impacts  Development must prevent or mitigate adverse air quality impacts and investigate all opportunities to improve air quality. Proposals will be refused if they would:  cause harm to air quality cumulatively or individually;  lead to deterioration of existing poor air quality;  reduce air quality benefits from measures to improve air quality; or create unacceptable levels of exposure to poor air quality.	<b>√</b>	✓	<b>✓</b>	<b>√</b>
	Policy S7, Part B	Achieve Air Quality Neutral Benchmark Is the development at least Air Quality Neutral through provision of on-site measures? See Air Quality Neutral London Plan Guidance.	<b>√</b>	<b>✓</b>	✓	<b>√</b>

Policy Area	Policy	Policy requirement	1	2	3	4
	Policy S7, Part E	On-site Air Quality design solutions  Deliver on-site design solutions, to prevent or minimise increased exposure to existing air pollution and make provision to address local air quality issues especially where development is located in an <a href="Air Quality Focus Area">Air Quality Focus Area</a> .	✓	<b>√</b>	<b>√</b>	<b>√</b>
Flood Risk Policy S8	Policy S8, Part A	A Flood Risk Assessment (FRA) is required if: Site is located in <u>critical drainage area</u> and development proposes more than 100sqm increase in floorspace; Change of use to a more vulnerable class (e.g. commercial to residential) (see table 6.4); Highly Vulnerable development (including basement dwellings) in an area of High or Medium surface water flood risk; and/or More Vulnerable development (including dwellinghouses) located in an area of High surface water flood risk.	<b>√</b>	<b>*</b>	<b>✓</b>	•
	Policy S8, Parts B-E	FRA Requirements  If an FRA is required, it must fulfil all the requirements of Policy S8 Parts B-E.	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>√</b>
	Policy S8, Part F	Flood mitigation for highly vulnerable development Highly Vulnerable development, including basement dwellings, in 'High' surface water flood risk areas, and/or where there is potential for groundwater flooding below ground level or potential for groundwater flooding to occur at surface are required to incorporate appropriate flood proof construction methods.	✓	<b>✓</b>	<b>√</b>	<b>✓</b>
Integrated Water Management Policy S9	Policy S9, Part A	Follow Sustainable Drainage Principles  Demonstrate proposal considers how water will be managed to deliver sustainable drainage, water efficiency, water quality and biodiversity across the site and with links to wider than site level plans.	✓	<b>√</b>	<b>✓</b>	<b>✓</b>

Policy Area	Policy	Policy requirement	1	2	3	4
	Policy S9, Part B	Minimise surface water run-off with drainage hierarchy Demonstrate proposal ensures run-off is managed as close to source as possible in line with the London Plan drainage hierarchy: rainwater use as a resource (for example rainwater harvesting, blue roofs). rainwater infiltration to ground at or close to source. rainwater attenuation in green infrastructure features for gradual release (for example green roofs, rain gardens). rainwater discharge direct to a watercourse (unless not appropriate). controlled rainwater discharge to a surface water sewer or drain. controlled rainwater discharge to a combined sewer.	•		<b>√</b>	<b>√</b>
	Policy S9,	Impermeable Paving Confirm the proposal does not include impermeable paving.	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>
	Policy S9, Part D	Maximise multiple benefits of SUDS  Demonstrate the proposal considers drainage that considers: water use efficiency water quality enhanced biodiversity urban greening amenity recreation		<b>*</b>	<b>✓</b>	<b>✓</b>

Policy Area	Policy	Policy requirement	1	2	3	4
	Policy S9, Part E	Demonstrate how initial rainfall run-off from site is dealt with, run-off rates, volumes and maintenance plans.  Development must demonstrate appropriate SUDS have been implemented to ensure surface water run-off rates and volumes are predictable and that water is clean and safe.  Demonstrate initial run-off dealt with following a rainwater event.  Demonstrate how will SUDS be maintained.	<b>√</b>	<b>V</b>	<b>V</b>	<b>✓</b>
	Policy S9, Part I	Demonstrate reduction of existing run-off rates  Demonstrate how existing run-off levels are reduced as far as possible.		<b>√</b>		
	Policy S9, Part J	Integrate SUDS as central to SDCS incl. landscaping SUDs must be designed as central to the SDCS to maximise benefits where practical in line with the landscape strategy as required by policy G4.	✓	✓	✓	✓
	Policy S9, Part K	Minimise mains usage  Demonstrate how mains water use has been minimised through use of water efficient fittings, appliances and smart metering.	<b>√</b>	✓	✓	<b>✓</b>
	Policy S9, Part M	Mains Water Optional Requirement Achieved Building Regulations Optional Requirement for mains water consumption of 105 litres per person per day achieved (excluding allowance of 5 litres external consumption) required.	✓	<b>✓</b>	<b>✓</b>	<b>√</b>
Circular Economy Policy S10	Policy S10, Part A	Circular economy approach  Demonstrate a circular economy approach to building design has been adopted to keep products in use for as long as possible and minimise waste.	✓	<b>√</b>	<b>√</b>	<b>√</b>
	Policy S10, Part B	Building component re-useable/ recyclable/ enable deconstruction  Demonstrate buildings are made from components and materials that can be re-used or recycled; that building design enables ease of deconstruction; and, that materials resulting from demolition to be reused/recycled.	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>

Policy Area	Policy	Policy requirement	1	2	3	4
	Policy S10, Part C	Material derived from recycled content  Demonstrate 10% value of materials must derive from recycled and re-used content.	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>
	Policy S10, Part E Demonstrate proposal: Adopts a circular economy approach to keep materials in use for as long as possible. Employs strategies to minimise waste and avoid unnecessary demolition. Is built in layers to allow elements to be replaced overtime, or does design support modular system Is designed to be flexible and adaptable to changing requirements over lifetime. Enables ease of deconstruction, allowing for disassembly and reuse.		<b>✓</b>	✓ · · · · · · · · · · · · · · · · · · ·	✓ · · · · · · · · · · · · · · · · · · ·	✓ · · · · · · · · · · · · · · · · · · ·
	Policy S10, Part F	Maximises reuse and recycling of materials arising from demolition.  Minimise environmental impact of materials  Demonstrate development minimises environmental impact of materials through sustainable sourcing, low impact materials, recycled materials and local suppliers.	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
	Policy S10, Part G	Islington's Code of Practice for Construction Sites Confirm development minimises impact of construction on environment and complies with Islington's Code of Practice for Construction Sites.	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Green Infrastructure , Biodiversity and	Policy G4, Part A	Protect and enhance green infrastructure  Demonstrate development protects, enhances and contributes to the landscape, biodiversity value and growing conditions, including protecting and enhancing connectivity between habitats.	✓	<b>√</b>	<b>✓</b>	<b>-</b>

Policy Area	Policy	Policy requirement	1	2	3	4
Landscaping Policy G4 Where elements have been addressed under Policy S9 (SUDS) please cross reference/ signpost, rather than repeating	Policy G4, Part B	Protection of SINCs If site is located on or close to a SINC, harm must be avoided. If risk of harm is present apply the following mitigation hierarchy: mitigation hierarchy should be applied to minimise development impacts:  Avoid damaging the significant ecological features of the site;  Minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site;  Deliver off-site compensation of better biodiversity value. Refer to Local Plan paragraph 5.30 for further detail.				<b>✓</b>

Policy Area	Policy	Policy requirement	1	2	3	4
	Policy G4,	Landscape Design Strategy	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
	Part C	Proposal must include a landscape design strategy to consider relevant				
		aspects:				
		integrated approach to hard and soft landscaping design, prioritising soft				
		landscaping, including areas of unconstrained planting;				
		Consideration of existing and proposed vegetation of landscape or				
		environmental significance, and impact on biodiversity, drainage, air quality and cooling;				
		Achieving a functional, attractive and inclusive design;				
		Maximising biodiversity benefits and ecological connectivity, protection and				
		enhancement of existing biodiversity, incorporation of new areas of				
		biodiversity, including green roofs and vertical greening. Secure a net gain in				
		biodiversity value, with a priority for on-site;				
		Incorporation of SUDS into landscape design using an integrated approach				
		maximising biodiversity, water use efficiency, amenity and recreation;				
		Incorporation of suitable wildlife habitats, including micro-habitats;				
		Consideration of the potential impact on biodiversity of lighting, noise or				
		shading, and adoption of a lighting scheme design that minimises impacts on				
		biodiversity;				
		Provision of a robust planting design that can sustain itself without intensive				
		maintenance and/or intervention;				
		Incorporation of maintenance arrangements in place from the outset of the				
		development, including a specific management plan secured by planning				
		condition where necessary; and				
		Integration of food growing opportunities, where feasible and practical.				

Policy Area	Policy	Policy requirement	1	2	3	4
	Policy G4, Part D	Protect and enhance biodiversity  Demonstrate development protects biodiversity or create habitats.  All development that involves external works on buildings to the first storey and above, or where trees are located on site, should include bird and bat bricks or boxes. See the "Bird and Bat Bricks and Boxes" policy guidance in the Climate Action SPD for more details.  Refurbishments and extensions must reduce impact on existing species.	<b>✓</b>	<b>✓</b>	<b>V</b>	<b>√</b>
	Policy G4, Part E	Biodiversity benefits and ecological connectivity  Demonstrate biodiversity benefits and ecological connectivity are maximised through planting design, ecological landscaping in accordance with Islington's Biodiversity Action Plan.	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>
	Policy G4, Part F	Ecological Survey If the application involves an extension of more than 50 sqm (net) and the site is located within 50m of a SINC and/or where development will impact a protected species, an ecological survey must be submitted. See Table 5 of the Climate Action SPD for a detailed trigger list indicating when, and what type of survey is required.	<b>✓</b>	<b>✓</b>	<b>V</b>	<b>✓</b>
	Policy G4, Part G	Minimise impact on existing trees and planting Demonstrate impact on existing trees, hedges, shrubs and other significant vegetation has been minimised. Provide sufficient space for the crowns and root systems of existing and proposed trees and their future growth. Existing trees must be protected during development. Removal of trees with TPOs or in conservation area will usually result in refusal.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

Policy Area	Policy	Policy requirement	1	2	3	4
	Policy G4, Part H	Minimise loss of or damage to trees Loss or damage will only be permitted where it is demonstrably unavoidable in order to meet other relevant Local Plan policy requirements agreed with Council.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Green Roofs Policy G5	Policy G5, Part A	Maximise green roofs  Demonstrate all available roof space incorporates biodiversity-based extensive green roofs. Developments involving extensions must seek to retrofit on existing roof areas where feasible.	<b>~</b>	<b>✓</b>	<b>√</b>	<b>√</b>
	Policy G5, Part B	Features of green roofs requires Consider at earliest stage possible, maximise benefits for biodiversity, sustainable drainage and cooling; promote ecological diversity including planting based on wildflowers and a maximum of 25% sedum planting; have a varied substrate depth of average 80-150mm, unless it can be demonstrated that this is not reasonably possible; and be easily monitored, allowing for an ongoing effective process to inspect and monitor the quality of the green roof.	<b>✓</b>	<b>✓</b>	<b>✓</b>	
	Policy G5, Part C	, , ,	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>√</b>

Policy Area	Policy	Policy requirement	1	2	3	4
	Policy G5, Part G	Applies to developments creating new residential or commercial units:  Green walls  Demonstrate vertical greening has been maximised so that it: maximises biodiversity, SUDS and cooling benefits; avoids mains water demand or pumped irrigation; promotes ecological diversity, including microhabitats for birds and bats as per the Islington Biodiversity Action Plan; Ensures conditions suitable for selected species that require minimal maintenance; Implements planting rooted at ground-level and roof level where practical;		<b>V</b>	•	<b>√</b>
Biodiversity Net Gain		Please submit Islington's Biodiversity Net Gain (BNG) form to establish whether the site must deliver BNG.  All of Islington's biodiversity policies (G4 and G5) must be delivered in addition to BNG.	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>

#### Appendix 1: Energy Hierarchy Table for minor residential applications creating new units

This table requires modelling outputs for both Part L 2013 **and** 2021 baselines. Policy S4, Part D describes a minimum on-site carbon emissions reduction in regulated emissions of 19% beyond Part L 2013.

Islington has undertaken an exercise to inform new policy thresholds for on-site carbon emissions to reflect 2021 updates to Part L Building Regulations. Draft thresholds are being consulted upon within the draft Climate Action SPD. Until the SPD is adopted, policy compliance against both Part L 2013 (using SAP10) and 2021 (using SAP10.2) is required.

Table 1 Template for energy modelling using SAP10, Part L 2013

Table 2, Template for energy modelling using SAP10.2, Part L 2021

	Total tCO2e per annum	Stage reduction, tCO2	Stage reduction, %
Baseline			
Be Lean			
Be Clean			
Be Green			
TOTAL			
Target			
Offset payment (£1,000 per new flat or £1,500 per new house)			

	Total tCO2e per annum	Stage reduction, tCO2	Stage reduction, %
Baseline			
Be Lean			
Be Clean			
Be Green			
TOTAL			
Target			
Offset payment (£1,000 per new flat or £1,500 per new house)			