

## Land Use and Ecology

The following table summarises the credits awarded for this section.

The Code Credit Reference	Number of Credits Achieved	Number of Credits Available
LE 1 - Re use of land	1	1
LE 2 - Contaminated land	0	1
LE 3 - Ecological value of land and protection of ecological features	1	1
LE 4 - Mitigating ecological impact	2	2
LE 5 - Enhancing site ecology	0	3
LE 6 - Long term impact on biodiversity	0	2
<b>TOTAL CREDITS</b>	<b>4</b>	<b>10</b>

**LE1 Re use of land****1 of 1 credits achieved****Credit criteria**

One credit where evidence provided demonstrates that the majority of the footprint of the proposed development falls within the boundary of previously developed land.

**Credit validation**

Development on previously developed site

**Credit references**

Assumption based on drawings provided by Ramsden and Partners.

**Further information/action**

At least 75% of the proposed development's footprint is on an area of land which has previously been developed for use by industrial, commercial or domestic purposes in the last 50 years.

It is required to provide details of previous land use e.g. maps, reports and site photographs.

**LE2 Contaminated land****0 of 1 credits achieved****Credit criteria**

One credit where evidence provided demonstrates that the land used for the new development has, prior to development, been defined as contaminated, and where adequate remedial steps have been taken to decontaminate the site prior to construction.

**Credit validation**

The site was considered not to be contaminated prior to development.

**Credit references**

Assumption by Lugus Engineering.

**Further information/action**

Should site have been contaminated prior to its development, and adequate remedial steps have been taken, evidence must be provided to award credit.

Evidence should contain:

- A report defining the site as contaminated
- Contract documents or letters of appointment detailing the requirement/commitment to implement the necessary remedial steps identified in the report

<b>LE3</b>	<b>Ecological value of land and protection of ecological features</b>	<b>1 of 1 credits achieved</b>
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**Credit criteria**

One credit where evidence provided demonstrates that the construction zone is defined as land of low ecological value and all existing features of ecological value will be fully protected from damage during site preparation and construction works.

**Credit validation**

Land is of low ecological value

**Credit references**

Assumption based on information obtained from Camden Council Website.

**Further information/action**

In order to award the credit it is required that a suitably qualified Ecological Consultant identifies the land as being of low ecological value within an ecological assessment report, based on a site survey. A copy of the ecologist's report must be provided, along with details of the appointed ecologist's professional status.

<b>LE4</b>	<b>Mitigating ecological impact</b>	<b>2 of 2 credits achieved</b>
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**Credit criteria**

One credit where evidence provided demonstrates that the change in ecological value of the site, as a result of development, is less than zero and equal to, or greater than, minus nine species, i.e. a small negative change.

Two credits where evidence provided demonstrates that there is no negative change in the ecological value of the site as a result of development, i.e. equal to, or greater than, zero species.

**Credit validation**

No negative change in ecological value to be expected; the new development will increase the existing number of species on site with at least three more.

**Credit references**

Confirmation given by Ramsden and Partners.

**Further information/action**

Evidence required to award credit:

- Details of vegetation plot types and their areas existing on site prior development (drawings, maps, plans, photographs, etc.)
- Details of vegetation plot types and their areas existing on site after development



**LE5 Enhancing site ecology****0 of 3 credits achieved****Credit criteria**

One credit is available where evidence provided demonstrates that the design team (or client) has appointed a professional to advice on enhancing and protecting the ecological value of the site; and implemented the recommendations for general enhancement of site ecology.

Two credits are available where evidence provided demonstrates a positive increase in the ecological value of the site of up to (but not including) 6 species.

Three credits where evidence provided demonstrates a positive increase in the ecological value of the site of 6 or more species.

**Credit validation**

A qualified ecologist will not be commissioned for this project.

**Credit references**

Confirmation given by Ramsden and Partners.

**Further information/action**

To award the credits it is required that

- A copy of the Ecologist Report is provided
- Written confirmation of the Ecologists professional status and how he complies with the qualification requirements
- Confirmation from design team/client that recommendations for enhancement will be implemented
- Confirmation from Ecologist on changes in ecological value of the site

Note: A suitably qualified Ecologist must be a member of one of the following organisations:

- AWTC [www.awtc.co.uk](http://www.awtc.co.uk)
- CIWEM Chartered Institute of Water and Environmental Management, 15 John Street, London, WC1N 2EB; t 020 78313110 [www.cowem.org](http://www.cowem.org)
- IEEM Institute of Ecology and Environmental Management, 45 Southgate Street, Winchester, Hampshire SO 23 9EH; t 01962 868626 [www.ieem.org.uk](http://www.ieem.org.uk)
- IEMA Institute of Environmental Management and Assessment – St. Nicolas House, 70 Newport, Lincoln, LN1 3DP; t 01522 540069 [www.iema.net](http://www.iema.net)
- LI Landscape Institute, 33 Great Portland Street, London, W1W 8QG; t 020 72994500, [www.landscapeinstitute.org](http://www.landscapeinstitute.org)

**LE6 Long term impact on biodiversity****0 of 2 credits achieved****Credit criteria**

One credit where evidence provided demonstrates that the client has committed to implementing some measures to minimise any negative long term impact on biodiversity.

Two credits where evidence provided demonstrates that the client has committed to implementing significant measures to minimise any negative long term impact on biodiversity.

**Credit validation**

A qualified ecologist will not be commissioned for this project.

**Credit references**

Confirmation given by Ramsden and Partners.

**Further information/action**

An Ecologist as per former credit must be appointed and confirm that

All relevant UK and EU legislation relating to protection and enhancement of ecology are complied with  
An appropriate management plan is produced covering at least 5 years after project completion; this should include

- Management of any protected features on site
- Management of any new, existing or enhanced habitats
- A reference to the current or future site level Biodiversity Action Plan

Additional requirements are, of which four have to be complied with in order to award second credit:

- A "Biodiversity Champion" has been nominated
- The relevant site work-force has been trained on how to protect site ecology during the project
- Record and monitor actions taken to protect biodiversity throughout key stages of construction
- The client requires that a new ecologically valuable habitat, appropriate to the local area, be created
- The client requires the contractor to programme site works to minimise disturbance on wildlife
- The client requires actions to be taken to protect/enhance biodiversity

## Pollution

The following table summarises the credits awarded for this section.

The Code Credit Reference	Number of Credits Achieved	Number of Credits Available
Pol 1 - Refrigerant GWP - building services	0	1
Pol 2 - Preventing refrigerant leaks	1	2
Pol 4 - NOx emissions from heating source	1	3
Pol 5 - Flood risk	3	3
Pol 6 - Minimising water course pollution	1	1
Pol 7 - Reduction of night time light pollution	1	1
Pol 8 - Noise Attenuation	1	1
<b>TOTAL CREDITS</b>	<b>8</b>	<b>12</b>

**Pol 1 Refrigerant GWP – building services****0 of 1 credits achieved****Credit criteria**

One credit where evidence provided demonstrates the use of refrigerants with a global warming potential (GWP) of less than 5 or where there are no refrigerants specified for use in building services.

**Credit validation**

It was considered that refrigerants will not comply with the requirements for this credit.

**Credit references**

Assumption by Lugus Engineering.

**Further Information/action**

The use of a refrigerant with a GWP of less than 5, e.g. Ammonia or R290 would be required to award credit.



**Pol 2 Preventing refrigerant leaks****1 of 2 credits achieved****Credit criteria**

One credit where evidence provided demonstrates that refrigerant leaks can be detected or where there are no refrigerants specified for the development.

One credit where evidence provided demonstrates that the provision of automatic refrigerant pump down is made to a heat exchanger (or dedicated storage tanks) with isolation valves. Or where there are no refrigerants specified for the development.

**Credit validation**

Refrigerant leak detection system will be specified if any refrigerant system is specified for the development.

**Credit references**

Confirmation given by Ramsden and Partners.

**Further Information/action**

To award the first credit, following requirements have to be addressed:

- EITHER systems using refrigerants are contained in a moderately air tight enclosure (or mechanical ventilated plant room) and a refrigerant leak detection system is specified covering high risk parts of the plant OR
- An automatic permanent refrigerant leak detection system is specified, which is not based on the principle of detecting or measuring the concentration of refrigerant in air OR
- Where there are no refrigerants specified for use in building services

To award the second credit, following requirements have to be addressed:

- The automatic shutdown and pump down of refrigerant occurs on the detection of high concentrations of refrigerant in the plant room
- The alarm threshold is set to a maximum of 2000 ppm (0.2%), or lower.



**Pol 4 NO<sub>x</sub> emissions from heating source****1 of 3 credits achieved****Credit criteria**

One credit where evidence provided demonstrates that the dry NO<sub>x</sub> emissions from delivered space heating energy are  $\leq 100$  mg/kWh (at 0% excess O<sub>2</sub>).

Two credits where evidence provided demonstrates that the dry NO<sub>x</sub> emissions from delivered space heating energy are  $\leq 70$  mg/kWh (at 0% excess O<sub>2</sub>).

Three credits where evidence provided demonstrates that the dry NO<sub>x</sub> emissions from delivered space heating energy are  $\leq 40$  mg/kWh (at 0% excess O<sub>2</sub>).

**Credit validation**

Space heating system to be specified will not have dry NO<sub>x</sub> emissions higher than 100mg/kWh (at 0% excess O<sub>2</sub>).

**Credit references**

Assumption by Lugus Engineering

**Further information/action**

The following demonstrates compliance:

- Where manufacturer's details demonstrate that the plant installed to meet the building's space heating demand has dry NO<sub>x</sub> emission levels as defined in the Credit Criteria (above). The emissions should be estimated under normal operating conditions (not standby).

**Pol 5 Flood risk****3 of 3 credits achieved****Credit criteria**

Two credits where evidence provided demonstrates that the assessed development is located in a zone defined as having a low annual probability of flooding.

OR

One credit where evidence provided demonstrates that the assessed development is located in a zone defined as having a medium annual probability of flooding and the ground level of the building, car parking and access is above the design flood level for the site's location.

One further credit where evidence provided demonstrates that surface water run-off attenuation measures are specified to minimise the risk of localised flooding, resulting from a loss of flood storage on site due to development

**Credit validation**

Development in area of low annual probability of flooding.

**Credit references**

Assumption based on information obtained from Camden Council Website.

**Further Information/action**

The provision of the following required to assess credit status:

- Annual probability of flooding in the area of the site; this information must state how this information was sourced i.e. from the Local Authority, EA or SEPA, flood maps etc.
- Confirmation if ground level of building is at least 600 mm above flood level if site is of medium annual flood risk

One additional credit;

- Where attenuation measures are specified to ensure that the peak rate of run-off from the site to the watercourses (natural or municipal) is no greater for the developed site than it was for the pre-development site. This should comply with the Interim Code of Practice for Sustainable Drainage systems (SUDS) (CIRIA, 2004), or for at least a 1 year and 100 year return period event with a 6 hour duration.
- The capacity of the attenuation measures must include an allowance for climate change; this should be made in accordance with current best practice

**Pol 6 Minimising water course pollution****1 of 1 credits achieved****Credit criteria**

One credit where evidence provided demonstrates that effective on site treatment such as Sustainable Drainage Systems (SUDs) or oil separators have been specified in areas that are or could be a source of watercourse pollution.

**Credit validation**

Sustainable Drainage Systems (SUDS) will be specified to reduce water run-off.

**Credit references**

Confirmation given by Ramsden and Partners.

**Further information/action**

The following demonstrates compliance:

1. Specification of Sustainable Drainage Systems (SUDs) or source control systems such as permeable surfaces or infiltration trenches where run-off drains are in areas with a relatively low risk source of watercourse pollution.
2. Specification of oil/petrol separators (or equivalent system) in surface water drainage systems, where there is a high risk of contamination or spillage of substances such as petrol and oil (see compliance notes for a list of areas).
3. All water pollution prevention systems have been designed and detailed in accordance with the recommendations of Pollution Prevention Guideline 3 and where applicable the SUDS manual.
4. A comprehensive and up-to-date drainage plan of the site will be made available for the building/site occupiers.



**Pol 7    Reduction of night time light pollution****1 of 1 credits achieved****Credit criteria**

One credit where evidence provided demonstrates that the external lighting design is in compliance with the guidance in the Institution of Lighting Engineers (ILE) Guidance notes for the reduction of obtrusive light, 2005.

**Credit validation**

Lighting design in accordance with requirements

**Credit references**

Confirmation given by Ramsden and Partners.

**Further information/action**

The following demonstrates compliance:

1. The external lighting strategy has been designed in compliance with Table 1 (and its accompanying notes) of the ILE Guidance notes for the reduction of obtrusive light, 2005, (see additional information below - Buildings located in Scotland must also refer to the Compliance Notes below for additional requirements).
2. All external lighting (except for safety and security lighting) can be automatically switched off between 2300hrs and 0700hrs. This can be achieved by providing a timer for all external lighting set to the appropriate hours.
3. If safety or security lighting is provided and will be used between 2300hrs and 0700hrs, this part of the lighting system complies with the lower levels of lighting recommended during these hours in Table 1 of the ILE's Guidance notes, for example by using an automatic switch to reduce the lighting levels at 2300 or earlier.
4. Illuminated advertisements, where specified, must be designed in compliance with ILE Technical Report 5 – *The Brightness of Illuminated Advertisements*.

**Pol 8 Noise Attenuation****1 of 1 credits achieved****Credit criteria**

One credit where evidence provided demonstrates that new sources of noise from the development do not give rise to the likelihood of complaints from existing noise sensitive premises and amenity or wildlife areas that are within the locality of the site.

**Credit validation**

A qualified acoustic professional will be commissioned.

**Credit references**

Confirmation given by Ramsden and Partners.

**Further information/action**

The following demonstrates compliance:

1. There are, or will be, existing *noise-sensitive areas or buildings* within 800m radius of the assessed development. Where there are or will be no *noise-sensitive areas or buildings* in the locality of the assessed development, the credit can be awarded by default.
2. A noise impact assessment in compliance with BS 4142:1997 has been carried out and the following noise levels measured/determined:
  - Existing background noise levels at the nearest or most exposed noise-sensitive development to the proposed development; or at a location where background conditions can be argued to be similar.
  - The rating noise level resulting from the proposed noise-source. This can be based upon reference to similar installations or sites, or determined by calculation. The noise impact assessment must be carried out by a suitably qualified acoustic consultant holding a recognised acoustic qualification and membership of an appropriate professional body. The primary professional body for acoustics in the UK is the Institute of Acoustics.
3. Where the rating level of the noise source(s) from the site/building is equivalent to or less than the background noise level, the credit can be awarded.
4. Where the rating level of the noise source(s) from the site/building is greater than the background noise level, measures have been installed to attenuate the noise at its source to a level where it will comply with requirement 3.