


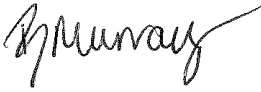
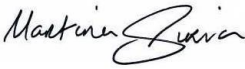
TFL_PSF_9131 SITE INVESTIGATIONS: SMALL SITES INITIATIVE WAPPING WHARF, TOWER HAMLETS, E1W 3NJ

Ecological Assessment

OCTOBER 2018

Wapping Wharf, Tower Hamlets, E1W 3NJ

Ecological Assessment

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1 INTRODUCTION

1.1 Background

Arcadis Consulting (UK) Limited (Arcadis) was commissioned by Transport for London (TfL) to undertake an ecological assessment to support the feasibility for potential development at the following locations (collectively referred to as Wapping Wharf):

- Land at 125-129 Wapping High Street, St Katherine's & Wapping, E1W 3NG; hereafter referred to as "Site A";
- Land at 13 to 15 Cinnamon Street, St Katherine's & Wapping, E1W 3NJ; hereafter referred to as "Site B"; and
- Land at 14 to 16 Clegg Street, St Katherine's & Wapping, E1W 3NJ; hereafter referred to as "Site C".

TfL is aiming to divest a number of small sites to enable prospective regeneration. The objective of the Small Sites Initiative is to provide robust and pragmatic advice that sensibly de-risks each of the sites such that unreasonable "abnormal" development costs are not included by developers.

The objective of this report is to identify potential ecological development constraints due to current ecological conditions on the Site. The constraints have been assessed based on the findings of a desk study and an ecological constraints survey. The report outlines the ecological constraints associated with the Site A, B and C with regards to biodiversity legislation and policy and provides advice on mitigation and enhancement opportunities, including requirement for any further assessment or licensing, if necessary. Site A, B and C are referred to as "the Sites" where all observations relate to all Sites.

1.2 Site Locations & Setting

Site A is located between Wapping High Street to the south and Cinnamon Street to the north, with a small section on Clave Street. The Site is centred at grid reference TQ 35007 80222 within the postcode of E1W 3NG. Site A is 0.17 hectares (ha) in area and is currently comprised of a partly demolished and unoccupied 19th Century warehouse and a large ventilation shaft and two fire escapes from Wapping Station. Semi-natural habitats within the site were largely restricted to bare ground and dense introduced shrub.

Site B is located on Cinnamon Street with a side return onto Clegg Street in the west. The site is centred at grid reference TQ 34983 80255 within the postcode of E1W 3NJ. Site B is 0.05 ha in area and is entirely occupied by a disused warehouse building.

Site C (located opposite Site B, across Clegg Street) is located on the corner of Cinnamon Street and Clegg Street. The Site is centred at grid reference TQ 35001 80272 within the postcode of E1W 3NJ. Site C is 0.03ha in area and is entirely occupied by a disused single storey warehouse which is abutted by a two-storey block to the northern end. A dilapidated party wall located between the eastern boundary of Site C and the houses on Cinnamon Street supported ornamental planting.

All three sites are located within the London Borough of Tower Hamlets. The immediate surrounding residential area is characterised by low rise housing.

The site boundaries for Site A, B and C for assessment are presented in Image 1 and in Figure 1.



Image 1: Ecological Walkover Survey Boundaries

© 2018 Google Image © 2018 Digital Globe

2 METHODOLOGY

2.1 Desk Study

Desk-based ecological information was collated from multiple sources.

The Multi-Agency Geographic Information for the Countryside (MAGIC) website¹ was used to search for any statutory or non-statutory designated sites of nature conservation importance within a specific radius of the boundary of Site A, B and C, (radius based upon maximum zone of influence potential) as follows:

- Special Protection Areas (SPAs) or Ramsar Sites designated for their bird interests (2km radius);
- Special Areas of Conservation (SACs) (2km radius);
- Sites of Special Scientific Interest (SSSIs) and all other statutory designated sites (1km radius);
- National Nature Reserves (NNR) (1km radius);
- Local Nature Reserves (LNR) (1km radius);
- Woodlands registered on the Ancient Woodland Inventory (AWI) (1km radius);
- Records of protected or otherwise notable species of conservation concern were obtained from National Biodiversity Network (NBN) Atlas² (1km radius); and
- Black redstart records were also obtained from blackredstarts.org³.

The following documents were reviewed for information relevant to the site:

- Section 41 of the Natural Environment and Rural Communities ((NERC Act) 2006) Species of Principle Importance in England⁴;
- London Biodiversity Action Plan⁵;
- Tower Hamlets Local Biodiversity Action Plan⁶; and
- The London Invasive Species Initiative (LISI) ⁷.

In addition, the Local Plan for Tower Hamlets Council⁸ and Southwark Council⁹ was reviewed for citations of any non-statutory designated sites located within a 1km radius of Site A, B and C, referred to as Sites of Importance for Nature Conservation (SINCs). SINC citation information was not publicly available from the Southwark Council website.

SINCs fall into three sub designations:

- Sites of Metropolitan Importance for Nature Conservation (SMINCs);
- Sites of Borough Importance for Nature Conservation (SBINCs) Grades I and II; and
- Sites of Local Importance for Nature Conservation (SLINCs).

¹ MAGIC (2002). MAGIC Map Search. [online] Available at <http://magic.defra.gov.uk> [Accessed August 2018]

² National Biodiversity Network <https://nbn.org.uk/> [Accessed August 2018]

³ <https://www.blackredstarts.org.uk/pages/london.html> [Accessed August 2018].

⁴ NERC Act (2006) Section 41 Species <http://www.nhm.ac.uk/our-science/data/uk-species/checklists/NHMSYS0020515439/index.html>

⁵ London BAP (Reviewed 2007) <http://www.gigl.org.uk/london-bap-priority-species/> [Accessed August 2018]

⁶ Tower Hamlets Local Biodiversity Action Plan 2014-2019. Tower Habitats, Tower Hamlets Council.

⁷ London Invasive Species Initiative list. [online]. Available at: <http://www.londonisi.org.uk/> [Accessed August 2018].

⁸ Tower Hamlets Interactive Policies Map. Available at: <http://towerhamlets.maps.arcgis.com/apps/webappviewer/index.html?id=eb310440ff6d4bb99b636141aec1b061> [Accessed August 2018]

⁹ Southwark Council Interactive Policies Map. [online] Available at <https://geo.southwark.gov.uk/connect/analyst/mobile/#/main?mapcfg=Southwark%20Adopted%20Planning%20Policies%20Map> [Accessed August 2018]

Waterbodies located within 250m of Site A, B and C identified from OS mapping were assessed with regards to their connectivity to the sites and their potential suitability for supporting a population of breeding great crested newts 'GCN' (*Triturus cristatus*).

2.2 Field Survey

An ecological constraints survey of Sites A, B and C was carried out by Rebecca Beale on 30 August 2018 (MCIEEM). Habitats were classified according to their JNCC Phase 1 habitat categories (JNCC 2010)¹⁰ and plants named after Stace (1997)¹¹. Survey Target Notes are presented in Figure 2 (at the end of the report).

2.3 Limitations and Expectations

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This report has been compiled from a number of sources, which Arcadis believes to be trustworthy. However, Arcadis is unable to guarantee the accuracy of information provided by others. The report is based on information available at the time. Consequently, there is a potential for further information to become available, which may change this report's conclusion and for which Arcadis cannot be responsible.

The ecological constraints survey was confined to an external inspection of the buildings present within Site A, B and C. Internal inspection was not deemed safe nor necessary to assess potential to support protected / notable species.

The desk study review did not include local environmental records from Greenspace Information for Greater London (GiGL). It is possible that records of protected or otherwise notable species may exist. While non-statutory designated site information was obtained from the Local Plan for Tower Hamlets Council and Southwark Council. However, SINC citation information was not publicly available from the Southwark Council website. Information from NBN Atlas was reviewed. It is however unlikely that additional records of notable or protected species would change the assessment within the report as ecological constraints have been based upon habitat potential to support such species.

¹⁰ Joint Nature Conservation Committee (2010), *Handbook for Phase 1 habitat survey - a technique for environmental audit*

¹¹ Stace, C. (1997). *New Flora of the British Isles Second Edition*. Cambridge University Press

3 SURVEY RESULTS

3.1 Reporting Outline

The results of the desk study and ecological constraints survey are described below, with sites or features of particular nature conservation interest detailed as appropriate.

Supporting information to be read in conjunction with the results and subsequent discussion are as follows:

- Figure 1: Site Locations;
- Figure 2: Target Notes Map; and
- Appendix A: Target Notes Recorded on Sites A, B and C.

Only information potentially relevant to the development of the Site A, B and C are included within the body of this report, other information is appended as follows:

- Appendix B: Desk Study Results;
- Appendix C: Bat Habitat Suitability Assessment and London Bat Population Status; and
- Appendix D: Selected Legislation and Policy.

3.2 Desk Study Results

Only desk study results that are potentially relevant to Site A, B and C are presented within the report. Detailed status and protections conferred by the relevant designations below are presented in Appendix B. The relevant information is summarised below.

- There is negligible potential for significant impacts to any statutory or non-statutory designated sites from development within the Sites;
- With the exception of bird species, there were no protected species that the Sites had the potential to support held on NBN located within 1km;
- There were no non-native invasive plant species records listed on Schedule 9 of the Wildlife and Countryside Act (as amended) 1981¹² held on NBN located within 1km of the Sites; and
- A review of OS mapping did identify several waterbodies (e.g. the River Thames, Shadwell Basin and Wapping Canals) located within 250m of the sites. These waterbodies were deemed either unsuitable for use by breeding great crested newts and / or lacked connectivity to the Sites.

3.3 Sites Overview

Site A was comprised of a partly demolished and unoccupied 19th Century warehouse and a large ventilation shaft and two fire escapes from Wapping Station. Semi-natural habitats within the site were largely restricted to bare ground and dense introduced scrub. Sites B and C were entirely occupied by buildings, these being a disused corner warehouse building and a disused single-storey warehouse which was abutted by a two-storey block.

3.4 Habitats

Phase 1 habitat categories and descriptions of these habitats are presented below:

- **Buildings:** The majority of Site A was occupied by a partly demolished and unoccupied 19th Century warehouse, a large ventilation shaft (associated with the underground) and two fire escapes from Wapping Station. The entirety of Site B was occupied by a disused corner warehouse building, between one and two storeys high. The entirety of Site C was occupied by a disused single-storey warehouse which was abutted by a two-storey block.
- **Dense Introduced shrub:** Dense mature Butterfly-bush (*Buddleja davidii*) was recorded in the central and parts of the northern section of Site A. Occasional young stands of Butterfly-bush were

¹² Anon (1981). Wildlife and Countryside Act. HMSO, London.

also observed on a dilapidated party wall located between the eastern boundary of Site C and the houses on Cinnamon Street. This species is listed on the LISI list. Other species, occasionally present in the central and parts of the northern section of Site A included: Red Valerian (*Centranthus ruber*), Pliant Lettuce (*Lactuca viminea*) and Hawk's-beard species (*Crepis* sp.).

- **Ornamental planting:** Grape-vine (*Vitis vinifera*) was observed growing over the south-east wall of Site C and on a trellis secured to a dilapidated party wall between Site C and the adjacent houses on Cinnamon Street.
- **Bare ground:** The central and parts of the northern section of Site A had a concrete or gravel substrate.

3.5 Protected and Notable Species

The following protected or notable species have the potential to be present on the Site:

- **Nesting birds (general):** There is potential for nesting birds to utilise the dense introduced shrub within Site A, the ornamental planting on the party wall located between the eastern boundary of Site C and the houses on Cinnamon Street and the numerous features identified on the buildings located within Site A, B and C (see Figure 2 and survey Target Notes presented in Appendix A for further details). The features identified on the buildings located within the Sites are particularly suitable for species associated with nesting in buildings / structures including, feral pigeon (*Columba livia*), house sparrow (*Passer domesticus*), starling (*Sturnus vulgaris*) both species are London and UK BAP Priority species) and blue tit (*Cyanistes caeruleus*). The likelihood of birds actively nesting within the Sites during the breeding bird season is assessed as High.
- **Nesting black redstarts:** Black redstarts are known to favour industrialised, built-up or derelict sites for breeding that are located in proximity to open water. There are 177 records of black redstarts from within 5km of the site on NBN Atlas. The London population of black redstarts is concentrated along the River Thames and the London Boroughs of Enfield, Tower Hamlets, Newham and Greenwich are believed to support the greatest number of breeding pairs¹³. The buildings within the Sites present a variety of holes at different heights within proximity to the Thames (approx. 100m). The exposed sections of the roof structure of the warehouse in Site A and B and the large ventilation shaft connecting to Wapping Station in Site A are potentially suitable for use by nesting black redstarts (*Phoenicurus ochrurus*). All nesting bird species are protected under the WCA (as amended) 1981, however this species is afforded further protection under Schedule 1 of the Act and is a London BAP Priority species. The likelihood of black redstarts actively nesting within the Sites during the breeding bird season is assessed as Medium.
- **Bats:** The buildings located within the Sites support numerous features potentially suitable for use by roosting bats (see Figure 2 and survey Target Notes presented in Appendix A for further details). However, there is very limited potential for bats to forage within or around the Sites due to their small size and lack of semi-natural habitat (other than the Thames). Furthermore, the sites are well lit from street lighting, which reduces their suitability for use by bats. Foraging and commuting habitat adjoining the Sites and within the wider landscape, includes parks and open spaces such as Wapping Rose Gardens and waterbodies including the River Thames and Shadwell Basin and Wapping Canals. The likelihood of the Sites to support roosting foraging and commuting bats was assessed as Low, owing to the presence of limited foraging and commuting habitat, noise and artificial lighting within the sites and surrounding landscape.
- No notable plant or fungi species were recorded within the Sites during the survey and it is considered unlikely that they are present.
- No signs of fox (*Vulpes vulpes*) or badger (*Meles meles*) were recorded within Sites during the survey, badger would be highly unlikely to be using the Sites although fox may be.
- Habitats within the Sites are unsuitable or of negligible value for notable terrestrial invertebrates, amphibians and reptiles.

¹³ <https://www.blackredstarts.org.uk/pages/london.html> [Accessed August 2018].

3.6 Invasive Species

Butterfly-bush, which is listed on the LISI list was identified within Site A and C (see Section 3.4 above for further details).

4 ECOLOGICAL CONSTRAINTS, AVOIDANCE, MITIGATION AND ENHANCEMENT RECOMMENDATIONS

The potential ecological constraints and associated further works including mitigation is briefly presented below. Further detail is presented in Table 2 in section 6.

4.1 Habitats / Invasive Species

The habitats on Site A, B and C were assessed as having limited green infrastructure and not protected or notable floral species.

There will be some ecological benefit from the removal of Butterfly-bush, a non-native, invasive species listed on the LISI which was recorded in Sites A and C.

An ecologist and arboriculturist should contribute to the evolution of any development and landscaping design for the Sites to minimise biodiversity loss and to advise upon the provision of appropriate green infrastructure.

4.2 Protected and Notable Species

The following protected species have the potential to be impacted by development within the Sites:

- **Nesting birds (general):** The buildings and vegetation within the Sites supported features suitable for use by nesting birds, vegetation within Sites A and Site C has the potential to support nesting birds. The clearance of vegetation and removal of buildings should be avoided during the nesting bird season (March to August inclusive). Should vegetation clearance and removal of buildings be required within this period, a check for active nests should be undertaken by a suitably experienced ecologist prior (within 48 hours) to works commencing that may affect the feature. If an active nest (including a nest in the process of being constructed) is found, a suitable stand-off area would need to be maintained until the young have fledged. The extent of this area would be determined by an ecologist and demarcated on site. A toolbox talk should be given by an ecologist to contractors / site staff to ensure the nest is not disturbed.
- **Nesting black redstarts:** The Sites have been identified as suitable for use by nesting black redstarts. As such demolition or construction works should be avoided during the black redstart nesting season (beginning of April to end of July inclusive). Should demolition and construction be proposed during this period, targeted black redstart surveys would be required prior to and during the duration of any works to ensure that nesting pairs of black redstart (that may be present) are not disturbed. These surveys should be undertaken by a suitably experienced surveyor, between mid-April and the end of June once every fortnight, a survey protocol based upon the recommendations of the Rare Breeding Bird Panel¹⁴. If an active nest (including a nest in the process of being constructed) is found, all construction works would be required to cease immediately within the vicinity of the nest. A protective buffer zone would be established surrounding the nest, where any works that could disturb the nest or the birds associated with the nest would not be permitted. The extent of the buffer would be location-specific and dependent on the proximity of the nest to the works area; however, it is likely that an exclusion buffer of 30 metres would be adequate. Natural England would be contacted for advice to ensure that birds, the nest and the dependent young, are not disturbed in accordance with the WCA (as amended) 1981. Once an active nest is identified, monitoring would continue during the breeding period to validate the suitability of the protective buffer and therefore ensure the nest and the birds associated with it are not disturbed. Once the monitoring confirms that breeding has finished and that the nest is no longer in use, the protective buffer would be removed, and construction works allowed to recommence.
- **Roosting Bats:** The value of the buildings within the Sites in regard to their likelihood to support roosting bats was assessed as Low. Due to health and safety concerns (particularly at Site A) and the nature of the buildings (numerous high and small crevices), internal inspections, to search for

¹⁴ https://www.rbbp.org.uk/downloads/Gilbert_et_al_PDFs/Black%20redstart%20Gilbert%20et%20al.pdf [accessed September 2018]

signs of bats, are not recommended. In accordance with Bat Conservation Trust good practice guidelines (Collins, 2016)¹⁵ a targeted bat survey, comprised of a single dusk emergence or dawn re-entry survey is recommended at each of the buildings in Site A, B and C. If the targeted bat surveys confirm the presence of a roost, it is likely that a European Protected Species (EPS) mitigation licence would be required for the development to proceed. An overview of the buildings on Site A, B and C, their potential suitability to support roosting bats and further survey requirements is presented in Table 1.

Table 1. Assessment of Buildings in Site A, B and C Regarding Their Suitability to Support Roosting Bats and Further Survey Work Requirements

Site	Potential to Support Roosting Bats*	Number of Dusk Emergence or Dawn Re-entry Surveys Required*	Number of Surveyors Required Per Survey
A	Low	1	3
B	Low	1	3
C	Low	1	3

*Potential to support roosting bats and survey effort based on guidance of Collins (2016).

4.3 Enhancement Recommendations

The draft London Plan (public consultation 2017, pending publication in 2019)¹⁶ advocates a green infrastructure approach to conservation of the natural environment recognising its social and economic value. It also moves to recognise the practical actual financial value. It now includes an Urban Greening Factor for demonstration of these enhancements (Policy G5).

These enhancements could include, biodiversity roofs, rain gardens, bee towers and insect hotels, bird and bat boxes and other green infrastructure. For example, any soft landscaping should be designed to maximise the biodiversity potential of the Sites. For example, by incorporating native and wildlife-friendly planting, this could be in the form of new trees and / or hedgerows; ornamental planting areas comprised of shrubs and herbaceous plants and wildflower / grass strips, which could enhance the Sites as follows:

- Increase water attenuation;
- Provide amenity value;
- Provision of a food source and habitats for invertebrates;
- Provision of nesting and foraging opportunities for birds through the inclusion of fruit-bearing species; and
- Provision of a foraging resource for bats through encouraging invertebrates, which bats feed on.

Enhancements should be specifically designed for species listed as London and / or Tower Hamlets BAP Species (e.g. tree sparrow, black redstarts and pipistrelle species bats).

¹⁵ Collins J (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

¹⁶ Greater London Authority. 2017. The Draft London Plan for Public Consultation

5 LEGISLATION AND KEY POLICY REQUIREMENTS

Potentially relevant Legislation and Policy are presented in Appendix D and further detail with regards to surveys and mitigation required are presented in Table 2.

nt Legislation

Development of the Sites will require surveys and or construction mitigation to fulfil legislative requirements for the following protected species:

- WCA (as amended) 1981, for nesting birds (general): vegetation clearance and demolition works should be timed to avoid the nesting bird season (March to August inclusive) or supervised to prevent impacts to nesting birds;
- Schedule I of the WCA (as amended) 1981, for nesting black redstarts: vegetation clearance and demolition works should be timed to avoid the black redstart breeding season (April to July inclusive). If this is not possible, targeted black redstart surveys are required (April to June inclusive), prior to and throughout the duration of any proposed construction to ensure that nesting pairs of black redstart (that may be present) are not disturbed; and
- WCA (as amended) 1981, and the Conservation of Habitats and Species Regulations (2017)¹⁷ for bats: the buildings have the potential to support roosting bats and should be surveyed.

Full details of subsequent works required are included within Section 6 and Table 1 below.

nt Policy

Elements of national, London and local policies and plans have the potential to be applicable to any development of the Sites A, these relate to:

- Protection of existing biodiversity;
- Creation and enhancement of biodiversity and green infrastructure in general; and
- While there is no legal requirement to remove or control Butterfly-bush listed as a LISI species, it would be appropriate and beneficial to remove the species as part of any future development.

An ecology report addressing the required further surveys, design and construction mitigation for any proposed development will be required in support of planning.

¹⁷ Anon (2017). Conservation of Habitats and Species Regulations 2017. HMSO, London.

6 SUMMARY OF LEGISLATIVE ECOLOGICAL CONSTRAINTS AND MITIGATION REQUIRED

Table 2 Legislative Ecological Constraints and Mitigation Summary Table

Key Issues	Legislation	Assumption	Further Survey required?	Seasonal Timing / Avoidance	Mitigation Required	Seasonal Timing summary	Programme Delay Risk	Risk Rating
Nesting birds (general)								
<p>All green infrastructure listed below is suitable for nesting birds. These features are likely to be removed for development.</p> <ul style="list-style-type: none">Dense introduced shrub; andOrnamental planting. <p>The buildings within Site A, B and C supported numerous features suitable for use by nesting birds.</p>	WCA, 1981, as amended	Buildings and vegetation will be removed for development / site investigation.	No (but see mitigation recommendations)	Remove any woody vegetation or buildings outside the core nesting bird season (March to August inclusive) or vegetation removal / demolition will need to be supervised by an ecological watching brief. If removal is required within the bird nesting season, a check for active nests should be undertaken prior (within 48 hours) to works commencing that will affect any of the features identified as suitable for use by nesting birds located in Site A, B and C.	It is recommended that any planning permission includes provision for planting of biodiversity value. Provision of bird boxes would be beneficial within any development.	September to February (inclusive) to remove woody vegetation.	If vegetation removal / demolition is required during the bird nesting season and nest(s) are found by the supervising ecologist, a delay of works within a buffer area around the nest would need to be maintained undisturbed for approximately 6 weeks until chicks have fledged.	High – very likely to be present
Nesting black redstarts								
Buildings / structures within Site A, B and C suitable for nesting black redstarts.	Schedule 1 of the WCA, 1981, as amended	Buildings will be removed for development / site investigation.	Yes, IF works (e.g. demolition or construction works) are to take place during the black redstart nesting season (April to July inclusive). Targeted black redstart surveys would be required prior to works and for the duration of works occurring within the black redstart nesting and survey season.	These surveys should be conducted between mid-April and the end of June once every fortnight.	Several surveys required prior to site works commencing and for the duration of works occurring within the black redstart nesting season. If an active nest found, no works that could disturb the nest or the birds associated with the nest would be permitted. A protective buffer zone would need to be established. Monitoring would be required to ensure no disturbance occurs and to confirm when construction works could commence.	Surveys required during the black redstart breeding season (beginning of April to end of July inclusive).	If an active nest is found a delay of 6 weeks is likely to be required until chicks have fledged.	Medium
Roosting/ hibernating bats (buildings)								
External features on the buildings located within Site A, B and C with potential for supporting roosting bats.	Schedule 5 of the of the WCA, 1981, as amended The Conservation of Habitats	Removed / modified for development.	Yes, in accordance with Bat Conservation Trust good practice guidelines (Collins, 2016) a targeted bat survey, comprised of a single dusk emergence or dawn re-entry survey is recommended at	Emergence / re-entry surveys can be conducted May to September inclusive (weather dependant).	If a bat roost is found it is likely a European Protected Species Licence will be required to enable building removal.	European Protected Species Licence takes 30 working days from submission (post planning) Exclusion of any bat roosts may be	Surveys can only be conducted between May and September inclusive.	Low

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Key Issues	Legislation	Assumption	Further Survey required?	Seasonal Timing / Avoidance	Mitigation Required	Seasonal Timing summary	Programme Delay Risk	Risk Rating
	and Species Regulations 2017		each of the buildings in Site A, B and C.			restricted to November to February inclusive dependent upon the species and roost type present.		

7 CONCLUSIONS

There are no likely significant ecological constraints with regards to the development of this Site.

The habitats on Sites A, B and C were assessed as having limited green infrastructure with no protected or notable flora. The Sites were suitable to support nesting birds including the Schedule 1 black redstart with low potential to support roosting bats.

No Statutory or non-statutory designated sites (including ancient woodlands or woodlands listed on the AWI) were identified within the vicinity of the Site A, B and C that have the potential to be significantly impacted by development on the sites.

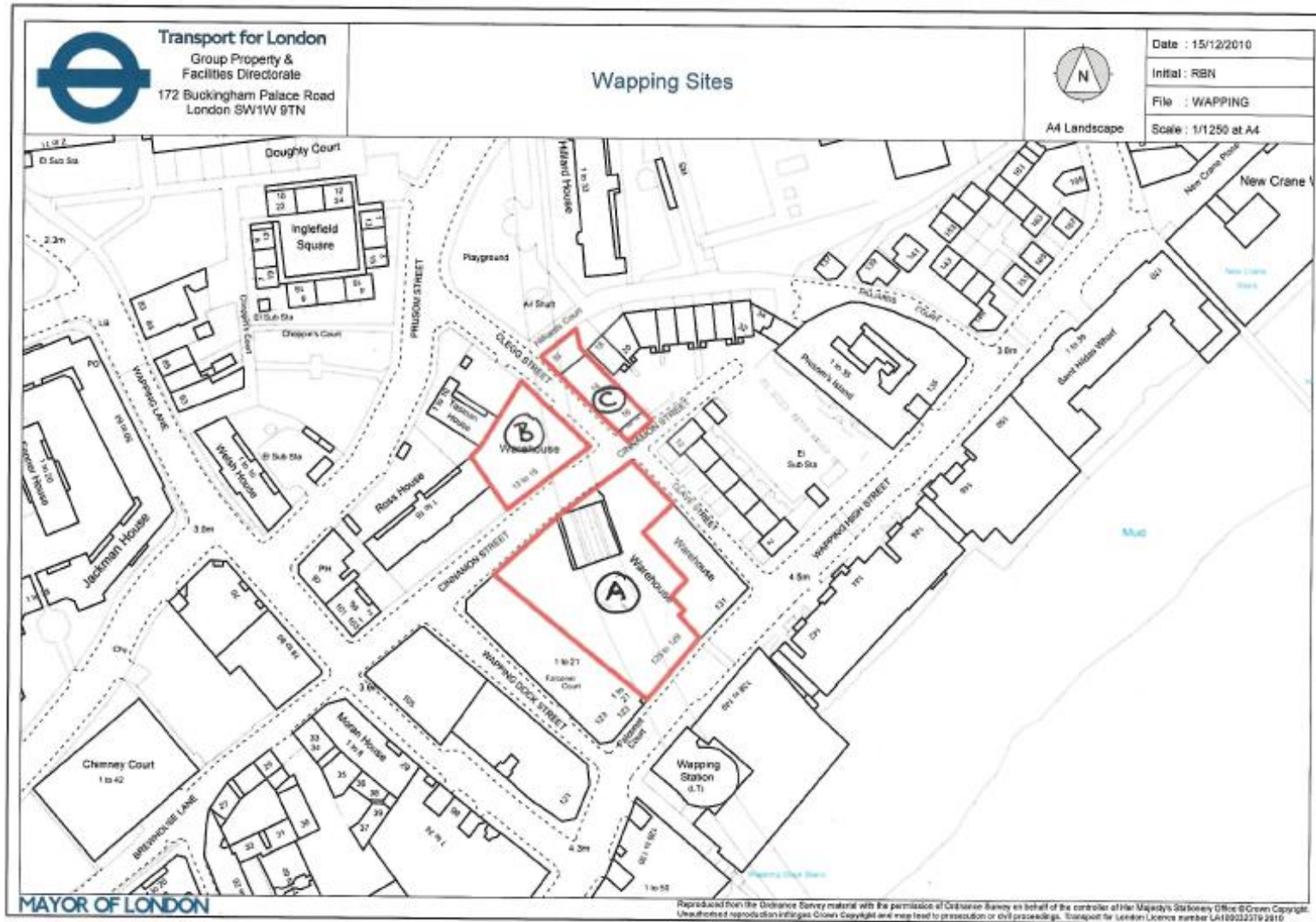
Legislative ecological constraints are listed below:

- There is potential for nesting birds to utilise the dense introduced shrub within Site A, the ornamental planting on the party wall located between the eastern boundary of Site C and the houses on Cinnamon Street and the numerous features identified on the buildings located within Sites A, B and C. Vegetation clearance and demolition works will need to be conducted outside of the bird nesting season (March to August inclusive) or under an ecological watching brief. The buildings within Sites A, B and C support features suitable for use by nesting birds. Should direct impacts be likely (i.e. demolition), a check for active nests should be undertaken by a suitably experienced ecologist prior (within 48 hours) to works commencing.
- Sites A, B and C have been identified as suitable for use by nesting Black Redstarts. Should works be programmed to take place during the Black Redstart nesting season (beginning of April to end of July inclusive) targeted Black Redstart surveys, would be required prior to works commencing and for the duration of works (if these span multiple years). The surveys should be conducted from mid-April to the end of June once every fortnight, to determine if nesting Black Redstarts are present and to ensure that nesting pairs of Black Redstart (that may be present) are not disturbed.
- The buildings within Sites A, B and C support features with potential for supporting roosting bats. In accordance with Bat Conservation Trust good practice guidelines a targeted bat survey, comprised of a single dusk emergence or dawn re-entry survey is recommended at each of the buildings in Sites A, B and C.

Policy considerations are listed below:

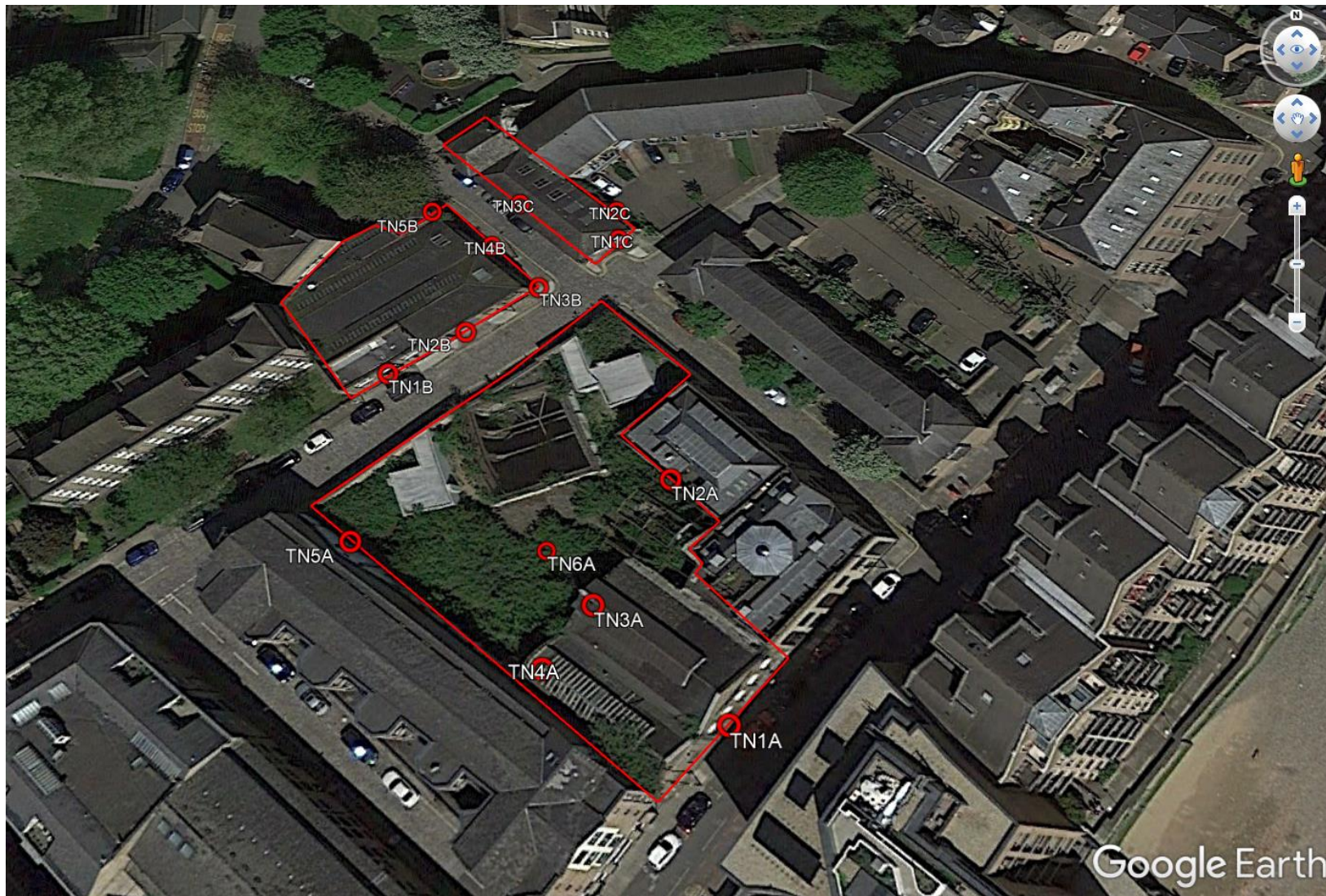
- There will be some ecological benefit from the removal of Butterfly-bush, a non-native, invasive species listed on the LSI which was recorded in Site A and C. There is no legal obligation to control any of the LSI species recorded on the Site or to remove them as controlled waste, but it is good practice to remove them and to avoid their spread.
- Compliance with local, London and national policy will be required. For example, biodiversity enhancements, such as the creation of green infrastructure, wildlife-friendly soft landscaping and the provision of bat and / or bird boxes could be selected to comply with net positive policy.

FIGURE 1: SITES LOCATION MAP



Wapping Sites: Land at 125-129 Wapping High Street, 14 to 16 Clegg Street and 13 to 15 Cinnamon Street
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FIGURE 2: TARGET NOTES LOCATION MAP










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Appendix A: Target Notes Recorded on Site A, B and C



Table 1: Figure 2 Target Notes Recorded on Site A, B and C (TNs labelled per site, i.e. A denotes Site A, B, Site B and C, Site C)





Target Note/Site	Description	Photograph
1A	Features on frontage of the partly demolished and unoccupied 19th Century warehouse building (facing Wapping High Street) with potential to support roosting bats and nesting birds: Drainage holes in metal beam at base of gable roof.	
	Crumbling / missing brick mortar (potential to support roosting bats only).	
	Cut rectangular hole in metal shutter of arched door.	



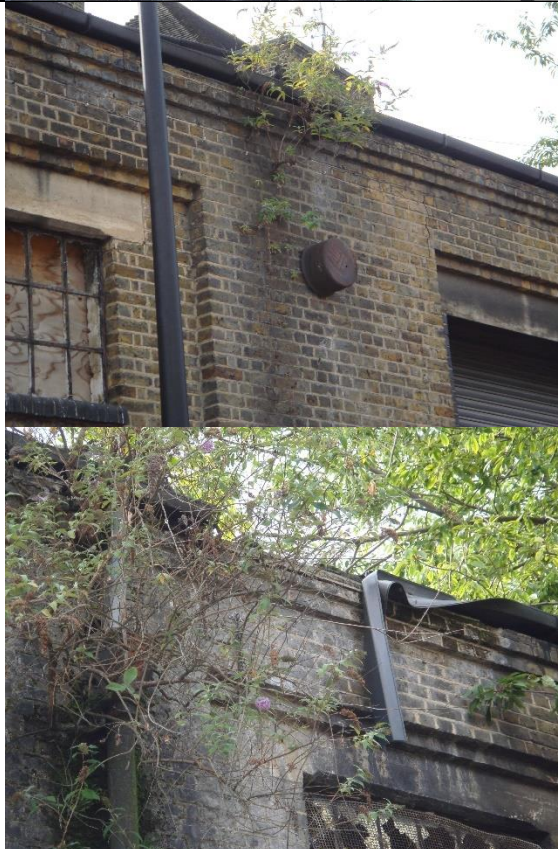
Target Note/Site	Description	Photograph
2A	Features on eastern boundary wall between Site A and Baltic Court with potential to support roosting bats and nesting birds: Buckled / loose lead flashing (potential to support roosting bats only).	
	Loose wooden plank fixed to brick wall (potential to support roosting bats only) and gap where the wooden plank connects to the pitched roof section of Baltic Court building.	
3A	Roof / interior of the partly demolished 19 th Century warehouse building suitable for use by nesting birds.	





Target Note/Site	Description	Photograph
		
4A	Gaps in brickwork of the 19 th Century warehouse with potential to support roosting / hibernating bats and nesting birds.	
5A	Retained exterior wall of 19 th Century warehouse with ledges suitable for use by nesting birds.	
6A	Dense mature Butterfly-bush scrub located in the central and parts of the northern section of Site A, suitable for use by nesting birds.	



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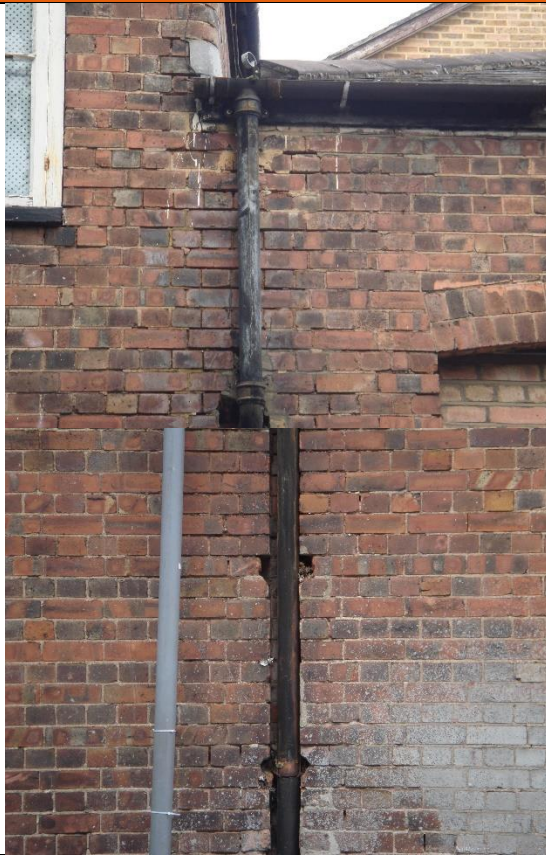

Target Note/Site	Description	Photograph
		
1B	Two holes in downpipes on frontage of corner warehouse building suitable for use by nesting birds.	

Target Note/Site	Description	Photograph
		
2B	<p>Several features on frontage of disused corner warehouse building with potential to support roosting bats and nesting birds:</p> <p>Gap at top of metal shutter in front of warehouse entrance.</p>	
	<p>Gaps in entrance door on metal shutter.</p>	
3B	<p>Features of south-east corner of disused corner warehouse building with potential to support roosting bats and nesting birds:</p> <p>Gap in brickwork behind plastic guttering and downpipe.</p>	


Target Note/Site	Description	Photograph
	Gap underneath ridge tile on south-east corner of roof.	
4B	Features on eastern wall of disused corner warehouse building with potential to support roosting / hibernating bats and nesting birds: Gaps in wooden hoarding behind remnants of glass windows leading into building interior.	
	Buckled / damaged plastic guttering (suitable for nesting birds only).	

Target Note/Site	Description	Photograph
	Damaged / crumbling brickwork beneath plastic guttering (suitable for nesting birds only).	
	Loose metal mesh over remnants of glass window.	
5B	Missing roof section, damaged window and slid glass panel on pitched roof providing access into building interior for nesting birds and roosting bats.	 

Target Note/Site	Description	Photograph
1C	<p>Features above garage door of disused warehouse with potential to support roosting bats and nesting birds:</p> <p>Gaps in brickwork below wooden soffit board and metal door beam.</p>	
2C	<p>Ornamental planting growing over the south-east wall of the warehouse and on a trellis secured to a dilapidated party wall between Site C and the adjacent houses on Cinnamon Street suitable for use by nesting birds.</p>	

Target Note/Site	Description	Photograph
3C	<p>Several features on western wall of the disused warehouse with potential to support roosting bats and nesting birds:</p> <p>Damaged brickwork behind two downpipes (suitable for nesting birds only) and missing brick mortar.</p>	
	<p>Missing mortar along ridge tiles.</p>	

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Target Note/Site	Description	Photograph
4C	Damaged brickwork behind downpipe on northern wall of warehouse building suitable for use by nesting birds.	

Appendix B: Desk Study Review

Statutory Designated Sites

The desk study found no statutory designated sites located within the search area.

Non-Statutory Designated Sites

The desk study found the following non-statutory designated sites within 1km of Site A, B and C:

Sites of Metropolitan Importance for Nature Conservation:

- River Thames and Bow Creek / The River Thames and tidal tributaries ((M031).

Sites of Borough Importance for Nature Conservation:

- Canada and Surrey Waters (SoBI11); and
- Russia Dock Woodland (SoBI05).

Sites of Borough Grade II importance for Nature Conservation:

- Cable Street Community Garden (THBII04); and
- Shadwell Basin, Wapping Wood and Wapping Canals (THBII13).

Sites of Local importance for Nature Conservation:

- Hermitage Basin (THL14);
- King Edward Memorial Park (THL32);
- King Stairs Garden (SoL36);
- St George-in-the-East Church Gardens (THL01);
- St Katharine's Dock (THL15);
- St Mary's Churchyard Gardens; and
- Swedenborg Gardens (THL08).

Further detail is presented in Table B1. Table B2 provides designated site descriptions.

It was assessed that there was negligible potential for significant impacts to these non-statutory sites from any development on the Site.

Woodlands registered on the Ancient Woodland Inventory (AWI)

There are no woodlands registered on the AWI located within, or adjacent to, Site A, B and C.

Table B:1 Non-statutory Designated Sites

Site Name	Size (ha)	Approximate Distance (m)	Direction	Citation
Sites of Metropolitan Importance for Nature Conservation				
River Thames and Bow Creek (located in Tower Hamlets Borough)	4.11	50m	South	<p>The River Thames across London and the tidal sections of creeks and rivers which flow into it are recognised as a single Metropolitan site. In Tower Hamlets, the site includes a section of the Thames, and Bow Creek, the tidal section of the River Lea, the midline of which forms the borough boundary with Newham south of Bow Locks.</p> <p>The Thames and its tidal creeks provide a number of valuable habitats not found elsewhere in London. The mud-flats, shingle beach, inter-tidal vegetation, islands and river channel itself support</p>

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Site Name	Size (ha)	Approximate Distance (m)	Direction	Citation
				<p>many species from freshwater, estuarine and marine communities which are rare in London. The site is of particular importance for wildfowl and wading birds, though the Tower Hamlets section of the river is not one of the most valuable for birds. The Thames is extremely important for fish, with over 100 species now present. Many of the tidal creeks are important fish nurseries, including for several species of commercial importance.</p> <p>Bow Creek supports significant numbers of teal and smaller numbers of other ducks, as well as redshank and common sandpiper. The creek also has areas of intertidal reed beds.</p>

Sites of Borough Importance for Nature Conservation

Canada and Surrey Waters		600	South-east	
Russia Dock Woodland		900	East	

Sites of Borough Grade II Importance for Nature Conservation

Shadwell Basin, Wapping Wood and Wapping Canals	6.25	200	North	<p>Shadwell Basin is a relic of the London Docks, now a water sports centre for children. To the west of the basin is Wapping Wood, a small park with naturalistic landscaping, including woodland and meadow. A series of shallow canals leads west from Shadwell Basin, passing through new developments and ending just before Hermitage Basin.</p> <p>Shadwell Basin has vertical sides, with little or no aquatic vegetation. Its main value is for birds. Several floating rafts provide nesting opportunities for common terns, Egyptian geese and mute swans, while sand martins nest in pipes in the dock walls. Small numbers of wintering waterfowl, including tufted ducks and great crested grebes, may swell in cold weather.</p> <p>A narrow strip of trees and scrub on the southern side of the basin, and several larger copses in Wapping Wood, support common breeding birds including blackcaps and goldfinches. The meadow in Wapping Wood includes cornfield annuals such as cornflower, corncockle, corn chamomile and corn marigold, and meadow species such as knapweed, birdsfoot-trefoil and chicory. As the meadows have matured in recent years, the annuals have largely disappeared.</p> <p>Despite their concrete bottom and vertical sides, the canals are full of submerged aquatic plants, including large amounts of small pondweed and common stonewort, both of which are rare in London. They support a surprisingly diverse community of dragonflies and damselflies, including a sizeable population of small red-eyed</p>
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Ecological Assessment

Site Name	Size (ha)	Approximate Distance (m)	Direction	Citation
				<p>damselfly, a recent colonist of Britain. They are also home to fish, including threespined sticklebacks and a few large carp.</p> <p>A pair of mute swans breeds annually, and other water birds include large numbers of mallards, a few pairs of coots and moorhens, and occasional tufted ducks. Rafts with native wetland vegetation were introduced in 2015 to diversify the habitats of the canals, and it is hoped to extend these in future.</p>
Cable Street Community Garden	0.55	800	North-east	<p>These active and attractive allotments extend north from Cable Street and under the railway line.</p> <p>The site has a large number of plots growing fruit, vegetables, herbs and flowers. Fruit trees and numerous berry-bearing bushes are scattered throughout the site. There are also numerous mini-ponds across the site. The varied flora, and the fact that it is managed without pesticides, attracts a range of animals including numerous butterflies and other invertebrates, newts, frogs, toads, foxes, squirrels and birds. The latter include robin, wren, dunnock, blackbird, song thrush, goldfinch and kestrel.</p> <p>At the southern end of the site, on Cable Street, is a communal area planted up with native trees and shrubs.</p>

Sites of Local Importance for Nature Conservation

King Stairs Garden		400	South	
St Mary's Churchyard Gardens;		400	South	
St George-in-the-East Church Gardens	1.30	550	North-west	<p>The site comprises a large area of amenity grassland with scattered mature trees, several small meadows, and shrub beds (mainly exotic species) located around the periphery of the site.</p> <p>The site entrance off Cable Street is hard-surfaced with a few pit-planted trees, mostly downy birch (<i>Betula pubescens</i>), and small shrub beds of exotic species. The wall on the east side of the entrance has a large mural depicting the Cable Street riots. This leads into a formal area of shrub beds and seating.</p> <p>The wildflower meadows around the edges of the park are well established, with a good variety of common flowers. Essex skipper butterflies can be seen here, and Roesel's bush-crickets produce their monotonous "song" on summer days. Among the trees are two large black mulberries; their abundant fruit is enjoyed by people and birds alike.</p>

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Site Name	Size (ha)	Approximate Distance (m)	Direction	Citation
				<p>The trees and shrubberies provide nesting habitat for typical common birds.</p> <p>Immediately west of this stand is a fenced area with numerous pollarded lime (<i>Tilia x europaea</i>) with a herb layer of dense common nettle (<i>Urtica dioica</i>).</p>
King Edward Memorial Park	2.34	600	North-east	<p>This attractive, medium-sized park contains a number of wildlife habitats, mostly created over the last few years. An area of scrub has been underplanted with native bulbs and woodland wild flowers, and a loggery installed to provide dead wood for invertebrates. Wild flower meadows along the eastern edge of the park contain a colourful mix of cornfield annuals and perennial species; the latter will gradually take over as the meadows mature. Elsewhere, borders contain numerous native and nectar-rich flowers for bees, butterflies and other insects. A small pond supports breeding frogs.</p> <p>There is a large colony of the nationally-rare daisy earthstar (<i>Geastrum floriforme</i>) at the edge of the children's playground, at the base of a row of Leyland cypress trees. Several hundred individuals are recorded in most years, making this perhaps the largest population of this fungus in Britain.</p>
Swedenborg Gardens	1.49	700	North-west	<p>Lying immediately north of The Highway, a very busy road, and in a densely populated part of the Borough, this park provides a pleasant and well-used oasis for people living in the surrounding flats and houses. There is a belt of trees and shrubs along the south-western edges. These were planted after the park was created in 1983, and consist of native species such as hornbeam, aspen, elder, ash and dogrose, as well as a selection of ornamentals. Although they have matured well, noise from the road is still very intrusive.</p> <p>Elsewhere in the western half of the park is a meadow containing a wide range of common wild flowers, although regular mowing probably prevents them from flowering for long. A former sandy sports pitch close to the mound has formed an interesting area of acid grassland, with several locally scarce plants. These include an abundance of hare's-foot clover (<i>Trifolium arvense</i>), as well as sand spurrey (<i>Spergularia rubra</i>) and toothed medick (<i>Medicago polymorpha</i>), the latter extremely rare in London.</p> <p>The rest of the park consists of mown grass, with a mixture of mature trees and saplings, as well as a playground and other amenity features.</p> <p>To the west of the park, the site also includes some of the landscaping in Eastend Homes' Swedenborg Estate. The most important part of</p>

Site Name	Size (ha)	Approximate Distance (m)	Direction	Citation
				this is Swedenborg Square Orchard, with 58 fruit trees planted by Trees for Cities in 2013.
Hermitage Basin	0.32	700	West	<p>This small dock has vertical brick walls. Abundant aquatic vegetation includes water milfoil (<i>Myriophyllum</i> sp.), white water-lily (<i>Nymphaea alba</i>), and rigid hornwort (<i>Ceratophyllum demersum</i>), as well as blanket weed (<i>Cladophora</i> sp.), which is kept under control.</p> <p>A pair of coots nests regularly, and pied and grey wagtails and house and sand martins regularly visit to feed, indicating a good insect population. The basin supports a number of species of dragonflies and damselflies, including a very large population of the small red-eyed damselfly, a recent colonist to Britain. Fish include common bream and carp.</p>
St Katharine's Dock	4.11	850	North-west	<p>Docks providing moorings for numerous large cruisers and barges. No aquatic vegetation was discernible, and there is little vegetation present on the dock walls. Those species present on the walls include a few plants of Jersey cudweed (<i>Gnaphalium luteoalbum</i>), which is protected under Schedule 8 of the Wildlife & Countryside Act 1981 (as amended), though this has not been seen since 2014. Other plants on the walls include ivy-leaved toadflax (<i>Mycelis muralis</i>), Hemlock water-dropwort (<i>Oenanthe crocata</i>) and eastern rocket (<i>Sisymbrium orientale</i>).</p> <p>Elsewhere around the dock, trees and planters with shrubs provide some colour.</p> <p>Small numbers of common waterfowl, including tufted duck, coot, mallard and moorhen, are present throughout the year and probably nest in the marina.</p>

Table B:2 Designated Sites Descriptions

Designation	Description
Special Areas of Conservation (SAC) Special Protected Areas (SPAs)	Sites designated under European law and are the most important sites for wildlife in the UK, along with Special Protected Areas (SPAs). SACs are designated under the European Habitats Directive (Council Directive 92/43/EEC). Both the Habitats and Birds Directives provide for the creation of a network of protected areas across the EU, to be known as 'Natura 2000'. The designations aim to conserve important or threatened species and habitats and provide them with increased protection and management
National Nature Reserve (NNR)	Statutory reserves established for the nation under the Wildlife and Countryside Act, 1981. NNRs may be owned by a relevant national body, e.g. Natural England, or by established agreement; a few are owned and managed by non-statutory bodies. NNRs cover a selection of the most important sites for nature conservation in the UK.

Designation	Description
Sites of Special Scientific Interest (SSSI)	Are areas notified under the Wildlife and Countryside Act 1981 by Natural England as being of special interest for nature conservation. SSSI notification forms the statutory bedrock for site protection. Biological SSSIs form a national network of wildlife sites, with each site being of national significance for its nature conservation value. Consultation and some form of agreement with the national statutory conservation agency is mandatory before any listed, potentially damaging development or change in land use can be carried out
Local nature reserves (LNR)	These are land owned, leased or managed by Local Authorities and designated under the National Parks and Access to the Countryside Act. These are sites of some nature conservation value managed for educational objectives. In some cases, it is managed by a non-statutory body (e.g. the London Wildlife Trust). Local Authorities have the power to pass bylaws controlling (e.g.) access, special protection measures.
Sites of Metropolitan Importance for Nature Conservation (SMINCs)	These are sites that contain the best examples of London's habitats. These sites are of strategic significance and are therefore of the highest priority against damage or loss
Sites of Borough Importance for Nature Conservation (SBINCs) Grades I and II	Sites of Borough Importance for Nature Conservation (SBINCs) Grades I and II are important in the context of the borough. The nature conservation quality of these sites varies and so these sites are graded as I or II in relation to their nature conservation potential.
Sites of Local Importance for Nature Conservation (SINCs)	These are sites of particular importance to people nearby (such as residents and schools). Local sites are particularly important in areas otherwise deficient in nearby wildlife sites.

Overview of Protected, Notable and Invasive Species in London

This section of this report outlines the status of protected and notable species in London. The status of these species on the Site is fully discussed in section 3.5. Relevant conservation status and legislation is presented in section 5 and Appendix C.

Non-native invasive species in Greater London

London is an extremely urbanised area and is a major international port for both people and goods, this in addition to its climate and major levels of construction has encouraged the spread of a number of non-native invasive species that are becoming pests. Therefore, in addition to those species listed on Schedule 9 of the Wildlife and Countryside Act (WCA) (1981, as amended) there is a London Species Initiative (LSI) managed by the London Biodiversity Partnership, which lists non-native invasive species that should be controlled in London.

Bats in Greater London

From previous Arcadis work in London and from data from the London Bat Group the most likely bats species to be present are common and soprano pipistrelle (*Pipistrellus pipistrellus* and *P. pygmaeus*) which are by far the more frequent, followed by Daubenton's (*Myotis daubentoni* in the vicinity of open water) noctule (*Nyctalus noctula*) and brown long-eared (*Plecotus auritus*). These are all London BAP species and S41 species with the exception of Daubenton's and common pipistrelle. Full details of the conservation status of these species and the results from the London Bat Group Species Action Plan Audit are presented in Appendix C, Table B2.

In general, every borough will have bats present, as even in the inner boroughs there are usually some areas of suitable habitat that can provide feeding habitat for small numbers of common and light tolerant bat species such as soprano and common pipistrelles. In general, the outer boroughs with larger areas of more suitable habitat should be expected to have higher numbers of bats and a greater diversity of species.

Birds in Greater London

There are a number of bird species that although relatively common are in decline and have been included as Species of Principle Importance in England under the NERC Act (2006). Those that have the potential to utilise the habitats within Site A, B and C are listed in Table 4A.

TableA:4: *Birds of conservation concern associated with London*

Common Name	English Name	Status	Typical London habitats
Black redstart	<i>Phoenicurus ochrurus</i>	L	Traditionally found on brownfield sites around the built environment in proximity to standing or tidal Thames water
Dunnock	<i>Prunella modularis</i>	S41:L:	Associated with dense scrub and trees in private gardens and pocket parks
House sparrow	<i>Passer domesticus</i>	S41:L:R	Associated with dense scrub and trees in private gardens and pocket parks traditionally a species associated with nesting in buildings
Peregrine	<i>Falco peregrinus</i>	L	Tidal Thames and the built environment using tall buildings for roosting and nesting and foraging on other birds particularly pigeons
Song thrush	<i>Turdus philomelos</i>	S41:L:R	Associated with dense scrub and trees in private gardens and pocket parks
Starling	<i>Sturnus vulgaris</i>	S41:L:R	Built environment
Tree sparrow	<i>Passer montanus</i>	S41:L:R	Associated with dense scrub and trees in private gardens and pocket parks

Section 41 = S41: London BAP = L: R = Birds of Conservation Concern Red List

Appendix C: Bat Habitat Suitability and London Population Status

Table B: 1 BCT (2016) – Habitat Suitability Criteria

Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	<p>A structure with one or more potential roost sites that could be used by individual bats opportunistically.</p> <p>However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions^a and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).</p> <p>A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.</p>	<p>Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat.</p> <p>Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.</p>
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	<p>Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.</p> <p>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</p>
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	<p>Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.</p> <p>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.</p> <p>Site is close to and connected to known roosts.</p>

Table B: 2 Bat species status in London from the London Bat Species Action Plan Audit

Common Name	Latin Name	UK Status	London Status	Notes
Greater horseshoe bat	<i>Rhinolophus ferrumequinum</i>	Endangered BAP Priority	Extinct	Last Greater London record from Oxleas Wood in 1953.
Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>	Endangered BAP Priority	Extinct	Last Greater London record from Abbey Wood (Woolwich) in 1952-3.
Whiskered bat	<i>Myotis mystacinus</i>	Vulnerable	Rare	Due to difficulty in separation, these are considered together. Occur rarely and in low numbers in outer London Boroughs such as Hillingdon, Richmond, Bexley and Bromley. One current known (winter) roost only.
Brandt's bat	<i>Myotis brandtii</i>	Vulnerable	Rare	
Natterer's bat	<i>Myotis nattereri</i>	Vulnerable	Scarce	Still relatively few records in Greater London. Most central locations are Highgate Wood and Hampstead Heath, otherwise Richmond and Hounslow and occasionally other outer London Boroughs. 8 current known roosts (mostly winter).
Daubenton's bat	<i>Myotis daubentoni</i>	Not Threatened	Locally frequent but declining	Relatively widespread and strongly associated with ponds, lakes & rivers. Occasional summer roosts have been found in trees on Wimbledon Common and in Ruislip Woods. Contrary to the national trend, this species is apparently declining in London and its sensitivity to increasing ambient light levels is a possible reason. 4 current known winter roosts.
Serotine	<i>Eptesicus serotinus</i>	Vulnerable	Rare; has declined	Serotines are found in outer London Boroughs, especially Bromley, Havering, Sutton and Richmond. 2 current known summer roosts, in Bromley and Teddington.
Noctule	<i>Nyctalus noctula</i>	Vulnerable; declining BAP Priority	Widespread but declining	The status of this large, wide-ranging bat is difficult to assess, but the past two decades have seen a rapid decline in the species and this mirrors the national trend. An exclusively tree-roosting bat; current known roosts number <10 London-wide.
Leisler's bat	<i>Nyctalus leisleri</i>	Vulnerable	Scarce	Leisler's bat has been recorded infrequently in London area, yet sightings have doubled in the last three years. New foraging sites for the species include the Barnes area, Wandsworth Common and Brent Reservoir. 3 current known roosts (Haringey, Bromley and Bexley).

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Common Name	Latin Name	UK Status	London Status	Notes
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	Not Threatened	Common	A widespread species, the common pipistrelle is believed to occur in all London boroughs. Roosts are still discovered relatively infrequently, however.
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	BAP Priority	Common	Also widespread and probably London's commonest bat. Apparently more associated with wetland habitats than its close relative, <i>P. pipistrellus</i> . Known roosts currently number 15-25?, but many more pass undetected.
Nathusius's pipistrelle	<i>Pipistrellus nathusii</i>	Rare	Rare	Only recently confirmed as a UK breeding species. Detector records from an increasing list of sites include Lesnes Abbey Woods, Chislehurst Ponds and the Wetland Centre at Barnes. 1 known current roost site in bat boxes in Hounslow.
Brown long-eared bat	<i>Plecotus auritus</i>	Declining BAP Priority	Scarce	Brown long-eared bats are fairly secretive and may be under-recorded in Greater London, although reasons for the national decline are also likely to affect London's population. Roosts have been found in Bexley, Bromley, Hillingdon, Wandsworth, Kensington & Chelsea, Barnet, and Richmond.

NB: This audit is based on data from the London Bat Project collected in the mid-1980s, as well as that collected since by the London Bat Group and is therefore not systematic. This audit is the best possible understanding of the status of bats in London that can currently be realised by the London Bat Group.

Appendix D: Selected Legislation, Nature Conservation Status and Policy

Legislation

Table C: 1 Legislation Summary

Receptor	Legislation
Nesting Birds	<p>The legislation relevant to the potential ecological constraints on site associated with nesting birds.</p> <p>All wild birds, their nests and eggs are protected under the Wildlife and Countryside Act 1981 (as amended). Section 1 of the Act makes it an offence to:</p> <ul style="list-style-type: none"> intentionally kill, injure or take any wild bird; intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built; or intentionally take or destroy an egg of any wild bird. <p>It is also an offence to:</p> <ul style="list-style-type: none"> intentionally disturb any wild bird included in Schedule 1 of the Act while it is building a nest or is in, on or near a nest containing eggs or young; or disturb dependent young of such a bird. Species listed on Schedule 1 include the black redstart, barn owl (<i>Tyto alba</i>), Cetti's warbler (<i>Cettia cetti</i>) and kingfisher (<i>Alcedo atthis</i>). <p>There is no potential for Schedule 1 birds to be nesting on Site, the legislation regarding common nesting birds will be complied with due to the precautionary mitigation previously stated.</p>
Bats	<p>The legislation relevant to the constraint identified associated with bats.</p> <p>Bats are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017.</p> <p>Bats are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are subject to the provisions of Section 9 of the Act, which make it an offence to:</p> <ul style="list-style-type: none"> intentionally or recklessly disturb a wild animal listed on Schedule 5 whilst it is occupying a structure or place which it uses for shelter or protection; intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a wild animal listed on Schedule 5; sell, offer or expose for sale, or to possess or transport for sale alive or dead wild animal listed on Schedule 5 or any part of or anything derived from a wild animal listed on Schedule 5. <p>Bats are also listed on Schedule 2 (European protected species of animals) of the Conservation of Habitats and Species Regulations 2017 and are subject to the provisions of Regulation 41 which makes it an offence to:</p> <ul style="list-style-type: none"> deliberately capture, injure or kill any wild animal of a European protected species; deliberately disturb wild animals of any such species (where disturbance is likely to impair their ability to survive, breed or reproduce, rear or nurture their young; or to hibernate or migrate; or to affect significantly the local distribution or abundance of the species); damage or destroy a breeding Site or resting place of such an animal; or be in possession of, control, transport, sell or exchange, or offer for sale or exchange any live or dead animal of such a species or any part of a wild animal or anything derived from an animal or any part of an animal of such a species.

Relevant Policy

National

The Site survey, assessment and recommended mitigation ensure compliance with the following policies, any additional enhancement measures would further comply with these policies:

- **The National Planning Policy Framework (NPPF 2018)**¹⁸ sets out how the planning system should protect and enhance nature conservation interests. Section 11 is concerned with conserving and enhancing the natural environment Opportunities to enhance biodiversity are also encouraged.
- **The Natural Environment and Rural Communities (NERC) Act 2006**¹⁹ places a duty upon public bodies to consider Section 41 lists flora, fauna and habitats (previously UK BAP habitats and species) as a material consideration in planning and to consider enhancement of biodiversity.
- **Biodiversity 2020: A strategy for England's Wildlife and Ecosystem Services**²⁰ includes a list of Habitats of Principal Importance in England (HPIEs) and Species of Principal Importance in England (SPIEs). These were previously included as Priority Habitats and Priority Species in the UK BAP.

London

- **London Invasive Species Initiative (LISI)**²¹: Managed by the London Biodiversity Partnership, LISI lists non-native invasive species that should be controlled in London. Species relevant to the Scheme include Japanese Knotweed and Butterfly-bush.
- **London Biodiversity Action Plan (BAP)**²²: Managed by the London Biodiversity Partnership (2006), the London BAP sets out priority habitats and species for the city. London BAP habitats relevant to the Scheme include reed beds, standing water and wasteland.
- **The London Plan (2016)**²³ Strategic Policy 7.19 Biodiversity and Access to Nature and Policy 7.21 Trees and woodlands: Regional planning policy for London is presented in the London Plan: Spatial Development Strategy for Greater London. It contains various policies with regard to nature conservation in London, which include commitments to protect, enhance, create, promote, expand and manage the extent and quality of green infrastructure and biodiversity and to increase access to nature, the following elements of SP 7 are as follows:
 - Strategic Policy 7.19 Biodiversity and Access to Nature and Policy:
 - A) The Mayor will work with all relevant partners to ensure a proactive approach to the protection, enhancement, creation, promotion and management of biodiversity in support of the Mayor's Biodiversity Strategy. This means planning for nature from the beginning of the development process and taking opportunities for positive gains for nature through the layout, design and materials of development proposals and appropriate biodiversity action plans.
 - B) Any proposals promoted or brought forward by the London Plan will not adversely affect the integrity of any European site of nature conservation importance.
 - C) Development Proposals should:
 - a) wherever possible, make a positive contribution to the protection, enhancement, creation and management of biodiversity
 - b) prioritise assisting in achieving targets in biodiversity action plans (BAPs), set out in Table 7.3, and/or improving access to nature in areas deficient in accessible wildlife sites

¹⁸ Anon (2018) The National Planning Policy Framework HMSO, London

¹⁹ Anon (2006) The Natural Environment and Rural Communities Act HMSO, London

²⁰ Department for Environment, Food and Rural Affairs (2011) *Biodiversity 2020: A strategy for England's Wildlife and Ecosystem Services*

²¹ London Invasive Species Plan (2012). Legislative and Information Exchange Framework. [online] Available at <http://www.londonisi.org.uk/tackling-inns/lisp/>. [Available June 2016]

²² City of London (2009). *London Biodiversity Action Plan 2010 – 2015*

²³ Greater London Authority. 2016. The London Plan

- c) not adversely affect the integrity of European sites and be resisted where they have significant adverse impact on European or nationally designated sites or on the population or conservation status of a protected species or a priority species or habitat identified in a UK, London or appropriate regional BAP or borough BAP.
- D) On Sites of Importance for Nature Conservation development proposals should:
 - a) give the highest protection to sites with existing or proposed international designations (SACs, SPAs, Ramsar sites) and national designations (SSSIs, NNRs) in line with the relevant EU and UK guidance and regulations
 - b) give strong protection to sites of metropolitan importance for nature conservation (SMIs). These are sites jointly identified by the Mayor and boroughs as having strategic nature conservation importance
 - c) give sites of borough and local importance for nature conservation the level of protection commensurate with their importance.
- E) When considering proposals that would affect directly, indirectly or cumulatively a site of recognised nature conservation interest, the following hierarchy will apply:
 1. avoid adverse impact to the biodiversity interest
 2. minimize impact and seek mitigation
 3. only in exceptional cases where the benefits of the proposal clearly outweigh the biodiversity impacts, seek appropriate compensation.
- F) In their LDFs, Boroughs should:
 - a) use the procedures in the Mayor's Biodiversity Strategy to identify and secure the appropriate management of sites of borough and local importance for nature conservation in consultation with the London Wildlife Sites Board.
 - b) identify areas deficient in accessible wildlife sites and seek opportunities to address them
 - c) include policies and proposals for the protection of protected/priority species and habitats and the enhancement of their populations and their extent via appropriate BAP targets
 - d) ensure sites of European or National Nature Conservation Importance are clearly identified
 - e) identify and protect and enhance corridors of movement, such as green corridors, that are of strategic importance in enabling species to colonise, re-colonise and move between sites.
- Strategic Policy 7.21 Trees and Woodlands:
 - A) Trees and woodlands should be protected, maintained and enhanced, following the guidance of the London Tree and Woodland Framework (or any successor strategy). In collaboration with the Forestry Commission the Mayor has produced supplementary guidance on Tree Strategies to guide each borough's production of a Tree Strategy covering the audit, protection, planting and management of trees and woodland. This should be linked to a green infrastructure strategy.
 - B) Existing trees of value should be retained and any loss as the result of development should be replaced following the principle of 'right place, right tree'. Wherever appropriate, the planting of additional trees should be included in new developments, particularly large-canopied species.
 - C) Boroughs should follow the advice of paragraph 118 of the NPPF to protect 'veteran' trees and ancient woodland where these are not already part of a protected site.
 - D) Boroughs should develop appropriate policies to implement their borough tree strategy.
- **The London Plan – Draft for public consultation (2017)** In 2017 the draft new London Plan went out to public consultation and is scheduled to be published in 2019 following consideration of the consultation responses and Public Examination. The draft London Plan advocates a green infrastructure approach to conservation of the natural environment recognising its social and economic value. It also moves to recognise the practical actual financial value. There is also now the drive for development to incorporate quality green space (i.e. enhancements). The draft London plan now includes an Urban Greening Factor for demonstration of these enhancements

(Policy G5). The most relevant chapter in the draft Plan is Chapter 8 Green Infrastructure and Natural Environment (previously Chapter 7 in the adopted London Plan), with other relevant sections in the rest of the Plan, including Chapter 9 Sustainable Infrastructure. Relevant policies include G2 Greenbelt, G3 Metropolitan Open Land, G4 Local green and open space, G5 Urban greening, G6 Biodiversity and access to nature, G7 Trees and woodlands, G8 Food growing and G9 Geodiversity.

With regards to the Draft London Plan (published 2017) by considering the wider potential effects on Regents Canal and the need to maximise the landscape value for biodiversity the OSD has fulfilled the policies regarding Green Infrastructure and Natural Environment.

- **Sustainable Design and Construction Supplementary Planning Guidance (GLA 2011)** ²⁴:
 - A) Mayor's Priority - Developments should contribute to the Mayor's target to increase tree cover across London by 5% by 2025.
 - B) Mayor's Priority - There is no net loss in the quality and quantity of biodiversity.
 - C) Mayor's Priority - Developers make a contribution to biodiversity on their development site.
 - D) Mayor's Priority - Any loss of a tree/s resulting from development should be replaced with an appropriate tree or group of trees for the location, with the aim of providing the same canopy cover as that provided by the original tree/s.
- **The Mayor's Biodiversity Strategy (2002) (Greater London Authority, 2002)** ²⁵ (Ref 17)
Connecting with London's Nature: The Mayor's Biodiversity Strategy provides a statutory framework for the delivery of biodiversity policies in London. It seeks to ensure that there is no overall loss of wildlife habitats in London.
- **London Environment Strategy (2018) (Greater London Authority, 2018)** ²⁶ the environment strategy highlights the importance of green infrastructure and Natural Capital designed and managed to:
 - promote healthier living
 - lessen the impacts of climate change
 - improve air quality and water quality
 - encourage walking and cycling
 - store carbon
 - improve biodiversity and ecological resilience.

Local

- **Tower Hamlets Policy ES3: Urban Greening and Biodiversity** ²⁷

Urban Greening and Biodiversity

1. Development is required to maximise the provision of 'living building' elements. 'Living building' elements need to contribute to local biodiversity through the provision of priority habitats, and/or features for priority species, as identified in the latest Tower Hamlets Local Biodiversity Action Plan.
2. Development is required to:
 - a. Protect or replace existing elements of biodiversity features within the development as well as incorporating further measures to support wildlife, proportionate to the development proposed.
 - b. Submit an Ecology Assessment demonstrating biodiversity enhancement that contributes to the objectives of the latest Tower Hamlets Local Biodiversity Action Plan, where the site is a Major development.

²⁴ Greater London Authority. 2011. The London Plan Sustainable Design and Construction Supplementary Planning Guidance adopted in April 2014.

²⁵ Greater London Authority. 2002. Connecting with Nature: The Mayor's Biodiversity Strategy adopted in 2002.

²⁶ Greater London Authority. 2018. London Environment Strategy.

²⁷ Tower Hamlets Draft Local Plan 2031. Managing Growth and Sharing the Benefits.

3. Planting and landscaping around developments should not include 'potentially invasive, non-native species'.
4. Development is required to:
 - a. Incorporate trees wherever possible;
 - b. Protect trees, including street trees; and
 - c. Provide replacement trees where the loss of or impact on trees in a development is considered acceptable.
5. Developments which would affect a Site of Importance for Nature Conservation (SINC), or significantly harm the population or conservation status of a protected or priority species, is required to be managed in accordance with the following hierarchy:
 - a. To avoid adverse impact to the biodiversity interest; and
 - b. To minimise impact and seek mitigation in exceptional cases where the benefits of the proposal clearly outweigh the biodiversity impacts, and for appropriate compensation to be sought.

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