

Preliminary Ecological Appraisal

301 St Vincent Street, Glasgow

For

Osborne + Co. Investments Management (OCIM Limited)

Final

2nd February 2024

Quality Management

Project No: WS4392.23				
Prepared by: Morna McBean	2.02.24	Signed by:		
Reviewed by: Helen Lundie	16.02.24	Signed by:		

Version No.	Date	Comments / Changes	Changed by
	00/00/00		
	00/00/00		
	00/00/00		

Contacts	
Helen Lundie	Helen@wildsurvey.co.uk 0141 887 2770
NatureScot	Caspian House Mariner Court Clydebank Business Park Clydebank G81 2NR www.nature.scot

The report is confidential to the Client and Wild Surveys Ltd accepts no responsibility of whatever nature to third parties to whom this report may be made known. The material in this report has been produced for the exclusive use of the Client and shall not be distributed or made available to any other company or person without the knowledge and written consent of the Client.

The report has been prepared by Wild Surveys Ltd. No individual is personally liable in connection with the preparation of this report. By receiving this report and acting on it, the client or any other person accepts that no individual is personally liable whether in contract, tort, for breach of statutory duty or otherwise.

Table of Contents

1	Intro	duction	5
	1.1	Project Objectives	5
	1.2	Site Location	5
2	Legis	lation and Policy	6
	2.1	Wildlife Legislation	6
	2.2	Planning Policies	6
3	Meth	odology	8
	3.1	Desk Study	8
	3.2	Determining the Zone of Influence	8
	3.3	Phase 1 Habitat Survey	9
	3.4	Protected Species	9
4	Resul	ts	13
	4.1	Desk study	13
	4.2	Zone of Influence	13
	4.3	Phase 1 Habitat Survey	13
	4.4	Protected Species	14
5	Discu	ssion and Recommendations	15
	5.1	Discussion	15
	5.2	Recommendations	15
6	Refer	rences	19
Αļ	pendix	1 – Site Location and Photographs	21
Αŗ	pendix	2 – European Protected Species and the Law	25
Αį	pendix	3 – Wildlife and Countryside Act Species and the Law	27
Αŗ	pendix	4 – Badgers and the Law	28
Αţ	pendix	5 – Birds and the Law	29
Αļ	pendix	6 – Guidance on Optimal Survey Periods	30
Αŗ	pendix	7 – Desk Study Search Results	31
Αŗ	pendix	8 – Phase 1 Habitat Survey Map, Species List, Target Notes and Photographs	33
A	pendix	9 – Biodiversity Enhancement Strategy	36

Executive Summary

Wild Surveys Ltd (WSL) was commissioned by Osborne + Co. Investments Management (OCIM Limited) to undertake a Preliminary Ecological Appraisal and desk study at 301 St Vincent Street, Glasgow (National Grid Reference NS5822865581). This report presents the results of the survey carried out. It is understood the report is required to provide an ecological baseline to inform BREEAM Refurbishment and Fit Out Credits LEO2 and LEO4, as the existing building is to be refurbished, in addition to supporting a planning application.

The aim of the survey was to provide a description and map of habitats within the survey area, including a plant species list and target notes (where appropriate) in line with the Joint Nature Conservation Committee (JNCC) Handbook for Phase 1 Habitat Survey methodology (JNCC, 2010). The survey also aimed to identify any suitable habitat for protected species and noted any field signs of protected species within the survey area.

The site is located within the city of Glasgow in the city centre in an urban environment. The site is located to the east of the M8 motorway.

A desk study was undertaken to review information available within the public domain. Publicly available databases, local wildlife groups and our own internal records were consulted for historical evidence of protected species in and around the site. In addition, a walkover survey was carried out on 16th January 2024 by two experienced ecologists to identify the broad habitat types present as well as any field signs of protected or notable species.

The proposed refurbishment of the building will have no effect on any statutory or non-statutory designed sites. There are no records of protected or notable species within the site or immediately adjacent. The survey area consists of built environment with ornamental planting on terraced areas which is in poor condition and of low biodiversity value overall. The building is of negligible suitability to support roosting bats and the site has no suitable habitat for foraging and commuting bats, and poor connectivity to areas of biodiversity value.

This report confirms that a Suitably Qualified Ecologist (SQE) was appointed prior to commencement of activities on-site, and measures are set out below to satisfy best practice guidelines, national and local policies and all relevant UK and EU legislation, as appropriate, in order to protect and enhance ecology.

There are no indirect or direct risks to the current ecological value of the site, as long as the recommendations for further survey and mitigation measures (following the mitigation hierarchy) detailed are followed. Further survey work, avoidance and mitigation has been recommended in line with the mitigation hierarchy within the body of the report. There are no areas within the site that require protection, however the amenity planting on St Vincent Plaza located adjacent should be protected from damage during the proposed works.

There are ecological opportunities and feasibility for enhancement within the site and this survey was carried out early enough in the design process to be able to influence the design. Recommendations have been made within the body of the report in line with the mitigation hierarchy. Bespoke ecological enhancement measures for the development, incorporated within the design, along with long-term management requirements will be required to inform a planning application and BREEAM, through consultation with the project ecologist and project team. This report should be distributed to the project team and any other interested parties as appropriate, to discuss and agree on ecological outcomes for the project.

1 Introduction

1.1 Project Objectives

- 1.1.1 Wild Surveys Ltd (WSL) was commissioned by Osborne + Co. Investments Management (OCIM Limited) to undertake a Preliminary Ecological Appraisal and desk study at 301 St Vincent Street, Glasgow (National Grid Reference NS5822865581). The existing building is due to be refurbished. The survey area is shown on the location map in Appendix 1.
- 1.1.2 It is understood the report is required to provide an ecological baseline for to inform BREEAM Refurbishment and Fit Out Credit LE02 and LE04, along with a planning application.
- 1.1.3 The aim of a PEA survey is to provide an assessment of the ecological features present, or potentially present, within the site and the surrounding areas. The survey aims to provide a description and map of habitats within the survey area, including a plant species list and target notes (where appropriate) and also to identify any suitable habitat for protected species and note any field signs of protected species within the survey area. The key objectives are to:
 - Identify the likely ecological constraints associated with a project;
 - Identify any mitigation measures likely to be required, following the mitigation hierarchy;
 - Identify any additional surveys that may be required; and,
 - Identify the opportunities offered by a project to deliver ecological enhancement with the aim to achieve positive effects on biodiversity.
- 1.1.4 As part of the Preliminary Ecological Appraisal, a key objective is to review the proposed development in relation to the pre-development biodiversity value, taking into account the baseline habitat types, species supported and ecological connectivity within the site and to the surrounding area. Bespoke ecological enhancement recommendations should be made as part of a strategy to achieve positive effects on biodiversity as a result of the proposed development. Long-term management requirements will require to be determined to ensure long-term success and to support this strategy.
- 1.1.5 This survey is completed in line with Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and comprises a dedicated Phase 1 habitat survey in line with the Joint Nature Conservation Committee (JNCC) Handbook for Phase 1 Habitat Survey methodology (JNCC, 2010).

1.2 Site Location

1.2.1 The site is located within the city of Glasgow in the city centre in an urban environment. The site is located to the east of the M8 motorway. The location of the survey and photographs are shown in Appendix 1.

2 Legislation and Policy

2.1 Wildlife Legislation

- 2.1.1 Full consideration has been given to all relevant nature conservation legislation when carrying out this assessment, these include:
 - The Conservation of Wild Birds (the Birds Directive) 1979 (as amended);
 - The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended);
 - Wildlife and Countryside Act 1981 (as amended in Scotland);
 - Wildlife and Natural Environment (Scotland) Act 2011 (as amended); and
 - Nature Conservation (Scotland) Act 2004 (referencing the Convention on Biological Biodiversity (1992) and the Scottish Biodiversity Strategy, which are implemented nationally through the Scottish Biodiversity List and locally through Local Biodiversity Action Plans (LBAP)

2.2 Planning Policies

City Development Plan

- 2.2.1 The policies set out below are those relevant to nature conservation and include those from the Glasgow City Development Plan. The City Development Plan was adopted by Glasgow Council in 2017 and is the land use plan which sets out the policies and proposals which the Council wishes to use to guide development across the area.
- 2.2.2 The City Development Plan contains the following policies which focus on the natural environment and details how new developments can enhance habitats/biodiversity including through creating, enhancing, and better linking habitats and ecosystems:
 - SG7 Natural Environment;
 - IPG6 Green Belt and Green Network; and
 - Glasgow Pollinator Plan 2017-2027.
- 2.2.3 Consultation should be undertaken with the individual responsible for biodiversity at the Local Planning Authority.

National Planning Framework 4 (NPF4) (Scottish Government, 2023)¹

- 2.2.4 National Planning Framework 4 contains policies of relevance to biodiversity, including Policy 3 a, c, and d:
 - NPF4 Policy 3.a states that development proposals will contribute to the enhancement of biodiversity, including where relevant, restoring degraded habitats, and building and strengthening nature networks and the connections between them. Proposals should also integrate nature-based solutions, where possible;
 - NPF4 Policy 3.c states that proposals for local development will include appropriate measures to conserve, restore and enhance biodiversity, in accordance with national and local guidance. Measures should be proportionate to the nature and scale of development; and

_

¹ https://www.gov.scot/publications/national-planning-framework-4/documents/

NPF4 Policy 3.d states that any potential adverse impacts, including cumulative impacts, of development proposals on biodiversity, nature networks and the natural environment will be minimised through careful planning and design. This will take into account the need to reverse biodiversity loss, safeguard the ecosystem services that the natural environment provides, and build resilience by enhancing nature networks and maximising the potential for restoration.

Developing with Nature guidance (NatureScot, 2023)²

2.2.5 Guidance on securing positive effects for biodiversity from local development to support NPF4 policy 3(c). This guidance has been published in support of policy 3(c) of National Planning Framework 4 in relation to planning applications.

Scottish Pollinator Strategy (NatureScot, revised 2021)

2.2.6 The Pollinator Strategy for Scotland 2017-2027, and the accompanying Implementation Plan, were created to set out how we can make Scotland a place where pollinators can thrive.

Scottish Biodiversity List

2.2.7 Scottish Ministers created the Scottish Biodiversity List (SBL) in 2005 in order to satisfy the requirements under Section 2(4) of the Nature Conservation (Scotland) Act 2004 and to assist public bodies in carrying out conservation of biodiversity, and to provide the general public with information regarding conservation within Scotland. The list contains habitats, plants and species which are deemed to be of principal importance to the Scottish population and meet the social criteria, defined as being "important for any reason including for conservation reasons, for their own personal enjoyment, as economically important, simply their favourites, as symbols of Scottish identity or just that they are nice to see" (Blake, 2005).

Scottish Government's Policy on Control of Woodland Removal

2.2.8 The Scottish Government's Control of Woodland Removal Policy includes a presumption in favour of protecting woodland. Woodland removal should only be permitted where it would achieve significant and clearly defined additional public benefits. Where woodland is removed in association with development, developers will generally be expected to provide compensatory planting.

Local Biodiversity Action Plan

- 2.2.9 Glasgow Local Biodiversity Action Plan (LBAP) (2017-2027) incorporates the local authority of Glasgow and focuses attention on the conservation and enhancement of the region's natural heritage and to address its decline.
- 2.2.10 The adopted LBAP outlines actions for the following species: Soprano pipistrelle (Pipistrellus pygameaus), common pipistrelle (Pipistrellus pipistrellus), Nathusius pipistrelle (Pipistrellus nathusii), Daubenton's bat (Myotis daubentonii) and Leisler's bat (Nyctalus leisleri) and brown long eared bat (Plecotus auritus).
- 2.2.11 In addition, the LBAP incorporates Habitat Action Plans and the following are of relevance to the site:
 - Urban.

_

² https://www.nature.scot/doc/developing-nature-guidance

3 Methodology

3.1 Desk Study

- 3.1.1 A data search was undertaken by WSL to review information available within the public domain. Publicly available databases, such as the National Biodiversity Network (NBN) Atlas, Habitat Map of Scotland (HabMoS) and our own internal records were consulted for historical evidence of protected and notable species and habitats within the 10 years and within 2km of the site. Listings in SBL and LBAP was also checked. This information was gathered to identify the status of notable or protected species or habitat within 2 km of the site.
- 3.1.2 In addition, a search using NatureScot sitelink and the relevant Local Authority nature conservation sites was carried out to discover any statutory or non-statutory designated sites within 2 km. Designated sites included within the desk study include:
 - Special Area for Conservation (SAC);
 - Special Protection Areas (SPA);
 - Ramsar;
 - Sites of Special Scientific Interest (SSSI);
 - National Nature Reserves (NNR);
 - National Parks;
 - Local Nature Reserves (LNR);
 - Local Authority designated site (such as Local Nature Conservation Sites (LNCS));
 - Wildlife Nature Reserves (such as Scottish Wildlife Trust or Royal Society for the Protection of Birds);
 - Ancient Woodland Inventory (AWI); and
 - Native Woodland.
- 3.1.3 In addition, in order to inform the BREEAM assessment, any ecological stakeholders that may be affected by the proposals, any existing ecological initiatives within the site and current maintenance and management levels and arrangements will be identified, where appropriate.

3.2 Determining the Zone of Influence

- 3.2.1 The 'zone of influence' for a project is the area over which ecological features may be affected by biophysical changes as a result of the proposed project and activities associated with the refurbishment and operation of the development.
- 3.2.2 The zone of influence will vary for different ecological features depending on their sensitivity to an environmental change. It may therefore be appropriate to identify different zones of influence for different features. The features affected could include habitats, species, and ecosystems and the processes on which they depend.
- 3.2.3 The ecological features likely to be affected by the proposed development will be identified and the zone of influence defined.

3.3 Phase 1 Habitat Survey

3.3.1 A Phase 1 habitat survey was carried out prior to commencement of refurbishment works by two experienced ecologists on 16th January 2024 in line with the Handbook for Phase 1 Habitat Survey methodology (JNCC, 2010), to provide a description and map of habitats within the survey area, including a plant species list and target notes (where appropriate).

3.4 Protected Species

- 3.4.1 The survey was extended to identify any suitable habitat for protected/ notable species and field signs within the survey area were noted in order to make recommendations for further survey effort, retention, avoidance and/ or mitigation, as appropriate. The survey area comprised of the site itself plus an additional 30 m where access allowed, unless otherwise noted. Legal context with regards to protected species can be found in Appendix 2 5.
- 3.4.2 Given the habitat types present within the survey area, particular attention was given to the potential presence of the following species: bats (Chiroptera) and habitat suitable for use by birds. Methodologies are detailed below for each of these species.
- 3.4.3 There is no habitat within the survey area suitable for great crested newt (*Triturus cristatus*), otter (*Lutra lutra*), water vole (*Arvicola amphibius*), red squirrel (*Sciurus vulgaris*), pine marten (*Martes martes*), reptiles (Squamata), badger (*Meles meles*) or wildcat (*Felis silvestris*) and these species are not discussed further.

Bats

Preliminary Ecological Appraisal - Daytime Bat Walkover (DWB)

- 3.4.4 A daytime bat walkover (DBW) was undertaken on 16th January 2024 to identify and record any structures, trees or other features that could be suitable for roosting bats and any habitats that could be suitable for foraging, commuting or swarming in/at the building. Roosting and foraging habitats, and flight paths were identified separately.
- 3.4.5 A DBW was undertaken to assess and record any habitats suitable for roosting, commuting and foraging bats within the proposed site and within land with ecological connectivity to the site. The suitability of the proposed site for bats was determined in line with Table 1. Suitability is categorised irrespective of the presence of a roost, but where a roost is found 'confirmed roost' will be added following the allocation of suitability. Where professional judgement has been used to assess the suitability of the proposed development site, it will be detailed within the results section.
- 3.4.6 The survey area consisted of the Zone of Influence which is defined as the area within which proposed activities will take place and includes any areas which will be directly and/or indirectly affected by proposed activities. The Zone of Influence is shown on the Figure in Appendix 1.

Table 1: Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement (adapted from Table 4.1 on Page 44 of current guidelines (BCT, 2023):

Potential Suitability	Description	
	Roosting habitat in structures	Potential flight paths and foraging habitats
None	No habitat features on site to be used by bats at any time of year (complete absence of crevices / suitable shelter).	No habitat features on site likely to be used by any commuting or foraging bats at

Negligible	No obvious features on site to be used by bats, however, uncertainty remains. Bats may use small or apparently unused features on occasion. Defined as "so small and unimportant as to not be worth considering, insignificant". Places a bat may roost but is unlikely to do so	any time of year (no habitats that form continuous lines of shade / protection for flight-lines, or generate / shelter insect populations as prey for bats). No obvious habitat features on site likely to be used as flight paths or by foraging bats; however, a small element of uncertainty remains to take account of non-standard bat behaviour.
Low	(due to another attribute). A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions 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 and not a classic cool / stable hibernation site, but could be used by individual hibernating bats).	Habitat that could be used by small number of bats as flight paths such as a 'gappy' hedgerow or unvegetated stream, but isolated and not well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland setting) or a patch of scrub.
Moderate	A structure 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, such as maternity or hibernation – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees, scrub and linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland and water.
High	A structure with one or more potential roost sites that are obviously suitable for bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts such as maternity or classic cool / stable hibernation site.	Continuous high quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used by bats regularly for

foraging such as broadleaved woodland, tree-lined watercourses and grazed parkland.
Site is close to and connected to known roosts

Hibernation Suitability Assessment

- 3.4.7 An assessment of suitability for hibernation was carried out considering the following:
 - The suitability of features to support bats or allow access for roosting bats;
 - The temperature and humidity conditions likely to be present within the structure during the winter period and the suitability in this respect for use by hibernating bats;
 - The surrounding habitat and potential use by bats year round; and
 - The presence of known roosts in the structure, adjacent structures or surrounding area during the active season.
- 3.4.8 The current BCT guidelines (BCT, 2023) suggest that the potential suitability should be defined as follows:
 - Low suitability no or very limited roosting potential;
 - Moderate suitability roosting potential non-classic site; and
 - High suitability roosting potential classic site (such as tunnels / cellars / underground).

Preliminary Roost Appraisal

3.4.9 A preliminary roost appraisal is a detailed inspection of the interior and / or exterior of a structure to look for features that bats could use for entry / exit and search for field signs of bats.

External Survey

3.4.10 A systematic search was made of the exterior of the structure to identify any potential or actual access points and to locate any evidence of bats (where present) such as live or dead bats, droppings, staining and / or squeaking noises. The search included the ground below potential access points such (but not limited to) any windowsills, windowpanes, tiles or slates, eaves, soffit boxes, fascia or existing bat boxes (where present). Any gaps in the fabric of the building were identified.

Internal Survey

- 3.4.11 An internal survey was carried out including access to the plant rooms and roof terraces where safe to do so.
- 3.4.12 The basement plant rooms and roof, which consisted of heating plant which mostly had no access externally or lift mechanisms as well a walk through of the office suites, which were mainly unoccupied was also undertaken.

Birds

3.4.13 The habitats within the survey area were evaluated for their suitability to support notable bird species and, in particular, nesting and wintering birds.

Invasive Non-native Species

3.4.14 Particularly common, invasive non-native species, such as giant hogweed (Heracleum mantegazzianum), Japanese knotweed (Fallopia japonica), and Himalayan balsam (Impatiens glandulifera) will have been noted, where found. Other non-native invasive species such as rhododendron (Rhododendron ponticum), cotoneaster (Cotoneaster spp) and snowberry (Symphoricarpos albus) will be noted where incidentally encountered.

Other Notable Species or Habitats

3.5 Any suitable habitat for and field signs of SBL species brown hare (Lepus europaeus), hedgehog (Erinaceus europaeus) and common toad (Bufo bufo) will be recorded where present. No survey was undertaken specifically for SBL invertebrates or bird species, however, species were recorded where incidentally observed during the survey. Limitations

Physical Limitations

3.5.1 There were no physical limitations to undertaking the survey.

Seasonal Limitations

- 3.5.2 Ecological surveys provide a snapshot of the broad habitats and species present within the survey area at the time the survey is undertaken. Faunal species are transient in nature and can move in and out of an area. A lack of field signs of any particular species does not confirm absence, only that no field signs were present at the time of survey. Suitability for protected species and variation in use of the site by protected species on a seasonal basis has been considered based on the broad habitat types present.
- 3.5.3 Bat surveys provide only a snapshot of activity within the survey area at the time the survey is undertaken. Bats are transient in nature and their use of a site for roosting, foraging and commuting may vary on a nightly or seasonal basis. A lack of field signs of bats does not confirm absence, only that no field signs were present at the time of survey. Suitability for roosting, foraging and commuting bats and variation in use of the site by bats throughout the year has been considered based on the broad habitat types present.
- 3.5.4 There are seasonal limitations to all species and habitat surveys. A table of optimal survey periods can be found in **Appendix 6**.

4 Results

4.1 Desk study

- 4.1.1 The following designated sites were located within 2km of the proposed site:
 - Four SINCs within 2km of the site, the closest being River Clyde City-wide SINC approximately 600 m to the south;
 - One LNR, an area of AWI and an area of native woodland, all located 1.4 1.7 km from the site.
- 4.1.2 The LBAP contains an Ecosystem Statement for Urban environments which is of relevance to the site.
- 4.1.3 From the desk study it has been established that there are no records of protected species within or immediately adjacent to the site.
- 4.1.4 There are no known ecological stakeholders that may be affected by the proposals, no existing ecological initiatives within the site and no significant maintenance and management levels and arrangements of relevance to ecology.
- 4.1.5 The full desk study results can be found in **Appendix 7**.

4.2 Zone of Influence

- 4.2.1 Given the habitat types on site and directly adjacent particular attention was given to the potential presence of the following species: bats, and habitat suitable for use by nesting birds. There are no designated sites within or adjacent to the proposed site.
- 4.2.2 There is limited natural habitat currently located within and adjacent to the site. Due to the potential for indirect effects such as noise to travel outwith the construction zone, the Zone of Influence contains the land within the site boundary and a 30m buffer. The site boundary is shown in **Appendix 1**.

4.3 Phase 1 Habitat Survey

Habitat Types

- 4.3.1 This section should be read in conjunction with the Phase 1 habitat map, species list and target notes in **Appendix 8**. The following habitat types were noted to be present within the survey area boundary. In addition to the habitat within the site boundary:
 - Scattered trees;
 - Buildings; and
 - Introduced shrubs.

Scattered Trees

4.3.2 Two small fruit trees, apple (*Malus sp*) and pear (*Pyrus* sp) are present in the terraced area. The trees are in a poor condition. There is also a row of immature birch (*Betula sp*) street trees immediately adjacent to the building at the western end in St Vincent Plaza with associated amenity planting, which are beyond the boundary of the site.

Buildings

4.3.3 The majority of the site is covered by a large building with associated hardstanding.

Introduced Shrubs

4.3.4 The building contains planted terraces at the east and west ends of the building. There are also two internal courtyards with terraces. On all terraces are areas of amenity planting consisting of introduced shrubs including cotoneaster (Cotoneaster spp) and buddleia (Buddleia davidi).

4.4 Protected Species

Bats

Preliminary Ecological Appraisal - Daytime Bat Walkover (DWB)

4.4.1 Habitat within the site itself is of negligible suitability for foraging bats due to the lack of natural habitat in the wider area.

Preliminary Roost Appraisal

- 4.4.2 The building consists of a polished granite base with the remaining storeys covered by metal and a large amount of glazing, with re-enforced concrete. The building is four to five stories in height with terraces at the building ends, as well as within two internal courtyards.
- 4.4.3 The building is well sealed and lacks opportunities for roosting bats, with no roost features noted on the externals of the building. No field signs of bats were noted.

Hibernation Suitability Assessment

4.4.4 The building has low suitability, defined as no or very limited roosting potential, to support hibernating bats.

Birds

4.4.5 During the site visit no bird species were noted, however the flat roof areas of the building have the potential to support nesting birds, such as gulls (Larus spp) and feral pigeon (Columbia livia domestica). A hawk is currently used to dissuade nesting gulls.

Invasive, Non-native Species

4.4.6 Common invasive non-native species including rhododendron, cotoneaster and buddleia were noted on the terraced areas, along with other introduced ornamental species.

Other Notable Species or Habitats

4.4.7 No other notable species or habitats were identified within the survey area.

5 Discussion and Recommendations

5.1 Discussion

- 5.1.1 The proposed refurbishment of the building will have no effect on any statutory or nonstatutory designed sites.
- 5.1.2 The survey area consists entirely of built environment with limited value amenity vegetation present on the roof terraces. The building is of negligible suitability to support roosting bats and the site has no suitable habitat for foraging and commuting bats and lacks connectivity to areas of ecological value. There are no records of protected or notable species within the site or immediately adjacent.
- 5.1.3 There are ecological opportunities and feasibility for enhancement within the site and this survey was carried out early enough in the design process to be able to influence the design. Ecological outcomes for the site are detailed below and in Appendix 9.
- 5.1.4 This report confirms that a Suitably Qualified Ecologist (SQE) was appointed prior to commencement of activities on-site, and measures are set out below to satisfy best practice guidelines, national and local policies and all relevant UK and EU legislation, as appropriate, in order to protect and enhance ecology.

5.2 Recommendations

5.2.1 Recommendations have been made in line with the mitigation hierarchy to avoid, protect, minimise and enhance to achieve a positive ecological outcome.

Licensing Requirements

- 5.2.2 No licence is currently required but may be required following further survey work.
- 5.2.3 All site staff should be made aware of the risk of finding protected species and what to do if signs of protected species are found. A Tool Box Talk should be given to all contractors. If any signs of protected species are found during site works, then all works must cease immediately, and a suitably experienced bat ecologist contacted.
- 5.2.4 A summary of the legal position in relation to protected species is contained within **Appendix** 2 5.

Avoidance and Protection Measures

5.2.5 No further surveys are required to inform a planning application.

Pre-refurbishment Surveys

Bats

5.2.6 If refurbishment works have not commenced by January 2025, the project ecologist should be consulted to determine if a resurvey should be carried out to re-evaluate the suitability of the building for roosting bats.

Nesting Birds

5.2.7 Should avoidance of the nesting bird season (March-September) not be possible a nesting bird survey should be undertaken no more than 48 hours prior to any work being undertaken on site by a suitably experienced ecologist. Access will be required to the flat roof areas.

Avoidance Measures

Foraging Bats

- 5.2.8 If any new lighting is to be installed, sensitive lighting designs should also be considered to avoid light spill or artificial light at night (ALAN) to avoid affected foraging or commuting bats. The proposed lighting scheme should be designed by a suitably qualified lighting engineer, if required, and should consider the following:
 - All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used;
 - LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability;
 - A warm white spectrum (ideally retain darkness above can be considered. However, this
 often comes at a cost of unacceptable glare, poor illumination efficiency, a high upward
 light component and poor facial recognition, and their use should only be as directed by
 the lighting professional;
 - Column heights should be carefully considered to minimise light spill;
 - Only luminaires with an upward light ratio of 0% and with good optical control should be used – See ILP Guidance for the Reduction of Obtrusive Light;
 - Luminaires should always be mounted on the horizontal, i.e. no upward tilt;
 - Any external security lighting should be set on motion-sensors and short (1min) timers.
 - As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed; and
 - Light spill can be successfully screened through soft landscaping and the installation of walls, fences and bunding. In order to ensure that fencing makes a long-term contribution, it is recommended that it is supported on concrete or metal posts. Fencing can also be over planted with hedgerow species or climbing plants to soften its appearance and provide a vegetated feature which bats can use for navigation or foraging.

Protection Measures

5.2.9 There are no sensitive habitats to protect within the survey area. However, the vegetation located on St Vincent Plaza, adjacent to the proposed works, should be protected from damage during the refurbishment.

Mitigation Measures to Minimise

5.2.10 There are no mitigation measures required to minimise adverse effects within the survey area.

Ecological Opportunities and Outcomes

Enhancement Measures

- 5.2.11 Biodiversity enhancement measures should be committed to by incorporation into the development plans and submitted with the planning application. Biodiversity measures incorporated into the design are outlined below and the full biodiversity strategy can be found in **Appendix 9** which explains how appropriate measures have been included to deliver positive effects for biodiversity.
- 5.2.12 A landscape and habitat management plan (LHMP), appropriate to the site, should be produced covering at least the first five years after project completion in accordance with BS 42020:2013 Section in order to manage and maintain the ecological enhancements to ensure

they reach their maximum biodiversity value. The LHMP is to be handed over to the building owner/occupants for use by the maintenance staff.

Planting for Wildlife

- 5.2.13 The plants, where possible, will be locally grown to reduce the risk of introducing pests and disease. Non-natives, other than those trees and plants on a Wildlife and Countryside Act 1981 exemption list that can be planted anywhere, can only be planted in areas designated as "non-wild" (such as private gardens, amenity greenspace, public parks, and gardens, civic and play space). Plants should be native species or species of benefit to wildlife.
- 5.2.14 The following measures have been selected for use within the site. The location and extent of biodiversity enhancement measures can be found on the landscape plans 1918_PL_P_01 (ground level), 1918_PL_P_02 (level 2), 1918_PL_P_03 (level 3) and 1918_PL_P_01 (level 4):
 - Retention of two existing trees along with the addition of specimen trees/shrubs (native where possible), ornamental planting (native where possible), pollinator planting, sensory planting and small areas of low maintenance ground cover.

Level 2

Ground Floor

 Retention of six existing trees/shrubs along with the addition of specimen trees/shrubs (native where possible), ornamental planting (native where possible), pollinator planting, sensory planting and small areas of low maintenance ground cover.

Level 3

Retention of around eight existing trees/shrubs, along with the addition of specimen trees/shrubs (native where possible), ornamental planting (native where possible), pollinator planting (shrubs and perennials), sensory planting and small areas of low maintenance ground cover, on the end terraces and two internal courtyard areas.

Level 4

 Specimen trees / shrub planting (native where possible), ornamental planting (native where possible), pollinator planting (shrubs and perennials), sensory planting and small areas of low maintenance ground cover.

Providing Homes for Wildlife

- 5.2.15 The best homes for nature are natural ones. Prior to installing artificial homes for wildlife, action will be taken to keep or provide natural features. This includes retaining natural features within buildings where possible. Artificial homes will be used to provide a valuable alternative and augment existing or lost natural features.
- 5.2.16 The following measures have been selected for use within the site. The number and location of wildlife boxes, will be installed in line with Guidance from the Royal Institute of British Architects (Williams, 2010), are to be agreed and will be displayed on the building elevation plans:
 - Swift Boxes should be considered.

Credit LE05 - Additional Measures for Improvement of Ecology

- 5.2.17 The following measures for improvement of ecology are relevant to the site and will be included within the LHMP:
 - The principal contractor nominates a Biodiversity Champion with the authority to influence site activities and ensure that detrimental impacts on site biodiversity are

- minimised in line with the recommendations of a Suitably Qualified Ecologist as specified within this report.
- The principal contractor trains the site workforce on how to protect site ecology during the project. Specific training must be carried out for the entire site workforce to ensure they are aware of how to avoid damaging site ecology during operations on-site. Training should be based on the findings and recommendations for protection of ecological features highlighted within a report prepared by a Suitably Qualified Ecologist – this can be in the form of a Tool-box talk, such as for nesting birds.
- The principal contractor records actions taken to protect biodiversity and monitor their effectiveness throughout key stages of the refurbishment or fit-out process. The requirement commits the principal contractor to make such records available where publicly requested. No records were collected during the ecologist's site visit.
- Where a new ecologically valuable habitat appropriate to the local area is created, such homes for swifts, local biodiversity expertise should be sought during the Preparation and Brief (RIBA Stage 1 or equivalent) to help identify species of local biodiversity importance on-site and ensure that the proposals support local priorities. Species of local biodiversity importance and measures to support them have been outlined in this report. This includes a habitat that supports nationally, regionally or locally important biodiversity, and/or which is nationally, regionally or locally important itself; including any UK Biodiversity Action Plan (UK BAP) priority habitats, Local Biodiversity Action Plan (LBAP) habitats, those protected within statutory sites (e.g. SSSIs), or those within non-statutory sites identified in local plans.
- Where flora and/or fauna habitats exist on-site, the contractor programmes site works to minimise disturbance to wildlife. For example, site preparation, ground works, and soft landscape works have been, or will be, scheduled at an appropriate time of year to minimise disturbance to wildlife. Timing of works may have a significant impact on, for example, breeding birds, flowering plants, seed germination, amphibians etc. Actions such as phased clearance of vegetation may help to mitigate ecological impacts. This additional requirement will be achieved where a clear plan has been produced detailing how activities will be timed to avoid any impact on site biodiversity in line with the recommendations of a Suitably Qualified Ecologist such as timing of works to avoid effects on nesting birds as outlined in this document.

6 References

Bang, P. & Dahlstrom, P., 2001, Animal Tracks and Signs, Oxford University Press, Oxford

Blake, K. (2005). Production of the list of species and habitats considered to be of principal importance for the purpose of conservation of biodiversity in Scotland (The Scottish Biodiversity List). Part 2 – Technical Report. Final Report. Scott Wilson, Edinburgh.112pp.

CIEEM, 2019, Advice Note on the Lifespan of Ecological Reports & Surveys, April 2019 https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf-

Collins, J, 2016, Bat Surveys – Good Practice Guidelines for Professional Ecologists, 3rd Edition. Bat Conservation Trust, London

Cresswell, W.J., 2012, UK BAP Mammals Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation, The Mammal Society, Southampton.

Dietz C., of Helversen O. & Nill D, 2007, Handbook of Bats of Europe and northwest Africa, Franckh-Cosmos-Verlag GmbH & Co. KG., Stuttgart

Entwistle A.C, Harris S, Hutson A.M, Racey P.A, Walsh AL, Gibson S.D, Hepburn I & Johnston J, 2001, Habitat Management for Bats – A guide for land managers, land owners and their advisors. JNCC, Peterborough

Harris, S., Yalden D W (Eds.), 2008, Mammals of the British Isles: handbook, 4th edition. The Mammal Society, Southampton, 799pp

JNCC Joint Nature Conservation Committee, 2005, Handbook for Phase I Habitat Survey: A Technique for Environmental Audit, JNCC, Peterborough

JNCC, 2003, Extended Phase 1 Habitat Survey, England Field Unit, Nature Conservancy Council, Peterborough

Mitchell-Jones, A.J and McLeish, A.P, 2004, The Bat Workers Manual. JNCC, Peterborough

Rose, F. & O'Reilly, C., 2006, The Wild Flower Key (revised edition), Frederick Warne, London

Scottish Biodiversity Forum, 2012, www.biodiversityscotland.gov.uk

Scottish Government, 2023, National Planning Framework 4

Spoelstra. K., Van Grunsven. R. H. A., Ramakers. J. J. C., Ferguson. K. B., Rapp. T., Doners. M., Veenendaal. E. M., Visser. M. E. (2017) Response of bats to light with different spectra: light-shy and agile bat presence is affected by white and green, but not red light. Proceedings of the Royal Society of London B: Biological Sciences, 284

Spoelstra. K., Van Grunsven. R. H. A., Donners. M., Gienapp. P., Huigens. M. E., Slaterus. R., Berendse. F., Visser. M. E., Veenendaal. E. (2015) Experimental illumination of natural habitat- an experimental set-up to assess the direct and indirect ecological consequences of artificial light of different spectral composition. Phil. Trans. R. Soc. B. 370

Preliminary Ecological Appraisal – 301 St Vincent Street, Glasgow

Voigt, C.C, C. Azam, J. Dekker, J. Ferguson, M. Fritze, S. Gazaryan, F. Hölker, G. Jones, N. Leader, D. Lewanzik, H.J.G.A. Limpens, F. Mathews, J. Rydell, H. Schofield, K. Spoelstra, M. Zagmajster (2018) Guidelines for consideration of bats in lighting projects

Williams, C. (2010) Biodiversity for Low and Zero Carbon Buildings: A Technical Guide for New Build, RIBA Publishing

Appendix 1 – Site Location and Photographs



21

Photographs



Photograph 1: Example of Internal plant room



Photograph 2: Example of terrace vegetation



Photograph 3: Example of end terrace vegetation



Photograph 4: Example of terrace vegetation around courtyard



Appendix 2 – European Protected Species and the Law

Bats, otters, great crested newts, natterjack toad, wildcat, cetaceans, and several other animals are protected under European law, in Annexes II and IV of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (The Habitats Directive 1992). The Habitats Directive is translated into Scots law under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended in Scotland), often referred to as the Habitats Regulations, with these species being classified as European protected species. Under these regulations it is an offence to:

- Damage or destroy a breeding site or resting place of such an animal; and to, deliberately or recklessly:
- Capture, injure or kill a wild animal of a European protected species;
- Harass a wild animal or group of wild animals of a European protected species;
- Disturb such an animal while it is occupying a structure or place which it uses for shelter or protection;
- Disturb such an animal while it is rearing or otherwise caring for its young;
- Obstruct access to a breeding site or resting place of such an animal, or otherwise to deny the animal use
 of the breeding site or resting place;
- Disturb such an animal in a manner that is, or in circumstances which are, likely to significantly affect the local distribution or abundance of the species to which it belongs; and,
- Disturb such an animal in a manner that is, or in circumstances which are, likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young.

There are also several plant, fungi, and lichen species protected under this legislation. EPS (European Protected Species) animals can potentially return to the same resting site every year; therefore, bat roosts, otter holts, etc. are protected even if there are no animals there all year round. These laws are not designed to prevent work, but to minimize its impact on the long-term survival of EPS. As such, some activities affecting EPS or their places of shelter may need to be done under and in accordance with the terms of a licence issued by the licensing authority, NatureScot. Licenses allow certain otherwise illegal actions to be undertaken legitimately. Such activities might include:

- Blocking, filling, or installing grilles over old mines or tunnels;
- Building, alteration, or maintenance work;
- Getting rid of unwanted bat colonies;
- Tree felling;
- Re-roofing;
- Remedial timber treatment;
- Rewiring or plumbing in roofs;
- Demolition;
- Maintenance or construction of watercourse crossings (e.g. culverts under roads, bridges);
- Vegetation clearance along riparian corridors;
- Any disturbing (e.g. loud or night works) within proximity to watercourses;
- Dewatering or infilling ponds;
- Removal of woodpiles and debris near waterbodies; and,
- Translocation of species.

If a licence is required:

Further survey will be required in order to gain sufficient information in order to supply a sufficient baseline and to inform the necessary mitigation plan required to support a licence application.

Application forms can be found on the NatureScot website along with guidance:

https://www.nature.scot/professional-advice/protected-areas-and-species/licensing/species-licensing-z-guide/bats/bats-licences-development

Please note the need to provide clear justifications as to the purpose of the licence and any alternatives which may have been considered. Supporting information will be required to specifically support an

application and depending on the findings of this survey, further survey work may be required, along with a detailed mitigation plan specific to the bat interest on this site and to the works proposed. NatureScot also generally require that all other consents, such as planning permission and historic building consent, are in place before a licence will be considered.

A Habitats Regulations licence may be granted by NatureScot if the following three tests are met:

- 1. That the licence application must demonstrably relate to one of the purposes specified in Regulation 44(2) of the Habitats Regulations. These purposes include, among others:
 - Preserving public health or public safety;
 - Other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment; or,
 - Preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber, or any other form of property, or to fisheries.
- 2. That there is no satisfactory alternative; and
- 3. That the development will not be detrimental to maintenance of the populations of the species at a favourable conservation status.

If an EPS is found during the period of development:

The project ecologist should be contacted immediately for advice before proceeding with works. Advice from NatureScot may be required; the project ecologist should be able to determine this.

Appendix 3 – Wildlife and Countryside Act Species and the Law

Red squirrel, pine marten, water vole, freshwater pearl mussel, as well as some species of fish and other invertebrates protected under national legislation, the Wildlife and Countryside Act (1981) (as amended in Scotland) Schedule 5. Several plants are also protected under this piece of legislation under Schedule 8. Species such as pine marten and red squirrel are fully protected, making it an offence to intentionally or recklessly:

- Kill, injure, or take any wild animal included in Schedule 5;
- Damage or destroy any structure or place which any wild animal specified in Schedule 5 uses for shelter or protection;
- Disturb any such animal while it is occupying a structure or place which it uses for shelter or protection;
 and
- Obstruct access to any structure or place which any such animal uses for shelter or protection.

The water vole, though in sharp decline in the UK, and is listed on Schedule 5 in respect of section 9(4) only, *i.e.* their habitat is protected but the animals themselves are not, except while they are in their shelters. So while it is not an offence to kill, injure or take a water vole in Scotland, the other offences regarding damage to shelter and disturbance still apply. Although water voles are not currently protected from killing or taking in Scotland, England and Wales gave water vole full protection in April 2008, and they are expected to receive full protection in Scotland in the near future.

If a licence is required:

The recent Wildlife and Natural Environment (Scotland) Act 2012 provided a new licensing purpose to apply to Schedules 5 and 8 species listed in the Wildlife and Countryside Act. The new purpose is designed to mimic the tests required for EPS species. Therefore, there is still a need to provide clear justifications as to the purpose of the licence and any alternatives which may have been considered. Supporting information will be required to specifically support an application and depending on the findings of this survey, further survey work may be required, along with a detailed mitigation plan specific to the Schedule 5 interest on this site and to the works proposed. NatureScot also generally require that all other consents, such as planning permission and historic building consent, are in place before a licence will be considered.

The relevant purposes for which a licence can be granted include:

- Preserving public health or public safety;
- Preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber, or any other form of property or to fisheries; or
- For any other social, economic, or environmental purpose; provided that
 - a. Undertaking the conduct authorized by the licence will give rise to or contribute towards the achievement of, a significant social, economic, or environmental benefit; and,
 - b. There is no other satisfactory solution.

Application forms can be found on the NatureScot website along with guidance:

https://www.nature.scot/professional-advice/protected-areas-and-species/licensing/licensing-forms-and-guidance

If a Schedule 5 species is found during the period of development:

The project ecologist should be contacted immediately for advice before proceeding with works. Advice from NatureScot may be required; the project ecologist should be able to determine this.

Appendix 4 – Badgers and the Law

Badgers are protected by the Protection of Badgers Act 1992 (as amended in Scotland).

The purpose of the Act is to protect the animals from deliberate cruelty and from the incidental effect of lawful activities which could cause them harm. Under this legislation it is an offence to deliberately or recklessly:

- Kill, injure, take, possess or cruelly ill-treat a badger or attempt to do so;
- Damaging or destroying it;
- Obstruct access to, or any entrance of, a badger sett; and,
- Disturb a badger whilst it is occupying a sett.

If a licence is required:

Application forms can be found on the NatureScot website along with guidance: https://www.nature.scot/badgers-licence-forms-and-guidance-documents

Please note supporting information will be required to specifically support an application and depending on the findings of this survey, further survey work may be required, along with a detailed mitigation plan specific to the badger interest on this site and to the works proposed. NatureScot also generally require that planning permission is in place before a licence will be considered.

If a badger is found during the period of development:

The project ecologist should be contacted immediately for advice before proceeding with works. Advice from NatureScot may be required; the project ecologist should be able to determine this.

Appendix 5 – Birds and the Law

All species of wild bird and their nests are also protected under the Wildlife and Countryside Act 1981 (as amended in Scotland), which makes it illegal if any person intentionally or recklessly:

- Kills, injures, or takes any wild bird;
- Takes, damages, or destroys the nest of any wild bird while that nest is in use or being built;
- At any other time takes, damages, destroys or otherwise interferes with any nest habitually used by any wild bird included in Schedule A1;
- Obstructs or prevents any wild bird from using its nest; and,
- Takes or destroys an egg of any wild bird.

There are also further offences for birds listed on Schedule 1 of the Act which includes intentionally or recklessly:

- Disturbing any wild Schedule 1 bird while it is building a nest or is in, on or near a nest containing eggs or young; and,
- Disturbing dependent young of such a bird.

You should note that there is no licensable purpose of development for birds.

Should there be a risk of one of the above offences it is strongly advised that works are either micro-sited to avoid the nests or timed to avoid the nesting season (1 March to 31 August), depending on the species and type of work.

If live nests are found:

The project ecologist should be contacted immediately for advice before proceeding with works. Advice from NatureScot may be required; the project ecologist should be able to determine this.

Appendix 6 – Guidance on Optimal Survey Periods

Protected Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Habitats & Vegetation	Surveys	for mosses ar only	nd lichens		Recommende	ed time to un	dertake Phas	e 1 habitat sur	veys	Surveys for r	mosses and licl	nens only
Badgers		Best time for	field surveys		Surveys possible, but sub-optimal if vegetation is high				Best time			
Bats	10.500 -0.700	of hibernation		Activity surveys; invasive surveys avoided	Activity sur	Andrew Company	pection of bu	ilding roosts.	100	ys only; invasive be avoided	Inspec hibernation building	n, tree and
Birds	Wint	er birds	Breeding	birds/migra	nt species	Breedi	ng birds	Breed	ing birds/migran	t species	Winte	r birds
Otters	The second secon	nd surveying, t ner can limit vi		Surve			and the second second		d, preferably wh er can be limitin		Year-round though wet limit vi	weather can
Pine Martens	Sub-	optimal	Surve	y for breedir	ng dens	Optir	mal spring to	summer	10	Sub-opti	mal	
Red Squirrels		y at any time o reeding fema	37		77			otimal in spring mber to Septe		Survey at any	time of year	Breeding females
Water Voles		Reduced WV	activity		First surv	rey .		Second Surve	ey	Redu	iced WV activi	ty
Great Crested Newt	7.0	ys as newts ernation	June. Mus mid-April mid-Jur	t include vis and mid-Mane. Larvae su	Its: mid-Marc its undertaker ay. Egg survey urveys from m abitat surveys	n between vs April to nid-May	August ⁻	veys to mid- Ferrestrial t surveys	Terrestrial h	abitat surveys	No Surveys hiberr	
Fish	For coast	al, river and st	ream dwellir	ng species, ti	ming of surve	ys will deper	and the same of th	· Control of the Cont	of the species. Br r depending on t	reeding surveys w	vill need to coi	ncide within

Appendix 7 – Desk Study Search Results

Location	301 St Vincent Street, Glasgow	OS Grid Reference	NS5822865581 Date of Search	05/01/24	50
NBN Species Protected and Notable Species (Publicly Available)	No of Records within 2 km	Closest distance from site boundary (km)	Site name/Grid Ref	Date	Data Licence
none					
Wild Surveys Data Protected Species	No of Records within 2 km	Closest distance from site boundary (km)	Site name/Grid Ref	Da	te
none					
NBN Bat Species Data (Publicly Available)	No of Records within 2 km	Closest distance from site boundary (km)	Site name/Grid Ref	Date	Data Licence
Chiroptera	2	1.2km NW	Within grid reference NS5766	14 th August 2021	OGL - BCT
Daubenton's Bat	2		Within Grid reference NS5766	27 th August 2021	OGL - BCT
Wild Surveys Bat Data	No of Records within 2 km	Closest distance from site boundary (km)	Site name/Grid Ref	Da	te
none					

Glasgow Biodiversity Action Plan (2017-2027)

The LBAP takes an ecosystems approach to biodiversity protection and enhancement. The ecosystems approach aims to protect individual species and habitats by conserving the whole of the environment in which they are found. Thus there is a focus on broad habitats rather than individual habitats and species. Ecosystem statements include associated habitats and species

An Ecosystem Statement has been prepared for each of the five identified Ecosystems in Glasgow: Grassland, Woodland, Wetland, Urban and Farmland. Each Ecosystem Statement lists the associated key habitats and species. The actions to be undertaken to conserve and enhance them are found in the associated LBAP Implementation Plans.

Ecosystem Statements

- Grassland
- Woodland
- Wetland
- Urban
- Farmland

Bat species within Local Authority

- Soprano pipistrelle
- Common pipistrelle
- Nathusius pipistrelle
- Daubenton's bat
- Leisler's bat
- Brown long eared bat

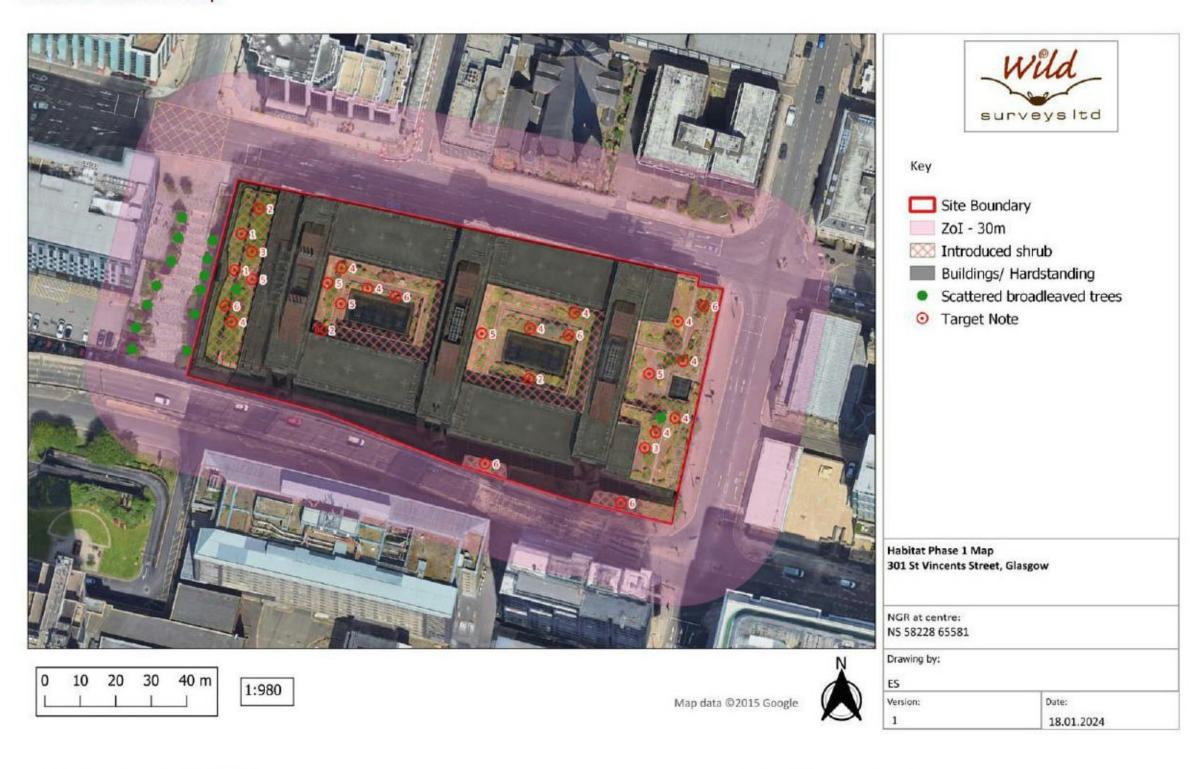
		on-statutory and Local Nature Reserves with	in 2 km
Number of Sites Within 2km	Designation	Closest Site Name and Grid Reference	Closest Site Distance
4	Glasgow SINC	River Clyde	600m S
1	LNR	Hamilton hill Claypits	1.7km N
1	Ancient Woodland	Site_ID: 59	1.4km NW
12	Native Woodland	Object_ID: 7504	1.6km N

Data Licenses

Open Government License (OGL). OGL license information can be found at: https://www.nationalarchives.gov.uk/doc/open-government-licence/version/2/ Creative Commons license with attribution (CC-BY). CC-BY license information can be found at: https://www.creativecommons.org/licenses/by/4.0/

Appendix 8 – Phase 1 Habitat Survey Map, Species List, Target Notes and Photographs

Phase 1 Habitat Map



Target Note	Grid Reference	Notes
	NS5814465594,	
1	NS5814265584	Buddleia – Dotted on each floor of the garden spaces
		Cotoneaster – Dotted on each floor of the garden
2	NS5815065601	spaces
	NS5814765589,	
3	NS5825865534	Rhododendron sp West and East Garden terraces.
	NS5814265569, NS5817365585,	
	NS5818065579, NS5823965572	
	NS5822565568, NS5826865569	
	NS5826865557, NS5826665542,	Ornamental Planting – Approx. 60%
4	NS5826065538	Found on all aspects of Garden spaces on each floor.
	NS5814765581, NS5816965580	Bare Ground – Approx. 40%
	NCEO1606EEO0 NCEO1606EEO0	Levels 2 Garden Terrace - 1.5m by 2m
	NS5816965580, NS5816965580	Level 3 Garden Terrace - 2m by 2m
5	NS5825965555	Level 4 Garden Terrace - 1.5m by 2m
	NS5813965573, NS5813965573,	
	NS5813965573, NS5825265518	Amenity Grassland – Approx. 2m by 0.5m
	NS5821265529, NS5823665566	Found on all boundaries and garden terraces as well as the outdoor area behind the canteen (Pitt Street)
6		SE of the site boundary.

	Species list Plant species					
Plant species						
Common Name	Latin Name					
ash	Fraxinus excelsior					
bamboo	Bambusa sp.					
bent grass species	Agrostis sp.					
cherry laurel	Prunus laurocerasus					
common ragwort	Jacobaea vulgaris					
common toadflax	Linaria vulgaris					
cotoneaster	Cotoneaster sp.					
creeping buttercup	Ranunculus repens					
cypress species	Cupressacea					
daffodil	Narcissus pseudonarcissus					
daisy	Bellis perennis					
dandelion	Taraxacum agg.					
groundsel	Senecio vulgaris					
herb robert	Geranium robertianum					
ivy	Hedera helix					
lesser periwinkle	Vinca minor					
pampas grass	Cortaderia selloana					

pearlwort sp	Sagina sp
perennial rye-grass	Lolium perenne
rhododendron	Rhododendron ponticum
ribwort plantain	Plantago lanceolata
rosebay willowherb	Chamerion angustifolium
white stonecrop Sedum album	

Appendix 9 – Biodiversity Enhancement Strategy

ACTIONS CONSIDERED	MITIGATION: Measures included to avoid and minimise impacts	ENHANCEMENT: Measures included to enhance biodiversity (or explanation for not applying)
Protection and enhancement of existing habitats on or adjacent to the site	There are no significant natural habitats within the site protect or enhance, existing small trees will be retained where possible within the design. Street trees and associated vegetation on the adjacent St Vincent Plaza should be protected from damage during works.	There are no natural habitats of value within the site protect or enhance, with the majority of plant species on the terraced areas are non-native and ornamental. Small trees will be retained within the design, with the majority of the planting to be removed and replaced with new planting which will provide a greater benefit to biodiversity. Removal of non-native invasive species such as buddleia and cotoneaster which improve the condition of habitats within the site.
Creation of new habitat on the site	N/A	Native species were selected from the Scottish Native Plants list assembled by Royal Botanical Gardens Edinburgh botanists on sbac.org.uk. Many of the proposed species have benefits for pollinator species, and the proposed landscaping will result in habitats of higher distinctiveness than post-development.: Ground Floor Planting of specimen trees/shrubs (native where possible), ornamental planting (native where possible), pollinator planting, sensory planting, with small areas of low maintenance ground cover. Level 2

Project number: WS4392.23 2nd February 2024

36

ACTIONS CONSIDERED	MITIGATION: Measures included to avoid and minimise impacts	ENHANCEMENT: Measures included to enhance biodiversity (or explanation for not applying)
		Retention of six existing trees/shrubs along with the addition of specimen trees/shrubs (native where possible), ornamental planting (native where possible), pollinator planting, sensory planting and small areas of low maintenance ground cover. Level 3 Retention of around eight existing trees/shrubs, along with the addition of specimen trees/shrubs (native where possible), ornamental planting (native where possible), pollinator planting (shrubs and perennials), sensory planting with small areas of low maintenance ground cover, on the end terraces and two internal courtyard areas. Level 4 Specimen trees / shrub planting (native where possible), ornamental planting (native where possible), pollinator planting (shrubs and perennials), sensory planting with small areas of low maintenance ground cover.
Protection and enhancement of connectivity through the site and with its surroundings	There is very limited ecological connectivity present to protect.	Although there is currently limited natural habitat in the wider area, this may change in the future, and the proposed planting will provide stepping-stones of connectivity across the city.
Protection and enhancement of existing species on or adjacent to the site	With the exception of nesting birds, such as gulls and pigeons, the building is unlikely to support any existing species and it has negligible suitability for roosting bats.	Incorporating swift boxes into the building design would provide nesting opportunities for a species known to be present in the wider area. Netting or other measures could be used to dissuade gulls and pigeons from unwanted nesting.

ACTIONS CONSIDERED	MITIGATION: Measures included to avoid and minimise impacts	ENHANCEMENT: Measures included to enhance biodiversity (or explanation for not applying)
Enhancement for new species	N/A	In line with Guidance from Royal Institute of British Architects document, it is recommended that swift boxes are installed on the building, the number and location to be determined through consultation with the project ecologist, as follows (Williams, 2010). The location of swift boxes should be shown on elevation plans where possible: Guidance from the Royal Institute of British Architects states that swift bricks should be: Located out of direct sunlight, ideally on north-east or north-west elevations Located 5 m above ground, ideally near the top of the elevation underneath eaves or roofing Located where swifts have clear airspace to approach and exit their nests, i.e. clear of trees/utilities, other building and plant equipment. Incorporated in groups appropriate for building size and mass: 10 to 20 boxes should be installed on a larger building where possible within the design.
Avoidance, control, and removal of invasive species from the site	Non-native plant species, especially those which are more invasive (cotoneaster and buddleia) should be removed from the terraced areas.	N/A

38

ACTIONS CONSIDERED	MITIGATION: Measures included to avoid and minimise impacts	ENHANCEMENT: Measures included to enhance biodiversity (or explanation for not applying)
Protecting wildlife from negative interactions with people and / or infrastructure	Refurbishment works on the roof area should be avoided during the nesting bird season where possible. If works to the roof area must be carried out during the nesting season, a nesting bird survey should be carried out within 48 hours of proposed works. If gulls and pigeons are found to be nesting in the roof area, advice should be sought from a specialist contractor as necessary There are no other threats to existing wildlife resulting from refurbishment.	N/A
Promoting awareness and encouraging further actions for nature	N/A	A landscape and habitat management plan (LHMP), appropriate to the site, should be produced covering at least the first five years after project completion in accordance with BS 42020:2013 Section in order to manage and maintain the ecological enhancements to ensure they reach their maximum biodiversity value. The LHMP is to be handed over to the building owner/occupants for use by the maintenance staff.
SUMMARY: Positive effects that will be delivered	N/A	Currently the site has very limited biodiversity value and connectivity to other green spaces. Positive effects on biodiversity can be gained through the removal of nonnative ornamental species, and incorporation of native species and species of benefit to pollinators. Swift boxes (where possible within the design) should be considered. The

ACTIONS CONSIDERED	MITIGATION: Measures included to avoid and minimise impacts	ENHANCEMENT: Measures included to enhance biodiversity (or explanation for not applying)
		number and location of swift boxes are still to be agreed and should be included within the final elevation plans. A landscape and habitat management plan which details that the scope of any habitat management, who will undertake future management, responsibility for delivering the
		plan and means by which continuity over the long term will be secured will require to be produced to support the habitat enhancements.



Registered Address Room 41, St James Business Centre, Linwood Road, +44 (0) 141 887 2770