Penny Anderson Associates Ltd
CONSULTANT ECOLOGISTS

SALBOY CENTRAL LTD

VIADUX PHASE 2

PRELIMINARY ECOLOGICAL APPRAISAL



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This project has been undertaken in accordance with PAA policies and procedures on quality assurance.

Signed:

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1. INTRODUCTION

1.1 Penny Anderson Associates Ltd (PAA) was commissioned by Salboy Central Ltd in October 2023 to carry out a Preliminary Ecological Appraisal (PEA) of land at Viadux, Manchester (hereafter referred to as the 'site). The site is centred on approximate grid reference SJ83569761.

1.2 The PEA comprised a desk study for a 2km search zone around the site and an extended Phase 1 habitat survey. This report details the results of the desk study and survey, and evaluates the results in the context of the proposals for the site, making recommendations for any further survey work and outline mitigation recommendations.

Site Description

1.3 The Site is located in Manchester city centre. It is bounded by the Manchester Central Conference Complex and Great Northern Warehouse to the north, Albion Street to the east, the Deansgate Castlefield Metrolink station and Deansgate Locks to the south, and the Beetham Tower to the west. It extends to 1.49 ha.

1.4 The Proposed Development will be delivered across two plots comprising the following principal uses:

- Plot A: a hotel with residential apartments above; and
- Plot B: affordable homes.

1.5 Together with these principal uses, the Proposed Development comprises residential amenities; secure cycle parking; public realm improvements and new green landscaping; and associated works to the public highway.

1.6 Plot 2a is located immediately east of the recently completed Phase 1 building, on land partially comprising the grade II listed Castlefield Viaduct. This plot will deliver a 76-storey mixed use tower comprising a hotel (Use Class C1) with associated bar and restaurant and residential units above comprising 1, 2 and 3 bed, and penthouse apartments (Use Class C3) with associated residential amenity spaces. Secure cycle spaces, serving this and the Phase 1 building, are provided at the ground floor level. At viaduct level, a redesigned service yard for the conference centre is enclosed by a new podium structure with residents' external amenity space above. A section of the Great Bridgewater Street bridge (deck) is removed to bring light into the street below.

1.7 Plot 2b, located at the western-most section of the Site between the viaduct and Beetham Tower, consists of a 23-storey residential building accommodating affordable 1-, 2- and 3-bed apartments (Use Class C3), secure cycle parking spaces, flexible commercial units (Use Class E) opening onto the viaduct, and public realm enhancements on Great Bridgewater Street.

Legislative Context

1.8 A range of international and national legislation has been established in the UK to protect important nature conservation sites and priority species. At the international level, European Union (EU) Directives require individual member states to implement their conservation provisions nationally for the benefit of Europe as a whole. These Directives have been transposed into UK law by the Conservation of Habitats and Species Regulations 2017 (amended).

1.9 Other international conventions include: the Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979), which requires the maintenance of populations of wild flora and fauna, giving particular protection to endangered and vulnerable species; and the Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979), which requires the protection of migratory species throughout their entire range. The above conventions are

implemented in England and Wales via the Wildlife and Countryside Act (WCA), 1981 (as amended) and Countryside and Rights of Way (CRoW) Act 2000. This legislation also protects important habitats and sites such as Sites of Special Scientific Interest (SSSI).

1.10 At the national level, Biodiversity 2020 (Defra 2011) forms England's national biodiversity strategy. Building on the Natural Environment White Paper[1] published in 2011, this provides a means of delivering the UK's commitments to maintaining and protecting biodiversity. Under Biodiversity 2020, the Priority Species and Habitats referred to are those of 'Principal Importance' for the conservation of biodiversity in England as listed on Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006 (amended).

1.11 More recently, the Environment Act 2021 further supports this commitment to, and strengthens the legislation in respect of, maintaining and also enhancing biodiversity in England, and Part 6 Nature and Biodiversity includes the following key areas:

- Strengthened biodiversity duty for public authorities in England;
- Biodiversity net gain to ensure developments deliver at least 10% increase in biodiversity;
- Local Nature Recovery Strategies to support a Nature Recovery Network;
- Duty upon Local Authorities to consult on street tree felling;
- Strengthen woodland protection enforcement measures; and
- Protected Site Strategies and Species Conservation Strategies to support the design and delivery of strategic approaches to deliver better outcomes for nature.

1.12 Finally, the National Planning Policy Framework (NPPF 2023) provides guidance for local authorities on the content of the Local Plans and is a material consideration in determining planning applications. Briefly, with an overall focus on sustainable development, the NPPF states that developments should aim to engender positive outcomes for habitats and biodiversity, with a particular focus on the maintenance and creation of ecological networks.

1.13 The NPPF identifies the following principals that should be applied by local planning authorities when determining planning applications:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a SSSI, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSI;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons, and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should

[1] https://www.gov.uk/government/publications/the-natural-choice-securing-the-value-of-nature

be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

1.14 The NPPF states that the planning system should contribute to and enhance the natural environment through a range of actions, including:

- Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- Maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- Remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

1.15 To protect and enhance biodiversity and geodiversity, plans should:

- Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

Invasive Species

1.16 Certain non-native species that have been introduced into the UK are regarded as being a threat to native biodiversity. Legislative measures have, therefore, been put in place to prevent the spread of these invasive species in the wild.

1.17 Under section 14 of the WCA, 1981 (as amended), it is illegal to introduce plants listed under Part II of Schedule 9 of the WCA into the wild or sell these species. Offences include causing the spread of viable plant material or neglecting to contain or appropriately manage non-native species.

1.18 Commonly introduced Schedule 9 species include non-native cotoneaster species, specifically, small-leaved cotoneaster[2] (*Cotoneaster microphylla*) and wall cotoneaster (*C. horizontalis*), Himalayan balsam (*Impatiens glandulifera*) and Japanese knotweed (*Reynoutria japonica*).

1.19 Relevant protected species legislation summaries can be found in Appendix 1.

[2] *Plant species names follow Stace (2019)*

2. METHODS

Desk Study

2.1 A request for details of protected and notable species and locally designated sites within 2km of the centre of the site was made to Greater Manchester Ecology Unit (GMEU), with data returned in October 2023. Additionally, the Multi-Agency Geographic Information for the Countryside (MAGIC[3]) website was consulted for details of statutory designated sites, and Priority Habitats within a 2km search area from the centre of the site, and European Protected Species (EPS) Licences within 1km of the site.

2.2 It is important to note that the desk study results provide an indication of the species present in and around the site, and do not confirm current presence or absence of any species. Protected species are often under-recorded in county wildlife databases.

Extended Phase 1 Habitat Survey

2.3 An extended Phase 1 habitat survey was undertaken by Ecologist Stephen Griffith on 17th October 2023.

2.4 The survey was carried out in accordance with the methodology in the Handbook for Phase 1 Habitat Survey by the Joint Nature Conservation Committee (JNCC 2010). This entailed mapping, describing and collating plant species lists for habitats within the site boundary. The broad habitat types were mapped, with each habitat type coded according to the standard JNCC Phase 1 habitat survey procedure.

2.5 Each plant species was assigned abundance codes within each habitat. This was done using the 'DAFOR' scale (where: D = Dominant; A = Abundant; F = Frequent; O = Occasional; R = Rare), which provides an indication of the relative abundance of each plant species present within a particular habitat. Common names and scientific names according to Stace (2019) are provided in the species list (Appendix 2) but common names only are referred to in the text.

2.6 The survey was 'extended' (Institute of Environmental Assessment 1995) to include notes on fauna and habitats which could potentially support protected or notable species. The presence of, or potential for, protected or notable species was noted on the field map and in the written target notes (TN) during the survey. The assessment followed the PEA guidance by the Chartered Institute of Ecology and Environmental Management (CIEEM 2017).

Limitations

2.7 The survey was undertaken at an appropriate time of year for this type of survey and all parts of the site were accessible on the day of survey, with no significant constraints.

[3] *https://magic.defra.gov.uk/MagicMap.aspx (last accessed 23/10/23)*

3. RESULTS

Desk Study

3.1 The desk study data returned by GMEU in October 2023, and the results of the MAGIC data searches are summarised below.

Statutory Protected Sites

European Sites

3.2 European protected sites include Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar wetland sites, possible SAC, potential SPA and proposed Ramsar sites.

3.3 No SAC, SPA, Ramsar, possible SAC, potential SPA or proposed Ramsar sites were identified within a 2km search area from the site.

Sites of Special Scientific Interest

3.4 SSSI represent a selection of this country's best wildlife and geological sites and cover approximately 7% of the terrestrial area of the country (with over 4,000 separate sites in England).

3.5 No SSSI fall within the 2km search area.

3.6 The site falls within 2km of Impact Risks Zones (IRZ[4]) of two SSSI:

- Hollinwood Branch Canal SSSI IRZ; and
- Rochdale Canal SSSI IRZ.

National and Local Nature Reserves

3.7 No National or Local Nature Reserves were returned within the 2km data search.

Non-Statutory Protected Sites

3.8 Three Local Wildlife Sites (LWS) were returned within the 2km data search. These are:

- River Irwell;
- Rochdale Canal: Stott's Lane to Ducie Street Basin; and
- Ashton Canal (West).

Priority Habitats

3.9 Thirty-four areas of deciduous woodland are present within 2km of the site boundary. The closest record is located 1435m north-west of the site, along the river Irwell.

[4] *The Impact Risk Zones are a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.*

3.10 Thirty-one records of open mosaic habitat are present within 2km of the site boundary. The closest record is located 290m south east of the site, with a significantly larger area of open mosaic located 795m north-west of the site boundary.

Protected and Notable Species

Granted European Protected Species Application

3.11 Three EPS licenses all relating to bat roosts were returned within the 2km search area. These roosts affected by these licences are summarised in Table 1, below.

Table 1 Bat European Protected Species Licenses

Species	License to Allow	Date Licence Granted	Date Licence Expires	Distance from Site Boundary
Brown long-eared bat (*Plecotus auritus*)	Impact and destruction of a breeding site Destruction of a resting place	10/12/2012	31/08/2015	330m N
Common pipistrelle (*Pipistrellus pipistrellus*) Soprano pipistrelle (*Pipistrellus pygmaeus*)	Destruction of a resting place	23/04/2014	30/06/2017	925m NE
Common pipistrelle	Destruction of a resting place	28/01/2016	27/01/2021	815m NW
Common pipistrelle	Destruction of a resting place	28/08/2012	30/09/2013	330m N
Common pipistrelle	Damage and destruction of a resting place	12/03/2018	30/04/2040	720m NE
Common pipistrelle	Destruction of a resting place	05/03/2020	01/01/2025	410M N
Common pipistrelle	Unknown	23/05/2013	30/09/2016	195m S

Badger

3.12 Three records of badger (*Meles meles*) were returned from the 2km data search, dating from 2011 to 2013. The closest of these records lies 575m east of the site.

3.13 One record of a badger sett was also returned from the 2km data search, this record is located 1.7km north-east of the site.

Otter

3.14 Five records of otter (*Lutra lutra*) were returned from the 2km data search. The closest record is approximately 415m west of the site, located on the Bridgewater Canal at Merchant's Bridge. The other four records are all associated with the River Irwell.

Water Vole

3.15 No records of water vole (*Arvicola amphibius*) were returned from the data search.

Bats

3.16 Seventy-one bat roost records and one-hundred-and-eighty-two non-roost ('other signs') records were returned from the 2km search area dating from 1994 to 2022. These are summarised in Table 2.

Table 2 Summary of Bat Records

Common Name	Scientific Name	Type of record	No. of Records	Closest Record (approximate distance and direction from site boundary)
Brown long-eared bat	*Plecotus auritus*	Other signs	1	830m NW
Common pipistrelle	*Pipistrellus pipistrellus*	Roost	50	165m SE
Common pipistrelle	*Pipistrellus pipistrellus*	Other signs	121	One record falls within the boundary of Plot 2c. This is a record of presence using a bat detector, dating from 2010. The next closest record is located 145m south of the site.
Daubenton's bat	*Myotis daubentonii*	Roost	1	670m NW
Daubenton's bat	*Myotis daubentonii*	Other signs	2	1.1km N
Myotis species	*Myotis* sp.	Roost	1	1.35km E
Myotis species	*Myotis* sp.	Other signs	1	1.8km NW
Noctule	*Nyctalus noctula*	Other signs	3	1.5km NE
Pipistrelle species	*Pipistrelle* sp.	Roost	16	165m SE
Pipistrelle species	*Pipistrelle* sp.	Other signs	40	270m S
Soprano pipistrelle	*Pipistrellus pygmaeus*	Roost	2	705m NW
Soprano pipistrelle	*Pipistrellus pygmaeus*	Other signs	9	380m NW
Unidentified bat species	Chiroptera spp.	Roost	1	715m NW
Unidentified bat species	Chiroptera spp.	Other signs	5	500m N

Other Mammals

3.17 Thirty records of hedgehog (*Erinaceus europaeus*) were returned from the 2km data search, dating from 2013 to 2022. The closest record is located 515m south of the site. The majority of

these hedgehog records are isolated from the site as they are located south of Mancunian Way, where this large road acts as a physical barrier to dispersal.

Birds

3.18 All nesting birds, their nests and eggs are protected from harm under the WCA, 1981 (as amended). In addition, species listed under Schedule 1 of the WCA are further protected against disturbance when breeding.

3.19 A number of bird species are listed under Section 41 in the NERC Act (2006, amended) as species 'of principal importance for the purpose of conserving biodiversity'. These species are often known as the 'S41 species'. There is a legal requirement for a public body to 'have regard to' these species in relation to maintaining biodiversity. The S41 list overlaps somewhat with the UK Biodiversity Action Plan species, with national or local targets to maintain and enhance populations.

3.20 Furthermore, the Birds of Conservation Concern (BoCC) report lists those bird species that are classed as being of High (Red listed) and Medium (Amber Listed) conservation concern based on population monitoring (Stanbury *et al*. 2021). This Red and Amber classification helps guide the assessment of bird species of conservation interest on or near to a site, alongside legislative and policy requirements.

3.21 Many records of Schedule 1 species were returned in within the 2km search area, including records of black redstart (*Phoenicurus ochruros*), hobby (*Falco Subbuteo*), kingfisher (*Alcedo atthis*), little ringer plover (*Charadrius dubius*) and peregrine (*Falco peregrinus*). These records are classed as confidential. All other protected and notable bird species records within the 2km search area are listed in Table 3 along with their conservation status.

Table 3 Bird Species of Principal Importance

Common Name	Scientific Name	Amber[5] Listed	Red Listed	Section 41 Priority Species[6]
Arctic skua	*Stercorarius parasiticus*	x		
Bullfinch	*Pyrrhula pyrrhula*	x		x
Cuckoo	*Cuculus canorus*		x	x
Curlew	*Numenius arquata*		x	x
Dunnock	*Prunella modularis*	x		x
Herring gull	*Larus argentatus*		x	x
House sparrow	*Passer domesticus*		x	x
Lapwing	*Vanellus vanellus*		x	x
Lesser redpoll	*Acanthis caberet*			x
Linnet	*Linaria cannabina*		x	x
Reed bunting	*Emberiza schoeniclus*	x		x
Skylark	*Alauda arvensis*		x	x

[5] *The UK's birds can be split in to three categories of conservation importance - red, amber and green. Red is the highest conservation priority, with species needing urgent action. Amber is the next most critical group, followed by green.*

[6] *Species of Principal Importance under Section 41 of the NERC Act 2006.*

Common Name	Scientific Name	Amber[5] Listed	Red Listed	Section 41 Priority Species[6]
Song thrush	*Turdus philomelos*	x		x
Spotted flycatcher	*Muscicapa striata*		x	x
Starling	*Sturnus vulgaris*		x	x
Yellow wagtail	*Motacilla flava*		x	x

Amphibians

3.22 Two records of great crested newt (*Triturus cristatus*, GCN) were returned from the 2km search area, dating from 2017 and 2019. Both these records are approximately 1.6km to the north-west of the site boundary; located in crescent meadow, their dispersal ability is largely inhibited by the presence of the River Irwell.

3.23 Three records of common toad (*Bufo bufo*) dating from 2014 to 2021 were returned from the 2km data search. As with the GCN records, these records of toad are approximately 1.6km north-west of the site boundary in the crescent meadow ponds.

3.24 An Ordnance Survey map search revealed no ponds or other waterbodies within 500m of the site suitable for hosting GCN.

Reptiles

3.25 No records of reptile were returned from the 2km data search.

Invertebrates

3.26 A small number of priority invertebrate species were returned from the 2km data search and are presented in Table 4.

Table 4 Priority Invertebrate Species Records

Common Name	Scientific Name
Cinnabar	*Tyria jacobaeae*
White-letter hairstreak	*Satyrium w-album*

White-clawed Crayfish and Notable Fish

3.27 No records of white-clawed crayfish (*Austropotamobius pallipes*) or other notable fish were returned from the data search.

Notable Plant Species

3.28 One notable plant species, the bee orchid (*Ophrys apifera*), was returned from the 2km data search.

3.29 No invasive non-native plant species records were returned from the 2km data search.

Phase 1 Habitat Survey

3.30 Figure 1 presents the habitat map of the site. Botanical species lists for the habitats on-site are presented in Appendix 2, with illustrative photographs in Appendix 3.

Main Habitats Present

3.31 The site is dominated by built structures and hardstanding with a small patch of self-seeded ephemeral/short perennial vegetation (Figure 1). Plot 2a of the scheme extends across two levels.

Hardstanding

3.32 At ground level (Plot 2a) the structure comprised an enclosed complex of vaulted arches supported by brick piers, previously used as a car park and now as storage of construction materials (Photograph 1). This area could only be accessed via the entrance off Albion Street, where a small concrete loading area is present beneath the viaduct.

3.33 The upper level of Plot 2a, accessed via a ramp at the southern side of the site (Trafford Street), comprised an open area of hardstanding previously used as a car park.

Ephemeral/Short Perennial Vegetation

3.34 A small patch of ephemeral/short perennial vegetation is present to the east of the site within Plot 2a, whilst there was also some occasional vegetation growth from gaps in the external facades. All species present were common, widespread and typical of urban city centre sites. Species included occasional perennial rye-grass, butterfly-bush, common chickweed, springy turf-moss, and ivy-leaved toadflax (locally frequent). Rare occurrence of creeping buttercup, dandelion, groundsel, common ragwort, and willowherb species were also recorded.

Invasive Non-Native Species

3.35 No invasive non-native plant species were observed during the survey.

Protected Species

3.36 The site is isolated from any larger areas of natural or semi-natural habitat. Due to the lack of suitable habitat or shelter for protected species in this urban environment, it was concluded that the only species relevant to the assessment are roosting bats and nesting birds.

Bats

3.37 Although generally in sound condition and in regular use, the buildings and structures (Photograph 2), could offer some limited opportunities for small numbers of crevice-roosting bats. In addition, bat roosts are known in the immediate local area and bat activity is relatively well-recorded in this wider area. It is, therefore, recommended that a detailed building inspection for potential bat roost features is undertaken.

3.38 The site contains no potential tree roost sites for bats as there are no mature or larger trees on or adjacent to the site.

3.39 The hardstanding provides no significant foraging habitat for bats. Street lighting, together with the lack of vegetation and connectivity to other semi-natural habitats, significantly diminishes its potential for bat foraging.

Nesting Birds

3.40 The suitability of the site for black redstart or peregrine is considered to be very limited due to the dominance of intact hardstanding and lack of suitable features for foraging and/or nesting. These species are known to be present within Manchester city centre but are not considered to be likely present or reliant on this site.

3.41 On the edge of the site boundary for Plot 2a was a bridge that traverses Great Bridgewater Street. The underside of this bridge offers suitable nesting habitat for feral pigeon (*Columba livia*) (TN1, Figure 1), with large collections of droppings present for the duration.

3.42 In addition, the underside of the viaduct may have offered suitable nesting habitat for feral pigeon, but bird spikes had been installed to prevent access (Photograph 3).

4. DISCUSSION AND RECOMMENDATIONS

Designated Sites

4.1 The site contains no statutory nature conservation sites, and none are within 2km of the site, with those situated further afield considered unlikely to be impacted by the proposed development.

4.2 Non-statutory sites are of a sufficient distance to site that they are unlikely to be impacted by the proposed development.

Habitats

4.3 The habitats and plant species recorded within the site are widespread and common throughout Greater Manchester and the UK. None of the plant species recorded within the site are either Nationally Scarce or Nationally Rare (Hill *et al.* 2004) or of any other conservation significance (Cheffings and Farrell 2005, as amended; Stroh *et al*. 2014). Priority Habitats within 2km of the site were limited, with the closest a small area of open mosaic habitat 290m from site.

4.4 No evidence of invasive non-native plant species was discovered on site.

Protected and Notable Species

Bats

4.5 It is recommended that a detailed inspection of the structures/buildings across the site for potential bat roost features is undertaken by a suitably licensed Ecologist. These surveys can be completed at any time of year and would enable suitable recommendations in relation to bats and their roosts to be made.

Nesting Birds

4.6 The site is considered to provide a relatively limited foraging resource for local populations of birds. The site is unlikely, therefore, to form a key part of the foraging habitat for any local populations of notable bird species such as black redstart.

4.7 Nesting birds, their nests, eggs and dependant young are protected under the WCA 1981 (as amended). Work during the nesting season has the potential to disturb or destroy active bird nests during the period March to September, which would be an offence under this legislation. The underside of the bridge on Great Bridgewater Street offers suitable nesting habitat for feral pigeon. It is assumed that the underside of the bridge will be left undisturbed as part of the site works. If this changes then prior to commencement of works a check for nesting birds will be required and any active nests will need to remain *in situ* undisturbed until the young have fledged.

Biodiversity Enhancement Opportunities

4.8 The site is currently of limited ecological value and development presents an opportunity to increase biodiversity. Potential enhancement measures comprise:

- Use of British native or pollinator-friendly tree, shrub and herbaceous species in any landscape planting, for example, inclusion of species that provide nectar for invertebrates or berries to provide a food source for birds;
- Inclusion of integrated bat roost features such as bat bricks or bat tubes to increase opportunities for roosting bats, preferably on the southern side of site to allow access to Rochdale Canal, coupled with a suitable lighting strategy to avoid unnecessary lighting of roost features; and
- Including a green/brown roof design would enhance/expand forage opportunities for any local populations of foraging birds, if the design allows.

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6. ABBREVIATIONS

BoCC	Birds of Conservation Concern
CIEEM	Chartered Institute of Ecology and Environmental Management
CRoW	Countryside and Rights of Way
EPS	European Protected Species
EU	European Union
GCN	Great Crested Newt(s)
GMEU	Greater Manchester Ecology Unit
IRZ	Impact Risk Zone(s)
JNCC	Joint Nature Conservation Committee
LWS	Local Wildlife Site(s)
MAGIC	Multi Agency Geographic Information for the Countryside
NERC	National Environment and Rural Communities
NPPF	National Planning Policy Framework
PAA	Penny Anderson Associates Ltd
PEA	Preliminary Ecological Appraisal
SAC	Special Area(s) of Conservation
SPA	Special Protection Area(s)
SSSI	Site(s) of Special Scientific Interest
TN	Target Note(s)
WCA	Wildlife and Countryside Act

FIGURE

383500 383550 383600 383650

397650 397600 397550

STREET LEVEL

Phase 2 plot b

Phase 2 plot a

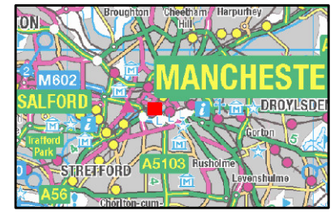
1

UPPER LEVEL

Phase 2 plot a

Trafford Street

TARGET NOTES
1. Nesting bird potential - underside of bridge



Legend

- Survey areas
- Phase 1 Habitats
- Ephemeral/short perennial
- Hardstanding
- Target notes

N

British National Grid
Projection: Transverse Mercator
False Easting: 400000.000000
False Northing: -100000.000000
Central Meridian: -2.000000
Scale Factor: 0.999601
Latitude Of Origin: 49.000000

ISO A3

Metres
0 5 10 15 20

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Project Name: Viadux Manchester

Discipline: Ecology

Title:

Extended Phase 1 Habitat Survey Map

Scale	1:600	Drawing No.	Figure 1
Drawn By	CC	Originator: SRS	Date: 24/10/2024
PAA Ref.			Revision: 1.1

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Figure 1 - Phase 1 Habitats Map - Viadux Manchester - SALB04-2 CC 241024.mxd

APPENDICES

APPENDIX 1

Relevant Protected Species Legislation

SUMMARY OF THE LEGISLATION RELATING TO BATS

All wild species of bat are protected under the Wildlife and Countryside Act (WCA) 1981, which has also been amended by later legislation, including the Countryside and Rights of Way (CRoW) Act 2000. Bats are listed on Schedule 5 of the WCA and are therefore subject to some the provisions of Section 9 which, with the amendments, make it an offence to:

- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection (S9:4b).
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a bat (S9:4c).

There are additional offences in relation to buying and selling (S9:5) any live or dead animal of this species or anything derived from them.

Bat species are also listed under Annexes IIa and IVa of the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora, also known as the 'Habitats Directive'. Inclusion on Annex IVa means they are consequently identified as European Protected Species (EPS) and protected under the Conservation of Habitats and Species Regulations 2017 (amended).

The Conservation of Habitats and Species Regulations 2017 (amended) state that a person commits an offence if they:

(a) deliberately capture, injure or kill any wild animal of a European protected species,

(b) deliberately disturb wild animals of any such species, in such a way as –

  (i) to impair their ability to survive, to breed or reproduce, or to rear their young, or

  (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate, or

  (iii) to affect significantly the local distribution or abundance of the species to which they belong;

(c) deliberately take or destroy the eggs of such an animal, or

(d) damage or destroy a breeding site or resting place of such an animal.

Under these Regulations it is an offence to damage or destroy a breeding site or resting place whether the animal is in occupation or not, and protection extends to all life stages of the animal in question. There are additional offences relating to possession, control and sale of a live or dead bat or part of such an animal.

In addition, seven native British bat species, including the soprano pipistrelle (*Pipistrellus pygmaeus*) and the brown long-eared bat (*Plecotus auritus*), are listed as 'species of principal importance' for the conservation of biodiversity in England under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (amended). In Wales, Section 7 of the Environment (Wales) Act 2016 provide a list of organisms of 'principal importance for maintaining and enhancing biodiversity' and lists several species of bat including the common pipistrelle (*Pipistrellus pipistrellus*) which is absent from England's S41 list.

Please note: the above text provides a brief summary of the legislation in relation to bats and their roosts and the original Acts, Regulations and any amendments should be referred to for the precise wording.

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SUMMARY OF THE LEGISLATION RELATING TO BREEDING BIRDS

All wild species of breeding birds and their nests and eggs are protected under Part 1 of the Wildlife and Countryside Act (WCA) 1981, as amended by later legislation including the Countryside and Rights of Way (CRoW) Act 2000. This legislation applies in England and Wales.

Part 1 (Section 1:1) of the WCA states that:

> 'If any person intentionally,
>
> (a) kills, injures or takes any wild bird;
>
> (b) takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
>
> (c) takes or destroys an egg of any wild bird,
>
> he shall be guilty of an offence.'

Part 1 (Section 1:5) of the WCA (amended by the CRoW Act 2000) refers to specific birds listed on Schedule 1 of the WCA, and states that:

> 'If any person intentionally or recklessly,
>
> (a) disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or
>
> (b) disturbs dependent young of such a bird,
>
> he shall be guilty of an offence and liable to a special penalty.'

Schedule 1 includes birds such as Western barn owl (*Tyto alba*), black redstart (*Phoenicurus ochruros*), woodlark (*Lullula arborea*) and Cetti's warbler (*Cettia cetti*). Please refer to the WCA for a complete list of Schedule 1 species[1].

Some provisions are made to allow the killing and taking of certain species under certain circumstances, as follows:

- Birds listed on Schedule 2 (Part 1) of the Act may be taken or killed outside of the 'close season' for each individual species (the 'close season' is defined by the Act). This includes various wild duck and geese species.
- Birds listed on Schedule 2 (Part 2) of the Act may be killed or taken by authorised persons at all times. This includes species such as carrion crow (*Corvus corone*), Eurasian magpie (*Pica pica*), feral pigeon[2] (*Columba livia*) and greater Canada goose (*Branta canadensis*). An 'authorised person' is defined as a person who has written authorisation to undertake the act from the relevant statutory authority. The written authority is in the form of a licence, either a general licence which covers a number of the more typical 'pest' species, or an individual licence for other individual species. In England these licences are issued by Natural England and in Wales by the Welsh Assembly Government.

Please note: the above text provides a brief summary of the legislation in relation to breeding birds in England and Wales and the original Act and any amendments should be referred to for the precise wording.

[1] *https://www.legislation.gov.uk/ukpga/1981/69/schedule/1*

[2] *Also known as rock dove*

APPENDIX 2

Botanical Species List

Appendix 2 Botanical Species List

Common Name	Scientific Name	DAFOR
Woody Species		
Butterfly-bush	*Buddleja davidii*	O
Herbs, Grasses and Ferns		
Common chickweed	*Stellaria media*	O
Common ragwort	*Jacobaea vulgaris*	R
Creeping buttercup	*Ranunculus repens*	R
Dandelion	*Taraxacum officinale* agg.	R
Groundsel	*Senecio vulgaris*	R
Ivy-leaved toadflax	*Cymbalaria muralis*	LF-O
Perennial rye-grass	*Lolium perenne*	O
Willowherb species	*Epilobium* sp.	R
Moss		
Springy turf-moss	*Rhytidiadelphus squarrosus*	O

KEY
D-Dominant, A-Abundant, F-Frequent, O-Occasional, R-Rare, L-Locally

APPENDIX 3

Photographs



Photograph 1
Phase 2 vaulted arch complex



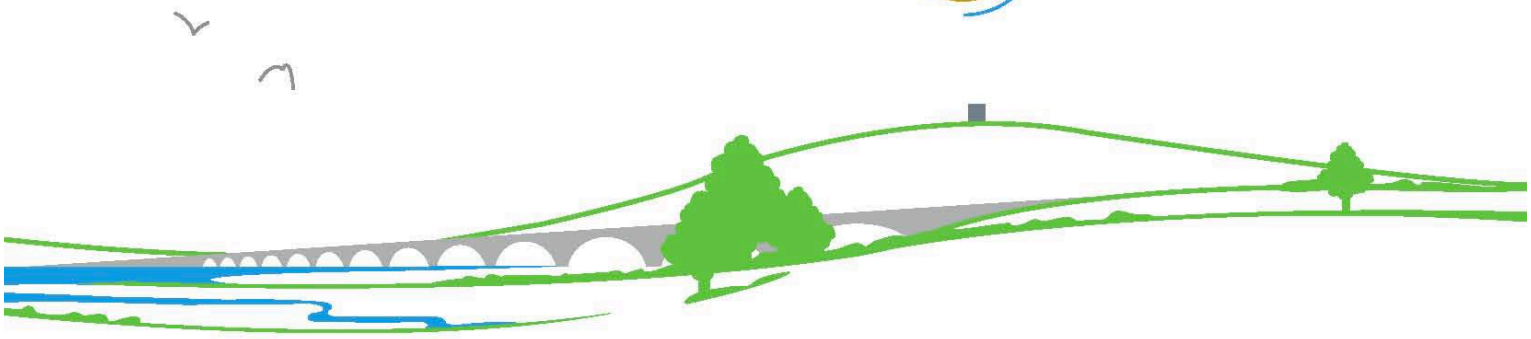
Photograph 2
Lighting within vaulted arch complex



Photograph 3
Underside of viaduct with bird spikes

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