

## **Fusion, Sauchiehall Street Bat Survey Report**



**October 2023**

# CONTROL SHEET

Client: Fusion Glasgow Devco Ltd  
 Project Title: Fusion, Sauchiehall Street  
 Report Title: Bat Survey Report  
 Document number: 13709  
 Project number: 177947

## Issue Record

| Issue | Status | Author | Reviewer | Approver | Issue Date |
|-------|--------|--------|----------|----------|------------|
| 1     | Final  | JEP    | AS       | GN       | 05/10/2023 |
| 2     |        |        |          |          |            |

## EnviroCentre Limited Office Locations:

**Glasgow**

**Edinburgh**

**Inverness**

**Banchory**

Registered Office: Craighall Business Park 8 Eagle Street Glasgow G4 9XA  
 Tel 0141 341 5040 [info@envirocentre.co.uk](mailto:info@envirocentre.co.uk) [www.envirocentre.co.uk](http://www.envirocentre.co.uk)

This report has been prepared by EnviroCentre Limited with all reasonable skill and care, within the terms of the Contract with Fusion Glasgow Devco Ltd (“the Client”). EnviroCentre Limited accepts no responsibility of whatever nature to third parties to whom this report may be made known.

No part of this document may be altered without the prior written approval of EnviroCentre Limited.

EnviroCentre Limited is registered in Scotland under no. SC161777.

VAT no. GB 348 6770 57.



## EXECUTIVE SUMMARY

EnviroCentre Limited was commissioned by Fusion Glasgow Devco Ltd to undertake a bat activity survey of 184 Sauchiehall Street, Glasgow, which is proposed for demolition.

The building, a brick and roughcast construction with some tiles and a flat roof, was identified as hosting low potential roost features (PRFs) for bats via the presence of gaps behind a dislodged wooden board above one of the shutters and loose roofing felt covering a window ledge, which offer limited opportunities for small numbers of individual bats.

One activity survey from four surveyor vantage points was undertaken on 22<sup>nd</sup> August 2023, where no bats were identified emerging from roosts within the building and no bat activity was recorded in proximity to the site.

The building is considered as providing **low potential** for roosting bats in reference to Bat Conservation Trust guidance.

The building is unlikely to provide the constant cool temperatures and humid conditions required by hibernating bats, as it is heated and in-use year-round, and is therefore considered to offer **negligible potential for hibernating bats**.

The lack of bat activity (foraging and commuting) recorded in proximity to the site during the activity survey is likely due to the city centre location of the site. It is well-lit via streetlights and there is limited green infrastructure in the immediate vicinity (only a small number of scattered trees south of the building). Therefore, in reference to BCT guidance, the habitats on site have been assessed as **low**.

Bat activity surveys are generally considered valid for 18 months by regulatory authorities. If works do not take place within this time period one further activity survey to update the status of the building with regards to bat presence/absence will be required within the activity season (May to September).

**A European Protected Species (EPS) licence for bats is not required** from NatureScot to undertake proposed works.

The following impacts (positive and negative) may occur during the works at the site:

- Permanent removal of low PRFs for bats during redevelopment works;
- Temporary disturbance to occasional commuting bats in the locale;
- Increased bat roosting provisions as well as commuting and foraging resources through inclusion of bat boxes and thoughtful lighting and landscaping.

Mitigation should be applied to the project during works and includes:

- The building is to be demolished to facilitate the redevelopment, this should be undertaken between October and March to avoid the summer bat activity season, where possible.
- Contractors should be made aware of the possibility of encountering bats at the site and in the locale prior to works commencing.
- In the event that any unexpected ecological constraints (such as bats as birds) are discovered on site, all works must stop, and an appropriately qualified ecologist contacted for advice.
- Temporary lighting used during works, and any replacement lighting, should not illuminate the surrounding buildings and scattered trees, which may be utilised by bats.

## Contents

|  |    |
|--|----|
| Executive Summary .....                          | i  |
| 1 Introduction .....                             | 1  |
| 1.1 Terms of Reference .....                     | 1  |
| 1.2 Background .....                             | 1  |
| 1.3 Scope of Report .....                        | 1  |
| 1.4 Site Description .....                       | 1  |
| 1.5 Project Description .....                    | 2  |
| 1.6 Legislation .....                            | 2  |
| 1.7 Report Usage .....                           | 2  |
| 1.8 Disclaimer .....                             | 3  |
| 2 Methods .....                                  | 4  |
| 2.1 Desk Study .....                             | 4  |
| 2.2 Preliminary Roost Assessment .....           | 4  |
| 2.3 Bat Activity Survey .....                    | 5  |
| 2.4 Constraints .....                            | 6  |
| 3 Results .....                                  | 7  |
| 3.1 Desk Study .....                             | 7  |
| 3.2 Preliminary Roost Assessment (PRA) .....     | 7  |
| 3.3 Habitat Description .....                    | 7  |
| 3.4 Bat Activity Survey .....                    | 8  |
| 4 Assessment and Potential Impacts .....         | 9  |
| 4.1 Roost Assessment .....                       | 9  |
| 4.2 Habitat Assessment .....                     | 9  |
| 4.3 Potential Impacts .....                      | 9  |
| 5 Further Survey, Licensing and Mitigation ..... | 10 |
| 5.1 Further Survey and Licensing .....           | 10 |
| 5.2 Mitigation .....                             | 10 |
| 5.3 Compensation .....                           | 10 |

## Appendices

- A Site Location Plan
- B Surveyor Vanatage Point Plan
- C Surveyor Profiles
- D Photographs

## Tables

|   |   |
|---|---|
| Table 2-1: PRFs, Access Points and Evidence of Bat Presence .....                                 | 4 |
| Table 2-2: Suitability Classification of Roosting, Commuting and Foraging Habitats for Bats ..... | 5 |

# 1 INTRODUCTION

## 1.1 Terms of Reference

EnviroCentre Limited was commissioned by Fusion Glasgow Devco Ltd to undertake a bat activity survey of a site referred to as 184 Sauchiehall Street in Glasgow, which is proposed for demolition.

The 'site' is defined as the area demarcated by the red line boundary as shown in Appendix A. The 'survey area' constitutes the area of the 'site' plus appropriate buffers.

## 1.2 Background

Following a Preliminary Ecological Appraisal of the site<sup>1</sup>, inclusive of a Preliminary Roost Assessment (PRA), in March 2023, the building was identified as hosting potential roost features (PRFs) for bats and was assessed as offering low potential for roosting bats. It was recommended that one bat activity survey of the building was to be conducted during the bat active season (May to August, inclusive) to inform the likely presence or absence of roosting bats on site.

## 1.3 Scope of Report

The aim of the survey was to inform the redevelopment works in regards to ecological constraints pertaining to bats. The main objectives were as follows:

- To review existing desk study information in relation to records of bats within 2km of the site;
- Review of previously identified Potential Roost Features (PRFs) and the suitability of habitats within and adjacent to the site in order to assess the building's potential to host roosting bats;
- To observe and record the behaviour of any bats using habitat within and adjacent to the site;
- To ascertain the presence or likely absence of roosting bats that would need to be taken into account prior to redevelopment works commencing and within the design and future operation of the site;
- Identify any further survey and European Protected Species (EPS) licensing requirements; and
- Outline appropriate mitigation and compensation enhancements.

## 1.4 Site Description

The site is situated within the city centre of Glasgow, on Sauchiehall Street, at an elevation of approximately (approx.) 25m above sea level, centred at NS 57099 65979. The site consists of a four-storey building, a former commercial premises. The surrounding landscape consists predominantly of other commercial and residential buildings, sparse street tree planting with fragmented areas of greenspace such as Kelvingrove Park approx. 1km west and Cowlares Park approx. 1.5km north. The River Clyde lies approx. 1km south of the site.

---

<sup>1</sup> EnviroCentre report 13435 (2023): 177947 Fusion, Sauchiehall Street Preliminary Ecological Appraisal

## 1.5 Project Description

The appraisal will inform the proposed redevelopment of the former commercial building into student accommodation with associated amenity space and infrastructure.

## 1.6 Legislation

Bats are a European Protected Species (EPS) listed in the EC Directive (92/43) The Conservation of Natural Habitats and of Wild Flora and Fauna (the "Habitats Directive"), which is transposed into Scottish law through the Conservation (Natural Habitats &c.) Regulations 1994 (the "Habitats Regulations") as amended. Under this legislation it is an offence to deliberately or recklessly:

- Capture, injure or kill such an animal;
- Harass an animal or group of animals;
- Disturb an animal while it is occupying a structure or place used for shelter or protection;
- Disturb an animal while it is rearing or otherwise caring for its young;
- Obstruct access to a breeding site or resting place, or otherwise deny an animal use of a breeding site or resting place;
- Disturb an animal in a manner or in circumstances likely to significantly affect the local distribution or abundance of the species;
- Disturb an animal in a manner or in circumstances likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young;
- Disturb an animal while it is migrating or hibernating; and
- Possess, control, transport, sell or exchange specimens of any animal listed on Annex IV of the Habitats Directive. This applies to living or dead specimens and to their derivatives.

It is an offence of strict liability to damage or destroy a breeding site or resting place of such an animal. These sites and places are protected even when the animal isn't present. For example, if a bat isn't present in a summer roost in winter months the roost is still protected by law.

## 1.7 Report Usage

The information and recommendations contained within this report have been prepared in the specific context stated above and should not be utilised in any other context without prior written permission from EnviroCentre Limited.

If this report is to be submitted for regulatory approval more than 12 months following the report date, it is recommended that it is referred to EnviroCentre Limited for review to ensure that any relevant changes in data, best practice, guidance or legislation in the intervening period are integrated into an updated version of the report.

Whilst the Client has a right to use the information as appropriate, EnviroCentre Limited retains ownership of the copyright and intellectual content of this report. Any distribution of this report should be managed to avoid compromising the validity of the information or legal responsibilities held by both the Client and EnviroCentre Limited (including those of third party copyright). EnviroCentre Limited does not accept liability to any third party for the contents of this report unless written agreement is secured in advance, stating the intended use of the information.

EnviroCentre Limited accepts no liability for use of the report for purposes other than those for which it was originally provided, or where EnviroCentre Limited has confirmed it is appropriate for the new context.

## **1.8 Disclaimer**

Bats are a transient species and utilise a variety of structures and habitats throughout the year. The activity survey forms a “snap-shot” of how bats were found to utilise the site in August 2023.

## 2 METHODS

### 2.1 Desk Study

A review of desk study information previously gathered for the site was undertaken, inclusive of the following sources:

- NatureScot Sitelink website<sup>2</sup> for statutory designated<sup>3</sup> sites up to 5km from the site relevant to bats;
- Records of ancient woodland available through Scotland's Environment Web<sup>4</sup>, within 2km of the site;
- Glasgow Museums Biological Records Centre (GMBRC) for records on non-statutory designated sites up to 2km of the site;
- The Scottish Biodiversity List<sup>5</sup> and Glasgow City Biodiversity Action Plan (LBAP)<sup>6</sup> for Priority Habitats and Species; and
- A review of the PRA undertaken by EnviroCentre in March 2023, based on the methods detailed within the Bat Conservation Trust (BCT) survey guidelines<sup>7 8</sup>.

### 2.2 Preliminary Roost Assessment

A Preliminary Roost Assessment (PRA) was undertaken by EnviroCentre Ecologist Rebecca Brown, who is a Qualifying member of the Chartered Institute of Ecology and Environmental Management (QCIEEM). The PRA was conducted on the 30<sup>th</sup> March 2023, based on the methods detailed within the Bat Conservation Trust (BCT) survey guidelines<sup>9</sup>. The weather on the day of survey was dry and cloudy. The average air temperature was 10°C. The building was externally inspected with the aid of a close focus binoculars to identify PRFs or field any evidence such as those presented in Table 2-1.

**Table 2-1: PRFs, Access Points and Evidence of Bat Presence**

| Frequently used roosting locations in structures   | Access points in structures frequently used as bat roosts  | Evidence of Bat Presence  |
|--|--|---|
| <ul style="list-style-type: none"> <li>• Top of chimney breasts, gable ends and dividing walls;</li> <li>• Beams including ridge, hip etc.;</li> <li>• Junction of timber joints, mortise and tenon joints;</li> <li>• Behind purlins;</li> <li>• Between tiles/slates and the roof lining; and</li> <li>• Under flat roof materials.</li> </ul> | <ul style="list-style-type: none"> <li>• Gaps in windowsills and window panes;</li> <li>• Underneath peeling paintwork or lifted rendering;</li> <li>• Behind hanging tiles, weatherboarding, eaves, soffit boxes, fascias and lead flashing;</li> <li>• Under tiles and slates;</li> <li>• Gaps in brickwork and stonework; and</li> <li>• Gaps in rendering behind gutters.</li> </ul> | <ul style="list-style-type: none"> <li>• Live or dead specimens;</li> <li>• Bat droppings;</li> <li>• Urine splashes;</li> <li>• Fur oil-staining;</li> <li>• Feeding remains (e.g. moth wings);</li> <li>• Bat fly pupal cases; and</li> <li>• Audible 'chattering' or social calling</li> </ul> |

<sup>2</sup> Available at: <https://sitelink.nature.scot/map> (Accessed March 2023)

<sup>3</sup> Special Protection Areas (SPA), Special Areas of Conservation (SAC), Ramsar sites, Sites of and Special Scientific Interest (SSSI), National Nature Reserves (NNR), and Local Nature Reserves (LNR)

<sup>4</sup> Available at: <https://www.environment.gov.scot/maps/scotlands-environment-map/> (Accessed March 2023)

<sup>5</sup> Available at: <https://www.nature.scot/scottish-biodiversity-list> (Accessed March 2023)

<sup>6</sup> Available at: [CHttpHandler.ashx \(glasgow.gov.uk\)](CHttpHandler.ashx(glasgow.gov.uk)) (Accessed March 2023)

<sup>7</sup> Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edition, Bat Conservation Trust.

<sup>8</sup> Full details of methods are available in the PEA report

<sup>9</sup> Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edition, Bat Conservation Trust.



Habitat connectivity to the wider landscape was also considered during this assessment, via a review of aerial imagery and site observations. The suitability of the building and trees to host roosting bats as well as commuting and foraging habitats on site were classified as outlined within Table 2-2.

**Table 2-2: Suitability Classification of Roosting, Commuting and Foraging Habitats for Bats**

| Suitability       | Roosting Features   | Foraging and Commuting Habitats   |
|-------------------|---|---|
| <b>High</b>       | A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.                             | <p>Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edges.</p> <p>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.</p> <p>The site is close to and connected to known roosts.</p> |
| <b>Moderate</b>   | A structure with one or more potential roost sites that could be used by bats due their size, shelter, protection, conditions and/or surrounding habitat but unlikely to support a roost of high conservation status.   | <p>Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.</p> <p>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</p>  |
| <b>Low</b>        | A structure with one or more potential roost sites that could be used by individual bats opportunistically. 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 | <p>Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated.</p> <p>Suitable but isolated habitat that could be used by small numbers of foraging bats such as a lone tree or a patch of scrub.</p>   |
| <b>Negligible</b> | A structure with negligible features likely to be used by roosting bats.  | Negligible habitat features likely to be used by foraging or commuting bats.  |

### 2.3 Bat Activity Survey

Bat activity surveys aim to establish roost presence or absence and characterise any roosts found within, or adjacent to the site. Foraging and commuting routes in the surrounding landscape are also noted. The resulting data is used to inform the requirement for, and design of, mitigation and/or compensation, in line with current wildlife legislation. The survey effort (i.e. number of survey visits) is scoped from the suitability of the structures to host roosting bats, as determined by the PRA results.

Frequency division bat detectors (Bat Box Duet) coupled with audio recorders were utilised during the surveys, as well as time expansion detectors (Echo Meter Touch (EMT)). Observations of bat activity were recorded with species, time identified, location and behaviour all noted.

Accurate numbers of bats can be difficult to identify during flight, therefore bat passes are used as a proxy measurement for activity levels. A bat pass comprises one sound file triggered by a bat call being detected by the EMT. Post survey analysis was conducted to confirm species identification and any observed species that were not possible to identify at the time of survey.

During the activity survey, surveyors were positioned at vantage points to gain visual and audible coverage of all features which offer potential roosting sites to bats. The vantage point locations for each survey can be seen in Appendix B. The surveyor profiles can be found in Appendix C.

### **2.3.1 Dusk Activity Survey**

Dusk activity surveys aim locate bats emerging from roost sites. The dusk survey commenced 15 minutes before sunset and ceased 1.5 hours after sunset, when surveyors were satisfied enough time had elapsed to encapsulate any late emerging bats within the survey results.

The survey was conducted on 22<sup>nd</sup> August 2023, when weather conditions were dry, with a south westerly wind (1-2 Beaufort), 95% cloud cover and 16°C. As sunset was at 20:36, the survey commenced at 20:20 and ended at 22:06.

## **2.4 Constraints**

### **2.4.1 Desk Study**

Desk studies are limited by the reliability of third party information and the geographical availability of biological and/or ecological records and data. This emphasises the need to collate up-to-date, site-specific data based on field surveys by experienced surveyors. The absence of a species from biological records cannot be taken to represent actual absence. Species distribution patterns should be interpreted with caution as they may reflect survey/reporting effort rather than actual distribution.

### **2.4.2 Survey**

Due to the height of the building PRFs near the upper reaches of the building were not closely accessible, however the building was inspected externally using binoculars in order to identify any PRFs which could not be observed clearly from ground level.

Due to the layout and height of the building, visual coverage of all the roof materials was not possible during the activity survey and surveyors had to be stood quite far back from the building in order to see the top of the roof. However, surveyors were positioned in such a way that any bats flying from the direction of the building would have been identified.

No accessible loft space was able to be internally inspected during the PRA, however, due to the survey results, this was considered unlikely to have any impacts on the survey findings.

## 3 RESULTS

The following should be read in conjunction with Appendix D: Photographs.

### 3.1 Desk Study

The desk study results comprised:

- No statutory or non-statutory designated sites in relation to bats were returned within 5km and 2km (respectively) of the site.
- No ancient or native woodland sites are present within or directly adjacent to the site boundary. The nearest block of ancient woodland to the site is Long-Established (of Plantation Origin) (LEPO), located 1.9km north west of the site. It is not considered to be ecologically connected to the site.
- Four records of common pipistrelle (*Pipistrellus pipistrellus*) were returned from the GMBRC desk study between 2014-2018, within 2km of the site, foraging in some of the green spaces amongst the city, such as Woodlands Community Garden.
- The following species are listed in the Glasgow City BAP and SBL and are relevant to the site:
  - Soprano pipistrelle (*Pipistrellus pygmaeus*) bat; and
  - Common pipistrelle bat.

### 3.2 PRA

#### 3.2.1 Building Description

A four-storey building comprises the entirety of the site (Photo 3). The majority of the building comprises of brick with roughcasting. The external walls of the first floor are covered with tiles. The building has a flat roof with concrete covering. The roof has multiple sets of metal stairs and some metal containers. The building is in poor condition with damp present throughout.

#### 3.2.2 External Inspection

No evidence of bats was identified during the PRA. The building has limited PRFs on all aspects which could provide opportunities for individual roosting bats, such as pipistrelle species. Two PRFs were identified on the northern aspect of the building comprising a gap behind a dislodged wooden board approx. 2.5m from the ground, above one of the shutters (Photo 4) and loose roofing felt covering a window ledge on the 2<sup>nd</sup> storey (Photo 5).

#### 3.2.3 Habitat Description

The site and surrounding area are absent of any uninterrupted linear vegetated corridors suitable for commuting bats with a small number of scattered trees are present along the street south of the building (Sauchiehall Street). However, these are considered to provide limited foraging and commuting opportunities for bats in the locale. Approximately 200m north west of the site are some residential gardens and approximately 250m south west is a small urban park area, both of which represent the most accessible potential foraging habitat bats; however, these habitats are fragmented from the site via commercial and residential properties.

### **3.3 Bat Activity Survey**

No bats were identified emerging from roosts within the building and no bats were observed during the activity survey.

The EMT did not record any bat activity.

## 4 ASSESSMENT AND POTENTIAL IMPACTS

### 4.1 Roost Assessment

The construction of the building offers limited opportunities for individual roosting bats and no bats were recorded emerging out of the building. Therefore, the building is assessed as providing **low potential** for roosting bats in reference to BCT guidance, as per Table 2-2: '*A structure with features that could be used by individual bats opportunistically; PRF's not suitable for use on a regular basis or by larger numbers of bats*'.

The building is unlikely to provide the constant cool temperatures and humid conditions required by hibernating bats, as it is heated and in-use year-round, and is therefore considered to offer **negligible potential for hibernating bats**.

### 4.2 Habitat Assessment

The lack of bat activity recorded in proximity to the site during the activity survey is likely due to the city centre location of the building. Sauchiehall Street to the south of the building and Renfrew Street to the north of the building are both busy roads and are therefore well-lit via streetlights and there is limited green infrastructure in the immediate vicinity. Bat species known to be present in the locale are likely to favour more suitable foraging and commuting habitats available north and south of the building including scattered trees and shrubs or the River Clyde further south and Glasgow Canal further north. Therefore, in reference to BCT guidance, the habitats on site have been assessed as **low**, as per Table 2-2: '*Isolated habitat that could be used by small numbers of foraging and/or commuting bats such as a fragmented hedgerow, un-vegetated stream, trees or scrub*'.

Pipistrelle species may use the site and surrounding landscape as they are generally more tolerant to light pollution from the associated street lighting as well as residential and commercial lighting from the surrounding buildings than other bat species.

### 4.3 Potential Impacts

The following impacts (positive and negative) may occur during the redevelopment works of the building:

- Permanent removal of low potential PRFs for bats during redevelopment works;
- Temporary disturbance to occasional commuting bats in the locale;
- Increased bat roosting provisions through inclusion of bat boxes and enhanced commuting and foraging resources via sensitive lighting and thoughtful landscaping.

Through applying mitigation outlined in section 5, it is considered that the works will not affect the favourable conservation status of the local bat population.

## 5 FURTHER SURVEY, LICENSING AND MITIGATION

### 5.1 Further Survey and Licensing

Bat activity surveys are generally considered valid for 18 months by regulatory authorities. If works do not take place prior to April 2024 one further activity survey to update the status of the building with regards to bat presence/absence will be required within the activity season (May to September).

**A European Protected Species (EPS) licence for bats is not required** from NatureScot to undertake proposed works.

### 5.2 Mitigation

The following mitigation should be applied to the project during works to ensure any potential impacts to bats are reduced:

- The building is to be demolished to facilitate the redevelopment, this should be undertaken between October and March to avoid the summer bat activity season, where possible.
- Contractors should be made aware of the possibility of encountering bats at the site and in the locale prior to works commencing.
- In the event that any unexpected ecological constraints (such as bats) are discovered on site, all works must stop and an appropriately qualified ecologist contacted for advice.
- Temporary lighting used during works, and any replacement lighting, should not illuminate the surrounding buildings, scattered trees along Sauchiehall Street, which may be utilised by bats for commuting and foraging routes.

### 5.3 Compensation

The following compensation opportunities have been recommended:

- Permanent lighting on the building should be designed to reduce impacts to nocturnal animals such as bats. Measures could include the use of shades to prevent light spill outside of the site, use of vegetation to act as a screen for artificial lighting and the use of soft white light. LEDs >2700K are recommended. The Lighting Institute guidance on appropriate lighting can be found here: <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>
- Future landscaping of the site should seek to enhance the site with green infrastructure, increasing foraging and sheltered commuting opportunities for bats in the locale. Measures such as planting native, nectar producing shrubs, trees and flowering plants that encourage habitat connectivity to the wider landscape, where possible.
- Bat roost and other wildlife nesting resources can be easily integrated into or affixed externally onto the new building. Further details can be sought here: [http://www.bats.org.uk/pages/new\\_build.html](http://www.bats.org.uk/pages/new_build.html) or <https://www.nestbox.co.uk/>

# APPENDICES

# **A SITE LOCATION PLAN**





Imagery Source: Bing Maps. Image courtesy of Ordnance Survey © 2023 TomTom

Legend

 Site Boundary

Do not scale this map

Client  
Fusion Glasgow Devco Ltd

Project  
Fusion, Sauchiehall Street

Title  
Site Location Plan

Status  
FINAL

|                          |                |                      |
|--------------------------|----------------|----------------------|
| Drawing<br>177947-GIS001 | Revision<br>-  | Date<br>04 Sept 2023 |
| Drawn<br>RB              | Checked<br>JEP | Approved<br>AS       |

Scale  
1:2,000 @ A3

| Rev | Date | Amendment | Initials |
|-----|------|-----------|----------|
| -   | -    | -         | -        |



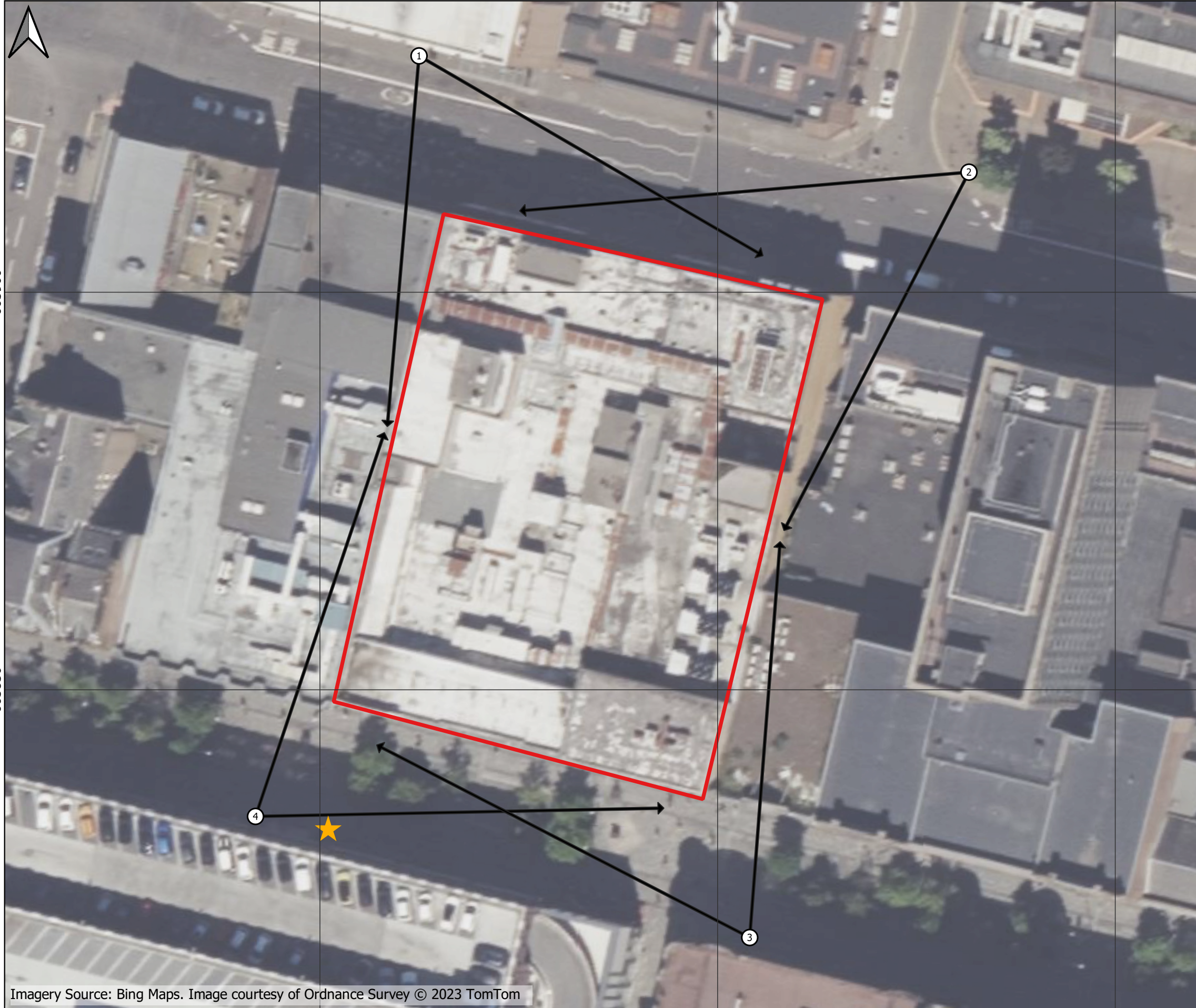
8 Eagle Street, Craighall Business Park,  
Glasgow, G4 9XA.

# **B SURVEYOR VANATAGE POINT PLAN**



665900

665850



Imagery Source: Bing Maps. Image courtesy of Ordnance Survey © 2023 TomTom

258700

258750

258800

### Legend

- Site Boundary
- Vantage Point Location
- ★ EM Touch Detector Location
- Surveyor Line of View

Do not scale this map

Client  
Fusion Glasgow Devco Ltd

Project  
Fusion, Sauchiehall Street

Title  
Surveyor Vanatage Point Plan

Status  
FINAL

|                          |                |                      |
|--------------------------|----------------|----------------------|
| Drawing<br>177947-GIS004 | Revision<br>-  | Date<br>04 Sept 2023 |
| Drawn<br>RB              | Checked<br>JEP | Approved<br>AS       |

Scale  
1:500 @ A3

| Rev | Date | Amendment | Initials |
|-----|------|-----------|----------|
| -   | -    | -         | -        |



8 Eagle Street, Craighall Business Park,  
Glasgow, G4 9XA.

## C SURVEYOR PROFILES

| Surveyor                          | Role                                | Profile   |
|-----------------------------------|-------------------------------------|---|
| <b>Ben Kelly</b><br>(VP 2)        | Senior Consultant<br>Ecologist      | Ben has three years experience in bat surveys through conducting emergence/re-entry surveys and activity transects for both small and large scale projects within work and through volunteering for the Bat Conservation Ireland. Ben is competent at conducting Potential Roost Feature assessments on trees. Ben is also competent in the use, assessment and interpretation of Anabat recording systems.   |
| <b>Steven Duncan</b><br>(VP1)     | Senior Consultant<br>Ecologist      | Steven is a bat-licenced ecologist with six years of experience in bat surveys through conducting roost assessments and leading emergence/re-entry surveys on buildings, structures and trees. Steven has undertaken projects requiring bat transects and static deployment and is experienced in using bat analysis software, including Anabook W and Anabat insight. Steven is a certified climber and has been undertaking elevated inspections for bats for over 5 years. |
| <b>Luigi Cristofaro</b><br>(VP 3) | Graduate<br>Consultant<br>Ecologist | Luigi has experience in undertaking bat surveys through emergence/re-entry surveys and Preliminary Roost Assessments on buildings, structures and trees. Luigi also has previous experience at interpreting Anabat recording systems.   |
| <b>Alexandra Darling</b><br>(VP4) | Graduate<br>Consultant<br>Ecologist | Alexandra has experience in undertaking bat surveys on buildings and trees through emergence and re-entry surveys. Alexandra has experience in undertaking Preliminary Roost Assessments on buildings, structures and trees.  |

## D PHOTOGRAPHS



Photo 1: North aspect of the building



Photo 2: Gap behind a dislodged wooden board approx. 2.5m from the ground, above one of the shutters



Photo 3: Loose roofing felt covering a window ledge on the 2<sup>nd</sup> storey