

PRELIMINARY BAT ROOST ASSESSMENT

NHDC Decarbonisation Project: Royston Leisure Centre



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Prepared for:

Willmott Dixon Construction Ltd on behalf of North Hertfordshire District Council

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1 INTRODUCTION

1.1 Purpose and scope of this report

- 1.1.1 RPS Ecology were commissioned by Willmott Dixon Construction Ltd on behalf of North Hertfordshire District Council (NHDC) to undertake a Preliminary Bat Roost Assessment (PBRA) of the building at Royston Leisure Centre located at 29 Woodcock Road, Royston SG8 7XT, part of the NHDC Decarbonisation Project.
- 1.1.2 Potential roosting features for bats were identified during a site walkover for the Preliminary Ecological Appraisal for site (RPS, 2024), this PBRA was then recommended as a result.
- 1.1.3 To undertake an initial assessment of the potential ecological impact of the proposals, a preliminary protected species assessment for bats was carried out. This is termed as a Preliminary Roost Assessment (PRA) in accordance with the Bat Conservation Trust guidelines (Collins, 2023). This assessment is considered 'preliminary' until any required protected species, are completed, and the results incorporated into a final Ecological Appraisal or Ecological Impact Assessment (EclA) which supports the planning application.
- 1.1.4 The PBRA aims to:
- Assess the site for potential to support protected bat species that could present a constraint;
 - Provide outline options for proportionate mitigation measures; and
 - Provide the above in the context of legislations, local planning policy, and evaluation of any potential impacts.
- 1.1.5 This report pertains to these results only; recommendations included within this report are the professional opinion of an experienced ecologist and therefore the view of RPS.

1.2 Development proposals

- 1.2.1 The development proposals include changes to the building fabric and plant and an external temporary site compound. This includes installation of external insulated render to existing masonry external walls, replacement of composite cladding at first floor, replacement of roof finish to curved roof finish over swimming pool, installation of additional insulation and new flat roof finish over the rear single story plant extension, installation of solar panels and an external air source heat pump (ASHP) compound.

1.3 Legislation and policy

- 1.3.1 All British bat species are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981, as updated by the Countryside and Rights of Way Act 2000. All British bats are also included on Schedule 2 of The Conservation of Habitats and Species Regulations 2019 (EU Exit Amendment) as European Protected Species. It is an offence to:
- Intentionally or recklessly kill, injure or capture bats;
 - Deliberately or recklessly disturb bats (whether in a roost or not); and
 - Damage, destroy or obstruct access to bat roosts
- 1.3.2 A roost is defined as 'any structure or place which [a bat] uses for shelter or protection'. As bats tend to reuse the same roosts, legal opinion is that a roost is protected whether or not bats are present at the time of survey.

- 1.3.3 A Natural England Survey Licence (Minimum Class 2) will therefore be required by those who carry out any operation that would otherwise result in offences being committed.
- 1.3.4 The following bat species are listed as being of principal importance for the conservation of biodiversity in England, (commonly referred to as UKBAP Priority species): Barbastelle *Barbastella barbastellus*, Bechstein's *Myotis bechsteinii*, Noctule *Nyctalus noctula*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Brown Long-eared *Plecotus auritus*, Greater Horseshoe *Rhinolophus ferrumequinum* and Lesser Horseshoe *Rhinolophus hipposideros*.

2 METHODS

2.1 Preliminary Roost Assessment

- 2.1.1 A systematic external and internal inspection of the structures on site were completed on the 14th November 2024 by Class 2 Natural England Bat Licence holder Nicola Pyle (MCIEEM) and Consultant Ecologist Toni Winbourne.
- 2.1.2 The survey used close focusing binoculars, an endoscope, and a high-powered torch as necessary. Roof and void spaces were accessed and potential roosting features were assessed by ladder where necessary/ feasible. The visit was completed in accordance with Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023).
- 2.1.3 The structures were assessed for their potential to support roosting bats and whether they would be impacted due to their removal or alteration as part of the proposed development or retained but disturbed due to the proximity to the proposed development.
- 2.1.4 To assess the potential bat roosting suitability, roosting features and evidence of bats were searched for, such as:
- Live, dead or skeletons of bats;
 - Bat droppings in roof voids (particularly below ridge beam and apex);
 - Feeding remains e.g., insect wings;
 - Tiny scratches / claw marks around external entry points;
 - Urine staining or polishing around external entry point;
 - Bat droppings in, around or below entry points of the buildings;
 - Audible squeaking at dusk or in warm weather;
 - Flies around entry point; and
 - Smoothing of surfaces around a cavity.
- 2.1.5 Structural features that may influence the suitability of a building to support roosting bats include the presence of a roof void, the presence of access points into the building (including gaps beneath barge boards, soffits and fascia boards, gaps under lead flashing, gaps within masonry and under loose tiles, gaps between mortise and tenon joints), the complexity and size of any roof voids and daytime light levels in the roof voids.
- 2.1.6 In addition to the building assessment, the surveyor identified surrounding habitat that had any potential to support roosting, commuting and foraging bats. The surrounding habitat can influence roost potential and notes were made on the setting of the structures, their proximity to significant linear habitat features (such as a watercourse, mature hedgerow, wooded lane or an area of woodland) and other factors including artificial lighting.
- 2.1.7 Taking account of the architectural and habitat features, the buildings were assigned a level of roost suitability (**Table 2.1**) based the criteria given in the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023) and professional judgement. The primary objective of this exercise was to identify the need for further detailed bat survey, or alternatively to obtain sufficient information that would dismiss the need for further assessment.

Table 2.1: Categories for bat roosting potential.

Category	Criteria
Low Potential	No evidence of use, one or two features suitable for low numbers of bats, with very limited roosting potential.

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Category	Criteria
	Limited connectivity to wider landscape with other bat habitats.
Moderate Potential	No evidence of use, several suitable features, but unlikely to support a roost type of high conservation status, connected to wider landscape with good foraging habitat.
High Potential	No evidence of use, but many suitable features for use by larger numbers of bats on a more regular basis and potentially for longer periods. Well-connected to good foraging habitat and known roosts nearby.
Confirmed Roost	PRFs with evidence of use present, observation or previous records of bats confirmed to be roosting in the feature/building/tree.

2.2 Limitations

Survey

- 2.2.1 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation and prediction of the natural environment.
- 2.2.2 The protected/notable species assessment provides a preliminary view of the likelihood of these species occurring on the site, based on the suitability of the habitat, known distribution of the species in the local area provided in response to our enquiries and any direct evidence on the site. It should not be taken as providing a full and definitive survey of any protected/notable species group.

Accurate Lifespan of Ecological Data

- 2.2.3 The majority of ecological data remain valid for only short periods due to the inherently transient nature of the subject. The survey results contained in this report are considered accurate for two years, assuming no significant considerable changes to the site conditions.

3 RESULTS

3.1 Preliminary Roost Assessment

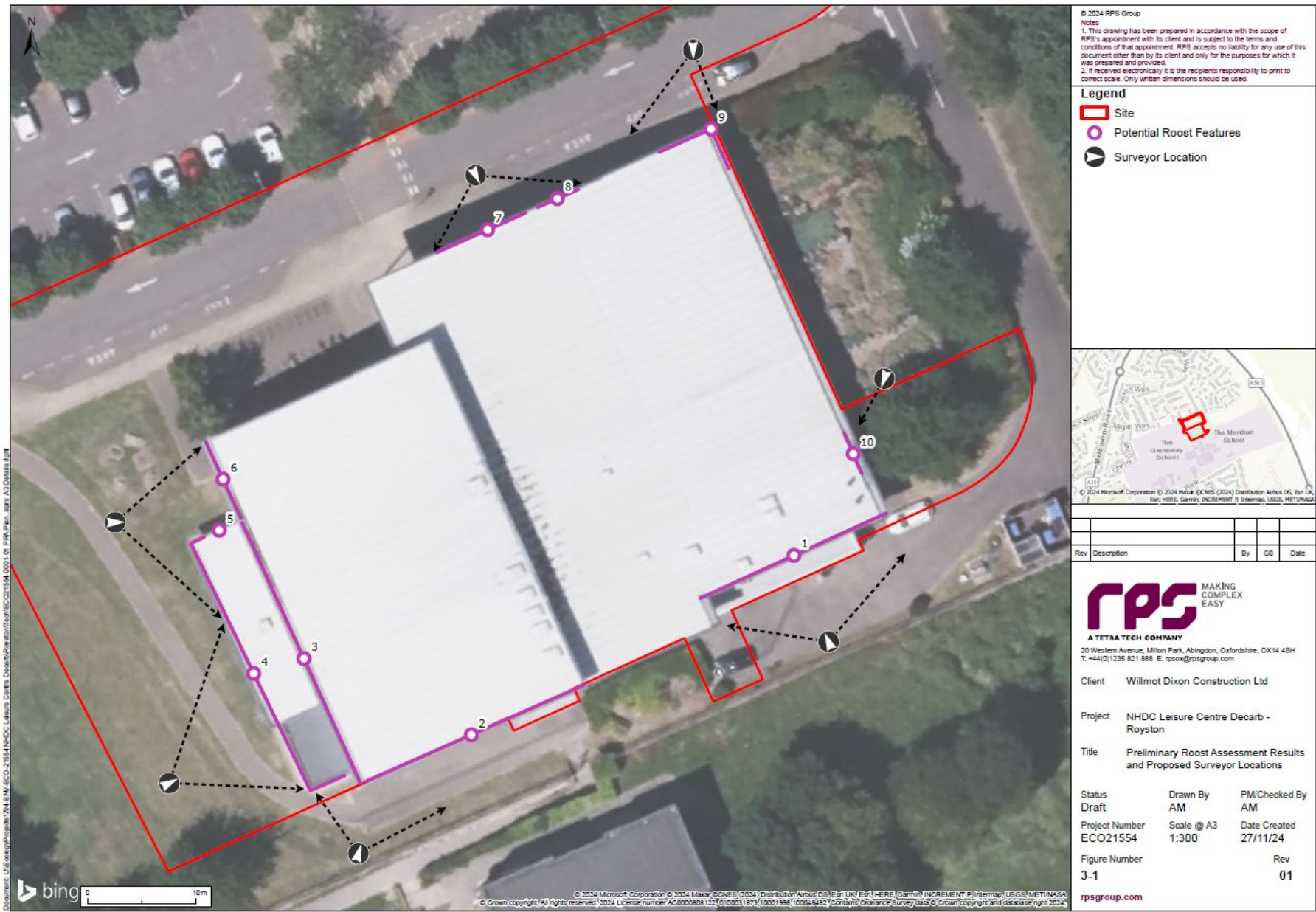
- 3.1.1 The site contains a large building which is currently being used as a leisure centre with internal swimming pool, gym, sports hall and workout classes. It is constructed using brick, timber and cladding with a skillion roof. The building is double storey.. A description of the building and its bat roosting suitability is listed below in **Table 3.1**.
- 3.1.2 In total, 10 potential bat roosting features (PRFs) were identified on the building. Considering the construction of the building and the suitability of the site, these features are all considered to be of low bat roosting suitability.
- 3.1.3 A map of the PRFs locations in the structure are show in **Figure 3.1**. Description and photographs of identified potential roosting features are presented in **Appendix A**.

Table 3.1: Summary of bat roost suitability of structures on site.

Structure	Description of Structure	Potential Roosting Features	Suitability Category
Building	- Constructed circa. 2005. - Currently in use as recreation centre. - Internal swimming pool, gym, sports hall and workout classes. - Brick, timber and cladding constructed. - Two-storey building. - Skillion roof.	- Gaps behind metal cladding. - Gaps between wall and cladding. - Gaps between wall and roof edging. - Cavity between roof and overhang. - Exposed vents on the wall.	Low bat roosting suitability

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Figure 3.1: Preliminary Roost Assessment Results and Proposed Surveyor Locations.



4 EVALUATION AND DISCUSSION

4.1 Bats

- 4.1.1 All species of bat present in the UK receive full protection under The Conservation of Habitats and Species (EU Exit) Regulations 2019, and the Wildlife and Countryside Act 1981 (as amended). Several bat species are also listed in Section 41 of the NERC Act 2006. These include the widespread species soprano pipistrelle *Pipistrellus pygmaeus* and brown long-eared bat *Plecotus auritus*, and the rarer woodland species such as Bechstein's *Myotis bechsteinii* and barbastelle *Barbastella barbastellus*.
- 4.1.2 External were carried out on all accessible areas of the building. The building was assessed as having low bat roost suitability. For structures with low bat roost potential, at least one emergence survey is required. **Table 4.1** outlines further action.

Table 4.1: Survey effort dependent on potential level assigned.

Bat Roost Potential	Surveys Required	Timing
Low Roost Suitability	At least one dusk emergence survey.	May to August.
Moderate Roost Suitability	Two separate dusk emergence visits.	At least 3 weeks apart between May to September with at least one survey between May and August.
High Roost Suitability/Confirmed Roost	Three separate dusk emergence survey visits.	At least 3 weeks apart between May to September with at least two surveys between May and August.

4.2 Potential Impacts

- 4.2.1 The existing building within the site boundary was assessed to have low bat roosting potential with 10 potential bat roosting features identified.
- 4.2.2 The proposed works involve installation of external insulated render to existing masonry external walls, replacement of composite cladding at first floor, replacement of roof finish to curved roof finish over swimming pool, installation of additional insulation and new flat roof finish over the rear single story plant extension, installation of solar panels and an external air source heat pump (ASHP) compound. These works are proposed to identified potential roosts and/or are in proximity to potential roosts and therefore have the potential to impact bats and their roosts.

4.3 Further Assessment

- 4.3.1 In accordance with best practice guidelines (BCT, 2023), dusk emergence surveys are recommended on the building prior to any works commencing that could affect bats and their roosts.
- 4.3.2 As the building has low suitability, at least one survey visit is required, in the appropriate survey season (May-mid-August inclusive).
- 4.3.3 The building will require seven surveyors each with night vision aids (NVAs) to cover all identified potential roosting features. **Figure 3.1** shows proposed locations of surveyors expected to be required to sufficiently cover all features identified on the building during each survey.
- 4.3.4 The results of this survey will inform the required mitigation. Should bats be found roosting in the structure on site, a license will be required from Natural England to proceed with the works, detailing specific measures to ensure any bat species are not harmed as a result of the development and may include suitable compensation such as bat boxes or bat houses.

4.4 Mitigation

- 4.4.1 Appropriate levels of mitigation for the site will be confirmed once the recommended emergence survey work has been undertaken (**Section 4**). Briefly, mitigation will consider the species and numbers of bats roosting at the site, to ensure that the post development scenario provides the same level of roosting opportunities, and bats are not harmed during the construction phase. All of this will be detailed in and secured through the application of a Natural England European Protected Species Mitigation License (EPSML) prior to works commencing.
- 4.4.2 Bat boxes are recommended within the final redevelopment design to enhance the site for breeding and mitigate for loss of suitable habitat for bat species. The boxes can be affixed to the building or to appropriate trees within the site.
- 4.4.3 Such boxes could include the 2FN Schwegler bat box or 2FR Schwegler bat tube. An ecologist should be consulted to inform the exact locations of new bat boxes.

5 SUMMARY

- 5.1.1 The building on site is currently in use as a recreation centre. The building is two storeys, built of brick, timber and cladding with a skillion roof.
- 5.1.2 This Preliminary Bat Roost Assessment identified 10 potential bat roosting features at the site. The building and features within are deemed as having low suitability for roosting bats.
- 5.1.3 The proposed development is required to address impacts in relation to bats in accordance with legislative and policy requirements (**Section 1.3**).
- 5.1.4 In accordance with best practice guidelines (BCT, 2023), at least one dusk emergence survey is recommended on the building prior to any works commencing that could affect bats and their roosts.
- 5.1.5 Bat boxes have been recommended to be included within the scheme in order to provide bat roosting opportunities within the site, post-development.

REFERENCES

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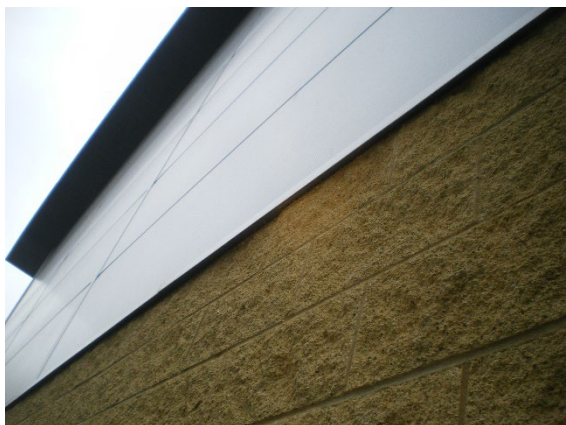
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APPENDICES

Potential Bat Roosting Feature Descriptions and Photos



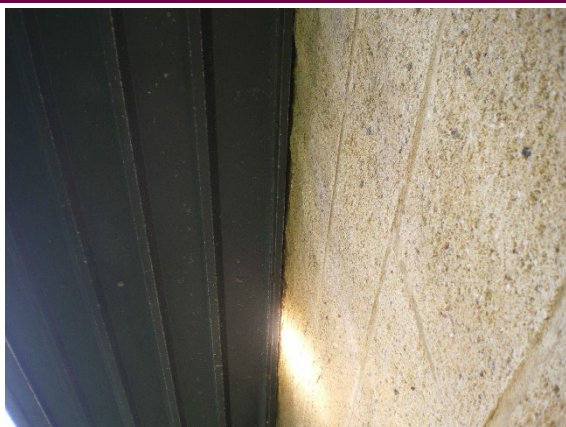
Feature 1: Gap behind the metal cladding, roof level. South elevation



Feature 2: Gap between wall and cladding along whole length. South elevation



Feature 3: Gap behind the metal cladding, roof level. South, on west elevation



Feature 4: Gap between wall and roof edging along whole length. West elevation

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Feature 5: Small cavity between roof and overhang. North elevation on west side of the building



Feature 6: Gap between wall and roof edging along whole length. South, on west elevation



Feature 7: On the corner of the main entrance, gap between the top of the wall and roof. All along the brick work. North elevation



Feature 8: Gap between wall and metal cladding, right of the large window. North elevation

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Feature 9: Gap between wall and metal cladding, left of the large window.



Feature 10: Vents on the wall. East elevation