

Ecological Impact Assessment



Courtyard by Marriott, Oxford
8th January 2024



Tyler
Grange

TG Report No. 16425_R01_GW

| Project No: | Report No. | Date | Revision |
|-------------|--|-------------------------------------|------------------------------------|
| 16425 | R01 | 8th January 2024 | - |
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Summary

- S.1. This report has been prepared by Tyler Grange Group Limited on behalf of Dominus. It sets out the findings of an Ecological Impact Assessment at Courtyard by Marriott, Oxford City Centre, OX1 1LD, hereinafter referred to as 'the site'. The proposals are for a rooftop extension and small-scale infill extensions where the building currently steps.
- S.2. An 'extended' Phase 1/UK Habitat Classification (UK Habs) survey and Preliminary Bat Roost Assessment (PBRA) was undertaken on the 6th December 2023. A summary of the results are as follows:
- The site is comprised of developed land, including a building and hardstanding (negligible ecological importance). The building does include a biodiverse green roof (local ecological importance)
 - The site contains habitats that could support common and widespread nesting and foraging birds and roosting bats, with bat and bird boxes present onsite.
- S.3. In terms of protected sites, there are two Natura 2000 statutory sites within 10 km, namely Oxford Meadows Special Area of Conservation (SAC) and Cothill Fen SAC located 1.3 km north west and 6.1 km south west respectively. There are three statutory sites within 2 km of the site, with the closest being Magdalen Grove Special Site of Scientific Interest (SSSI) located 1 km north east. The data search returned 22 non-statutory sites also within 2 km of the site with the closest being Oxford canal City Wildlife Site (CWS) located 0.7 km north west. As Castle Mill Stream abuts the western and eastern side of the site boundary, which connects to the wider area and further non-statutory sites, best practice measures to prevent any impacts occurring during construction such as run-off and dust, will be incorporated into a Construction and Environmental Management Plan (CEMP).
- S.4. Habitats of negligible ecological importance to be lost to the development, such as developed land, require no specific mitigation. Habitats of higher ecological importance to be lost, such as the intensive and biodiverse green roof and façade-bound green wall, will need to be compensated for through replaced planting of both biodiverse and intensive green roof. As bat and bird boxes have been implemented on the building on site, a Precautionary Works Method Statement (PWMS) will be required to ensure these are not in active use prior to development. Impacts during the construction phase to the areas of biodiverse roof that are being retained on the lower levels of roofing, will be controlled by suitable mitigation measures, and incorporated into a CEMP.
- S.5. Species-specific enhancements recommended within this report, which include native planting and green roofs, would enhance the site for wildlife and increase the habitat diversity on site providing a range of foraging and commuting opportunities for species such as invertebrates, birds and bats.
- S.6. The biodiversity net gain assessment found that the proposals would result in a gain of **13.85% in habitat units**. This would comply with Policy G2 of the Oxford City Local Plan 2020 as well as the National Planning Policy Framework (NPPF). This would also comply with the upcoming Town and Country Planning Act 2023 which is expected to mandate a 10% net gain in biodiversity units.



S.7. It is therefore concluded that the proposed development complies with relevant policy and legislation relating to biodiversity, namely policies RE1, G2 and G8 of the Oxford City Local Plan 2020.



Section 1: Introduction and Context

Introduction

- 1.1. This report has been prepared by Tyler Grange Group Ltd on behalf of Dominus. It sets out the findings of an Ecological Impact Assessment (EclA) at Marriott, Oxford, OX1 1LD (OS Grid Reference SP 50896 06108), hereafter referred to as 'the site'. See **Figure 1.1** for the indicative red line boundary.



Figure 1.1: Indicative red line boundary (© Google Aerial Imagery)

- 1.2. This assessment has been undertaken to inform a planning application for the development of a rooftop extension and small-scale infill extensions where the building currently steps, including the creation of a green roof. The site proposals are shown in the **Post Development Habitat Features Plan (16425/P02)**.

Site Context

- 1.3. The site is approximately 0.18 ha in size and comprises of hardstanding with a green roof located on the five story building, with implemented bat and bird boxes. The site is currently used as a hotel and is bordered on both the western and eastern side by Castle Mill Stream as well as residences and businesses. The wider landscape consists of the urban area of Oxford City Centre. To inform the planning application for the development of the current

building, a Preliminary Ecological Appraisal¹ was undertaken in 2015 and a subsequent Bat Survey Report² and BREEAM Assessment³ was prepared in 2015 and 2016 respectively.

Purpose

- 1.4. This report:
- Uses available background data and results of the field surveys to describe and evaluate the ecological features present within the likely "Zone of Influence"⁴ (ZoI) of the proposed development;
 - Describes the actual or potential ecological issues and opportunities that might arise as a result of the site's development.
 - Where appropriate, makes commitments for mitigation measures for adverse effects on ecological features as well as ecological enhancements, to ensure conformity with policy and legislation listed in **Appendix 1**; and
 - Can be used to inform a planning application for the site's development.
- 1.5. This assessment and the terminology used are consistent with the Guidelines for Preliminary Ecological Appraisal⁵ and the Guidelines for Ecological Impact Assessment⁶. A full methodology is set out in **Appendix 2**.

Methodology

- 1.6. Full methods for the data search, Phase 1/ UK Habs survey, PBRA and BNG work can be found in **Appendix 2**.

Quality Control

- 1.7. All ecologists at Tyler Grange Group Limited are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) or are working towards membership, and act under the direction of members and abide by the Institute's Code of Professional Conduct⁷.

¹ The Ecology Consultancy (2015) 5 St Thomas Street and 15 Paradise Street, Oxford – Preliminary Ecological Appraisal

² The Ecology Consultancy (2015) 5 St Thomas Street, Oxford – Bat Survey Report

³ The Ecology Consultancy (2016) 15 Paradise Street, Oxford – BREEAM New Construction Assessment

⁴ Defined by the CIEEM (2018) Guidelines for Ecological Impact Assessment as the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries

⁵ CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

⁶ CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.

⁷ CIEEM (2022) Code of Professional Conduct, CIEEM, Winchester



Limitations

- 1.8. The 'extended' Phase I habitat survey took place during winter, a less favourable time for assessing biodiverse roofs due to many herb species not being in flower and recent vegetation cuts complicating species identification and habitat assessment. To compensate, historical aerial photography (Google Earth⁸), and a detailed landscape plan from the roof's 2019 construction (Appendix 4) were used to carry out a precautionary condition assessment of the biodiverse roof. Despite the suboptimal timing, this combined evidence enabled a thorough assessment, mitigating the impact of limitations on accurately gauging the roof's condition.
- 1.9. The survey focused solely on the roof area of the site because that was the only part affected by the planned works. Therefore, no river condition assessment of the nearby watercourses was conducted because these features are beyond the intended scope of the project and will remain unaffected.

⁸ Google Earth Pro Version 7.3.6.9345



Section 2: Ecological Features and Evaluation

Designated Sites

- 2.1. The data search was based on records purchased from Thames Valley Environmental Records Centre (TVERC), as well as data from the Multi-Agency Geographic Information for the Countryside (MAGIC). See **Appendix 2** for full methodology.
- 2.2. The data search returned two Natura 2000 sites within 10 km of the site, three statutory, and 22 non-statutory designated sites within 2 km of the site. These are detailed in **Table 2.1** below.



Table 2.1: Designated sites

| Designated site | Distance and direction from site | Citation | Ecological Importance |
|--|----------------------------------|--|-----------------------|
| Oxford Meadows SAC | 1.3 km north west | Designated for its Annex I habitat of Lowland hay meadows and supporting populations of creeping marshwort <i>Apium repens</i> . | International |
| Cothill Fen SAC | 6.1 km south west | Designated is designated for its Annex I habitat Alkaline fens with forests comprising of alder <i>Alnus glutinosa</i> and willow <i>Salix spp.</i> | International |
| Magdalen Grove SSSI | 1.0 km north east | Designated for its fossiliferous sediments underlying the Summertown-Radley Terrace of the Upper Thames and forms part of the important stratigraphy. | National |
| Port Meadow with Wolvercote Common & Green SSSI | 1.3 km north west | Designated for its neutral grasslands. | National |
| New Marston Meadows SSSI | 1.5 km north east | Designated for its neutral meadows providing a natural corridor through the centre of Oxford. | National |
| Oxford canal City Wildlife Site (CWS) | 0.7 km north west | Designated for its wildlife corridor supporting a variety of flora assemblages and populations of water vole <i>Arvicola amphibius</i> , kingfisher <i>Alcedo atthis</i> and grass snake <i>Natrix natrix</i> . | Local |
| Bullstake stream CWS | 1.0 km north west | Designated for its wooded watercourse including ash, crack willow <i>Salix x fragilis</i> , grey willow <i>Salix cinerea</i> , hawthorn <i>Crataegus monogyna</i> , elder, poplars <i>Populus spp.</i> and sycamore <i>Platanus occidentalis</i> . | Local |
| St Cross Cemetery CWS | 1.1 km north east | Designated for its grassland with planted trees and stone wall. | Local |
| Osney Mead (Botley meadow) Local Wildlife Site (LWS) | 1.2 km south west | Designated for its large floodplain meadow. The site also supports good plant assemblages. | Local |
| St Hilda's College Meadow LWS | 1.2 km south west | Designated for its small meadow which supports a population of snake's-head fritillaries and wet grassland species. | Local |
| Hinksey Lake LWS | 1.2 km south | Designated for its lake supporting valuable assemblages of wintering birds. | Local |
| Magdalen Meadow LWS | 1.3 km north east | Designated for its flood meadow. | Local |
| Willow Walk Meadow LWS | 1.3 km south west | Designated for its meadow supporting a population of creeping marshwort. | Local |
| Cripley Island and Fiddler's Island CWS | 1.3 km north west | Designated for its young orchard. Site also includes a wetland habitat including small areas of swamp and large willow pollards. | Local |
| Long meadow North CWS | 1.3 km south east | Designated for its rough grassland. | Local |
| Field North of Osney Mead CWS | 1.4 km west | Designated for its species-rich grassland and encroaching scrub. | Local |
| University Parks CWS | 1.4 km north west | Designated for its historic parkland. | Local |
| Raleigh Park LWS | 1.5 km south west | Designated for its grassland with scrub with some areas of species-rich alkaline fen. | Local |
| Hinksey pools CWS | 1.5 km south | Designated for its pools and mature willow trees lining the pool. | Local |
| Great Meadow (St Catherines Meadow) LWS | 1.6 km north east | Designated for unmanaged meadow with willows, hawthorn and other trees and shrubs. Supports assemblages of priority bird species. | Local |
| Long Meadow LWS | 1.6 km south east | Designated for its lowland meadow habitat supporting populations of fen and reed bunting <i>Emberiza schoeniclus</i> . | Local |
| Aston Eyot and the Kidneys CWS | 1.7 km south east | Designated for its semi-improved grassland and plantation of broad-leaved species dominated by ash <i>Fraxinus excelsior</i> and shrub. | Local |
| Medley Manor Wood CWS | 1.7 km north west | Designated for its small oak <i>Quercus spp.</i> , ash and sycamore <i>Acer pseudoplatanus</i> woodland with an understory of hazel <i>Corylus avellana</i> , elder <i>Sambucus nigra</i> and hawthorn. | Local |
| New Slinc by New Marston Meadows CWS | 1.7 km north east | Designated for its grassland. | Local |



| | | | |
|------------------------------|-------------------|--|-------|
| Park Farm Meadow CWS | 1.8 km north east | Designated for its semi-improved pasture fields. | Local |
| Longbridges Nature Park, CWS | 1.9 km south east | Designated for its part in the wildlife corridor through Oxford City. | Local |
| Trap Grounds LWS | 1.9 km north | Designated for its rare reedbed habitat supporting assemblages of birds including water rail, sedge and reed warblers. In addition, the site also supports reptile assemblages including slow worm, grass snake and common lizard. | Local |



- 2.3. The site falls into the SSSI Impact Risk Zone for Port Meadow with Wolvercote Common & Green SSSI. However, the development does not fall into any of the criteria set out by Natural England requiring further assessment, including large infrastructure such as warehousing. As such, consultation with Natural England is not considered necessary, and this is **not discussed further within this report**.

Habitats and Flora


- 2.4. The habitats present on site are summarised below in **Table 2.2**, along with a description of the composition of the main plant species present and an assessment of their ecological importance. The location of habitats are shown on the **Habitats Features and Preliminary Bat Roost Assessment Plan 16425/P01**.



Table 2.2: Habitats and flora

| Habitat | Description and Species | Ecological Importance | Photograph |
|---|---|---|---|
| <p><u>Primary code:</u> Built-up areas and gardens u1 Building u1b5</p> | <p>A red-brick five-story building, with a set back sixth story brick floor and aluminium window framings. The building also has an open courtyard area located in the centre.</p> | <p>The habitat is of no intrinsic value to biodiversity and is therefore considered to be of negligible ecological importance.</p> |  |
| <p><u>Primary code:</u> Built-up areas and gardens u1 Building u1b5</p> <p><u>Secondary code(s):</u> Intensive Green Roof 88</p> | <p>Consists of a shrub area including three ornamental shrubs, big blue lily-turf <i>Liriope Muscari</i>, lavender <i>Lavandula</i> spp., hellebore <i>Helleborus</i> spp. and garden sage <i>Salvia officinalis</i>. Wildflower turf along the western and northern area of the building found to be recently cut. Comprising of ribwort plantain <i>Plantago lanceolata</i>, cat's ear <i>Hypochaeris radicata</i>, yarrow <i>Achillea millefolium</i> and creeping thistle <i>Cirsium arvense</i>.</p> | <p>Green roofs are supported by Oxford City Council and included in the local plan Policy G8 (Appendix 1). As such, although majority of the species featured are very common in the wider landscape, the habitat is considered to be of local ecological importance.</p> |  |
| <p><u>Primary code:</u> Built-up areas and gardens u1 Building u1b5</p> <p><u>Secondary code(s):</u> Biodiverse Green Roof 87</p> | <p>The green roof located onsite is comprised of several different areas including;</p> <ul style="list-style-type: none"> • A gravel area featuring <i>Carex</i> spp., hedge crane's bill <i>Geranium pyrenaicum</i> and bloodleaf <i>Iresine herbstii</i>, • Sedum blanket featuring yarrow, yorkshire fog <i>Holcus lanatus</i>, bristly oxtongue <i>Helminthotheca echioides</i>, ribwort plantain, daisy <i>Bellis perennis</i> and red clover <i>trifolium pratense</i>. | <p>Green roofs are supported by Oxford City Council and included in the local plan Policy G8 (Appendix 1). As such, although majority of the species featured are very common in the wider landscape, the habitat is considered to be of local ecological importance.</p> |  |



| | | | |
|--|---|---|---|
| <p><u>Primary code:</u> Built-up areas and gardens u1 Building u1b5</p> <p><u>Secondary code(s):</u> Façade Bound Green Wall 843</p> | <p>Green wall featuring Ivy <i>Hedera helix</i>, Japanese pachysandra <i>Pachysandra terminalis</i> and spider plant <i>Chlorophytum comosum</i>.</p> | <p>Green infrastructure is supported by Oxford City Council and included in the local plan Policy G8 (Appendix 1). As such, the habitat is considered to be of local ecological importance.</p> |  |
|--|---|---|---|



Protected and Notable Species

- 2.5. The below section sets out the potential for protected species on site. Species which are considered likely absent from the site based on professional judgement, following consideration of the habitats within the site, signs of species presence at the time of survey and data search records, are not discussed.

Amphibians

- 2.6. The data search returned records of common frog *Rana temporaria*, common toad *Bufo bufo*, great crested newt (GCN) *Triturus cristatus*, and smooth newt *Lissotriton vulgaris* within 2 km of the site. The nearest of these was a record of common toad 1.4 km northwest of the site in 2020. No European Protected Species (EPS) licences were returned for GCN within 2 km of the site.
- 2.7. The data search found two waterbodies within 250 m of the site, which is generally considered to be within the typical migratory range of GCN from a waterbody⁹. The terrestrial habitats on site are not suitable to support GCN and the two waterbodies within 250 m of the site are also considered unsuitable to support GCN as they are fast flowing canals and as such offer limited suitability to support GCN during the aquatic phase of their life cycle.
- 2.8. As such GCN considered **likely absent from the site and are not discussed further within the report**.
- 2.9. As such any population of amphibians such as common toad on site would be of **negligible ecological importance**.

Bats

- 2.10. The data search returned records for 10 different bat species within 2 km of the site. Species included common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, noctule *Nyctalus noctule*, alcaholic bat *Myotis alcaholic*, and brown long eared bat *Plecotus auritus*. The nearest of these were records of brown long eared bat and Daubenton's bat *Myotis daubentonii* 0.5 km south of the site in 2019 and 2018. In addition, seven granted EPS licences for bats were returned within a 2 km radius of the site. The closest licence was located 0.4 km north of the site (case reference: 2018-34136-EPS-MIT) and was granted for the destruction of a resting place of soprano pipistrelle bats.

Bat Activity

- 2.11. The site lies within an urban context, with light pollution within and adjacent to site, and limited habitats for commuting and foraging bats in the wider landscape. It is assumed that light tolerant species, such as common and soprano pipistrelle, could forage within and adjacent to the site. The habitats on site, such as green roofs, don't provide significant commuting and foraging opportunities for bats due to their small size and low diversity.

⁹ Cresswell, W. & Whitworth, R., 2004. An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt *Triturus cristatus*: English Nature Research Report 576, Peterborough: English Nature.





- 2.12. Overall, the assemblage of bats utilising the site for foraging and commuting is considered to be of **negligible ecological importance**.

Preliminary Bat Roost Assessment

- 2.13. A Preliminary Bat Roost Assessment (PBRA) was conducted alongside the 'extended' Phase 1 Habitat survey. This assessment was carried out on the buildings on and directly adjacent to site, which may be impacted by the development. See **Appendix 2** for methodology, **Table 2.3** below for results, and the **Habitat Features and Preliminary Bat Roost Assessment Plan 16425/P01** for locations of Potential Roost Features (PRFs).



Table 2.3: PBRA results.

| | Potential Roost Feature (PRF) | Photograph |
|---|--|---|
| <p>Building B1</p> <p>Low suitability</p> | <p>PRF 1-10- The plastic overhang/edging (approximately 15 cm in width) along the southern and northern elevation of the roof terrace was seen to have visible gaps and would be suitable for crevice dwelling bats such as Pipistrelles. Locations are shown in 16425/P01</p> |  |
| | <p>PRF2 - A Schwegler 1FQ bat roost box was located on the southern elevation.</p> |  |



Birds

- 2.14. The data search returned a number of records of protected and notable birds' species within 2 km of the site. Of these, some species of relevance to the site include house sparrow *Passer domesticus*, starling *Sturnus vulgaris*, swift *Apus apus*, and house martin *Delichon urbicum*.
- 2.15. Habitats on site, such as the building and green roofs have the potential to support common and widespread nesting birds.
- 2.16. It is considered the assemblage of birds that may use the site for foraging and breeding is of **negligible ecological importance** due to the small area of the site, nevertheless consideration for nesting birds to avoid a breach of legislation is discussed in **Section 3** of this report.

Invasive species

- 2.17. No invasive species were noted during the site visit and as such they are not discussed further in this report.



Section 3: Ecological Impacts, Mitigation, and Enhancement

Proposed Development

- 3.1. The proposals are for a rooftop extension and small-scale infill extensions where the building currently stands. The potential impacts at this site as a result of the proposed Development are set out below, with reference to relevant legislation and planning policy, which is summarised in **Appendix 1**.

Design Evolution

- 3.2. The design of the Development has been iterative, and in accordance with policy and best practice guidance, follows the 'mitigation hierarchy'. As such, the Development has been designed to avoid and retain the most important ecological features to ensure they can be managed in the long-term to enhance their importance for biodiversity. Where this is not possible, new habitats have been proposed to compensate for habitat losses with the aim of maximising the overall ecological value of the habitats proposed on site.

Designated Sites

Statutory Sites

- 3.3. Given the nature and scale of the proposals, no adverse direct or indirect effects are anticipated on either Oxford Meadows or Cothill Fens SACs, and no specific mitigation is required.
- 3.4. Magdalen Grove SSSI lies 1.0 km northeast of the site. No impacts to Hampstead Heath Woods SSSI are anticipated as part of the operational phase of the Development, given there is no significant change of use and the change in commercial units will be minimal. During the construction phase, there could be potential impacts via chemical/fuel run-off, noise/visual/vibration impacts, dust, etc.
- 3.5. Standard best practice pollution prevention¹⁰ is expected to be incorporated into a Construction Environmental Management Plan (CEMP). These potential impact pathways will therefore be controlled and impacts to Magdalen Grove SSSI avoided.

¹⁰ CIRIA (2015) Construction Work Sector Guidance for Designers. Fourth edition



Non-statutory Sites

- 3.6. Oxford canal CWS lies 0.7 km northeast and 0.2 km southwest respectively. Impacts during the operational phase are not anticipated due to the scale of the proposals. Impacts during construction activities could potentially occur to these sites via dust deposition and run-off.
- 3.7. These potential impacts can be controlled through best practice pollution prevention measures, which can be implemented in a CEMP.
- 3.8. In summary, the production and implementation of a CEMP, to include standard best practice pollution prevention, is expected to be conditioned and therefore prevent impacts to the designated sites above.

Habitats and Flora

- 3.9. Most of the habitats onsite to be impacted by the proposals are of negligible ecological importance, namely the building, and as such no specific mitigation is required for the loss of some of this habitat.
- 3.10. Habitats of local ecological importance including the intensive green roof, areas of biodiverse green roof and façade-bound green wall are to be removed for development. To mitigate the loss of these habitats, a biodiverse green roof is included in the proposed scheme, which is also expected to improve the site overall for biodiversity. To protect the areas of retained biodiverse green roof during the construction phase of the development, a CEMP will be implemented to control potential impacts such as run-off and dust pollution.

Protected and Notable Species

Bats

- 3.11. Building B1 were assessed as having low suitability to support roosting bats in regard to the feature located on the building. In addition, a bat roosting box is located on the southern elevation of the building. Both the features and the bat box will be impacted during the construction phase of Development.
- 3.12. Impacts associated with dust, vibration and noise during the construction phase will be minimised by the implementation of a CEMP. No lighting during construction is proposed. It is anticipated that lighting levels post-construction will not be greater than current levels. However, any outside lighting should avoid spilling onto retained habitats include the bat box.
- 3.13. The potential roost features should be inspected by a licenced bat ecologist at least 48 hours before construction starts as a precaution. In regard to the bat box, an a pre-works inspection by a licenced bat ecologist would be required prior to work commencing to confirm there are no bats actively roosting. Once this has been confirmed, the bat box can be removed and be reinstated after works finish. In the unlikely event that roosting bats are identified during the check a derogation bat licence application to Natural England to allow for the removal of the bat box would likely be required to ensure that legislation is adhered to.



- 3.14. To enhance the site for roosting bats, an additional bat box is recommended to be incorporated within scheme by either using integrated bat boxes or externally erected bat boxes (expected to be secured via a suitably worded planning condition). This will be in line with Policy RE1 in the Oxford City Council Local Plan by incorporating measures to enhance biodiversity value.

Birds

- 3.15. All birds, their nests and eggs, are protected by law and as such it is an offence to intentionally kill, injure, or take any wild bird; intentionally take, damage, or destroy the nest of any wild bird while it is in use or being built; and intentionally take or destroy the egg of any wild bird.
- 3.16. To avoid triggering the legislation protecting nesting birds, pre-work checks of the Schwegler 1N deep nest box and Schwegler 17A swift box will be required during the nesting season by a suitably experienced Ecological Clerk of Works (ECoW), no more than 48 hours prior to the works commencing. If any nesting birds are found to be present, works are excluded for the duration of the breeding attempt. Any active nests will need to be left in situ until a suitably experienced ecologist confirms that the chicks have fledged and the nest is no longer active. As with the bat roosting box, if no nesting birds are found during the pre-work check the nesting boxes can be temporarily removed during construction and reinstated when finished.
- 3.17. Habitat creation, such as native shrub on the intensive green roof and the biodiverse green roof, is expected to increase nesting opportunities on site which will also be in line with Policy RE1 in the Oxford City Council Local Plan by incorporating measures to enhance biodiversity value.



Section 4: Biodiversity Net Gain

- 4.1. Policy G2 in the Oxford City Council Local Plan, as well as the NPPF, requires Developments to demonstrate a net gain in biodiversity. (see **Appendix 1**). In addition, the upcoming Town and Country Planning Act is expected to make a 10% net gain mandatory from January 2024.
- 4.2. A Development achieves biodiversity net gain when the total biodiversity units present post-Development is higher than that of the biodiversity units present on site prior to Development. Defra's 4.0 metric has been used to calculate the biodiversity value of the site before and after Development in terms of "biodiversity units" to calculate an overall biodiversity net gain or loss.

Existing Habitats

- 4.3. The following habitats are present within the red line boundary of the site and are shown on **Habitat Features and Bat Roost Assessment Plan 16425/P01**. The rationale for condition assessments is detailed within the metric **16425/BNG**.



Table 4.1: Baseline habitats and areas retained and enhanced. action

| Broad Habitat | Habitat Type | Area (hectares) | Distinctiveness | Condition | Area retained (hectares) | Area enhanced (hectares) | Area lost (hectares) |
|---------------|--------------------------------|-----------------|-----------------|-------------|--------------------------|--------------------------|----------------------|
| Urban | Developed land; sealed surface | 0.09 | V. Low | N/A - Other | 0.09 | 0 | 0 |
| Urban | Developed land; sealed surface | 0.04 | V. Low | N/A - Other | 0.02 | 0 | 0 |
| Urban | Biodiverse Green Roof | 0.04 | Low | Moderate | 0 | 0.009 | 0.03 |
| Urban | Intensive Green Roof | 0.006 | Low | Moderate | 0 | 0 | 0.006 |
| Urban | Façade-bound Green Wall | 0.004 | Low | Moderate | 0 | 0 | 0.004 |



Proposed Habitats

- 4.4. The proposals, as shown within **16425/P02**, have been used to calculate the proposed habitat areas. The rationale for target condition assessments is detailed within the metric **16425/BNG**.

Table 4.3: Created and enhanced habitats

| Broad Habitat | Proposed habitat | Area (hectares) | Created/enhanced | Baseline condition | Distinctiveness | Target condition |
|---|-----------------------|-----------------|------------------|--------------------|-----------------|------------------|
| Urban | Biodiverse Green Roof | 0.06 | Created | NA | Medium | Good |
| A net gain of 0.06 habitat units, +13.85% | | | | | | |



Results Summary

- 4.5. As described within the Defra 4.0 metric **16425/BNG** and summarised below in **Figure 4.1**, based on the habitats present on site that will be lost and those to be created, the Development would result in a gain of 0.06 habitat units. This is a percentage gain of 13.85% in habitat units.

| FINAL RESULTS | | |
|---|--------------------------|--------|
| Total net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small> | <i>Habitat units</i> | 0.06 |
| | <i>Hedgerow units</i> | 0.00 |
| | <i>Watercourse units</i> | 0.00 |
| Total net % change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small> | <i>Habitat units</i> | 13.85% |
| | <i>Hedgerow units</i> | 0.00% |
| | <i>Watercourse units</i> | 0.00% |
| Trading rules satisfied? | Yes ✓ | |

Figure 4.1: Biodiversity Net Gain Assessment Results Summary, taken from the Defra 4.0 Metric.

Management

- 4.6. The results of the Defra 4.0 metric are based on the habitats within the site being maintained at a certain condition, as prescribed by the condition assessment sheets published by Defra.
- 4.7. Details of habitat establishment and long-term management will be provided through the production of a Landscape and Ecological Management Plan (LEMP). The LEMP would set out the prescriptions for the establishment and maintenance of the habitats on site for 30 years.



Section 5: Conclusions

- 5.1. Five statutory designated sites: Oxford Meadows SAC, Cothill Fen SAC, Magdalen Grove SSSI, Port Meadow with Wolvercote Common & Green SSSI and New Marston Meadows SSSI, and 22 non-statutory sites were assessed. No direct impacts are anticipated due to the nature of the proposals, as long as standard best practice is followed to control impacts via air, run-off, and other pollutants. These are to be incorporated into a CEMP.
- 5.2. The Development will affect habitats of local ecological importance. Loss of the green roof, façade-bound green wall and balcony greenery will be compensated for by replacement biodiverse and intensive green roofing. With habitat creation proposed, including additional bat and bird boxes, loss of habitats of ecological importance on site will be mitigated, and additional opportunities for biodiversity within the site will be provided. A CEMP is also expected to ensure the protection of the retained area of biodiverse roofing during construction phases.
- 5.3. The building onsite was found to have ten potential bat roosting features as well as a Schwegler 1FQ bat roost box on the southern elevation. Prior to work commencing, a pre works endoscope inspection by a licenced bat ecologist will be required, to confirm the presence or likely absence of roosting bats. If the bat roosting box is not in active use, this can be temporarily removed prior to construction commencing and reinstated once Development has completed. As two bird boxes are also located on site, a pre-works check by an ECoW would be required to determine whether active birds' nests are present.
- 5.4. The proposals would result in a net gain of 0.06 habitat units (+13.85%). A LEMP / Habitat management and monitoring plan (HMMP) to ensure the long-term management of the proposed habitat enhancements is expected to be secured via a suitable worded planning condition.
- 5.5. An appropriately worded planning condition is expected to secure a suitable LEMP or Ecological Enhancement Plan to ensure the long-term management of the proposed habitat enhancements, including intensive green roof, as well as provision of enhancements for specific species groups such as bird and bat boxes.
- 5.8. In conclusion, in anticipation of the implementation of any necessary mitigation, the proposed Development will be compliant with relevant planning policies RE1, G2 and G8 of the Oxford City Local Plan 2020, as well as legislation with regard to ecology.



Appendix 1: Legislation and Planning Policy

Legislation

- A1.1. Specific habitats and species receive legal protection in the UK under various pieces of legislation, including:
- The Environment Act 2021;
 - The Wildlife and Countryside Act (WCA) 1981 (as amended);
 - The Conservation of Habitats and Species Regulations 2017 (as amended);
 - The Countryside and Rights of Way (CROW) Act 2000;
 - The Natural Environment and Rural Communities Act (NERC) 2006;
 - The Hedgerows Regulations 1997; and
 - The Protection of Badgers Act 1992.
- A1.2. The European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, often referred to as the 'Habitats Directive', provides for the protection of key habitats and species considered of European importance. Annexes II and IV of the Directive list all species considered of community interest. The legal framework to protect the species covered by the Habitats Directive has been enacted under UK law through The Conservation of Habitats and Species Regulations 2017 (as amended).
- A1.3. In Britain, the WCA 1981 (as amended) is the primary legislation protecting habitats and species. SSSIs, representing the best examples of our natural heritage, are notified under the WCA 1981 (as amended) by reason of their flora, fauna, geology or other features. All breeding birds, their nests, eggs and young are protected under the Act, which makes it illegal to knowingly destroy or disturb the nest site during nesting season. Schedules 1, 5 and 8 afford protection to individual birds, other animals and plants.
- A1.4. The CROW Act 2000 strengthens the species enforcement provisions of the WCA 1981 (as amended) and makes it an offence to 'recklessly' disturb a protected animal whilst it is using a place of rest or shelter or breeding/nest site.

Environment Act 2021: Upcoming Town and Country Planning Act

- A1.5. The Environment Act gained Royal Assent in November 2022. Whilst the premise of Biodiversity Net Gain (BNG) has been around prior to this, the Assent of the Act sets the Framework for future legislation to be changed. This will be in the form of the Town and Country Planning Act (TaCPA), specifically Schedule 14 of the TaCPA, which will make Biodiversity Net Gain a condition of planning (not a planning condition). The target 'gain' is currently set at 10% but the Secretary of State has the ability to change this.



A1.6. The timescales for changes to the wording of the TaCPA are that it will be legally mandated and enforceable from November 2023.

National Planning Policy

National Planning Policy Framework (NPPF), July 2021

A1.7. The National Planning Policy Framework (NPPF) was updated in July 2021 and sets out the Government's planning policies for England and how these should be applied. It replaces the National Planning Policy Framework published in July 2019.

A1.8. Paragraph 11 states that:

"Plans and decisions should apply a presumption in favour of sustainable development."

A1.9. Section 15 of the NPPF (paragraphs 174 to 182) considers the conservation and enhancement of the natural environment including habitats and biodiversity (paragraphs 179-182)

A1.10. Paragraph 174 states that planning and decisions should contribute to and enhance the natural and local environment by:

- *"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; and*
- *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures"*

A1.11. Paragraph 175 states that *plans should distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.*

A1.12. Paragraph 179 states that *in order 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.”*

A1.13. When determining planning applications, Paragraph 180 states that local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- *“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;*
- *development on land within or outside a Site of Special Scientific Interest, 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 Sites of Special Scientific Interest;*
- *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*
- *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should 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.”*

A1.14. As stated in paragraph 181 the following should be given the same protection as habitats sites:

- *“potential Special Protection Areas and possible Special Areas of Conservation;*
- *listed or proposed Ramsar sites; and*
- *sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.”*

A1.15. Paragraph 182 states that the presumption in favour of sustainable development does not apply where the planned project is likely to have a significant effect on a habitat site (alone or in combination with other plans or projects) unless an appropriate assessment has concluded the plan or project will not adversely affect the integrity of the habitats site.



Local Planning Policy

Oxford City Council Local Plan 2036 Adopted 8th June 2020¹¹

A1.16. Policy RE1: Sustainable design and construction

Planning permission will only be granted where it can be demonstrated that the following sustainable design and construction principles have been incorporated, where relevant:

- a) Maximising energy efficiency and the use of low carbon energy;*
- b) Conserving water and maximising water efficiency;*
- c) Using recycled and recyclable materials and sourcing them responsibly;*
- d) Minimising waste and maximising recycling during construction and operation;*
- e) Minimising flood risk including flood resilient construction;*
- f) Being flexible and adaptable to future occupier needs; and*
- g) Incorporating measures to enhance biodiversity value*

A1.17. Policy G2: Protection of biodiversity and geo-diversity

Development that results in a net loss of sites and species of ecological value will not be permitted.

Sites and species important for biodiversity and geodiversity will be protected. Planning permission will not be granted for any development that would have an adverse impact on sites of national or international importance (the SAC and SSSIs), and development will not be permitted on these sites, save where related to and required for the maintenance or enhancement of the site's importance for biodiversity or geodiversity.

Development proposed on land immediately adjacent to the SSSIs should be designed with a buffer to avoid disturbance to the SSSIs during the construction period.

On sites of local importance for wildlife, including Local Wildlife Sites, Local Geological Sites and Oxford City Wildlife Sites, on sites that have a biodiversity network function, and where there are species and habitats of importance for biodiversity that do not meet criteria for individual protection, development will only be permitted in exceptional circumstances whereby:

- a) there is an exceptional need for the new development and the need cannot be met by development on an alternative site with less biodiversity interest; and*
- b) adequate onsite mitigation measures to achieve a net gain of biodiversity are proposed; and*
- c) where this is shown not to be feasible then compensation measures will be required, secured by a planning obligation.*

Compensation and mitigation measures must offset the loss and achieve an overall net gain for biodiversity. For all major developments proposed on greenfield sites or brownfield

¹¹ Oxford City Local Plan https://www.oxford.gov.uk/downloads/file/7380/adopted_oxford_local_plan_2036 [Accessed: 04/12/2023]



sites that have become vegetated, this should be measured through use of a recognised biodiversity calculator. To demonstrate an overall net gain for biodiversity, the biodiversity calculator should demonstrate an improvement of 5% or more from the existing situation. Offsetting measures are likely to include identification of appropriate off-site locations/projects for improvement, which should be within the relevant Conservation Target Area if appropriate, or within the locality of the site. When assessing whether a site is suitable for compensation, consideration will be given to the access, enjoyment and connection to nature that the biodiversity site to be lost has brought to a locality. A management and monitoring plan might be required for larger sites. The calculation should be applied to the whole site.

A1.18. Policy G8: New and enhanced Green and Blue infrastructure Network Features

Development proposals affecting existing Green Infrastructure features should demonstrate how these have been incorporated within the design of the new development where appropriate. This applies to protected and unprotected Green Infrastructure features, such as hedgerows, trees and small public green spaces.

All proposals requiring a Design and Access Statement²⁵ should demonstrate how new or improved green or blue infrastructure features will be incorporated, which should contribute to the following, except where not relevant:

- i. public access
- ii. health and wellbeing, considering opportunities for food growing, recreation and play
- iii. biodiversity
- iv. creating linkages with the wider Green Infrastructure Network (and the countryside)
- v. climate change (including flood risk and sustainable drainage)
- vi. character/sense of place
- vii. SuDS
- viii. connectivity of walking and cycling routes

Proposals for green or brown roofs and walls will be supported. All major developments that include flat or gently sloping roofs should incorporate green or brown roofs where feasible, which should be designed to be low maintenance, or if they are not a maintenance plan should be provided.

For residential sites of 1.5 hectares and above, new public open space of 10% of the area covered by residential development is required. For mixed-use sites, the area of residential use should be used for that calculation, and 10% of that space used as public open space. Where appropriate, applicants will be expected to enter into a legal agreement to ensure that the new public space is properly maintained, by means of a financial contribution to the City Council.

Planning permission will only be granted for developments that affect, or are likely to increase the use of Public Rights of Way if, by planning condition or planning obligation, they safeguard and improve or add to the Public Rights of Way network.



Planning permission will be granted for new water-based recreation facilities or extensions to existing facilities except where they would create unacceptable adverse environmental impacts or effects, or have an adverse effect on the environmental quality of Oxford's waterways and their surroundings.



Appendix 2: Methodology and Results

Data Search

A2.1. A desk-based study was conducted whereby records of designated sites and records of protected and priority species were purchased and interrogated for the site and the surrounding landscape. The aim of the data search is to collate existing ecological records for the site and adjacent areas. Obtaining existing records is an important part of the assessment process as it provides information on issues that may not be apparent during a single survey, which by its nature provides only a 'snapshot' of the ecology of a given site.

A2.2. The following resources were consulted/contacted:

- Multi-Agency Geographic Information for the countryside (MAGIC) website¹²;
- Thames Valley Environmental Records Centre (TVERC)¹³; (Data ordered on 4th December 2023 and received on 4th December 2023);
- Oxford City Local Council website¹⁴;
- Joint Nature Conservation Committee (JNCC) website¹⁵;
- Natural England (NE) designated sites website¹⁶;
- Ordnance Survey mapping; and
- Google Maps, including aerial photography.

A2.3. The following areas of search around the boundary of the site boundary were applied:

- 2 km for protected and priority species, national statutory designated and non-statutory sites; and
- 10 km for European statutory sites.

'Extended' Phase I Habitat Survey and UKHabs

A2.4. An 'extended' Phase 1 survey was carried out on the 6th December 2023 by Julie Watson BSc (Hons) MSc MCIEEM, a suitably experienced ecologist and qualifying member of CIEEM. The methods used during the walkover survey broadly followed methods used in an 'extended' Phase I habitat survey¹⁷ and entailed recording the main plant species and classifying and mapping

¹² <https://magic.defra.gov.uk/> [Accessed 04/12/2023]

¹³ <https://www.tverc.org/cms/> [Accessed: 04/12/2023]

¹⁴ [https://www.oxford.gov.uk// https://www.redbridge.gov.uk/planning-and-building/planning-policy/](https://www.oxford.gov.uk//https://www.redbridge.gov.uk/planning-and-building/planning-policy/) [Accessed 04/12/2023]

¹⁵ <http://jncc.defra.gov.uk/ProtectedSites/> [Accessed 04/12/2023]

¹⁶ <https://designatedsites.naturalengland.org.uk/> [Accessed 04/12/2023]

¹⁷ Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey - a technique for environmental audit. JNCC, Peterborough.



habitat types with reference to the Habitat Definitions provided by the UK Habitat Classification Working Group¹⁸.

- A2.5. Additionally, the habitats identified were evaluated for their potential to support legally protected and notable fauna species. Where access allowed, adjacent habitats were also considered in order to assess the site within the wider landscape and to provide information with which to assess possible impacts within the context of the site boundary.
- A2.6. All habitats were assessed utilising the relevant condition criteria for the relevant habitat type under Metric 4.0", which included confirming 'pass' / 'fail' criteria taken from the UK Habitat/Phase 1 methodology where necessary.

Preliminary Bat Roost Assessment (PBRA)

- A2.7. A PBRA was undertaken on trees and buildings of relevance to this assessment. The assessment was undertaken on the 6th December 2023 by Julie Watson BSc (Hons) MSc MCIEEM. All surveys were daytime inspections and the conditions for all surveys was considered optimal. The location of the buildings at the site are shown on **16425/P01**. All buildings are inspected from the ground using binoculars and high-powered torch for accessible features. In relation to buildings, such signs may include bat droppings, urine splashes, staining and features suitable for allowing bats access to roost (e.g. gaps behind soffits / hanging tiles / ridge tiles, lifted slates / flashing).
- A2.8. The potential of each tree and building at the site and immediately adjacent to the site to support roosting bats have been categorised against the criteria described in **Table A2.1**.

| Suitability | Description of Roosting Habitats |
|-------------|--|
| None | No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels) |
| Negligible | No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion. |
| Low | A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ^b 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 ^c). |
| Moderate | A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^b and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described |

¹⁸ Butcher, B., Carey, P., Edmons, R., Norton, L. and Treweek, J. (2020). UK Habitat Classification – Habitat Definitions V1.1



| | |
|--|---|
| | in this table is made irrespective of species conservation status, which is established after presence is confirmed) |
| High | 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. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site. |
| <p>^a Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).</p> <p>^b For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.</p> <p>^c Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments. Common pipistrelle swarming has been observed in the UK and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland. This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.</p> | |

Table A2.1: Building Assessment Criteria – adapted from Collins, 2023

A2.9. Results of the PBRA are shown in **Section 2** of this report.

Biodiversity Net Gain

A2.10. The Biodiversity Metric 4.0 metric operates by calculating the number of biodiversity units associated with a particular habitat type (both pre-and post-development) – the 'unit' value associated with each habitat type is calculated based on the following parameters:

- Size (in hectares)/Length (in km);
- Distinctiveness (i.e. how rare/valuable a given habitat is);
- Condition (i.e. how well the recorded habitat fits [or will fit] the standardised description of that habitat); and
- Strategic significance (i.e. if the existing or proposed habitat is within an area formally adopted in the local plan for green infrastructure or biodiversity improvements).

A2.11. When considering the creation of new habitats in the post-development site, other factors are also considered when calculating the 'unit' value of a given habitat and these are:

- Time to reach the target condition of each habitat; and



- Difficulty category for the creation of a given habitat.

A2.12. A calculation has been undertaken using the baseline habitats identified during habitat condition assessment survey, which was carried out on the 18th December 2023, alongside the 'extended' Phase 1 survey above. All surveys were carried out by Julie Watson BSc (Hons) MSc MICEEM, a suitably experienced ecologist and qualifying member of CIEEM.

A2.13. The UK Habitat Classification was used to identify habitat types. Note that the calculation is completed separately for non-linear and linear habitats. Habitat areas entered into the Defra 4.0 metric in hectares were rounded to two decimal places.

Evaluation

A2.14. The evaluation of habitats and species is defined in accordance with published guidance¹⁹. The scale of importance of each ecological feature is assigned within a defined geographical context, namely international and European, national, regional, county, and local. Below these are features considered to be of negligible importance.

A2.15. Consideration will also be given to legally protected or controlled species which are 'important features' in the context of this assessment, for which mitigation measures are required to ensure legal compliance, regardless of their geographic scale of importance. Thus, it is possible for a feature of negligible ecological importance to be legally protected and hence require mitigation.

A2.16. Evaluation is based on various characteristics that can be used to identify ecological features likely to be important in terms of biodiversity. These include site designations (such as Sites of Species Scientific Interest (SSSIs), or for undesignated features, the size, conservation status (locally, nationally or internationally), and the quality of the ecological feature. In terms of the latter, quality can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats) or species populations or assemblages.

Impact Assessment

A2.17. The assessment of impacts identifies impacts and their effects as a result of the proposed development on important ecological features. This includes consideration of impacts at all relevant stages of the development, including construction and operation. The assessment includes reference to legislation and policy, and supplementary planning guidance where relevant.

Application of Mitigation Hierarchy

A2.18. Application of the mitigation hierarchy is fundamental to the ecological impact assessment process. This requires consideration of the following measures, in order of priority, for all potential

¹⁹ CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.



impacts, to determine the most appropriate mitigation, compensation and enhancement strategy for the project. This is taken into account within **Section 3** of this report and set out below:

- Avoidance – measures to avoid harm to ecological features (set out in 'Design Evolution', Section 3);
- Mitigation – measures to avoid or minimise potential impacts as part of the design or guaranteed by planning controls;
- Compensation – measures required to offset significant residual negative effects following avoidance and mitigation; and
- Enhancement – measures over and above requirements for avoidance, mitigation and compensation to provide biodiversity net gain.

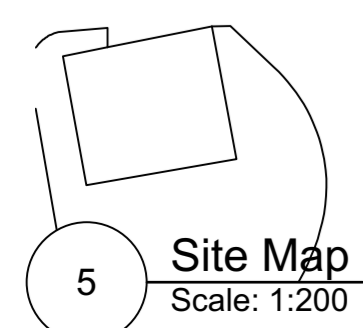
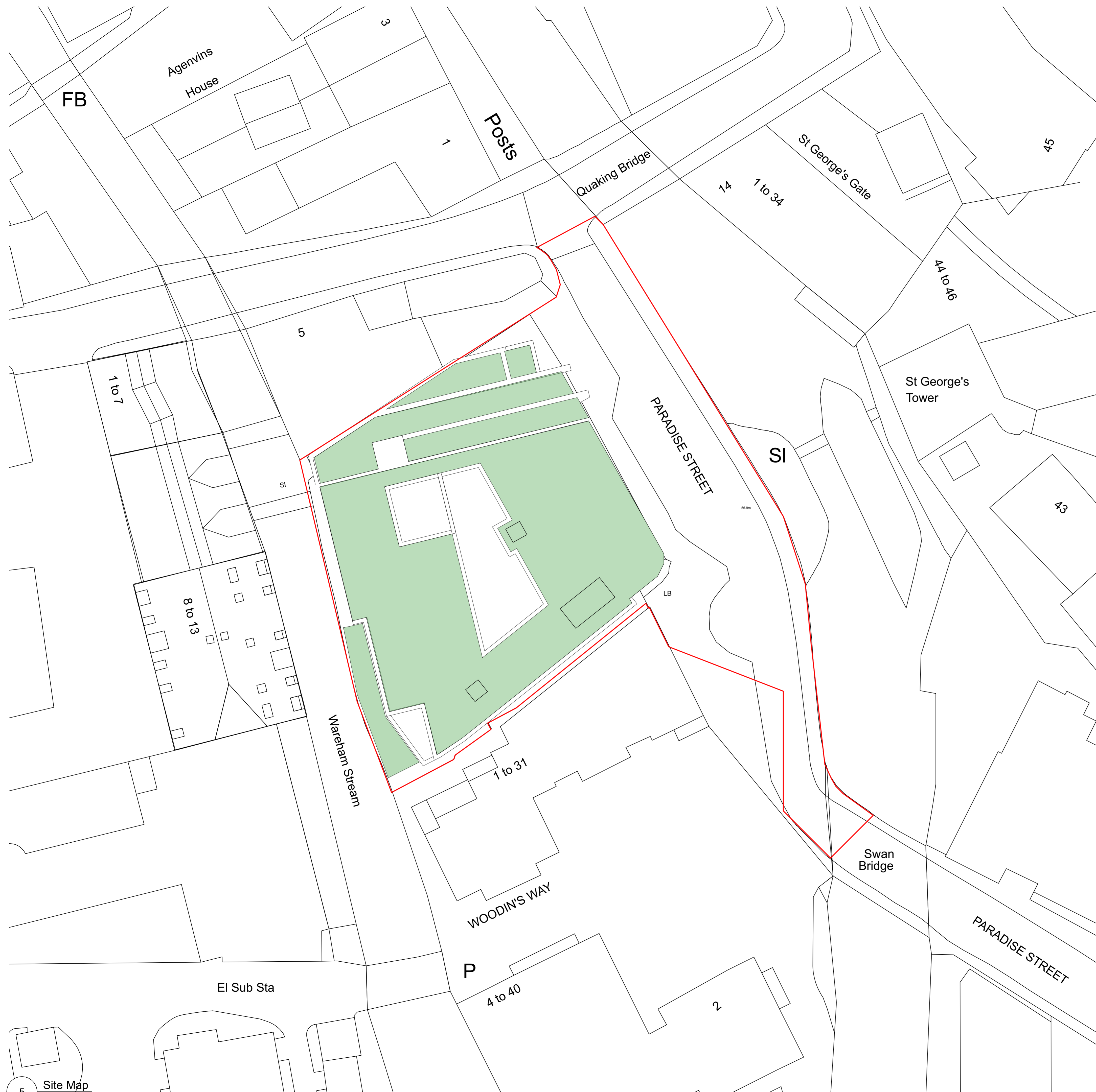
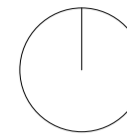
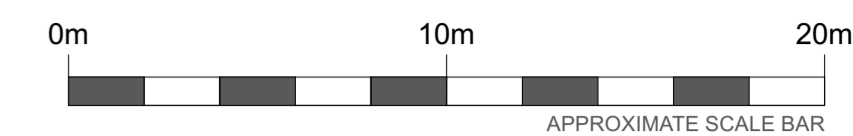


Appendix 3: Proposed Landscaping Site Plan

6086-PI-101



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Client
Dominus

Project
Court yard By Marriott Oxford City Centre
Oxford
(Extension)

Drawing
Proposed Site Plan

| Scale | Date | Drawn | Checked |
|-------|----------|-------|---------|
| 1:200 | 20/10/23 | LG | JM |

Drawing No. Revision

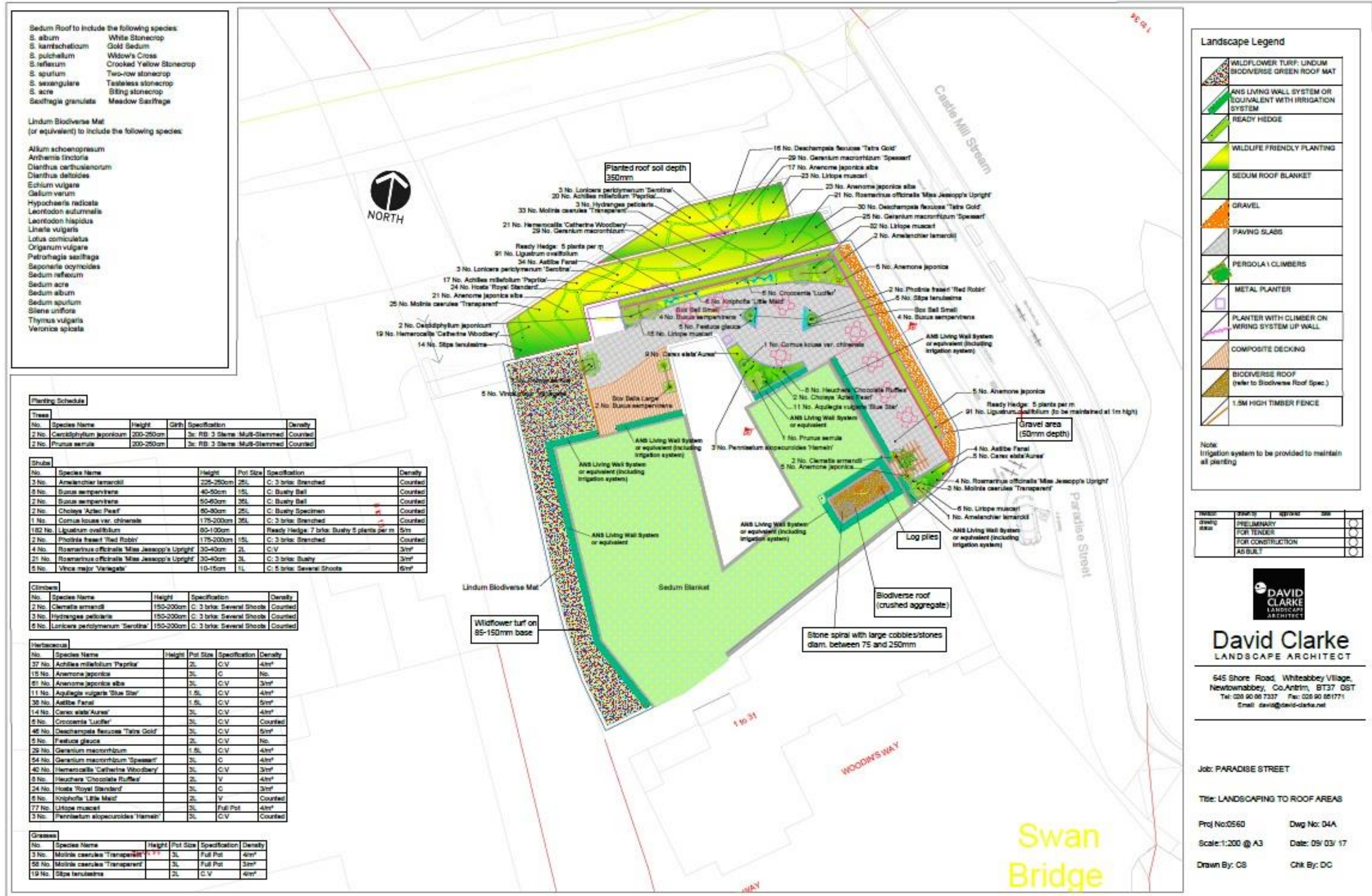
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Status
PLANNING

Appendix 4: Previous Proposed Landscaping Plan 04A (2017)



Figure 1: Landscaping Roof Level

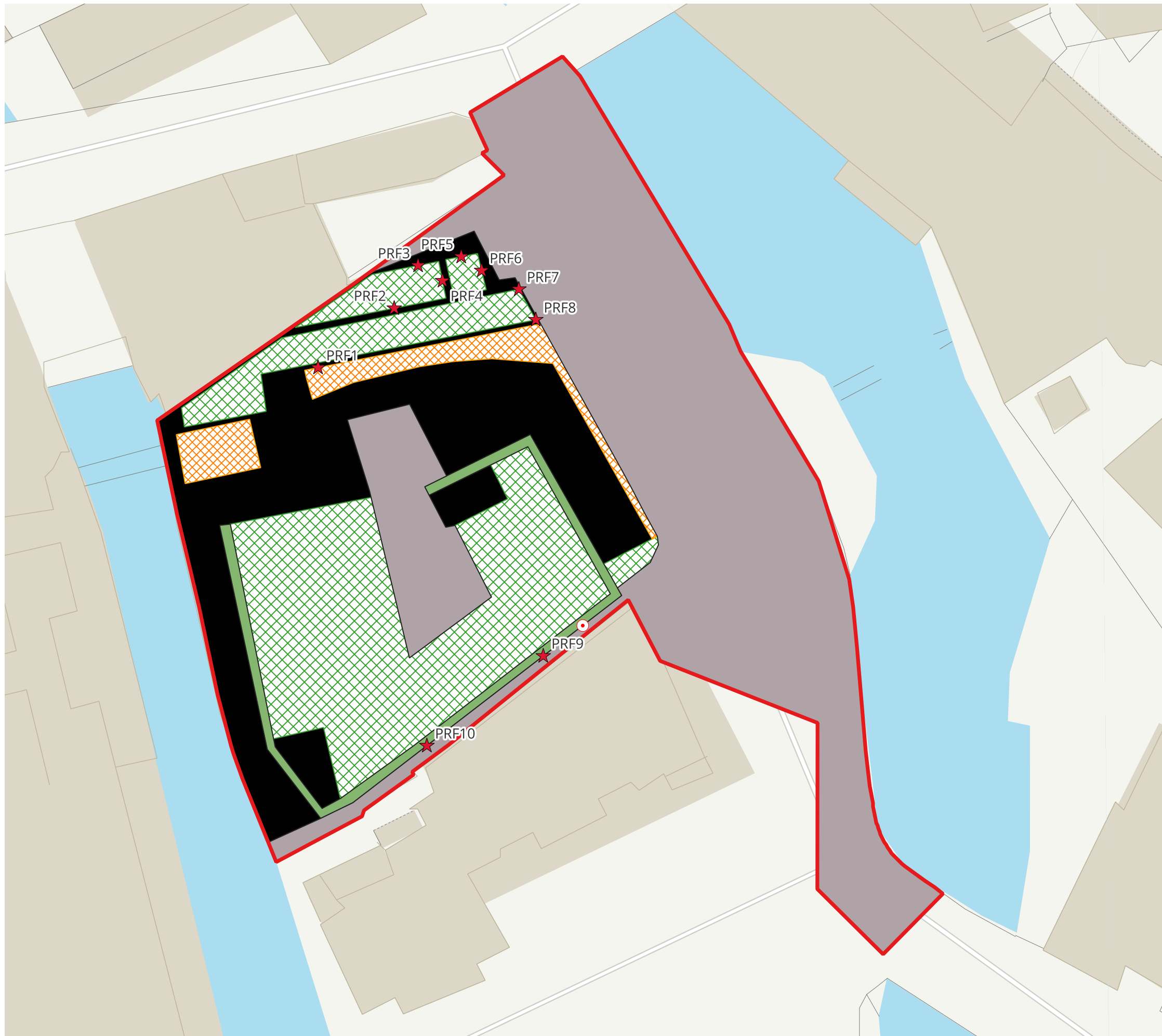


Plans:


Plan 1: Habitat Features and Preliminary Bat Roost Assessment Plan
16425/P01

Plan 2: Post-Development Habitat Features Plan **16425/P02**





Legend

 Red line boundary

Baseline Habitats

 Hardstanding

 Building

 Biodiverse green roof

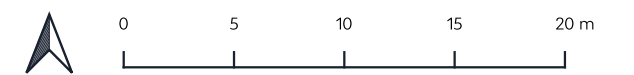
 Intensive Green Roof

 Facade Bound Green Wall

Preliminary Bat Roost Assessment

 Potential Roosting Features (PRFs)

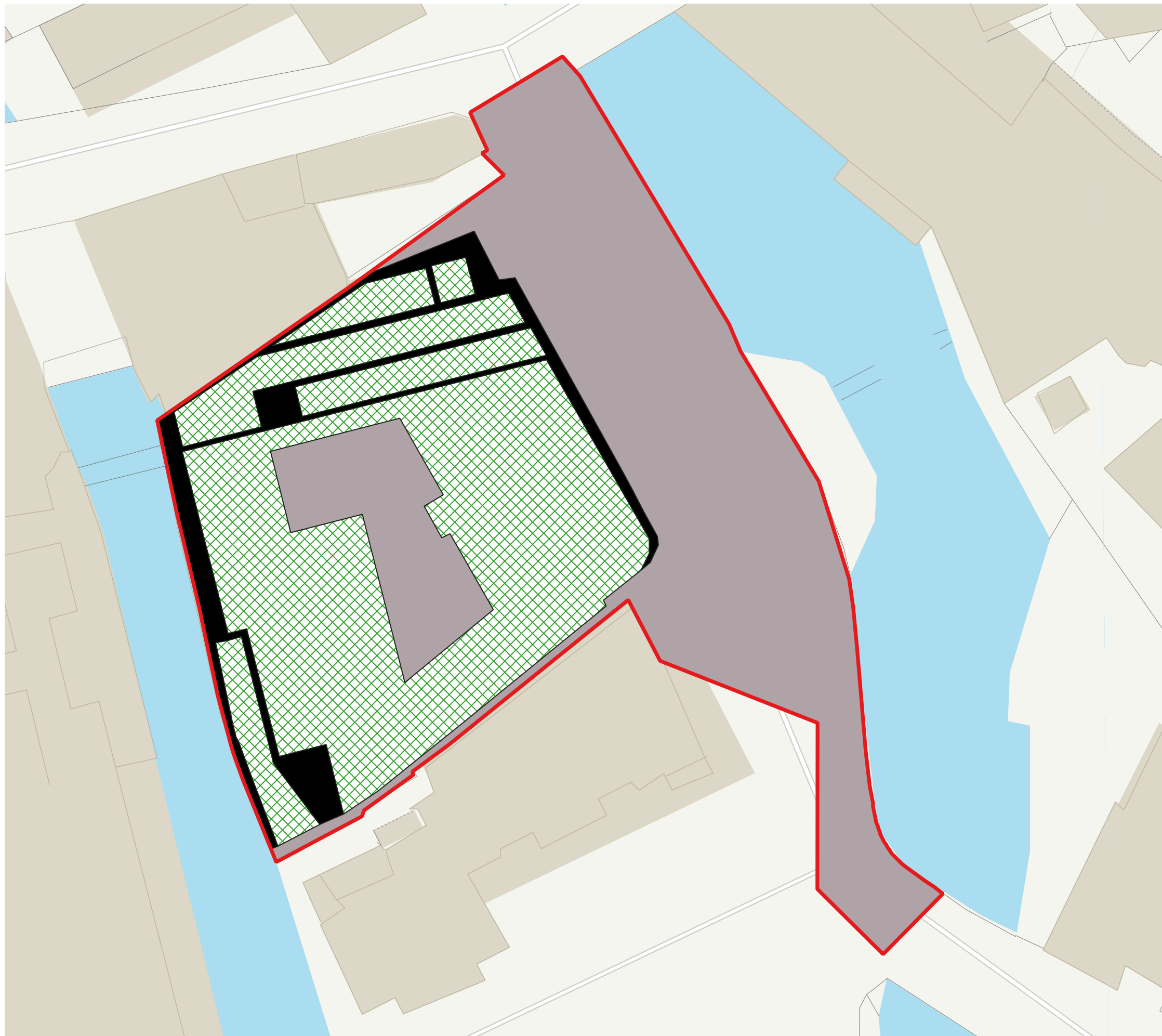
 Schwegler 1FQ Bat Roost Box




| | |
|---------------|--|
| Project | Courtyard by Marriott Oxford |
| Drawing Title | Baseline Habitat and Preliminary Bat Roost Assessment Plan |
| Scale | As Shown (Approximate) |
| Drawing No. | 16425/P01 |
| Date | January 2024 |
| Checked | GW/JW |



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Legend

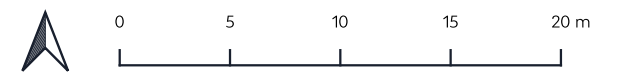
 Red line boundary

Post Development Habitats

 Hardstanding

 Building

 Biodiverse Green Roof



| | |
|---------------|--|
| Project | Courtyard by Marriott Oxford |
| Drawing Title | Post Development Habitat Features Plan |
| Scale | As Shown (Approximate) |
| Drawing No. | 16425/P02 |
| Date | January 2024 |
| Checked | GW/JW |



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