

Preliminary Ecological Appraisal and Preliminary Roost Assessment

Survey site:

57 Church Road Bishopstoke Hampshire SO50 6DN

Client:

Old Park Construction Ltd

Survey date:

13th February 2024

Project:

This report is prepared to inform a planning application with the Eastleigh Borough Council. The proposal is described as:

Two, two-bedroom maisonettes. Including the internal reconfiguration of the existing building, installation of two dormer windows, solar panels and a two-storey extension of the southern elevation to match the existing roof pitch.

PEA survey methodology and legislation can be found in the Arbtech Supplement: [PEA Methodology and Legislation - 2024.](#)

PRA survey methodology and legislation can be found in the Arbtech Supplement: [PRA Methodology and Legislation - 2024.](#)

The site survey was undertaken by The site survey was undertaken by Harley Stone BSc Consultant Ecologist (Natural England Bat Licence Number: 2023-11031-CL17-BAT)					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (mph)	Rain
13/02/2024	7	96	100	8	Light rain

Ecological Survey Factor	Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.
Conclusion, Impact or Recommendations	
Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, photos in appendix 3 and proposal plan in appendix 4).	
Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).	
Summary of Survey Findings (UKHab codes used)	The site is located at National Grid Reference SU 4668 1978. The site is within the small urban area of Bishopstoke, just north of Southampton. The survey was required to inform a planning application for the construction of two maisonettes to be built within the site boundary. <u>Buildings u1b5</u> There is one building onsite (B1) which is a single-story residential dwelling. <u>Developed land; Sealed Surface u1b</u> To the north of the site, there is a path leading to the front of the property. <u>Artificial unsealed, unvegetated surface</u> The area surrounding B1 is gravel. <u>Bare ground</u> Along the southwest boundary is an area of bare ground with no vegetation present. The area is exposed top soil.

	<u>Local habitats</u> Within 2km of the site, the following BAP habitats were returned: Coastal and floodplain grazing marsh; Good quality semi-improved grassland; Lowland meadows; Purple moor grass and rush pastures; Lowland Fens; Reedbeds; Ancient & Semi-Natural Woodland; Deciduous woodland; Wood-pasture and Traditional Orchards. The context of the habitats is that 122m west of the site lies a large parcel of deciduous woodland that connects to a parcel of coastal floodplains. The river Itchen is located 364 m west of site which is a designated chalk river. The surrounding landscape also consists of parcels of grassland, Broadleaved, Mixed and Yew Woodland, and parcels of swamps and fen surrounding the river. There are also large parcels of modified grasslands that surround urban development.
<i>Foreseen Impacts</i>	The habitats on site are widespread and not notable. Slight impacts are foreseen on the deciduous woodland to the west from the construction or operation of the development if left unmitigated (dust, litter, surface run off etc).
<i>Recommendations</i>	Best practice measures to minimise the possibility of pollution affecting the nearby woodland must be implemented during construction.
Locality and Designated Sites	
<i>Summary of Survey Findings</i>	The following designated sites are within 2km from the site: River Itchen SSSI SAC 335m east of the site. The River Itchen is a classic chalk river and shows a greater uniformity in physical characteristics along its entire length than other rivers of this type. Since the river is mainly spring fed, there is only a narrow range of seasonal variation in physical and chemical characteristics. The water is of high quality, being naturally base-rich and of great clarity; and its temperature is relatively constant, with dissolved oxygen levels at or near saturation. (Magic, 2024).

<i>Foreseen Impacts</i>	There are physical urban barriers between the site and any designated sites. The site is isolated from connectivity to designated sites. The development type is small and the development type is not listed as high risk for SSSI impact zones. No direct impacts are foreseen for this development, however, indirect impacts from pollution during the construction or operation of the development if left unmitigated (dust, litter, surface run off etc) may impact designated sites to the North.
<i>Recommendations</i>	Best practice measures to minimise the possibility of pollution affecting the nearby ancient woodland must be implemented during construction.
Invasive / Non-native species	
<i>Summary of Survey Findings</i>	No problematic invasive and non-native species were recorded on site.
<i>Foreseen Impacts</i>	N/A
<i>Recommendations</i>	No further surveys but remain vigilant.
Invertebrates	
<i>Summary of Survey Findings</i>	No habitat for protected or notable invertebrates is found on site.
<i>Foreseen Impacts</i>	None foreseen.
<i>Recommendations</i>	No further surveys.
Bats	
<i>Summary of Survey Findings</i>	A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roost sites in close proximity to the licensed site. EPSL records for bats include 2019-43153-EPS-MIT for common pipistrelle and brown long-eared allowing destruction of a breeding site approximately 33m west of the site. A total of five granted EPSLs were found within a 2km radius. The EPSL licences were granted for the following; • Two for the destruction of a resting place for brown long-eared, soprano pipistrelle and common pipistrelle. • Destruction of a resting place for common pipistrelle Damage to a resting place for common pipistrelle, soprano pipistrelle and brown long-eared.

	PRA Table:		
	Feature	Description	Photographs
	Bat foraging and commuting habitat	The site consists of hard standing and a building. The site is close to woodland and a floodplain which are ideal foraging habitats for a range of bat species. Due to the close proximity it is likely bats use the site for commuting to foraging areas.	
	B1 - overview	B1 is a red brick detached single-storey dwelling. The porch on the northern elevation is made from the same bricks with concrete features around the top of the door. The roof is hipped and made of clay tiles with gaps between tiles being identified as well as missing tiles.	

	B1 – north elevation	Brick brickwork was in moderate condition gaps in the brickwork suitable for crevice-dwelling species. There are also large gaps in the eaves and soffit of the roof creating access for roosting bats at the gable end.	
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	B1 – south elevation	The brickwork is in good condition with no gaps in the brickwork. There are visible gaps in the eaves and soffit creating potential roosting features. The wooden gable under the gable end is lifted at the bottom corner making the internal loft space accessible.	
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	B1 – east elevation	The soffit of the porch is broken with an old swifts nest being found inside. This creates a suitable roosting feature for bats and a nesting feature of nesting birds. There are also gaps in the tiles on the porch as well as missing tiles. The brickwork is in moderate condition with gaps being present along the eastern elevation, particularly around the eaves and windows.	  
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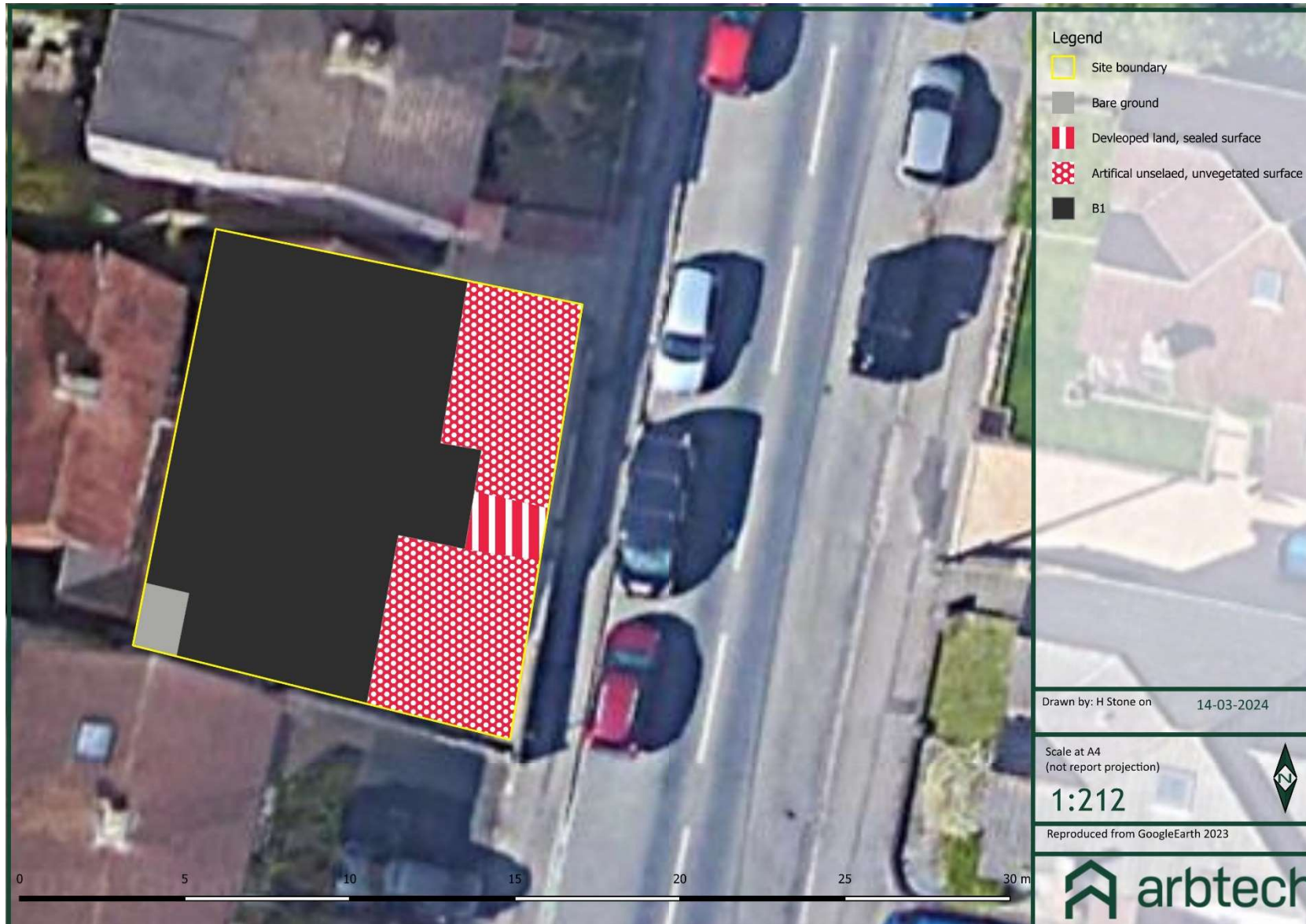
	B1 – west elevations	The brickwork on the western elevation is in good condition with very few gaps. Small gaps in the eaves were visible as this creates light spills during the internal access. These features are suitable for roosting bats.	
	B1 – interior	The roof void was not accessible but the was visible due to holes in the boarding. This showed the roof was not lined. Brickwork is exposed and is a moderate condition with gaps that are suitable for crevice-dwelling species. No bat droppings or evidence of roosting bats was found in the areas that were accessible.	

	B1 – interior (cellar)	The floorboards that would form a void of the cellar roof have been removed due to poor condition. The cellar floor was wet from flooding. The cellar is sub-optimal for roosting or hibernating bats as the cellar is open, causing fluctuation in humidity, light and temperature and is prone to flooding. The cellar does not have any suitable gaps for crevice dwellers and the absence of floorboards make this unsuitable for void dwellers. No evidence of bats was present in the cellar.	
	B1 – suitability assessment	There was significant lifting of the clay roof tiles as well as a number of tiles being broken or missing. Combined with the gaps in the brick work B1 is suitable for crevice-dwelling species. There are significant gaps in the eaves, soffit, and wooden panel making the internal space accessible for both void-dwelling and crevice-dwelling species. Overall, B1 has high roosting suitability.	
Foreseen Impacts	The proposed development will result in the renovation of B1 including the internal reconfiguration of the existing building, installation of two dormer windows, solar panels, and a two-story extension of the southern elevation to match the existing roof pitch. This could destroy any bat roosts present and could cause disturbance, death or injury to bats.		
Recommendations	Three bat emergence and re-entry surveys are required during the active bat season (optimal May to August, suboptimal September) to characterise the roosts present. Infra-red cameras should be used as an aid. Surveys should be a minimum of two weeks apart. Three surveyors are required to provide full coverage of the building		

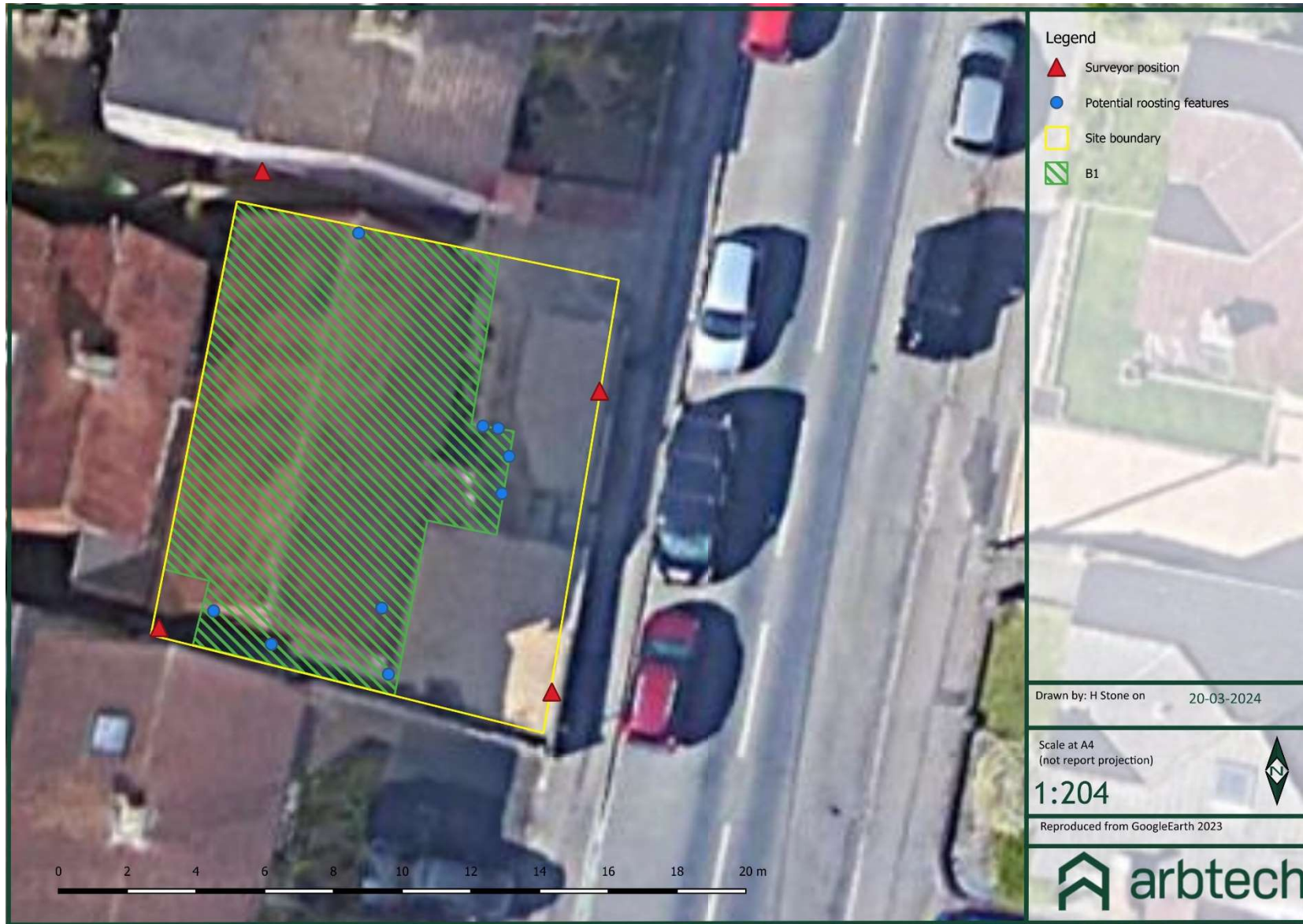
Birds	
<i>Summary of Survey Findings</i>	An old bird's nest was observed within the broken soffit box of the front porch.
<i>Foreseen Impacts</i>	As the building has been observed as suitable for nesting birds, any works to the building has the potential to result in the destruction or the disturbance and subsequent abandonment of active bird nests.
<i>Recommendations</i>	Modification to the building should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building should be undertaken immediately, by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.
Reptiles	
<i>Summary of Survey Findings</i>	No suitable reptile habitat on, adjacent or connected to the site.
<i>Foreseen Impacts</i>	None foreseen
<i>Recommendations</i>	No further surveys are required.
Amphibians	
<i>Summary of Survey Findings</i>	No suitable amphibian habitat on, adjacent or connected to the site. There are no great crested newt European Protected Species License (EPSL) within 2km.
<i>Foreseen Impacts</i>	None foreseen
<i>Recommendations</i>	No further surveys are required.
Badger	
<i>Summary of Survey Findings</i>	The woodland 122m west of the site provides an ideal habitat and foraging area for badgers. Urban areas separate the woodland from the site making it unlikely badgers will use the site. No evidence of badgers was found on or within 30m of the site.
<i>Foreseen Impacts</i>	None foreseen
<i>Recommendations</i>	No further surveys are required.

Riparian animals	
<i>Summary of Survey Findings</i>	There are no watercourses on or connected to the site. No works will be undertaken within 170m of a watercourse.
<i>Foreseen Impacts</i>	No impacts are anticipated on riparian animals as a result of the proposed development.
<i>Recommendations</i>	No further surveys are required.
Hazel dormouse	
<i>Summary of Survey Findings</i>	No suitable amphibian habitat on, adjacent or connected to the site. There are no dormouse European Protected Species License (EPSL) within 4km.
<i>Foreseen Impacts</i>	None foreseen
<i>Recommendations</i>	No further surveys are required.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	There is no vegetated garden making the site unsuitable for hedgehogs. The adjacent properties have larger, vegetated gardens meaning there is a moderate probability that hedgehogs will commute through the site.
<i>Foreseen Impacts</i>	Works at night should be limited with any excavations being covered ta night to prevent death or injury to any commuting hedgehogs.
<i>Recommendations</i>	No further surveys are required.

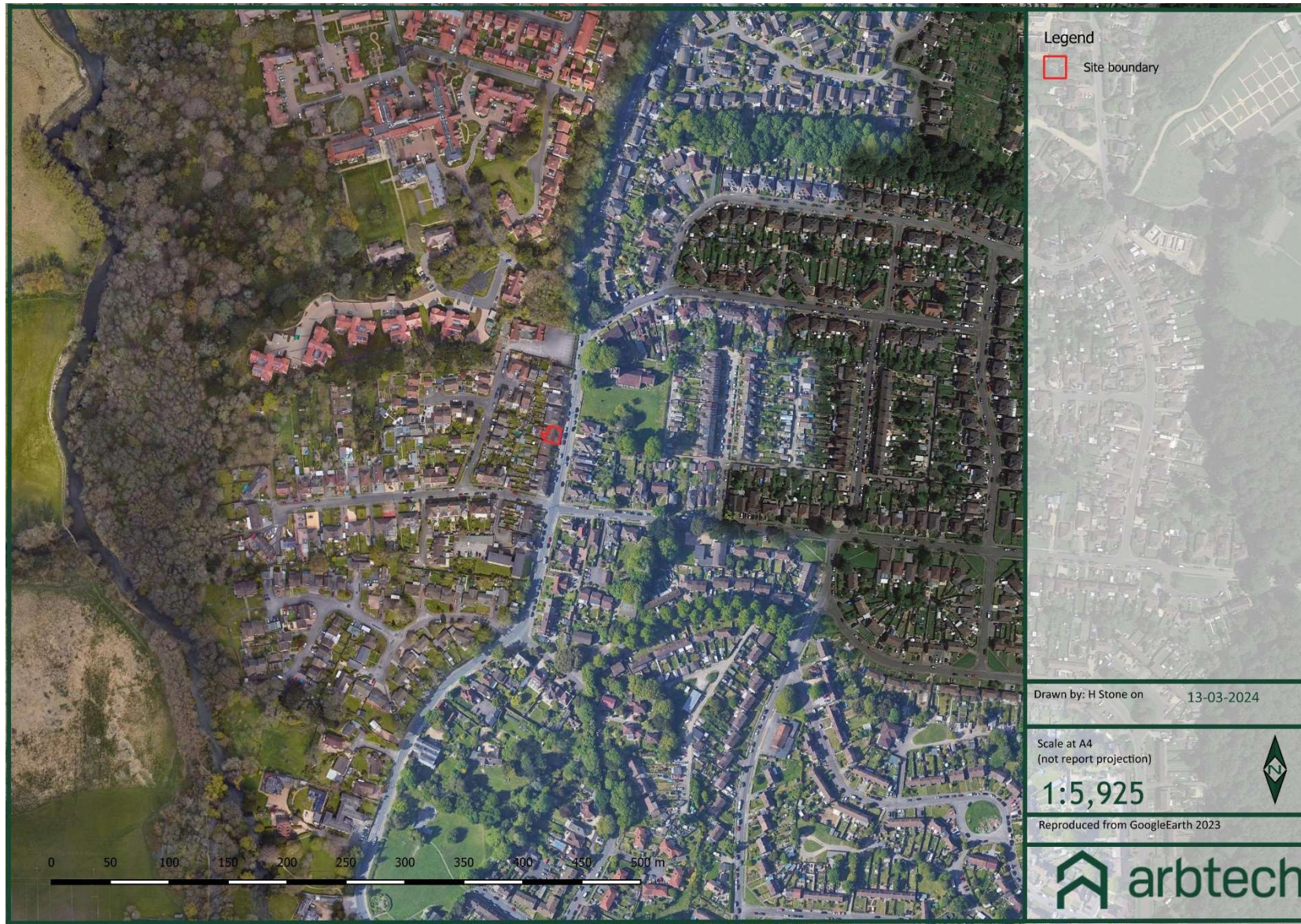
Appendix 1a: Habitat map



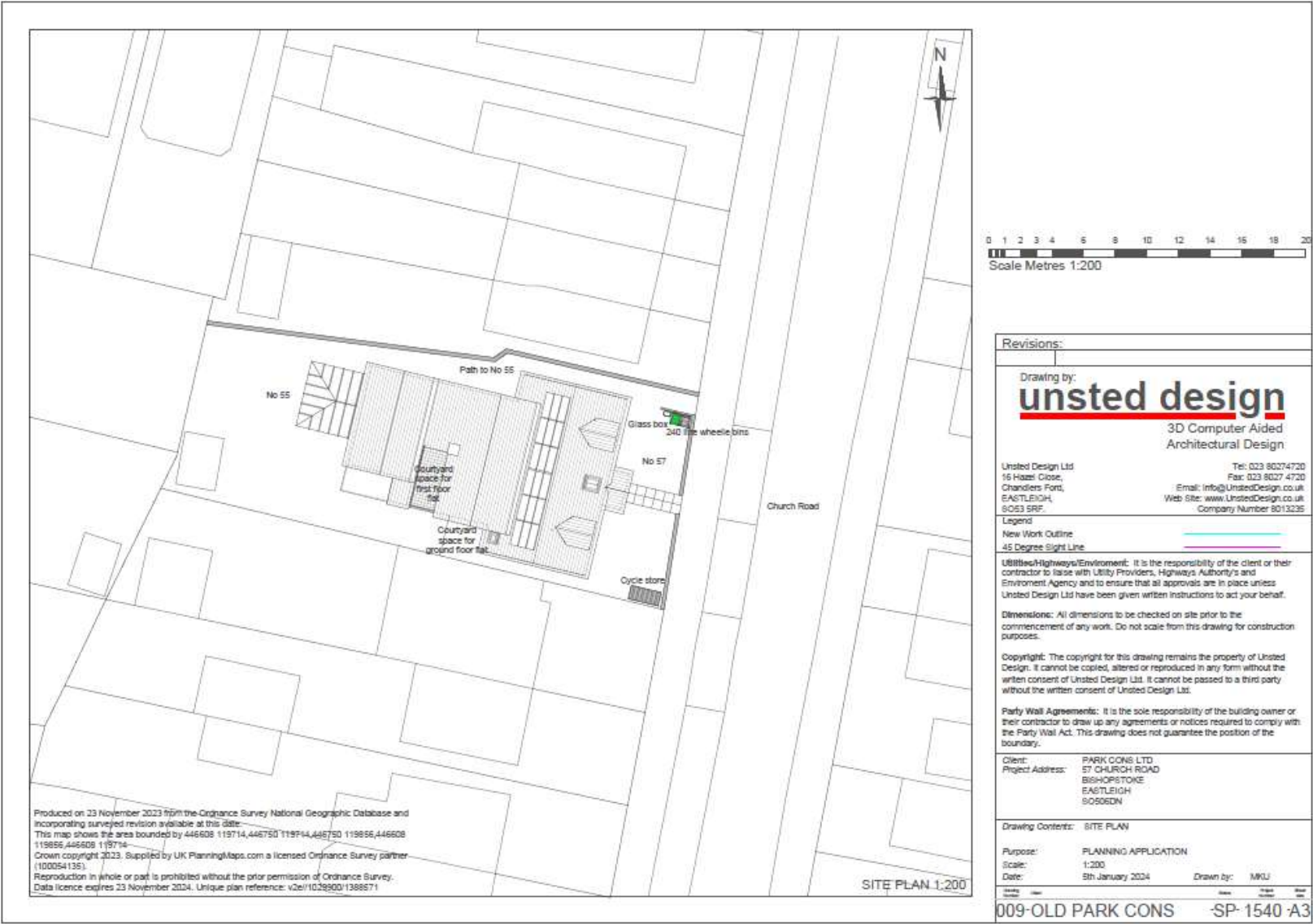
Appendix 1b: PRA map



Appendix 2: Location map



Appendix 3: Proposed plan



Appendix 4: Photos



Photo 1: Rear garden of bare ground



Photo 2: Front of B1, showing artificial;
unsealed surface

Status	Issue	Name	Date
Draft	1	Harley Stone BSc Consultant Ecologist	08/03/2024
Reviewed	1.1	Mel Reid BSc (Hons) MRes MRSB, Senior Consultant	20/03/2024
Second Review	1.2	Mel Reid BSc (Hons) MRes MRSB, Senior Consultant	26/03/2024
Final	2	Harley Stone BSc Consultant Ecologist	26/03/2024
Amendment	2.1	Harley Stone BSc Consultant Ecologist	27/06/2024

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