

Preliminary Ecological Appraisal

Survey site:

Swinley, Pylands Lane, Bursledon, Southampton, Hampshire, SO31 1BH

Client:

V Hoodless & C Hoodless

Survey date:

23/07/2024

Project:

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

The re-roofing and refurbishment of the existing dwelling, including an extension to the western elevation.

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 Consultant Ecologist Kelly Clarke (Accredited Agent on Natural England Bat Licence Number: (2018-33540-CLS-CLS)).					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
23/07/2024	22.1	69	100	0	None

Ecological Survey Conclusions, Impact or Recommendations	Detailed using desk study and site survey (carried out under optimal weather conditions). Any specific limitations noted within the 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.
Habitats and Plants	
<i>Summary of Survey Findings</i>	<u>Site Context</u> The site is located at National Grid Reference SU 48946 11427 and has an area of approximately 0.13ha. The site is characterised by a detached residential dwelling with associated garage and driveway. The site has recently been cleared and now comprises bare ground, concrete paving, and some remaining ornamental planting. The site is bound by residential development to the north, east, and west and Pyland's Lane to the south. The wider environment is primarily urban with the village of Bursledon located ~1.15km to the south, the town of Hedge End located ~1.47km to the north, and the M27 ~515m to the west. There are several habitats that offer ecological value within the wider landscape including River Hamble Country Park ~800m to the east and the River Hamble ~1.2km east, as well as small pockets of woodland and arable fields to the south. The landscape is hydrologically active with the River Hamble and its associated drainage network to the east and two small ponds to the west. The site is located on slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils. A location plan is provided in Appendix 1. <u>Priority Habitats</u> There are no priority habitats within or immediately adjacent to the site. The nearest priority habitat is ancient and semi-natural deciduous woodland which is located ~121m to the east. <u>Limitations</u> A full impact assessment could not be undertaken as the site was being cleared at the time of the survey, and the habitats on site had already been removed. However, based on the habitats viewed on Google Earth Historical Imagery 2020, a small area of

	hard standing and gravel driveway will be lost during the proposed development. As such, this is not considered to be a significant limitation on the results of the survey. A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present, and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report. <u>UK Habs Codes</u> • Other broadleaved woodland (w1g); with secondary code line of trees (33) • Artificial unvegetated, unsealed surface (u1c); with secondary code bare ground (510) and vegetated garden (828) • Non-native and ornamental hedgerow (h2b) • Developed land; sealed surface (u1b) • Built linear feature (u1e) • Buildings (u1b5) This report has been compiled retrospectively due to clearance of the site prior to the survey. As such, a UK Habs map detailing the habitats surveyed on site is provided in Appendix 2b, and a UK Habs map detailing the habitats on site prior to clearance is provided in Appendix 2a. <u>Other broadleaved woodland (w1g); with secondary code line of trees (33)</u> A line of trees is present along the western boundary of the site located in a narrow gap between two wooden fences (Fig 1). The tree canopy is predominantly continuous, although some gaps less than 5m wide are present. All trees are semi-mature and are considered to be in healthy condition. None of the trees provide natural ecological niches for vertebrates or invertebrates. The following species were noted within this habitat type European Beech (<i>Fagus sylvatica</i>), Common Ivy (<i>Hedera helix</i>), and Bramble (<i>Rubus fruticosus</i>). Figure 1. View of line of trees along the eastern boundary.
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Artificial unvegetated, unsealed surface (u1c); with secondary code bare ground (510) and vegetated garden (828)

The site was being cleared at the time of the survey and predominantly comprised bare ground with some small areas of ornamental planting (**Fig 2 & 3**). Satellite imagery shows that an area of lawn, ornamental planting, approximately four trees, and a gravel driveway have been lost during site clearance. A refuse pile comprising logs, fencing, and vegetation is present to the north of the site (**Fig 4**). Some early colonising species have started to colonise the bare ground to the northmost part of the site, with seedlings of Common Ivy (*Hedera helix*), Bramble (*Rubus fruticosus*), Dandelion (*Taraxacum officinale*), Field Bindweed (*Convolvulus arvensis*) and Creeping Buttercup (*Ranunculus repens*) present.

Figure 2. View of bare ground to the north of the site.



Figure 3. Ornamental planting along the eastern boundary of the site.



Figure 4. View of the refuse pile located to the north of the site.



Non-native and ornamental hedgerow (h2b)

A well-managed ornamental hedgerow is present along the eastern boundary (**Fig 5**). The species within the hedgerow comprise **dominant** Cherry Laurel (*Prunus laurocerasus*), **occasional** Holly (*Ilex aquifolium*), and Common Ivy (*Hedera helix*). There is a small strip of herbaceous species including Geranium (*Pelargonium spp.*), Creeping Buttercup (*Ranunculus repen*), and Common Silverweed (*Argentina anserina*) to the west of the hedgerow, and a boundary fence to the east. A mound of soil from the site clearance is encroaching onto the hedgerow and as such many of the herbaceous species have been covered.

Figure 5. View of the ornamental hedgerow along the eastern boundary of the site.



Developed land: sealed surface (u1b)

There is a block paving driveway to the south of the site that appears to have been partially removed (**Fig 6**). A mound of soil from the site clearance covered much of the driveway making it difficult to distinguish where the driveway ends. There is also an area of hardstanding to the rear of the dwelling with some ornamental planting (**Fig 7**). A gravel pile was present on the patio area at the time of visit.

Figure 6. View of block paving driveway under a mound of soil.



Figure 7. View of hardstanding to the rear of the dwelling.



Built linear feature (u1e)

A wooden fence is present along the west of the site, separating a line of trees from the rest of the site.

	<u>Buildings (u1b5)</u> There is a detached residential dwelling (B1), detached garage (B2), shed and greenhouse present on site. Buildings are described in further detail within the bats section of this report.												
Foreseen Impacts	The proposed development includes an extension of the main dwelling on the western elevation which would have resulted in the loss of a small area of hard standing and gravel driveway. The hard standing and driveway do not provide any ecological value, therefore there are not considered to be any impacts to the habitats on site as a result of the proposed development.												
Recommendations	<u>Mitigation</u> No mitigation is required. <u>Enhancements</u> The following habitat enhancement could be incorporated into the proposed development to improve biodiversity: Planting within flower beds and boarders should favour native species over non-natives and ornamentals. Species to be considered include Rowan (<i>Sorbus aucuparia</i>), Alder (<i>Alnus glutinosa</i>), Hazel (<i>Corylus avellana</i>), Hawthorn (<i>Crataegus monogyna</i>), Blackthorn (<i>Prunus spinosa</i>), Bird Cherry (<i>Prunus padus</i>), Dog rose (<i>Rosa canina</i>), Dogwood (<i>Cornus sanguinea</i>), Holly (<i>Illex aquifolium</i>), Elder (<i>Sambucus nigra</i>), Silver Birch (<i>Betula pendula</i>), Small-leaved Lime (<i>Tilia cordata</i>), <i>Quercus</i> spp. and Willow (<i>Salix</i> spp.).												
Locality and Designated Sites													
Summary of Survey Findings	<u>Statutory Designated Sites</u> The following Statutory Designated sites are present within 2km of the site: Table 1. Statutory Designated sites within 2km of the site. <table><tr><th>Statutory Designated Sites</th><th>Location</th><th>Reason for Designation</th></tr><tr><td>Manor Farm (Local Nature Reserve)</td><td>SU49061129 ~106m southeast</td><td>The site supports abundant wildlife including Roe Deer, Skylarks and an array of wildflowers, insects and reptiles.</td></tr><tr><td>Wildern (Local Nature Reserve)</td><td>SU48551286 ~ 1.3km north -</td><td>A wetland habitat featuring a mosaic of ponds, two flooded meadows, woodlands and a valley mire all linked by the streams which flow through the site. The site supports a large range of birds including Lesser Redpoll and Brambling, as well as invertebrates.</td></tr><tr><td>Netley Common (Local Nature Reserve)</td><td>SU47721180 ~1km west</td><td>The city's last remaining area of open heathland including grassland with islands of scrub and gorse, surrounded by a mixed woodland fringe. Heathland is particularly rare and</td></tr></table>	Statutory Designated Sites	Location	Reason for Designation	Manor Farm (Local Nature Reserve)	SU49061129 ~106m southeast	The site supports abundant wildlife including Roe Deer, Skylarks and an array of wildflowers, insects and reptiles.	Wildern (Local Nature Reserve)	SU48551286 ~ 1.3km north -	A wetland habitat featuring a mosaic of ponds, two flooded meadows, woodlands and a valley mire all linked by the streams which flow through the site. The site supports a large range of birds including Lesser Redpoll and Brambling, as well as invertebrates.	Netley Common (Local Nature Reserve)	SU47721180 ~1km west	The city's last remaining area of open heathland including grassland with islands of scrub and gorse, surrounded by a mixed woodland fringe. Heathland is particularly rare and
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			remnant fragments of heathland are of national biodiversity importance and are host to a variety of wildlife.
	Solent and Southampton Water (RAMSAR)	SU49651067 ~902m southeast –	The site supports internationally important numbers of wintering waterfowl. including Common ringed plover, Eurasian teal, and Brent geese, important breeding gull, and tern populations, as well as an impressive assemblage of rare invertebrates and plants.
	Upper Hamble Estuary and Woods (SSSI)	SU49661115 ~310m southeast	Favourable condition woodland offering ecological value to a variety of terrestrial mammals and invertebrates.
	Solent Maritime (SAC)	SU49961050 ~910m southeast	The Solent and its inlets are unique in Britain and Europe for their hydrographic regime of four tides each day and for the complexity of the marine and estuarine habitats present within the area. The area provides important habitat for a variety of marine life.
	Solent and Southampton Water (SPA)	SU49651067 ~902m southeast -	The mudflats support a rich invertebrate fauna that forms the food resource for the estuarine birds. In summer, the site is of importance for breeding seabirds, including gulls and four species of terns. In winter, the SPA holds a large and diverse assemblage of waterbirds.
	The site lies within the impact risk zone of Upper Hamble Estuary and Woods SSSI.		
	<u>Non-Statutory Designated Sites</u> The presence of non-statutory designated sites cannot be determined without the results of a biological records centre search.		
Foreseen Impacts	The site lies within the impact risk zone of Upper Hamble Estuary and Woods (SSSI); however, the proposed development is not listed as a possible high risk for this designation. No impacts to designated sites are anticipated due to the distance of the proposed development from such sites (where known) as well as the urban location of the site with surrounding physical barriers.		
Recommendations	Best practice measures to minimise the possibility of pollution and damage to adjacent habitats must be implemented during construction.		
Invertebrates			
Summary of Survey Findings	<u>Local Records</u> Records cannot be determined without the purchase of biological records data. <u>Site Value</u>		

	The habitats present on-site before clearance, including lawns, ornamental planting and trees, likely provided common invertebrates with opportunities to forage and shelter. The site contains no further notable habitats which may provide niches for specialised or protected invertebrates.																		
Foreseen Impacts	No impacts are anticipated on invertebrates as a result of the proposed development.																		
Recommendations	<u>Mitigation</u> No mitigation is required. <u>Enhancements</u> Logs or wooden insect hotels could be included within the garden borders to provide sheltering and egg-laying opportunities for a variety of invertebrates.																		
Bats																			
Summary of Survey Findings	<u>Limitations</u> It was not possible to survey the western elevation of the garage (B2) due to proximity to the neighbouring fence. However, given the construction of the garage (B2) this is not considered to hinder the results of the survey. <u>Local Records</u> The following European Protected Species Licenses (EPSLs) are present within 2km of the site: Table 2. EPSLs within 2km of the site. <table><tr><th>Licence Number</th><th>Distance from site (approx.)</th><th>Details of EPSL</th></tr><tr><td>2019-40805-EPS-MIT</td><td>SU48991129 ~95m south</td><td>The destruction of a breeding site and resting place for Brown Long-eared, Common Pipistrelle and Soprano Pipistrelles.</td></tr><tr><td>2015-9288-EPS-MIT</td><td>SU48801178 ~377m north</td><td>The destruction of a resting place for Common Pipistrelles.</td></tr><tr><td>EPSM2013-5805</td><td>SU48501321 ~1.8km north</td><td>The destruction of a resting place for Common Pipistrelles.</td></tr><tr><td>2014-1952-EPS-MIT</td><td>SU47091129 ~1.8km west</td><td>Nature of the work not listed, but for licence for Common Pipistrelles.</td></tr><tr><td>2014-4817-EPS-MIT</td><td>SU47091129 ~1.8km west</td><td>The destruction of a resting place for Common Pipistrelles.</td></tr></table> <u>Bat Foraging and Commuting Value</u>	Licence Number	Distance from site (approx.)	Details of EPSL	2019-40805-EPS-MIT	SU48991129 ~95m south	The destruction of a breeding site and resting place for Brown Long-eared, Common Pipistrelle and Soprano Pipistrelles.	2015-9288-EPS-MIT	SU48801178 ~377m north	The destruction of a resting place for Common Pipistrelles.	EPSM2013-5805	SU48501321 ~1.8km north	The destruction of a resting place for Common Pipistrelles.	2014-1952-EPS-MIT	SU47091129 ~1.8km west	Nature of the work not listed, but for licence for Common Pipistrelles.	2014-4817-EPS-MIT	SU47091129 ~1.8km west	The destruction of a resting place for Common Pipistrelles.
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The site currently contains a treeline to the west and four trees were estimated to be present prior to site clearance, providing suitable habitat for foraging and commuting bats. The trees present on the site are reasonably well connected to the trees lining Pyland's Lane to the south. These treelines in turn are reasonably well connected to priority habitat ancient and semi-natural deciduous woodland ~121m to the east of the site. The site has connectivity to high value habitats within the wider landscape and the trees and lawn previously on site would have provided opportunities for foraging and commuting bats. Therefore the site is considered to have **high value** for foraging and commuting bats.

Bat Roosting Value (B1)

B1 is a detached, two-story residential dwelling featuring external rendering and clay hanging tiles, with a roof constructed of clay tiles and two gable ends. The dwelling also has a chimney stack on the eastern gable end and a dormer window on the southern elevation. There is a single loft void lined with bitumen felt, with fiberglass insulation present on the floor and partial boarding. A potential roosting feature (PRF) map can be found in Appendix 3.

The proposals include construction of a two-story extension to the western elevation, as well as demolishing and reconstructing the second storey and roof. The roof elevation will be raised to accommodate a second story without eaves.

Figure 8. View of the northern aspect of B1.



Table 3. B1 roosting features.

Feature	Materials	Condition/Description	Suitability/Access/Evidence of Bats
Walls	Rendering	All good condition.	N/A

				
	Hanging tiles	Clay hanging tiles	The hanging tiles are present on both gable ends and are generally in poor condition with gaps under many of the tiles. There are slipped and missing hanging tiles on the western gable end and slipped and missing hanging tiles on the eastern gable end. 	Slipped, missing and broken hanging tiles and gaps under the hanging tiles could provide roosting opportunities for crevice dwelling bats

			 Hanging tiles are also present on the second storey of the northern elevation and are in generally moderate condition with some gaps present under the hanging tiles. 	
	Roof	Clay tiles	The clay tiles on the northern and southern aspects of the roof are tight fitting and in generally good condition apart from a gap under the ridge tile on the western side. There is also a gap under the led flashing around the boiler flue.	Small gaps under the ridge tile and under led flashing could present roosting opportunities for individual crevice dwelling bats.

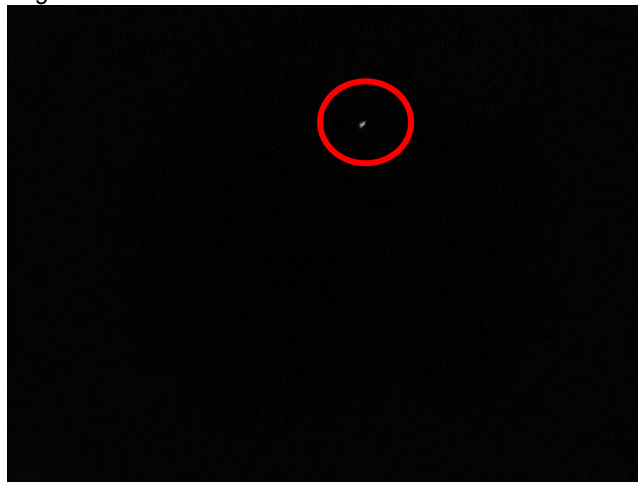
				
	Soffits and Fascia	Timber	The soffits and fascias are in generally moderate condition with some light warping of fascia wood on the eastern gable end. There is also a gap present between the fascia and roof tiles on the southwest corner. 	

				
	Chimney	Brick build with rendering and led flashing	The rendering is in poor condition with multiple cracks and sections removed revealing the brickwork underneath. There are gaps in the pointing however, the flashing is in good condition. 	Gaps in the pointing and cracks in the rendering may provide roosting opportunities for individual crevice dwelling bats.
	Dormer Window		There are several gaps under the hanging and hip tiles on the dormer window. Otherwise, the flashing and window are tightly sealed.	Gaps under the hanging tiles could provide roosting opportunities for crevice dwelling bats

				
	Windows/Door Frames and Lintels	PVC windows and doors	Windows and doors are tightly sealed except from a gap under the window flashing on the northern elevation. 	Gaps under the flashing could provide roosting opportunities for crevice dwelling bats
	Loft Void Dimensions: L – 6.2m W – 8.7m H – 2.56	Wooden beams and bitumen felt.	Loft void lined with bitumen felt, fiberglass insulation present on the floor and there is partial boarding. Constructed with wooden beams and gabled on both ends. Overall, the loft space is dark with minimal light spill. A large gap on the western side offers direct access to the loft void which may be linked to the gap under the ridge tile.	

Temperature –
20.5°C
Humidity –
60%

Figure 8. View of loft void with lights turned off showing the gap under ridge tile.



There were several gaps in the brickwork along with two clusters of 10-15 bat droppings present at the gable ends. The droppings were 5 – 8mm in size and had a fine to medium texture indicative of Common pipistrelles. The majority of the droppings appeared to be fresh, and six were retained for DNA analysis. The results of DNA testing have confirmed the presence of Common pipistrelle (*Pipistrellus pipistrellus*) within the loft void.



												
<u>Bat Roosting Value (B2)</u> B2 is a pre-fabricated garage with corrugated metal roof and two metal garage doors. The garage has been used for storage for many years and is in generally poor condition. The current proposals will not impact the garage.												
Table 4. B2 roosting features. <table><tr><th>Feature</th><th>Materials</th><th>Condition/Description</th><th>Suitability/Access/Evidence of Bats</th></tr><tr><td>Walls</td><td>Prefabricated concrete sheets</td><td>Tightly sealed.</td><td>N/A</td></tr></table>					Feature	Materials	Condition/Description	Suitability/Access/Evidence of Bats	Walls	Prefabricated concrete sheets	Tightly sealed.	N/A
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	Cladding	Timber	The timber cladding is in poor condition with much of the woodwork rotten and several gaps providing direct access into the garage.	N/A
	Windows/Doors	Timber window frames and metal garage doors	The timber windows are in poor condition with much of the woodwork rotten and gaps around window ledge on the eastern aspect. Garage doors are not tightly sealed.	Gaps under the window ledge may provide roosting opportunities for individual crevice dwelling bat.

				
	Roof	Corrugated metal	The roof is in generally poor condition with moss, lichens and debris present. No roosting features are present 	N/A
	Internal	Prefabricated concrete sheets and metal beams	The roof is not lined, and no insulation is present making the inside of the garage cool. There are several gaps under the corrugated metal roofing that allow direct access outside. No evidence of bats was found.	N/A

					
	<u>Habitat Value</u> B1 provides high value for roosting bats due to the presence of multiple potential roosting features and direct access into the loft void. As Common pipistrelle bat droppings were found inside the loft void at both gable ends, B1 is a confirmed roost. B2 is considered to be of negligible value for roosting bats and will be retained under the proposed development.				
<u>Foreseen Impacts</u>	<u>Foraging and Commuting Bats</u> The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats. <u>Bat Roosting Value (B1 and B2)</u> The proposed development involves the removal of the roof, raising the height of the roof and adding an extension to the western elevation of B1. This will result in the destruction of any bat roosts present and could cause disturbance, death or injury to bats. There will be no impacts to B2.				
<u>Recommendations</u>	<u>Foraging and Commuting Bats</u> No further surveys are required. <u>Roosting Bats (B1)</u> Three bat emergence and re-entry surveys are required during the active bat season (optimal May to August, suboptimal September) to assess the extent of bat activity, roost types, and whether maternity or hibernation roosts are present. At least two of the surveys should be completed during the optimal survey period mid-May to August inclusive.				

	Infra-red cameras should be used as an aid. Surveys should be a minimum of three weeks apart. Four surveyors are required to provide full coverage of the building. A European Protected Species Licence (EPSL) application to Natural England will be required. The EPSL application requires that surveys have been undertaken within the most recent active bat season, planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission. <u>Enhancements</u> To be confirmed upon completion of the surveys.
Birds	
<i>Summary of Survey Findings</i>	<u>Local Records</u> Records cannot be determined without the purchase of biological records data. <u>Site Value</u> No evidence of nesting birds was recorded during the survey however the hedgerows and trees onsite provide opportunities for foraging, roosting and breeding birds. As such the site is considered to provide moderate value for nesting, foraging and breeding birds.
<i>Foreseen Impacts</i>	The proposed development could result in the disturbance and subsequent abandonment of active bird nests.
<i>Recommendations</i>	<u>Mitigation</u> Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged. <u>Enhancements</u> The addition of 1 x 1B Schwegler Nest Box would provide additional nesting habitat for common garden bird species and should be erected onto the external wall of the main house or a mature tree onsite. The addition of 1 x WoodStone External House Sparrow Nest Box within the eaves of the house would also provide additional nesting opportunities. All bird boxes should be installed in line with manufacturers recommendations.
Reptiles	
<i>Summary of Survey Findings</i>	<u>Local Records</u> There are no EPSLs for reptiles within 2km of the site.

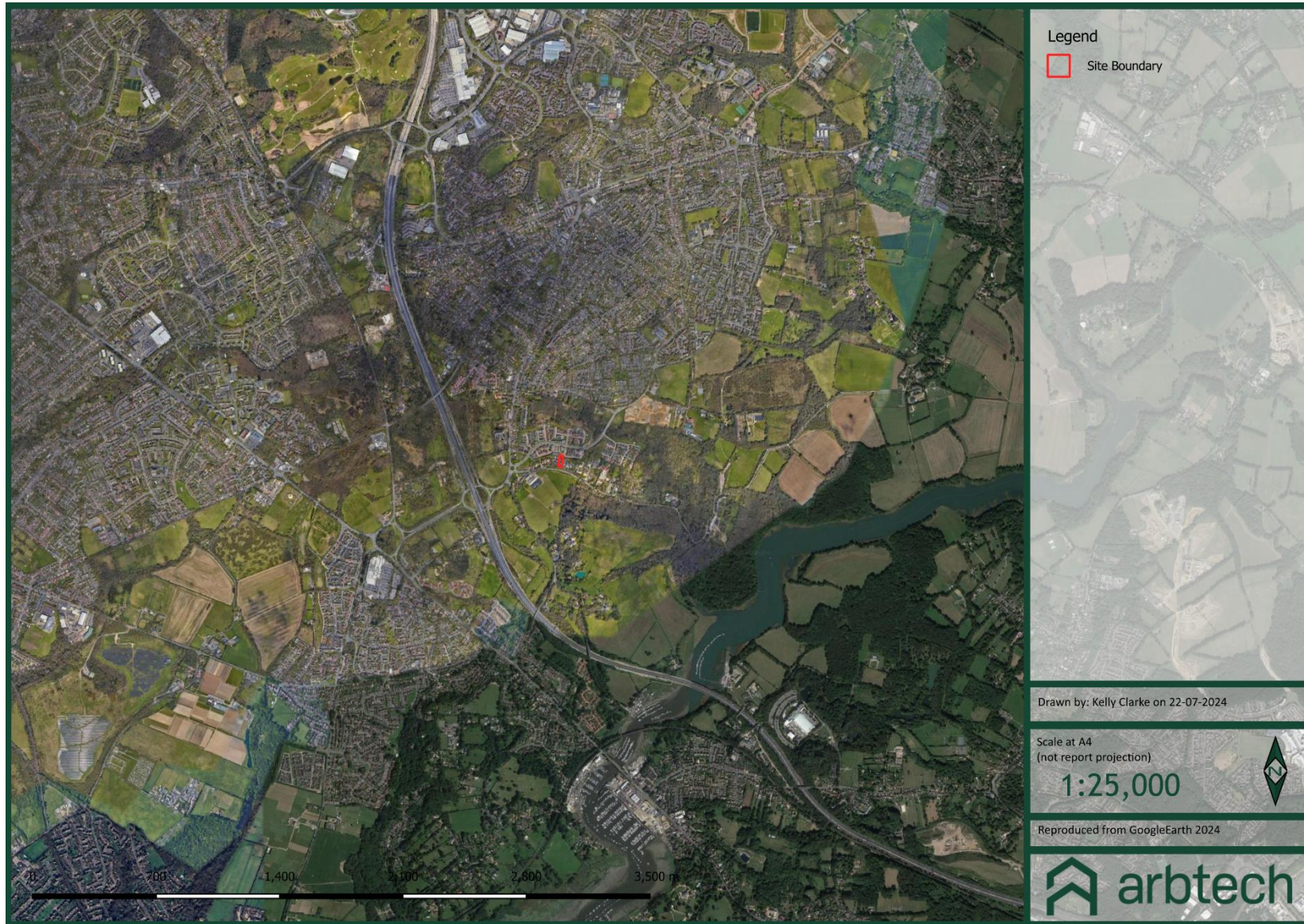
	<u>Site Value</u> The site previously comprised of a lawn and ornamental planting which lacks the required structure for reptiles. A refuge pile was present on site at the time of the survey which may provide opportunities for shelter for reptiles, however, given the disturbance caused by clearance and the lack of suitable habitat the site is considered to be of low value for foraging and commuting reptiles.
<i>Foreseen Impacts</i>	No impacts are anticipated on reptiles as a result of the proposed development. However, further clearance of vegetation and the refuge pile may cause disruption or the death of any transient reptiles on site.
<i>Recommendations</i>	<u>Mitigation</u> Owing to the nature of the proposed development and the low potential for impacts to reptiles, further surveys are considered to be disproportionate. However, during the removal of any log piles, brash piles and rubble, a precautionary working method will be implemented during construction, including the following measures: - Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. - Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats. - Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. - If any reptiles are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. In the unlikely event that a reptile is identified, works must cease and advice must be sought from a suitably qualified ecologist. <u>Enhancements</u> The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for reptiles: - Incorporating natural refugia such as logs or small brash piles within the landscaping will provide reptiles with shelter and basking opportunities.
Great Crested Newts (GCN) & Other Amphibians	
<i>Summary of Survey Findings</i>	<u>Local Records</u> There are no EPSLs for great crested newts (GCN) within 2km of the site. <u>Pond Locations</u> There are no waterbodies on site. However, there are several waterbodies within 500m of the site including two ponds located approximately 203m and 250m to the west, as well as a Hoe Moor Creek located approximately 254m north. A Habitat Suitability Index (HSI) was not carried out as one of the ponds is located on private land and the other is bound by Pyland's Lane and Barnfield Way which are considered major barriers to dispersal.

	<u>Site Value</u> The site previously comprised of a lawn and ornamental planting which may have provided limited foraging and commuting opportunities for GCN. However, given that the site does not provide connectivity to any waterbodies, the disturbance caused by clearance and the lack of suitable terrestrial habitat, the site is considered to be of negligible value for foraging and commuting GCN and other amphibians.
<i>Foreseen Impacts</i>	No impacts are anticipated on GCN as a result of the proposed development.
<i>Recommendations</i>	<u>Mitigation</u> No mitigation is required.
Badgers & Other Mammals	
<i>Summary of Survey Findings</i>	<u>Limitations</u> It was not possible to survey 30m beyond the proposed development due to the neighbouring residential gardens bound by fencing, hedgerows, and trees. <u>Local Records</u> Records cannot be determined without the purchase of biological records data. <u>Badger Setts</u> No evidence of badgers was noted on the site. The lawn previously on site is relatively flat, limiting sett excavation opportunities and the wider environment is primarily urban. Therefore, it is unlikely that any badger setts are present within 30m of the site boundary. <u>Foraging and Commuting Badgers</u> To the south of the site, there is an area of ancient and semi-natural deciduous woodland which offers valuable foraging and commuting habitat for badgers and other mammals. However, the site is separated from these habitats by Pyland's Lane, residential dwellings, and is well-secured by fencing. The site previously comprised of a garden lawn and ornamental planting which does not provide the necessary foraging resources for badgers. Consequently, the site is considered to be of negligible value for foraging and commuting badgers.
<i>Foreseen Impacts</i>	No works will be undertaken within 30m of a known badger sett. No impacts are anticipated on badger setts or foraging and commuting badgers as a result of the proposed development.
<i>Recommendations</i>	<u>Mitigation</u> No mitigation is required.

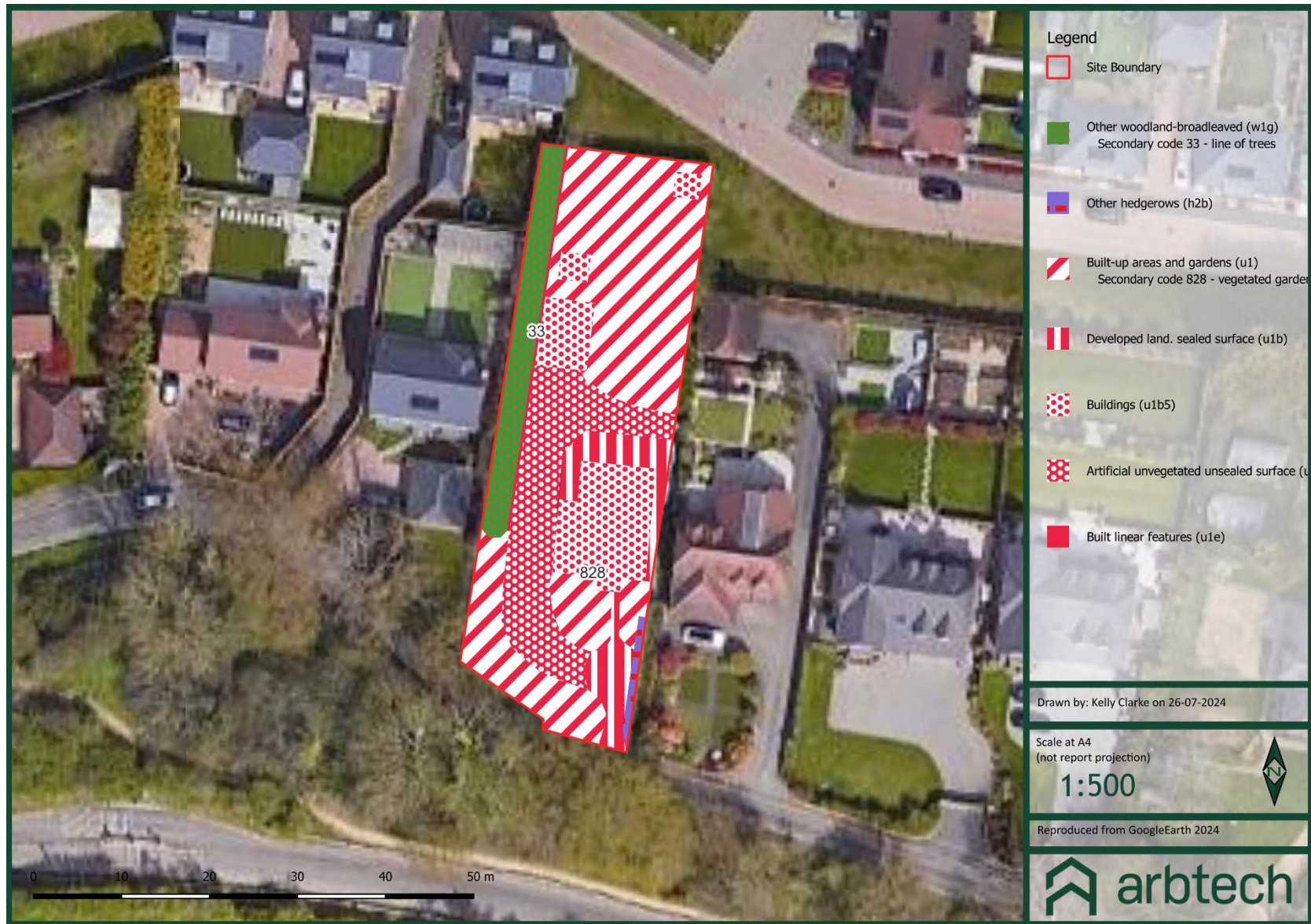
Hedgehogs	
Summary of Survey Findings	<u>Local Records</u> Records cannot be determined without the purchase of biological records data. <u>Site Value</u> There is a small gap under the fence on the western boundary of the site, providing access between gardens that could be used by small mammals such as hedgehogs. The refuse pile also provides sheltering opportunities for hedgehogs and the habitats previously on site would have provided suitable commuting and foraging opportunities for hedgehogs. The site therefore offers moderate value for other mammals.
Foreseen Impacts	Clearance of any remaining vegetation and the refuse pile may cause disruption or the death of any transient hedgehogs on site.
Recommendations	<u>Mitigation</u> As a precautionary measure, a working method will be implemented during the removal of log piles, brash piles and rubble. The following measures should be adopted: • A staged approach will be adopted for any further vegetation clearance or removal of log piles, brash piles and rubble, whereby no more than half of a given habitat is cleared per day giving hedgehogs time to disperse into the wider environment • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • In the event that a hedgehog is identified, works must cease, and advice must be sought from a suitably qualified ecologist. <u>Enhancements</u> The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for mammals: • A hedgehog home such as the World Hedgehog Home or Hogitat Hedgehog House can be incorporated into the landscaping to provide a rapidly declining species with shelter and hibernation opportunities. • To ensure permeability for small mammals across the site, allow at least 2 gaps within the gravel boards/bases of the fence line to allow for movement of hedgehogs between gardens and into the wider area. The gaps should be at least 15 cm high by 15 cm wide with permeability for small mammals.
Riparian animals	
Summary of Survey Findings	<u>Local Records</u> Records cannot be determined without the purchase of biological records data. <u>Site Value</u>

	There are no watercourses on or connected to the site within a 100m radius. Therefore, the site is unsuitable for riparian mammals.
<i>Foreseen Impacts</i>	No impacts are anticipated on riparian animals as a result of the proposed development.
<i>Recommendations</i>	<u>Mitigation</u> No mitigation is required.
Hazel dormouse	
<i>Summary of Survey Findings</i>	<u>Local Records</u> There are no EPSLs for dormice within 2km of the site. <u>Site Value</u> No evidence of hazel dormice was found on site. The habitats present prior to site clearance lack value for arboreal species like the hazel dormouse. There is an area of ancient and semi-natural deciduous woodland east of the site that offers valuable foraging, commuting and nesting habitat for hazel dormice. However, due to the lack of arboreal connectivity between the site and the area of woodland caused by Pyland's Lane and residential dwellings the site is considered to offer negligible value for hazel dormice.
<i>Foreseen Impacts</i>	No impacts are anticipated on hazel dormice as a result of the proposed development.
<i>Recommendations</i>	<u>Mitigation</u> No mitigation is required.

Appendix 1: Site Location



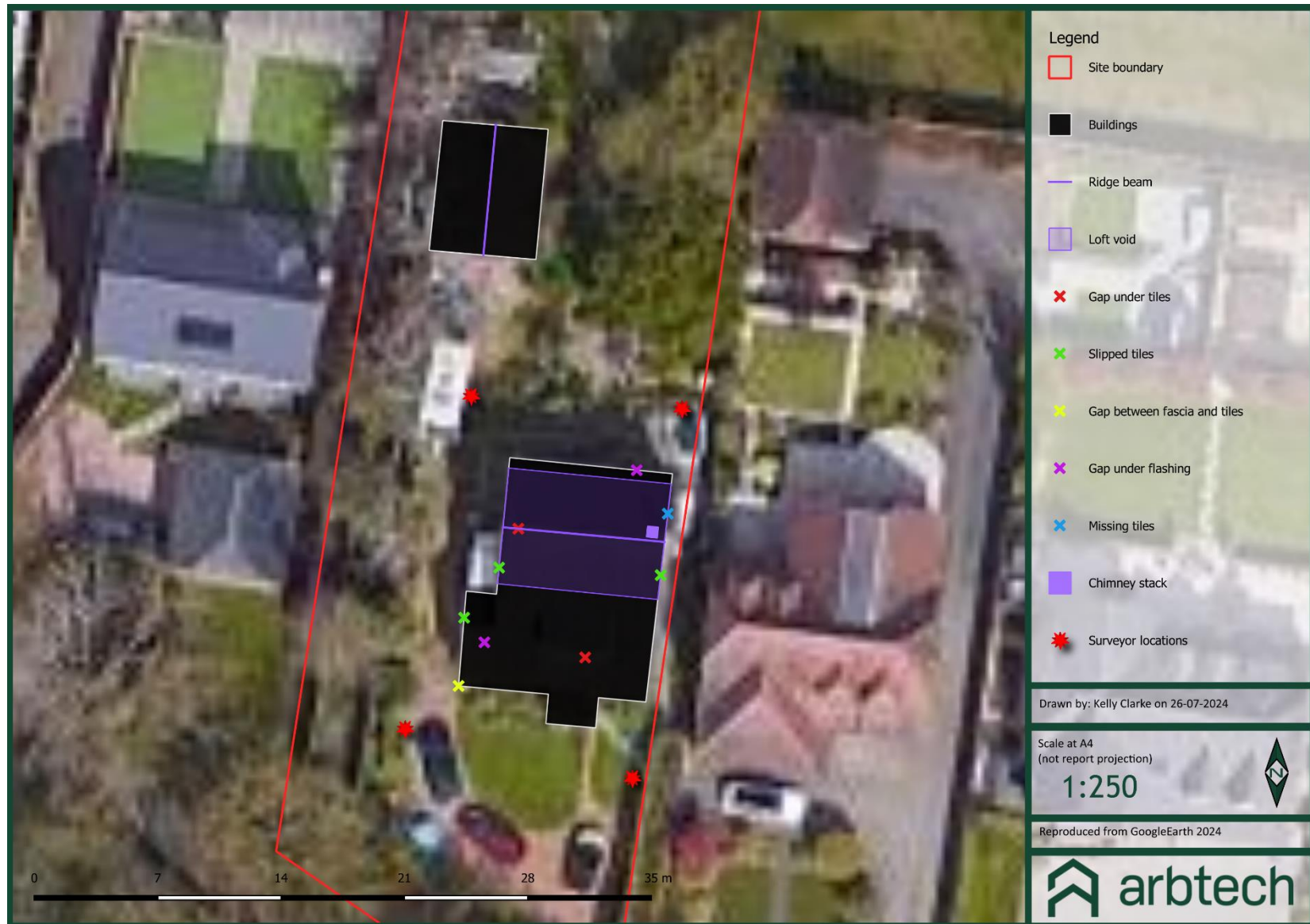
Appendix 2a: UKHabs Map (site prior to clearance)



Appendix 2b: UKHabs Map (site post clearance)



Appendix 3: PRF Locations/building locations



Appendix 4: Proposed Plans



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