

Preliminary Ecological Appraisal

Survey site:

The Unicorn Inn, 405 Cronton Road, Widnes, Knowsley, WA8 5QF

Client:

Graham Powell

Survey date:

22/01/2025

Project:

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

"The erection of single storey side extension with partial demolition and internal alterations".

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

The survey results and recommendations contained within this report are valid for 18 months. An updated site visit may be required if the report is to be used any longer than 18 months after completion.

Site Location and Context					
The survey site is centred on UK national grid reference SJ 49302 88255 and has an area of approximately 0.25ha The site is comprised of a two-storey commercial building with associated auxiliary buildings, area of grassland and hardstanding with scattered trees, and partial hedgerow boundary. The site is located within a suburban context, ~3.6km northeast of Widnes town centre. As a result, the site is immediately surrounded by dense residential dwelling with associated gardens to the north, east and west with areas of grassland to the south. Beyond its immediate surroundings there are habitats of elevated ecological value including areas deciduous woodland, grassland, standing bodies of water and watercourses. A site location plan is provided in appendix 2.					
Survey Details					
The site survey was undertaken by David Hill-Chambers MSc, BSc (Hons), Graduate Ecologist, Accredited agent of Natural England Bat Licence Number 2018-33540-CLS-CLS.					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain(mm)
22/01/2025	3	98	100	4	0
Survey limitations					
It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the searches of historical biological records. Due to seasonal limitations, further survey within the optimal season for surveying vegetation would normally be required to obtain accurate habitat classification and condition assessment data. However, in the case of this site, the delays involved would likely be disproportionate to the predicted likely value of the habitat as they consist only of modified grassland dominated by a single species which have limited ecological value. As such, a “worst case scenario” precautionary assessment is applied in line with Statutory Guidance within Biodiversity Net Gain Condition Assessment Criteria. If there is a lack					

of appropriate evidence to accurately determine the suitability of each habitat, using the precautionary principle, condition scores are automatically set as good.

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.

Ecological Survey Factor Conclusion, Impact or Recommendations	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.
Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, pond map in appendix 3 proposal plan in appendix 4 and photos in appendix 5). Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).	
<i>Summary of Survey Findings</i> <i>(UKHab codes used)</i>	The site does not contain any habitats listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). However, the site also contains two mature native trees which are of good quality and could be of value to local wildlife populations (as detailed in subsequent sections of this table). Other habitats within the site are common and widespread and have low ecological value. Notable habitats are present within 2km. On-site habitat descriptions

	u1b5 – Buildings A two-storey brick built commercial building is located on the corner of the southern and eastern elevations. Auxiliary buildings are also present including wooded sheds used for storage and a brick-built garage on the corner of the northern and western elevations. u1b – Developed land/sealed surface Areas of hardstanding ground are present in the form of an access road, carpark and walkways. g4 – Modified grassland To the rear of the two-storey commercial building is an area of modified grassland managed as an outdoor seating area. Species composition includes. • Perennial Ryegrass (D) • Red Clover (F) • Cocks Foot (O) • Yorkshire Fog (F) • Daisy (F) • Common Cats Ear (R) • Creeping Buttercup (F) • Annual Meadow Grass (O) The species composition includes 6-8 vascular plant species with at least two forbs present. No variation in sward height is present given the active management. No areas of bracken or scrubs are present within the grassland. Although there are noted areas of bareground, these areas account for less than 10% of the total area. No signs of physical damage were identified along with no invasive species. h3d – Bramble scrub A small area of bramble scrub is located to the rear of the modified grassland, along the northern boundary. A section of the scrub has been overgrown by a species of Honeysuckle possibly originating from the neighbouring residential gardens.
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	g 32 -Scattered trees 32 Four individual trees are present with the area of modified grassland. T1 – A mature medium sized beach tree (DBH 55.4cm) primarily oversailing the grassland. This tree stands alone and does not form part of a continuous canopy. The tree appears in good health with no dieback or natural or anthropogenic damage in addition to no ecological niches such as lifted bark or ivy present. T2 – A mature medium sized cherry (sp.) tree (DBH 33cm) primarily oversailing the grassland. This tree stands alone and does not form part of a continuous canopy. The tree canopy appears in good health with no signs of dieback and no anthropogenic damage apart from minimal pruning. Ivy was present, obscuring the trunk and climbing into the canopy above, creating a natural ecological niche. T3 – A small sized Lawson Cypress tree (DBH <30cm) primarily oversailing areas of hardstanding. This tree is located in proximity to another Lawson cypress (T4), with their canopies predominately continuous. Evidence of recent anthropogenic damage is present with moderate levels of trimming and pruning. Given the scale the damage the tree no longer appears in good health with browning due to pruning stress present. No natural ecological niches such as lifted bark or ivy is present. T4 – A small sized Lawson Cypress tree (DBH <30cm) oversailing areas of hardstanding. This tree is located in proximity to another Lawson Cypress (T3), with their canopies predominately continuous. No evidence of recent anthropogenic damage is present. No ecological niches such as lifted bark or ivy is present. h2b – Non-native and ornamental hedgerow Bordering the site are areas of ornamental hedgerow. These hedgerows are comprised exclusively of Lawson Cypress and are present along the southern boundary and partially along the northern boundary. Evidence of recent site degradation was also
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	present. Along the entire western boundary evidence of the recent removal of an ornamental hedgerow. Based on aerial imagery this hedgerow was identified to be Lawson Cypress. In addition, aerial images also show smaller ornamental hedgerows which are no longer present on site between the carpark and the Unicorn Inn. Local notable habitats Within a (2km) radius of the site the following priority habitats have been identified: • One area of good quality semi-improved grassland located ~0.85km northeast of the site boundary. • 21 areas of Deciduous Woodland are located within 2km of the site boundary with the closest located ~0.3km west. • Two areas of Traditional Orchards are located within 2km of the site boundary with the closet located ~0.45km north.
<i>Foreseen Impacts</i>	On-site habitats The proposed development will result in the loss of areas of ornamental hedgerow (already removed) and the replacement of areas of developed land, sealed surface with a rear extension to the Unicorn Inn. The proposed plans provided by Revival Architecture mention the retention of Trees T1 and T2, however T3 and T4 are not mentioned within the plans to be retained. In addition to the loss of two trees due to the recent site degradation, the development will result in a loss of biodiversity at the site. Notable habitats No impacts to any notable habitats are anticipated due to the small scale and distance of the proposed development from such habitats as well as the urban location of the site with surrounding physical barriers.
<i>Recommendations</i>	On-site habitats Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). To compensate for the proposed habitat losses at the site, the following habitat creation measures should be incorporated:

	• Native tree planting within the area of modified grassland. • Native mixed scrub planting boarding the area of modified grassland. Notable habitats None required. Biodiversity net gain The Environment Act (2021) requires all developments (excluding exemptions) to deliver a 10% net gain in biodiversity. Therefore, the planning application must be accompanied by a landscaping/habitat creation and enhancement strategy, biodiversity net gain calculations and a habitat management and monitoring plan to ensure the proposed development delivers a 10% net gain. Given the evidence of recent site degradation, the BNG assessment will need to be partially carried out retrospectively using aerial imagery and historic data.
Locality and Designated Sites	
<i>Summary of Survey Findings</i>	On-site designations The site is not subject to any designation. Statutory designated sites (within 2km) There are no known statutory sites within 2km of the site. Non-statutory designated sites The presence of non-statutory designated sites within 2km of the site cannot be established without data from RECORD – Biodiversity Information Centre for Cheshire, Halton, Warrington and Wirral.
<i>Foreseen Impacts</i>	On-site designations No impacts foreseen.

	Statutory and non-statutory designated sites No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites (where known) as well as the urban location of the site with surrounding physical barriers. For SSSI sites The site lies within the impact risk zone for Mersey Estuary SSSI. The proposed development type is not listed as a possible high risk for this designation.
<i>Recommendations</i>	On-site designations None required. Statutory and non-statutory designated sites None required.
Invasive / Non-native species	
<i>Summary of Survey Findings</i>	No problematic invasive and non-native species 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>	The habitats present on-site, including modified grassland, hedgerow and scattered trees, likely provide common invertebrates with opportunities to forage and shelter. The site contains no further notable habitats which may provide niches for specialised or protected invertebrates.
<i>Foreseen Impacts</i>	Areas of hedgerow will be removed during construction or pre site clearance. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to their low value and the presence of more extensive habitat locally.
<i>Recommendations</i>	No further surveys.

Bats	
<i>Summary of Survey Findings</i>	EPSL data and local records 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 roosts sites in close proximity to the licensed site. No EPSLs are present within a 2km radius of the site. Foraging and commuting habitat The site comprises an area of grassland, with scattered trees and ornamental hedgerows. These habitats provide suitable all be it limit foraging and commuting habitats for bats. The surrounding habitats comprise areas of grassland and arable land with hedgerow boundaries and small patches of deciduous woodland which provide opportunities for bats to foraging and commute using the hedgerows as commuting lanes. Bats are well known to utilise linear features to aid navigation whilst travelling between foraging resources and roost sites. The site is therefore considered to have low value for foraging and commuting bats. Roosting habitat Four built structures are present on site. The main two-storey brick-built commercial building (The Unicorn Inn), a detached garage and two wooden sheds used for storage. No roosting features were identified that would be suitable for roosting bats. In addition, Merseyside Environmental Advisory Service (MEAS) have advised that no further actions would be required for roosting bats.
<i>Foreseen Impacts</i>	Foraging and commuting bats The loss of ornamental hedgerow on site are anticipated to have minimal impact on the foraging and commuting value of the area. Roosting bats

	Given the development will only impact and small section of the main building.
<i>Recommendations</i>	Foraging and commuting habitat No further surveys are required. Artificial lighting None required. Suggested biodiversity enhancements The installation of two bat boxes at the site will provide additional roosting habitat for bats. The bat boxes can be installed on the retained sections of the main building. Suitable bat boxes include Habibat Bat Box, Ibstock Enclosed Bat Box or similar alternative brand. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light.
Birds	
<i>Summary of Survey Findings</i>	Buildings No evidence of nesting birds was identified during the survey. The buildings are not considered suitable for nesting birds. Trees and vegetation No bird nests were identified within the trees or vegetation on site; however, they all offer nesting opportunities and nest-building resources for birds. Overwintering birds Due to the small size of the site and the extent and type of the habitats recorded, the site not considered suitable to support a significant assemblage of protected and/or notable birds.

<i>Foreseen Impacts</i>	Buildings/trees No impacts are anticipated on nesting birds as all trees are to be retained as part of the development. Overwintering birds None foreseen.
<i>Recommendations</i>	Buildings/trees None required. Overwintering birds None required. Suggested biodiversity enhancements The installation of a minimum of two bird boxes on mature trees around the site boundaries or on retained buildings will provide additional nesting habitat for birds e.g. Schwegler No 17 Swift Nest Box (buildings) Schwegler 1SP Sparrow Terrace (buildings) Schwegler 1B Nest Boxes (trees) Schwegler 2H Robin Boxes (trees) Woodstone Nest Box (buildings or trees) Or a similar alternative brand. Tree boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole.
Reptiles	

<i>Summary of Survey Findings</i>	EPSL data and local records A review of the MAGIC database returned no granted EPSL records for protected reptiles within 2km of the site. Habitat suitability There is suboptimal habitat present on site for reptiles due to a lack of habitats such as scrub and rank grassland which would offer refuge for these species. Further, the site is surrounded by urban development (i.e. roads and buildings) which is considered sub-optimal for reptile migration and therefore reptiles are considered unlikely to migrate from any nearby suitable habitats to the development site. As such it is likely that reptiles are absent from the development site.
<i>Foreseen Impacts</i>	No impacts are anticipated on reptiles as a result of the proposed development.
<i>Recommendations</i>	None required.
Amphibians	
<i>Summary of Survey Findings</i>	EPSL and survey data A review of the MAGIC database returned no granted EPSL records for great crested newts within 2km of the site. Further, no positive class survey licence returns or DLL historic survey data (2017 – 2019) were present within 2km of the site. Aquatic habitat suitability (including ponds within 500m) Great crested newts (GCN) exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001). There are no ponds on the site, but a review of aerial imagery (MAGIC and OS Maps) indicates the presence of two ponds within 500m; a pond (P1) is located ~0.38km southwest of the site and is situated on the other side of Cronton road within an arable field. The second pond (P2) is located ~0.46km southeast of the site and is situated on the other side of Cronton

	road with an arable field. This landscape feature is likely to represent a significant barrier to dispersal due to heavy traffic flow and high kerbs along the road, eliminating connectivity to the site for great crested newts. Terrestrial habitat suitability Areas of vegetation in the form of the ornamental hedgerows provide foraging and sheltering opportunities for amphibians. However, given the urban nature of the surrounding landscape (i.e. dominated by roads and hard standing which are sub-optimal for amphibians) it is unlikely that amphibians will migrate on to site. Further, there is limited suitable terrestrial habitat across the wider landscape reducing the likelihood of amphibians being present on site and across the surrounding areas.
<i>Foreseen Impacts</i>	When georeferencing the proposed development plans over scaled mapping of the site, it is noted that the development area is likely to result mainly in the loss of area of developed land, sealed surface. If great crested newts are present within the ponds located ~0.46km and ~0.38km respectively, when completing the rapid risk assessment published by Natural England (Natural England 2015), the proposed development produces a Green risk score, which states Offence Highly Unlikely .
<i>Recommendations</i>	None required.
Badger	
<i>Summary of Survey Findings</i>	No badger setts were noted on site or within a 30m radius of the site. The site is considered unsuitable for badgers given the lack of suitable sett excavation areas/ground. Further, there is limited suitable badger foraging habitat on site given the lack of fruiting trees/scrub. The site is also surrounding by urban development (i.e. roads and buildings), which is sub-optimal habitat therefore reducing the likelihood of badgers being present within the surrounding area of the site.
<i>Foreseen Impacts</i>	No impacts are anticipated on badgers as a result of the proposed development.
<i>Recommendations</i>	None required.
Riparian animals	

<i>Summary of Survey Findings</i>	A review of the MAGIC database returned no granted EPSL records for otters or water voles within 2km of the site. There are no water courses on or connected to the site. There are also no riparian habitats present on site or within an influencing distance.
<i>Foreseen Impacts</i>	No impacts are anticipated on riparian animals as a result of the proposed development.
<i>Recommendations</i>	None required.
Hazel dormouse	
<i>Summary of Survey Findings</i>	EPSL data and local records A review of the MAGIC database returned no granted EPSL records for hazel dormice within 2km of the site. Habitat suitability The site lies outside of the know current range for hazel dormice and there are no suitable habitats within the development area. As such it is considered likely that hazel dormice are absent from site.
<i>Foreseen Impacts</i>	No impacts are anticipated on hazel dormice as a result of the proposed development.
<i>Recommendations</i>	None foreseen.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	The modified grassland and hedgerows on site provide foraging and commuting opportunities for hedgehogs. The hedgerow also provides areas for them to shelter.
<i>Foreseen Impacts</i>	Areas of developed land, sealed surface will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.
<i>Recommendations</i>	None required. Suggested biodiversity enhancements

	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: • Planting fruit bearing trees and species-rich grassland to increase foraging opportunities. • Creation of brash piles or installation of hedgehog houses in shady areas. • Installation of gaps under boundary fencing to enable hedgehogs to move freely through the site.
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Appendix 1: Survey/Habitat map

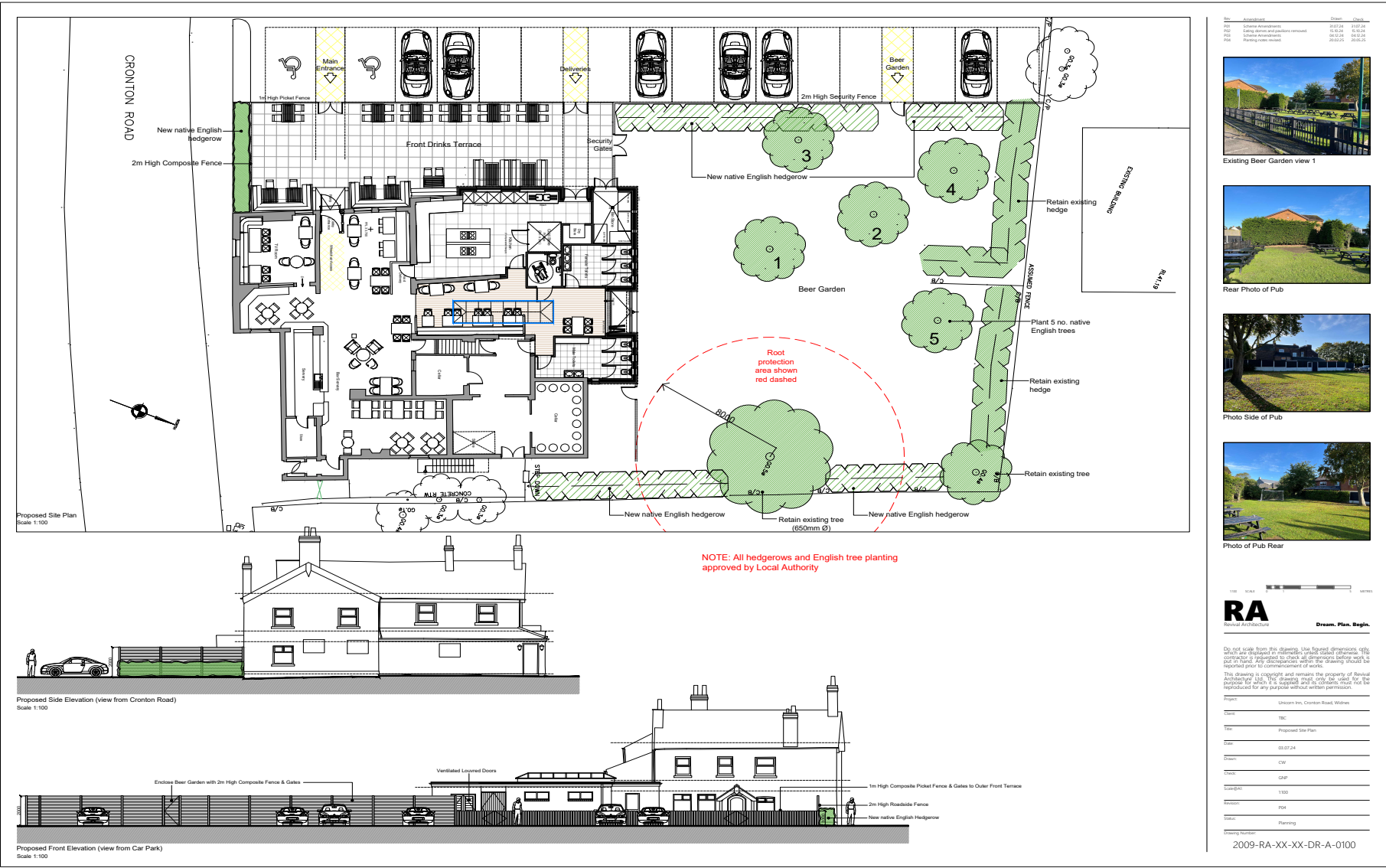
Appendix 2: Location map



Appendix 3: Pond map



Appendix 4: Proposed plan



Appendix 5: Habitat Photos



Image 1: u1b5 Building



Image 2: u1b5 Building



Image 3: u1b5 Building



Image 4: u1b5 Developed land, sealed surface



Image 5: h3d Bramble scrub



Image 6: g4 Modified grassland



Image 7: h2b Non native/ornamental hedgerow



Image 8: h2b Non-native/ornamental hedgerow
(removed)



Image 9: g 32 Scattered Tree (T1)



Image 10: g 32 Scattered Tree (T2)



Image 11: g 32 Scattered Tree (T3&4)

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