

**A12 Chelmsford to A120 widening scheme
TR010060**

**6.3 ENVIRONMENTAL STATEMENT
APPENDIX 9.4 BAT SURVEY REPORT**

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ENVIRONMENTAL STATEMENT
APPENDIX 9.4 BAT SURVEY REPORT

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0 Executive Summary

- 0.1.1 This is an appendix of the A12 Chelmsford to A120 widening scheme Environmental Statement (ES). This report presents an evaluation of bat presence on the proposed scheme based on recent surveys. It also presents the policy and legislative context within which the Environmental Impact Assessment (EIA) process is being carried out. Likely significant effects of the proposed scheme on bats, and mitigation for bats, are considered in Chapter 9 of the ES.
- 0.1.2 Bat ground assessments of trees, buildings and bridges, bat tree climbing surveys, bat dusk emergence / dawn re-entry surveys of trees, buildings and bridges, building backtracking surveys and static detector and transect surveys were undertaken using best practice guidance from Collins (2016), Bat Tree Habitat Key (BTHK, 2018) and Berthinussen and Altringham (2015).
- 0.1.3 Bat surveys were previously undertaken by Jacobs between 2016 and 2018. The purpose of this report is to present the results of updated surveys undertaken between 2019 and 2021.
- 0.1.4 Species of bat recorded within the study area from desktop and field surveys undertaken between 2019 and 2021 include barbastelle (*Barbastella barbastellus*), whiskered bat / Brandt's bat (*Myotis mystacinus* / *Myotis brandtii*), brown long-eared bat (*Plecotus auritus*), common pipistrelle (*Pipistrellus pipistrellus*), Daubenton's bat (*Myotis daubentonii*), Leisler's bat (*Nyctalus leisleri*), Nathusius' pipistrelle (*Pipistrellus nathusii*), Natterer's bat (*Myotis nattereri*), noctule (*Nyctalus noctula*), serotine (*Eptesicus serotinus*) and soprano pipistrelle (*Pipistrellus pygmaeus*).
- 0.1.5 Bat roosts were confirmed within nine trees within the study area. Species included brown long-eared bat, common pipistrelle and soprano pipistrelle. Roosts were identified through climbing, endoscope or emergence and re-entry surveys.
- 0.1.6 60 roosts were identified in buildings through external, internal, emergence and re-entry and backtracking surveys.
- 0.1.7 Structure surveys confirmed two bat roosts within Benton Bridge (BE11 North and BE11 South) housing common and soprano pipistrelle adjacent to a woodland corridor.
- 0.1.8 Only common bat species were identified roosting within the survey area.
- 0.1.9 Ten species of bat were recorded during transect and static detector surveys using the site regularly to forage and commute through. Key areas for commuting and foraging bats in the survey area included Prested Hall and along the River Blackwater and the River Ter, where high levels of bat activity were recorded, including for rarer species such as barbastelle and Nathusius' pipistrelle.
- 0.1.10 Bats within the study area have been evaluated as of county value.

1 Introduction

1.1 Background

- 1.1.1 The A12 Chelmsford to A120 widening scheme, hereby referred to as the proposed scheme, covers an approximate distance of 24km or 15 miles. The proposed scheme comprises highways improvements to the A12 between junction 19 and junction 25. Improvements include widening the A12 to three lanes between Boreham (TL 741094) and Marks Tey (TL 917238), along with various safety improvements. The safety improvements include, closing off the existing at grade accesses and reducing access to cyclists along the dual carriageway. An alternative route for walkers, cyclists and horse riders is proposed.
- 1.1.2 The proposed scheme requires new crossings of watercourses and potential improvements to existing culvert and bridge crossings. There are eight crossings of main rivers, six of which are existing crossings and two of which are proposed crossings on offline sections of road. Three crossings require minor realignments at the crossing points.
- 1.1.3 Land would be required both temporarily and permanently to construct, operate and maintain the proposed scheme. Permanent land-take requirements include the proposed highway infrastructure footprint and associated earthworks, drainage works and access roads. Environmental mitigation areas such as landscape planting and biodiversity habitat creation are included within the permanent land-take areas.
- 1.1.4 The proposed scheme is classed as a Nationally Significant Infrastructure Project (NSIP) under the Planning Act (2008). An application for a Development Consent Order (DCO) is therefore required.
- 1.1.5 The selection criteria in the Infrastructure Planning (Environmental Impact Assessment) (EIA) Regulations 2017 have been used to screen the proposed scheme and identified the potential for significant effects. The proposed scheme is therefore required to be accompanied by an Environmental Statement (ES) to provide information on likely significant effects.
- 1.1.6 The Scoping Report (Highways England, 2020a) (informed by an Extended Phase 1 Habitat Survey (National Highways, 2020)) identified several ecological receptors which have the potential to be impacted by construction or operation of the proposed scheme. Surveys were therefore required to establish an accurate baseline against which the impacts of the scheme could be assessed in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) guidance for Ecological Impact Assessment (CIEEM, 2018) and DMRB LA 108 – Biodiversity (Highways England, 2020b). Scoping opinions received from statutory and non-statutory consultees during this process are taken into consideration (refer to Chapter 9 of the ES).
- 1.1.7 The Extended Phase 1 Habitat Survey confirmed the requirement to undertake the following suite of ecological surveys for the proposed scheme:
- Botanical surveys of potential UK Biodiversity Action Plan priority habitats

- Hedgerow
- Freshwater macro-invertebrates
- Freshwater fish
- Freshwater macrophytes
- White-clawed crayfish (*Austropotamobius pallipes*)
- River Habitat Survey (RHS)
- Pond habitat survey (PSYM)
- Birds (breeding and wintering)
- Barn owls (*Tyto alba*)
- Bats (bat activity, bat roost potential, and roost characterisation surveys)
- Dormice (*Muscardinus avellanarius*)
- Water vole (*Arvicola amphibius*)
- Otter (*Lutra lutra*)
- Badger (*Meles meles*)

1.2 Purpose of the report

- 1.2.1 This report is an appendix of the A12 Chelmsford to A120 widening scheme ES. It presents an evaluation of the status of bats within the surrounding area based on a desk-based review of species records and field surveys. It presents the policy and legislative context within which the EIA is carried out. Likely significant effects on, and mitigation for, bats are considered in Chapter 9 of the ES.
- 1.2.2 This report presents the results of the bat surveys undertaken between 2019 and 2021. Where relevant, reference is made to results from bat surveys undertaken between 2016 and 2018 (e.g. trees with confirmed bat roosts).

1.3 Survey objectives

- 1.3.1 The key objectives of these survey were to:
- determine the presence or likely absence of bat roosts within the study area
 - determine species usage and roost type once roosts are discovered (e.g. maternity, hibernation roosts) within the study area
 - identify key commuting routes and foraging areas to evaluate the bat activity in and through the study area

-
- inform the assessment of potential impacts on confirmed bat roosts, foraging areas and commuting routes associated with the proposed scheme (as detailed in the ES)
 - provide sufficient field data for the development of appropriate mitigation where necessary (as detailed in the ES)

2 Bat ecology

- 2.1.1 There are currently 18 species of bat known to be present in England, 17 of which have been recorded breeding. Mating occurs in autumn, but the female does not become pregnant until the following spring with one pup born each year. During spring and summer, female bats gather to form maternity colonies to give birth and rear their young (Mitchell-Jones, 2004).
- 2.1.2 Bats in Britain eat insects including beetles, moths, midges and other invertebrates such as spiders. Bats gather to feed wherever there is an abundance of insects, so the best foraging habitat includes pasture, woodland, marshes, ponds and slow-moving rivers (Mitchell-Jones, 2004). Hibernation occurs during the winter when food sources are scarce.
- 2.1.3 Bats will use a variety of roosts for different purposes throughout the year which range from feeding perches, transitory night and day roosts, mating roosts, hibernation sites and maternity roosts. The conservation significance of each of these roost types increases with frequency and duration of use, the number of bats involved and on the rarity of the species/assemblage of bats present (Mitchell-Jones, 2004).
- 2.1.4 Roosting habitat generally comprises three main types (Bat Conservation Trust (BCT), 2021) including:
- Roosts in buildings: includes bridges, houses, ancient monuments, churches, farms, and industrial, agricultural, and commercial buildings. These are often important in summer when it is warmer.
 - Underground roosts: sites like caves, cellars, mines and tunnels can provide cool, sheltered areas suitable for hibernating. Some bats also use underground roosts in summer for feeding or mating.
 - Trees: most UK bats evolved to roost in trees. Any cracks, splits, cavities, and loose bark can provide roosting habitat for bats throughout the year. Oak (*Quercus* sp.), beech (*Fagus sylvatica*) and ash (*Fraxinus excelsior*) trees are particularly suitable for bats, but any tree can have roost potential given appropriate roosting features

3 Legislation and policy

3.1 Legislation

- 3.1.1 All species of bats and their breeding sites or resting sites (roosts) are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. All bat species are therefore classed as UK and European Protected Species (EPS). It is an offence to intentionally kill, injure or capture a bat, to possess a bat (whether live or dead) or any part of a bat, or sell or offer a bat for sale without a licence. It is also an offence to intentionally damage or destroy any place used by bats for shelter, whether they are present or not and to disturb a bat intentionally or recklessly in its roost or obstruct access to a bat roost.
- 3.1.2 Licences can be granted by Natural England (the licensing authority) to allow illegal activities to take place if carried out in accordance with the provisions of the licence.
- 3.1.3 Section 40 of the Natural Environment and Rural Communities Act 2006 (NERC) places a duty on all public bodies to have regard to the conservation of biodiversity in England when carrying out their normal functions (the biodiversity duty).
- 3.1.4 Section 41 of the NERC Act 2006 lists seven bat species (barbastelle, Bechstein's bat (*Myotis bechsteinii*), brown long-eared bat, greater horseshoe bat (*Rhinolophus ferrumequinum*), lesser horseshoe bat (*Rhinolophus hipposideros*), noctule and soprano pipistrelle) as species of principal importance for the purpose of conserving biodiversity.

3.2 National Networks National Policy Statement

- 3.2.1 The National Networks National Policy Statement (NNNPS) sets out the government's policies to deliver the development NSIPs on the national road and rail networks in England. The Secretary of State uses the NNNPS as the primary basis for making decisions on DCO applications.
- 3.2.2 Paragraph 5.22 of the NNNPS states that 'the applicant's assessment should describe any likely significant effects on internationally, nationally and locally designated sites of ecological conservation importance; protected species; habitats (including irreplaceable habitats such as ancient woodland and veteran trees); and other species identified as being of principal importance for the conservation of biodiversity.' The surveys described in this report will inform the assessment of significant effects within the ES.
- 3.2.3 In addition to the national policy set out in the NNNPS, the proposed scheme has also had regard to relevant legislation and local plans and policy.

3.3 Priority species

- 3.3.1 The NERC Act 2006 places a responsibility on local authorities and government departments to consider the purposes of conserving biodiversity in a manner consistent with their normal duties, such as policy and decision-making. This Act ties together wildlife legislation and planning policies.
- 3.3.2 The common pipistrelle is included in the Essex biodiversity action plan (Essex Field Club, 2021).

4 Methodology

4.1 Desk study

4.1.1 A desk study was undertaken in June 2021 to obtain information pertaining to bats within the proposed scheme and surrounding landscape.

Designated sites

4.1.2 Details of statutory designated sites designated for bats within a 30km radius of the proposed scheme were obtained through the Multi-Agency Geographic Information for the Countryside (MAGIC) website on 4th June 2021 (Natural England, 2020).

Bat records

4.1.3 Bat records were requested within 5km of the proposed scheme (Design Freeze (DF) 0) (see Annex A, Figure 1). The following organisations were contacted to provide desk study records:

- Essex Field Club (to include Essex Bat Group Data)
- Essex Wildlife Trust Biological Records Centre

4.1.4 Information on EPS Licenses for bats within a 5km radius of the proposed scheme were obtained through the MAGIC website on 10th March 2021.

Limitations

4.1.5 Although the data provided by the consultees is the most complete set of species data available, the absence of records should not be taken as an indication of species' absence.

4.1.6 The Essex Bat Group was not contacted directly but Essex Field Club provided records originating from this group.

4.2 Field study

4.2.1 The study area for each individual field survey was based on the Provisional Order Limits (POL) at the time of survey completion (as defined in the paragraphs below). The POL consists of the areas to be impacted pre-construction, during construction and post construction. This includes area designated for the final road footprint, construction compounds, haul roads, mitigation areas and balancing pond areas. As the proposed scheme evolved, design freezes were used to drive environmental assessments. The design freeze iteration used to create each survey type's survey area is described in the individual methodologies below.

Ground-based bat roost assessments of trees

4.2.2 Ground-based bat roost assessments of trees were previously undertaken by Jacobs in 2016, 2017 and 2018. These surveys identified all trees with potential to support roosting bats within a predetermined study area, based on the scheme design at the time of survey. A total of 395 trees were assessed within the study area, of which eight had confirmed roosts. Table 4.1 shows the number of trees and the overall tree grade assigned at the time of the surveys.

Table 4.1 Summary of bat tree survey results (including ground level, emergence/re-entry surveys, tree climbing and ground endoscope surveys) in 2016, 2017 and 2018

Overall tree grade	Total number
Roost	8
High	37
Moderate	123
Low	38
Negligible	134
Potential	55

- 4.2.3 Ground-based bat roost assessments of trees within the study area were repeated between 2019 and 2021 due to the changeable nature of bat roosts in trees. Only those trees which had confirmed bat roosts in 2016–2018 were carried forward for consideration in 2020–2021 surveys, all other survey results from 2016-2018 were updated.
- 4.2.4 All trees extending up to 100m either side of the proposed route and up to 50m of proposed land use areas (to include construction compounds, borrow pits and drainage mitigation) were subject to a ground-based bat roost assessment in 2019 and 2020. This defined location comprises the study area for ground-based bat roost assessments of trees and is based on the POL at DF 1 (see Figure 2). All trees within 30m of the gas main diversion were subject to a ground-based bat roost assessment in 2021.
- 4.2.5 All trees extending up to 100m either side of the proposed route and up to 50m of proposed land use areas (to include construction compounds, borrow pits and drainage mitigation) were subject to a ground-based bat roost assessment in 2021.
- 4.2.6 The ground-based bat roost assessments are based on guidance found in British Standards Institution (BSI; 2015), BTHK (2018) and Collins (2016). The survey involves comprehensively inspecting each tree from the ground level, using binoculars, high powered torches and an endoscope as required, to identify features suitable for supporting roosting bats. These features are referred to as potential roosting features (PRFs) and may include the following:
- Disease and decay features which include:
 - Woodpecker-holes
 - Squirrel-holes
 - Knot-holes
 - Pruning cuts
 - Tear-outs

- Wounds
- Cankers
- Compression forks
- Butt rots
- Damage which includes:
 - Lightning strikes
 - Hazard-beams
 - Subsidence-cracks
 - Shearing-cracks
 - Transverse-snaps
 - Welds
 - Lifting bark
 - Desiccation-fissures
 - Frost-cracks
- Association, which includes:
 - Fluting
 - Ivy

4.2.7 All surveyed trees were assigned to a potential suitability category outlined by Collins (2016). The potential suitability categories include high, moderate, low and negligible suitability to support roosting bats (Table 4.2). If a roost was identified during the survey, the individual tree was assigned the category of 'roost'. Any tree that had negligible suitability to support roosting bats was not recorded.

4.2.8 The level of suitability assigned to an individual tree determined the need for further survey efforts. All trees with high or moderate suitability, as well as any confirmed roosts, were subject to either tree climbing, ground endoscope or dusk emergence and dawn re-entry surveys. If further survey effort was required, the individual trees were assessed during the ground-based assessment for their climbing suitability.

Table 4.2 Description of how roost suitability is assigned to individual trees and structures based on potential roost features and surrounding habitats (Collins, 2016)

Suitability	Description of roosting habitats	Commuting and foraging habitats
Roost	Roost confirmed during survey.	
High	Tree or structure with one or more potential roost sites that are obviously suitable for large 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.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree lined watercourse and grazed parkland. Site is close to and connected to known roosts.
Moderate	A tree or structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of scrub or trees or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
Low	<p>Tree sufficiently large and of an age to contain PRFs but with either none seen from the ground or features seen with only very limited roosting potential.</p> <p>A structure with one or more potential roost sites that could be used by individual bats opportunistically.</p> <p>The PRFs on either the tree or structure do not provide enough space, shelter, protection, appropriate conditions and/or surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).</p>	<p>Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but that is isolated (i.e. not very well connected to the surrounding landscape by other habitat).</p> <p>Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.</p>
Negligible	Negligible habitat features on site likely to be used by roosting bats.	

Limitations

- 4.2.9 The ground-based assessment surveys were planned for winter 2019 / 2020, which is the optimal season for this survey type. Due to the size of the proposed scheme, the ground-based assessment surveys continued into the summer months of 2020. A considerable proportion of the survey work was therefore undertaken while trees had full foliage and dense ground flora. This is considered a suboptimal time of year to complete ground-based surveys as the view from the ground is obstructed by foliage. The likelihood that surveyors will miss PRFs increases during the summer months. This is therefore considered a limitation of the survey work. This will be mitigated for through repeat preconstruction surveys of any trees due to be directly impacted by construction.
- 4.2.10 Much of the land within the survey area is privately owned and therefore access to certain areas was restricted. In some areas access was refused or only partially given due to the presence of game cover for pheasant shooting. This resulted in surveys being either partially complete, taking place at a suboptimal time of the year or not completed at all. It is estimated that 90% of the land was accessed making the likelihood that a roost was not identified very low. Preconstruction surveys of these areas will mitigate the risk of any missed roosts.

Tree climbing and ground endoscope surveys

- 4.2.11 During the ground-based assessments individual trees that required further survey effort were assessed for their suitability for tree climbing and ground endoscope surveys. The trees were assessed based on health and safety considerations such as the condition of the tree, presence of nearby hazards, and height of the PRF.
- 4.2.12 The BCT guidance (Collins, 2016) outlines that all trees of moderate or high potential, and confirmed roosts, should be surveyed in advance of any removal or disturbance. These surveys are required to identify any active bat roosts, the type of roost and the species of bat using the roost.
- 4.2.13 The number of further surveys for the proposed scheme was further streamlined based on the distance of the tree from the scheme and if the area of the scheme was considered online or offline; with trees offline having a higher potential impact from the proposed scheme than those trees in online areas.
- 4.2.14 The areas considered online are those within a 100m buffer of the existing A12 carriageway where widening of the carriageway is proposed. The areas considered offline are those within a 100m buffer of the proposed A12 carriageway to be built as part of the proposed scheme. Table 4.3 shows the breakdown of the number of surveys required for individual trees based on their location and suitability grade.

Table 4.3 Survey criteria based on location in relation to the POL at DF1 and tree roost potential

Roost potential	Offline		Online			Borrow pits (within 100m)
	Up to 50m	50-100m	Up to 25m	25-50m	50-100m	
Confirmed	3	2	3	2	2	3
High	3	2	2	1	1	3
Moderate	2	1	2	0	0	2
Low	0	0	0	0	0	0
Negligible	0	0	0	0	0	0

- 4.2.15 Trees requiring further survey effort that had PRFs above 1.5m in height were subject to tree climbing surveys if they had been deemed safe to climb during the ground-based assessment. If a tree was considered unsafe to climb but had PRFs above the height of 1.5m, the tree was subject to dusk emergence and dawn re-entry surveys. Trees with PRFs below 1.5m in height were subject to ground-based endoscope surveys only.
- 4.2.16 Both tree climbing and ground endoscope surveys comprised close inspection of all PRFs found on individual trees. Inspections were undertaken using a small torch and / or endoscope (Ridgid / Seesnake CA100). All surveys were completed by appropriately qualified and licensed ecologists (Natural England Bat Licence Class 2). The ecologists conducting the tree climbing surveys required an additional National Proficiency Test Council (NPTC) CS38 tree climbing and aerial rescue qualification.
- 4.2.17 The following information was recorded during the tree climbing survey for each PRF that had a potential suitability of high, moderate or was confirmed as a roost (BTHK, 2018):
- Approximate dimensions of entrance
 - Approximate internal dimensions
 - Dry or wet
 - Clean or dusty/dirty/sludgy
 - Evidence of use by birds, squirrels or other non-bat species
 - Evidence of bat activity (smoothing of internal surfaces, droppings, feeding remains, staining or presence of bat mites)
 - Presence, number, and species of bats observed
- 4.2.18 The information gathered was used to determine the suitability of each PRF to support roosting bats. Any evidence of bats having previously been present was recorded.

- 4.2.19 Where it was possible to survey either through climbing or ground endoscope surveys, each tree had a hibernation check, as well as summer surveys, to determine their potential use by bats. Hibernation checks were based on guidance set out in *Bat Roosts in Trees* (BTHK, 2018), which recommends a survey visit in either January or February to ensure a reasonable likelihood of detecting winter roosts.
- 4.2.20 All relevant information gained through the tree climbing and endoscope surveys was used to revise the original feature grades assigned during the ground-based assessment. Where a bat roost was identified, the PRF was upgraded to a confirmed roost. The overall tree grade for individual trees was subsequently updated, improving the accuracy of the assessments. The tree climbing and ground endoscope surveys determined the need for any further survey work associated with the individual trees.

Limitations

- 4.2.21 A tree can only be confirmed as a roost if a bat is found within the PRF or if evidence such as bat droppings are found. Bats move between tree roosts frequently and so the likelihood of finding a bat during a tree climbing or ground endoscope survey is low. Bat droppings remain present in PRFs longer than the bats themselves but degrade over time, especially if droppings are near the entrance of a PRF or exposed to the elements. Due to these reasons, it can be challenging to identify a confirmed roost during these surveys. However, completing inspections with an endoscope either from the ground or by climbing techniques increases the likelihood of identifying roosts even when there are no bats present, unlike traditional methods such as emergence / re-entry surveys. Repeating endoscope or climbing surveys during the summer months increases the robustness of these surveys further.
- 4.2.22 Other signs of roosting bats include smoothing of internal surfaces as well as staining and scratches on trees. These features are not solely indicative of roosting bats and therefore cannot be used as bat roosting evidence.
- 4.2.23 There is a high risk of injury associated with tree climbing surveys and vigorous health and safety checks are essential for any potential tree climbing survey. If a tree was considered unsafe to climb due to any health and safety reason, the tree was subject to dusk emergence and dawn re-entry surveys.
- 4.2.24 Trees that were deemed unsuitable for climbing or ground endoscope could not be accessed during the hibernation season, and as such there is a small risk that hibernation roosts have been missed from these trees. Killing and injury of hibernating bats can be avoided through timing of works to avoid hibernation period.
- 4.2.25 Restrictions on land access due to land access refusal resulted in either an incomplete suite of surveys or no surveys being carried out on trees in some parts of the study area. This may have resulted in some roosts not being identified. The land access varied throughout the year with restrictions during the winter months due to areas being used as game cover for pheasants. Winter surveys, including hibernation surveys, were particularly impacted because of the restricted land access. Any limitation arising from these restrictions will be mitigated for through preconstruction surveys.

- 4.2.26 As a result of the Covid 19 pandemic and snow in January 2021, some trees assigned for hibernation checks were not climbed until March, this may have resulted in bats already transitioning out of their hibernation roosts and roosts being mis-identified.

Tree emergence / re-entry surveys

- 4.2.27 The BCT guidance (Collins, 2016) outlines that all trees with moderate or high suitability to support roosting bats should be surveyed in advance of any removal or disturbance. Trees with low suitability do not require further survey effort.
- 4.2.28 The number of further surveys required was streamlined based on the distance of the tree from the scheme, focus on roosts of conservation concern such as maternity and the potential impacts on the trees resulting from the proposed scheme, as detailed for tree climbing and ground endoscope surveys.
- 4.2.29 All tree emergence / re-entry surveys were undertaken between May and September 2021. Depending on the location of the tree, all trees with moderate or high suitability to support roosting bats, but which could not be climbed or that had PRFs higher than 1.5m, were subject to at least one dusk emergence or dawn re-entry as per survey criteria outlined in Table 4.3.
- 4.2.30 Dusk emergence and dawn re-entry surveys involved monitoring of individual trees and their PRFs by suitably qualified ecologists either side of sunset and sunrise. The number of surveyors required for the survey, and their positions, was determined during the ground-based assessment. Surveyors were positioned around the tree to ensure all aspects were monitored during the survey. At least two surveyors were required for the dusk emergence and dawn re-entry surveys due to health and safety requirements.
- 4.2.31 Each surveyor was equipped with an Echo Meter Touch Pro 2 (EMT2) bat detector, with auto identification, and an iPad mini to record bat activity during the survey. Echo Meter Touch bat detector settings were: Trigger sensitivity – High; Audio division ratio 1/20; Nightly session mode – On; Real time ID – Off. All bats that emerged from or re-entered the individual trees were recorded by the surveyor. Details of the location and time of the emergence / re-entry and the number / species of bats that emerged / re-entered were recorded. Weather conditions were recorded at the start and end of each survey, and if any significant changes in the weather occurred during the survey. All observations of bats were recorded including any foraging, commuting, or swarming behaviour. In certain circumstances, where visibility was reduced, surveyors were equipped with an infrared (IR) camera to assist with the survey.
- 4.2.32 Dusk emergence surveys started 15 minutes before sunset and continued for 2 hours after sunset to account for late emerging species. Dawn re-entry surveys started two hours before sunrise and continued for 15 minutes after sunrise.
- 4.2.33 Recordings of bats emerging from / re-entering a confirmed roost were subject to sound analysis. Kaleidoscope was used to identify the individual species of bat according to Russ (2012). Additional time was spent analysing recordings of rare or unusual bat species identified during the surveys.

Limitations

- 4.2.34 Restrictions on land access due to land access refusal resulted in three trees (T973, T975 and T1452) not being surveyed in the study area. This may have resulted in some roosts not being identified.
- 4.2.35 Three trees (T1167, T628 and T1162) were found felled or collapsed and further surveys were not carried out.
- 4.2.36 Changes in the scheme's design (DF2) resulted in two trees (Untagged_ex722581_1 and T1011) being scoped out the survey buffers, and as such no further surveys were required.
- 4.2.37 Some land parcels were found unsafe to access by the ecologists and were deemed unsuitable for surveying. As such five trees (T1249, T1099, T89, T747 and T749) were not surveyed. This may have resulted in some roosts not being identified.
- 4.2.38 Due to low temperatures at the beginning of the survey season, 12 trees (T1098, T1094, T1432, T1433, T1196, T622, T69, T723, T734, T733, T0002b and T99) had an individual survey carried out in suboptimal conditions. However, the other surveys were undertaken in optimal conditions as recommended in Collins (2016). A roost was recorded in T69 in an optimal survey, as such it is considered that the suboptimal surveys on the trees did not impact the robustness of this assessment.

Ground-based bat roost assessments of buildings

- 4.2.39 Ground-based bat roost assessments of buildings were previously undertaken on the proposed scheme by Jacobs in 2017. These surveys identified all buildings with potential suitability to support roosting bats within a 100m survey buffer of the proposed scheme options.
- 4.2.40 Since 2017, the proposed scheme has changed in its design. Further ground-based assessments of buildings were therefore required and were undertaken between January 2020 and May 2021. The aim of the surveys was to update the previous datasets and to extend the spatial coverage of the previous surveys due to land access restrictions.
- 4.2.41 All buildings extending up to 100m either side of the proposed scheme and 50m of proposed land use areas (to include construction compounds, borrow pits and drainage mitigation) were initially scoped via aerial photography and Ordnance Survey maps for their suitability to support roosting bats. The survey buffer evolved alongside the design of the proposed scheme but was most recently based on DF2 of the POL (see Figure 3).
- 4.2.42 Subsequently all buildings within 30m of the gas main diversion were subject to a ground-based bat roost assessment in 2021.
- 4.2.43 The scoping exercise categorised the buildings as follows:
- Buildings which were not in need of ground-based assessment due to the lack of potential effect from the proposed scheme.

- Buildings in dense residential and industrial areas where the surrounding habitats were predominantly urban and of poor quality to support bats. These areas were assessed by age and structure from public right of way.
- Buildings which require full ground-based assessments due to the potential impacts of the proposed scheme.

4.2.44 Where access was permitted, scoping of the suitability of the buildings to support roosting bats was undertaken in the daytime. This was based on an external ground-based assessment set out in *Bat Surveys: Good Practice Guidelines* (Collins 2016). The surveys included analysis of the structure of the building and quality of surrounding habitats to support foraging, commuting and roosting bats.

4.2.45 The survey involved comprehensively inspecting each building from ground level, using binoculars, high powered torches and an endoscope, as required, to identify PRFs. All PRFs were recorded including details on the location, height, aspect and size of the feature. Features which may offer access or roosting opportunities for bats include but are not limited to the following:

- Raised lead flashing
- Pointing cavities
- Gaps in soffit boxes
- Gaps around fascia boards
- Gaps between wooden cladding
- Gaps underneath roof tiles
- Gaps in brickwork or stonework
- Broken, loose and hanging tiles

4.2.46 A systematic search was undertaken by the surveyors of all external surfaces and ledges for any evidence indicative of roosting bats. Evidence of roosting bats include:

- Bat droppings (these may accumulate under an established roost entrance / exit)
- Accumulations of insect remains, especially wings from feeding
- Oil from fur and urine staining around access holes to roosts
- Scratch marks
- Actual sightings of bats, including corpses

4.2.47 Any droppings found were collected and put into individual tubes. These tubes were clearly labelled with the building reference number and a location reference. The droppings were sent for DNA analysis to identify the species of bat.

- 4.2.48 All surveyed buildings were assigned to a potential suitability category outlined by Collins (2016). The potential suitability categories included high, moderate, low and negligible suitability to support roosting bats (see Table 4.2). If any direct evidence of bats was found, the building was categorised as a confirmed roost.
- 4.2.49 The information gathered during the ground-based assessment was reviewed to identify the most appropriate type of survey required for individual and groups of buildings. The level of suitability assigned to an individual building determined the need for further survey efforts. All buildings with low, moderate, or high suitability to support roosting bats were subject to further survey effort.
- 4.2.50 Buildings considered to be directly impacted by the proposed scheme (i.e. those within the footprint of the proposed infrastructure design at the time of survey) were subject to dusk emergence and dawn re-entry surveys. Groups of buildings in densely populated areas that were not considered to be directly impacted by the proposed scheme were subject to forward-tracking and back-tracking surveys. The number and positioning of bat surveyors for these further surveys was determined during the ground-based assessment. A number of buildings with hibernation potential (i.e. buildings that could contain areas with constant cool temperature and high humidity) were identified and subject to hibernation surveys (described in further detail below).

Limitations

- 4.2.51 The building inspections were restricted to ground-level external inspections only and no internal surveys were conducted. It is considered that this level of survey effort was adequate to characterise the roost potential and evaluate each building's suitability for roosting bats for the purpose of the ES.
- 4.2.52 Restrictions on land access due to land access refusal resulted in either an incomplete suite of surveys or no surveys being carried out on buildings in some parts of the study area. This may have resulted in some roosts not being identified.
- 4.2.53 Buildings in dense residential and industrial areas were largely assessed for their potential to support roosting bats from public rights of way only. When assessing these areas, if surveyors encountered any individual buildings with high potential PRFs, further access was pursued to facilitate further survey. Additionally, back-tracking surveys completed in these areas would also have picked up any potential roosts of conservation value. However, as full external surveys were not conducted in these areas, likely absence of roosts cannot be assumed.

Building emergence / re-entry surveys

- 4.2.54 The BCT guidance (Collins, 2016) outlines that all buildings with suitability to support roosting bats should be surveyed in advance of any removal or disturbance. These surveys are required to identify any active bat roosts, the type of roost and the species of bat using the roost.
- 4.2.55 Buildings which were likely to be directly impacted by the proposed scheme had full surveys undertaken, where feasible, as per Collins (2016). However, in consultation with stakeholders, the methodology set out in Collins (2016) was

altered for those buildings further away from the scheme to enable a focus on ecologically significant effects. The aim was to identify roosts of higher value in habitats more likely to be impacted by the proposed scheme, for example maternity or more regularly used roosts. The buildings were categorised into offline and online, with buildings in offline areas considered to have a higher potential impact from the proposed scheme than those in online areas as roosts adjacent to an active carriageway are less likely to be impacted by construction disturbance in the short term and operational noise in the long term. In addition, online roosts would be less impacted by fragmentation.

- 4.2.56 The areas considered online are those within a 100m buffer of the existing A12 carriageway along sections of the proposed scheme where widening is proposed. The areas considered offline are those within a 100m buffer of the proposed A12 carriageway to be built as part of the proposed scheme. Table 4.4 shows the breakdown of the number of surveys required for individual buildings based on their location and suitability grade.

Table 4.4 Survey criteria based on location in relation to the POL at DF2 and building roost potential

Roost status	Offline		Online		Within POL/ borrow pit boundary
	Up to 50m	50-100m	Up to 25m	25-100m	0m
Confirmed roost	3	2	3	2	3
High potential	3	2	3	2	3
Moderate potential	2	1	2	0	2
Low potential	1	0	1	0	1
Negligible potential	0	0	0	0	0

- 4.2.57 The survey methodologies for the dusk emergence and dawn re-entry surveys for bats followed guidelines set out in the BCT guidelines (Collins, 2016). Surveys were carried out between June and September 2020 and May and September 2021. When buildings required more than one survey, these surveys were undertaken at least two weeks apart.
- 4.2.58 Dusk emergence and dawn re-entry surveys involved monitoring of individual buildings and their PRFs by suitably qualified ecologists either side of sunset and sunrise. The number of surveyors required for the survey, and their positions, was determined during the ground-based assessment. Surveyors were positioned around the structure to ensure all aspects were monitored during the survey. The number of surveyors used for the dusk emergence and dawn re-entry surveys ranged between one and twelve.
- 4.2.59 Each surveyor was equipped with an EMT2 bat detector, with auto identification, and an iPad mini to record bat activity during the survey. Echo Meter Touch bat detector settings were: Trigger sensitivity – High; Audio division ratio 1/20; Nightly session mode – On; Real time ID – Off. All bats that

emerged from or re-entered the individual buildings were recorded by the surveyor. Details of the location and time of the emergence/re-entry and the number / species of bats that emerged / re-entered were recorded. Weather conditions were recorded at the start and end of each survey and if any significant changes in the weather occurred during the survey. All observations of bats were recorded including any foraging, commuting, or swarming behaviour. In certain circumstances, where visibility was reduced, surveyors were equipped with an IR camera to assist with the survey.

- 4.2.60 Dusk emergence surveys started 15 minutes before sunset and continued for an hour and a half after sunset. Dawn re-entry surveys started an hour and a half before sunrise and continued for 15 minutes after sunrise.
- 4.2.61 Recordings of bats emerging from or re-entering a confirmed roost were subject to sound analysis. Kaleidoscope was used to identify the individual species of bat according to Russ (2012). Additional time was spent analysing recordings of rare or unusual bat species identified during the surveys.

Limitations

- 4.2.62 Dusk emergence and dawn re-entry surveys were not always evenly spaced throughout the season as is recommended in Collins (2016). However, the surveys were undertaken during the peak activity season and in optimal weather conditions. A two-week period between surveys on the same building was implemented as per the BCT guidelines. The surveys covered the maternity period and therefore would have detected any maternity roosts if present. It is considered that the spacing of the surveys on individual buildings did not impact the robustness of this assessment.
- 4.2.63 Restrictions on land access due to land access refusal resulted in either an incomplete suite of surveys or no surveys being carried out on buildings in some parts of the study area (Annex F). This may have resulted in some roosts not being identified.

Building back-tracking and forward-tracking surveys

- 4.2.64 Following the ground-based assessments for buildings, areas with high densities of buildings which would not be directly impacted by the construction of the proposed scheme were identified. These areas were online, meaning they were within 100m of the existing A12 carriageway.
- 4.2.65 The buildings were grouped by their location, type and structure and assigned to a potential suitability category outlined by Collins (2016). The potential suitability categories included high, moderate, low, and negligible suitability to support roosting bats (Table 4.5). Buildings with negligible suitability had no further surveys.
- 4.2.66 In line with the BCT guidelines (Collins, 2016), the number of required surveys was guided by the suitability of the buildings within the area to support roosting bats. Table 4.5 provides the recommended number of surveys as well as survey timings for these presence / absence surveys to give confidence in a negative result.

Table 4.5 Recommended number and timings of backtracking / forward tracking presence / absence surveys

	Low roost suitability	Moderate roost suitability	High roost suitability
Number of surveys required	1 survey – either a dusk emergence or dawn re-entry survey	2 surveys – including both a dusk emergence survey and a separate dawn re-entry survey	3 surveys – including at least one dusk emergence and one separate dawn re-entry survey. The third may be either a dusk emergence or dawn re-entry survey.
Timings of surveys	May to August	May to September with at least one of the surveys between May and August.	May to September with at least two of the surveys between May and August.

- 4.2.67 All building areas identified as having low, moderate or high suitability to support roosting bats were subject to bat back-tracking and forward-tracking surveys to identify the presence of any large roosts. A daytime visit of the sites was conducted prior to the back-tracking and forward-tracking surveys to determine the starting locations and safe access routes for the surveyors.
- 4.2.68 The back-tracking and forward-tracking surveys were undertaken by suitably qualified ecologists between May and September 2021. Each area was split into several sections and at least four surveyors were assigned to each area. Each section was patrolled by a pair of surveyors who walked transects of their section on public right of ways.
- 4.2.69 The surveyors were equipped with an EMT2 bat detector, with auto identification, and an iPad mini to record bat activity during the survey. Echo Meter Touch bat detector settings were: Trigger sensitivity – High; Audio division ratio 1/20; Nightly session mode – On; Real time ID – Off. The time and direction of flight of any bats observed was recorded along with number, behaviour, and species of bats. Weather conditions were recorded at the start and end of each survey and if any significant changes in the weather occurred during the survey.
- 4.2.70 The back-tracking surveys commenced 15 minutes before sunset and finished two hours after sunset. During the back-tracking surveys, the surveyors paid particular attention to the buildings to identify any bats emerging from the buildings. If a bat was seen emerging from a building the surveyor recorded the building location and roosting feature, the time of the emergence, and the number and species of the bats emerging from the building. The surveyors followed the bat as far as possible to determine its commuting/foraging route.
- 4.2.71 The forward-tracking surveys commenced 2 hours before sunrise and finished 15 minutes after sunrise. When a bat was observed during the forward-tracking surveys, the surveyors followed the bat as far as possible to determine if the bat was returning to a roost. If a bat was seen re-entering a building the surveyor recorded the building location and roosting feature, the time of the emergence, and the number and species of the bats re-entering the building.

- 4.2.72 To help identify the roost locations, each pair of surveyors were equipped with a radio device to communicate the direction of a bat they were following. If a bat flew into another pair's section of the survey area, the bat could continue to be followed.
- 4.2.73 Recordings of bats emerging from or re-entering a confirmed roost were subject to sound analysis. Kaleidoscope was used to identify the individual species of bat according to Russ (2012). Additional time was spent analysing recordings of rare or unusual bat species identified during the surveys.

Limitations

- 4.2.74 All surveys were carried out on public right of ways with no access to private land during the surveys. Surveyors could only walk along pavements and in some cases these pavements lead to dead ends. On several occasions, surveyors could not continue following a bat as it flew across an area with restricted access. Surveyors were given radios to communicate the flight line to another team, if they saw the bat heading into another surveyor's section. Due to this limitation, all roosts in these areas may not have been identified.

Building hibernation surveys

- 4.2.75 Buildings with suitability to support hibernation roosts, identified during the ground-based assessment, were subject to hibernation surveys during winter 2020 / 2021. Hibernation surveys comprised an inspection of all PRFs and subsequent static monitoring surveys, if required.
- 4.2.76 The internal surveys were undertaken during the bat hibernation season by two suitably qualified and licensed ecologists. At least one visit to each building identified as having hibernation suitability was undertaken between November 2020 and March 2021. The survey involved comprehensively inspecting all internal PRFs with an endoscope for hibernating bats. Internal features include cracks, crevices, and voids. Walls and ceilings of hibernacula were searched as some bat species hang freely from these features. High powered torches and mirrors were used during the internal surveys.
- 4.2.77 Any evidence or signs of bats, as detailed previously for the ground-based bat roost assessment of buildings, was recorded during the survey. Any droppings found were collected and put into individual tubes. These tubes were clearly labelled with the building reference number and location within the building. The droppings were sent for DNA analysis to identify the species of bat.
- 4.2.78 Any bats encountered during the survey were identified to species level and the building was confirmed as a hibernation roost. The number of hibernating bats was recorded along with details of the feature being used, such as the size, type, and position of the feature. If after the first visit, the building was deemed unsuitable for hibernation, no further visits were undertaken.
- 4.2.79 Further automated / static surveys using Anabat Express or Swift bat detectors were undertaken in buildings where PRFs could not be inspected using an endoscope.

4.2.80 Automated / static detector surveys were undertaken from December to February where access could be obtained. Static detectors were left in situ for two weeks per month. Sonograms were analysed using Kaleidoscope software.

Limitations

4.2.81 Restrictions on land access due to land access refusal resulted in either an incomplete suite of surveys or no surveys being carried out on buildings in some parts of the study area (Annex H). This may have resulted in some roosts not being identified.

Ground-based bat roost assessments of bridges and culverts

4.2.82 All structures within a 100m buffer of the proposed scheme (POL at DF0) were subject to ground-based assessments in May 2020 (see Figure 4). The structures comprised both bridges and culverts. Bridges were defined as either a steel and/or concrete structure carrying a road or footbridge over the A12, slip roads, water course or railway line. Culverts present were either concrete box culverts or corrugated steel pipes that carried water underneath the A12 or railway lines. A list of structure names and detail of structure type is defined in Annex I, Table I.1.

4.2.83 The survey was undertaken by suitably qualified and licenced bat surveyors who inspected the individual structures for PRFs and field signs indicating the presence of bats. The surveyors used binoculars, high powered torches, and an endoscope, as required, to identify and inspect all PRFs from the ground. The PRFs associated with bridges and culverts include:

- Bearing shelf
- Central reservation gaps
- Cracks
- Cracks / cervices in stonework and brickwork
- Crevices leading to voids
- Expansion joints
- Gaps between structural joints
- Gaps in buttresses
- Holes
- Internal voids
- Metal pipes
- Widening gaps

4.2.84 The information collected during the ground-based assessments was used to evaluate the suitability of the individual structures to support roosting bats. All structures were assigned to a potential suitability category outlined by Collins (2016) (see Table 4.2). The level of suitability assigned to each structure determined the need for further survey efforts. If further survey effort was required, the number and positioning of bat surveyors for dusk emergence and dawn re-entry was determined during the ground-based assessment. Due to the variation in size, some of the structures were split into two sections, north / south or east / west. This indicated the structure needed to be surveyed by two survey pairs.

Limitations

4.2.85 Two of the structures were not fully surveyed due to health and safety concerns of working near live railway lines with no safety barriers (structures BE02 North; Generals Lane and BE03 North; Porters Park Bridge). These structures, however, have been identified as having no direct impact from works and indirect impact to bats is low.

4.2.86 Two structures were not surveyed (Boreham Bridge BE01 and Colemans Bridge BE14) due to health and safety concerns, given their location adjacent to the live flow of traffic. These are both due to be directly impacted by the proposed scheme, however further preconstruction surveys are due to take place when traffic management can be put in place or an alternative survey technique implemented. Given their location and construction style, it is likely that these will be of low potential for roosting bats, and they are assessed as such within this report. Should a bat roost be identified then appropriate licences will be sought and mitigation designed.

4.2.87 Where features could not be inspected with an endoscope, an experienced bat licensed ecologist used professional judgment to determine roost suitability. However, these structures were subject to a minimum of one dusk emergence / dawn re-entry survey as an alternative.

4.2.88 Preconstruction surveys will be undertaken for any structures impacted by the proposed scheme.

Bridges and culverts emergence / re-entry surveys

4.2.89 Dusk emergence and dawn re-entry surveys of structures were carried out between July and September 2020 in suitable weather conditions. One exception to this was BE11 North; Benton Bridge which due to a change in classification had two surveys undertaken in 2020 and the third in 2021.

4.2.90 The number of structures surveyed was reduced from those subjected to ground-based bat roost assessment in May 2020 due to refinement of the scheme design which resulted in fewer bridges and culverts within the 100m buffer.

4.2.91 In line with the BCT guidelines (Collins, 2016), the number of required surveys was guided by the suitability of the structure to support roosting bats. Table 4.6 provides the recommended number of surveys to give confidence in a negative result.

Table 4.6 Recommended number of surveys for structure presence / absence surveys

Roost Category	Number of Surveys Required
Confirmed	3
High	3
Moderate	2
Low	1
Negligible	0

- 4.2.92 Should a structure require more than one survey, these surveys were undertaken at least two weeks apart, as recommended in the BCT guidelines (Collins, 2016).
- 4.2.93 Dusk emergence and dawn re-entry surveys involved monitoring of individual structures and their PRFs by suitably qualified ecologists either side of sunset and sunrise. The number of surveyors required for the survey, and their positions, was determined during the ground-based assessment. Surveyors were positioned around the structure to ensure all aspects were monitored during the survey.
- 4.2.94 Each surveyor was equipped with an EMT2 bat detector, with auto identification, and an iPad mini to record bat activity during the survey. Echo Meter Touch bat detector settings were: Trigger sensitivity – High; Audio division ratio 1/20; Nightly session mode – On; Real time ID – Off. All bats that emerged from or re-entered the individual structure were recorded by the surveyor as well as details on the location and time of the emergence / re-entry and the number and species of bats that emerged / re-entered. All observations of bats were recorded including any foraging, commuting or swarming behaviour.
- 4.2.95 Dusk emergence surveys started 15 minutes before sunset and continued for an hour and a half after sunset. Dawn re-entry surveys started an hour and a half before sunrise and continued for 15 minutes after sunrise.
- 4.2.96 Recordings of bats emerging or re-entering a confirmed roost were subject to sound analysis. Kaleidoscope was used to identify the individual species of bat according to Russ (2012). Additional time was spent analysing recordings of rare or unusual bat species identified during the surveys.

Limitations

- 4.2.97 Due to time constraints, surveys on one structure (BE18; Ashmans Bridge) were repeated within the two-week recommended gap period suggested by Collins (2016). The surveys were conducted in separate months on 26th August 2020 and 2nd September 2020. On both occasions, bat activity was recorded in proximity of the structure, but no emergence or re-entry recorded, thus the survey was deemed reliable.

Crossing point surveys

- 4.2.98 The crossing point survey methodology was based on best practice guidelines set out by Berthinussen and Altringham (2015). The locations of the crossing point surveys were identified through aerial imagery and scoping surveys undertaken in 2017 by Jacobs. Five locations (four online and one offline) were chosen to best represent the various habitat features along the proposed scheme (see Figure 5). Four in online locations and one in an offline location. Surveys were conducted between June and October 2020.
- 4.2.99 The crossing point surveys comprised two surveyors located at either side of the road or feature. The timings of the survey were altered from the relevant guidelines (Berthinussen and Altringham, 2015) to ensure late emerging bats identified within the desk study were not missed during the survey. All surveys commenced 15 minutes prior to sunset and continued for an hour and a half after sunset. In total five surveys were conducted at each crossing point location.
- 4.2.100 Each surveyor was equipped with an EMT2 bat detector, with auto identification, and an iPad mini to record bat activity during the survey. Echo Meter Touch bat detector settings were: Trigger sensitivity – High; Audio division ratio 1/20; Nightly session mode – On; Real time ID – Off. All bats that crossed the habitat feature were recorded along with the time of crossing, the flight height, the direction, and any notable behaviour. Surveyors identified any factors which could influence the number of bats crossing the road or feature and the height in which they crossed (where relevant). This may include presence of lighting, gaps and height of hedgerows / trees, height of fences or embankments, and moon phase.
- 4.2.101 Weather conditions were recorded at the start of the surveys using a handheld thermometer / anemometer. Where possible, surveys were completed in suitable weather conditions. This included a starting temperature of more than seven degrees Celsius with wind speeds of less than 20km per hour and generally dry conditions (no rain).
- 4.2.102 Data collected during these surveys was analysed using guidelines in Berthinussen and Altringham (2015) and was completed using the statistical program R). This data will provide a baseline for statistical comparison with surveys in future years in accordance with Berthinussen and Altringham (2015).
- 4.2.103 The baseline data was tabulated to present the number of times each species of bat crossed the road at each location with a total number of crosses also presented. The mean flight heights have also been calculated and tabulated for each species, and boxplots have been produced to show the heights at which bats cross the proposed scheme. The number and percentage of each bat species 'using' a feature (recorded within 5m of the feature) have been calculated, along with the number and percentage of each species of bat recorded crossing unsafely (flying at or below 5m). Boxplots showing the range in numbers of bats recorded per survey, using the feature per survey and crossing unsafely per survey have been produced for each crossing point location. Kernel Density Estimation plots have been produced for each crossing point location. These plots are a visual way of displaying the density and spatial position of crossing bats at a site and can be used for identifying crossing hotspots.

Limitations

- 4.2.104 Due to health and safety limitations, surveyors were positioned on the same side of the feature for two crossing point locations (crossing points A and E). While this prohibited surveyors from determining the direction bats came from, they were still able to identify if bats were using the crossing point feature.
- 4.2.105 Light to moderate rain was recorded during some surveys. This is not considered to be a constraint as some rainfall is typical of the local weather conditions at this time of year in this location (see Annex K).
- 4.2.106 Berthinussen and Altringham (2015) recommended surveys take place between June and August, however surveys in 2020 were undertaken between June and October. This was justified due to a subtle difference in survey objective between Berthinussen and Altringham (2015) and the proposed scheme. The former involves monitoring mitigation structures, and the latter involves looking for activity and potential impacts on bats from the proposed scheme. As these surveys follow the active season for bats as outlined in Collins (2016), this change is considered acceptable.

Linear transects

- 4.2.107 Linear transect surveys followed the methodology specified within Berthinussen and Altringham (2015). Five independent linear transects (three online and two offline) were identified within the survey area (Figure 5). The transects were one kilometre in length and all were situated perpendicular to the A12 proposed road. Two were located with start locations away from the existing road, to provide a baseline for offline locations. A reconnaissance visit was completed prior to the survey to assess the suitability of these predetermined transects for ecological surveyors to walk along.
- 4.2.108 All transect surveys were undertaken between 2nd June and 29th July 2020. The surveys commenced 30 minutes after sunset and were completed within approximately two hours. Surveys were completed in 'good' weather: temperature at the start of the survey greater than 7 °C, wind speeds of less than 20km per hour and no rain (Berthinussen and Altringham, 2015). Weather conditions were recorded at each spot check location using a handheld thermometer / anemometer. A description of the transect routes, the survey dates, timings and weather data are provided in Annex L.
- 4.2.109 The surveys consisted of two suitably qualified ecologists walking the length of each transect and recording all bat activity encountered. In total, 11 spot checks were completed per transect per survey (see Figure 5). Ten-minute stationary spot checks were made at 100m intervals along the transect route in addition to the starting spot check. Habitat types at each spot check were recorded and classified into five categories (Table 4.7).

Table 4.7 Linear transect habitat grades and descriptions

Habitat grade	Category description
1	Open field
2	Dense residential area
3	Hedgerows / shrubs lining verges / field boundaries
4	Intermittent trees along field boundary / road / path
5	Continuous tree cover

- 4.2.110 Echo Meter Touch Pro 2 bat detectors were used for the linear transect surveys, as well as heterodyne detectors. The bat detector settings were selected giving due consideration to the requirements of the methodology and the nature of the local environment. The EMT2 bat detector settings were: Trigger sensitivity – High; Audio division ratio 1/20; Nightly session mode – On; Real time ID – Off.
- 4.2.111 Each of the five transects was surveyed twice and the starting location for each of the surveys differed. The first survey started at the proposed A12 carriageway and followed the transect away from the proposed road. The second survey started at the end of the transect and followed the transect towards the proposed road.
- 4.2.112 Statistical analysis was completed following the methodology described in Berthinussen and Altringham (2015). A multiple regression model was built to investigate the relationship between bat activity and distance from the proposed road and, at the same time, examine the effects of other variables (time and habitat) that could potentially influence bat activity and hence the relationship. This was performed by fitting appropriate generalised estimating equations (GEE) using the `geeglm` function from the library `geepack` (Højsgaard, Halekoh and Yan, 2006) in the R program (R Core Team, 2020). This approach was used to account for within cluster correlation that violates the independence assumption in conventional regression analyses and leads to type 1 errors (i.e. finding a false positive due to mis-using statistical analyses).
- 4.2.113 A first-order autoregressive model AR (1) was used to account for autocorrelation between spot checks conducted along the same route and on the same night. Transect routes were assumed to be independent. A fully iterated jackknife estimation principle with a Gaussian distribution and with an identity link was used in accordance with Berthinussen and Altringham (2015).
- 4.2.114 Explanatory variables used in the model to explain patterns of data (factors that might explain levels of bat activity) were distance from the proposed road, time after sunset (either specified as a linear term or as a quadratic term) and habitat type. Six a priori models that may explain patterns in bat activity were created and then the model that best explains the patterns in the data was selected based on Quasilikelihood under the Independence Model Criterion (QICu) values. The model with the lowest QICu value was then selected as the best fitting and most reliable model. Plots of residuals were examined to check for normality and assess the appropriateness of the fitted model. Models for

individual species or genera in this study were carried out where the species / genera were recorded at more than 20% of point counts: this threshold is set to ensure that there is sufficient data present for analysis to avoid finding false positives / negatives.

- 4.2.115 At each listening point the proportion of each species / species group recorded compared to the total number of species / species groups present during the linear transect surveys (recorded across all listening points of all transects) was identified. Models were fitted with a binomial family function to account for the type of data used for this model.
- 4.2.116 The results have been tabulated and presented graphically (where appropriate) to clearly show the relationship between bat activity in terms of abundance and species diversity and distance from the proposed road.

Limitations

- 4.2.117 Transects 2 and 4 were only walked in one direction for both surveys due to surveyor error. Transect 2 was only surveyed walking towards the road and Transect 4 was only surveyed walking away from the road. This should not have an impact on results as the two transects will balance each other out accounting for variation in bat activity.
- 4.2.118 Three surveys were started at sunset, and as a result finished earlier, deviating from the methodology as described in Berthinussen and Altringham (2015) due to surveyor error. This may have led to a bias towards earlier emerging bats and variation in bat activity comparing the two surveys on each transect may have been missed.
- 4.2.119 Weather for the majority of surveys was good, apart from the July survey for Transect 4, where it was suboptimal due to strong winds. This is not thought to have affected the results.

Manual / automatic activity surveys

- 4.2.120 Static (automatic) and traditional transect (manual) surveys followed guidance as outlined in Collins (2016) and were designed to identify foraging and commuting habitat used by bats. The locations of both static detectors and transects were identified in 2017 through aerial imagery and scoping surveys.
- 4.2.121 There were 16 transects identified for surveys in 2020 (see Figure 5). These were surveyed once a month between May and October at dusk with each receiving one dawn survey in August. Dusk transects were started at sunset and lasted for at least two hours after sunset. Dawn transects started at least two hours before sunrise and continued until sunrise. For details on transect survey metadata see Annex M.
- 4.2.122 The surveys consisted of two suitably qualified ecologists walking the length of the transect and recording bat activity at listening points situated along the route. Starting points were varied for each transect per month according to a pre-determined schedule. Five-minute stationary spot checks were made at periodic intervals along the transect route. If for any reason a specific listening point could not be accessed, then the nearest location of similar habitat was used.

- 4.2.123 Each surveyor was equipped with an EMT2 bat detector, with auto identification, and an iPad mini to record bat activity during the survey. Echo Meter Touch bat detector settings were: Trigger sensitivity – High; Audio division ratio 1/20; Nightly session mode – On; Real time ID – Off. A bat pass was considered as up to 10 seconds of continuous activity.
- 4.2.124 Two static detectors were deployed at fixed locations on each traditional transect to record bat activity remotely (see Figure 5). Additionally, four Song Meter 2 (SM2) detectors (SM2.1-SM2.4) were added to transects in areas where barbastelle calls were recorded in previous survey years (2017-2018).
- 4.2.125 Statics were deployed for a minimum of five nights per month (May to October) and were timed to automatically record bat calls 30 minutes before sunset to 30 minutes after sunrise. This was based on habitat being classed as having moderate suitability for bats.
- 4.2.126 Data from the static detectors was run through Kaleidoscope pro auto-id to automatically identify bat species. A manual check of the data was then carried out, to confirm the auto-identification and also identify additional species present within the calls. This was carried out for all files apart from those identified as noise, common pipistrelle, or soprano pipistrelle. Typically, for these files the first 10% of files per auto-id group per night were checked. The total number of calls per species per night per detector were then calculated. A correction factor was then applied to the totals to account for the results from the 10% of files checked for noise, common pipistrelle and soprano pipistrelle. Quartile ranges were calculated per species to determine levels of activity.
- 4.2.127 Activity indexes were based on nightly number of calls and were classed per quartile:
- Below the lower quartile was classed as low
 - Equal to or greater than lower quartile to below median was classed as low-to-moderate
 - Equal to median to below upper quartile was classed as moderate-to-high
 - Equal to or greater than upper quartile was high
- 4.2.128 Transect data was analysed using the same methodology as the static detectors (described above) with the number of passes and species indicating the activity level per transect.

Survey Limitations

- 4.2.129 Static detectors experienced a number of faults throughout the survey season in 2020 resulting in some months not having any recordings for that location. See Annex N for details on detectors deployment and faults.
- 4.2.130 Access restrictions in May meant some detectors were deployed late so over ran into the following month by a night or two; this is not likely to have impacted on results.

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- 4.2.131 Several static locations had access refused for the month of May (SD8.1, SD8.2, SDG.1, SDH.1, SDH.2) and September (SM2.1 and SM2.4). This was outside the control of the survey team but as most of these sites had successful surveys for the rest of the season this is not thought to have impacted on results.
- 4.2.132 Three detector locations had only a third of the recommended surveys (SD1.1, SD5.1, SDI.1) and five detector locations had only 50% of the recommended surveys (SD4.1, SD7.1, SD7.2, SM2.3 and SM2.4). This was through a combination of variables throughout the survey season, including equipment failure in the field, data errors when uploading, access restrictions and reduced number of days recorded for the month. For details, see Annex M.

General survey limitations

- 4.2.133 No bat surveys were undertaken in April 2020 due to the Covid-19 pandemic. This is not considered likely to have significantly constrained the baseline given the robust amount of bat data collected for bats between 2019 and 2021.
- 4.2.134 The findings of this report represent the professional opinion of qualified ecologists and do not constitute professional legal advice. The client may wish to seek professional legal interpretation of the relevant wildlife legislation cited in this document.
- 4.2.135 This report should be read in full and excerpts may not be representative of the findings.
- 4.2.136 This report has been prepared exclusively for Jacobs' client and no liability is accepted for any use or reliance on the report by third parties.

5 Results

5.1 Desk study

Designated sites

- 5.1.1 There are no Special Areas of Conservation designated for bats within the 30km study area.

Bat records

- 5.1.2 Due to the large numbers of records returned, only those records that were recorded in the previous 15 years have been included as these represent the bat species most likely to be impacted by the proposed scheme. For the purpose of bat records the study area used was DF2 of the POL.
- 5.1.3 The desk study returned a total of 10 bat species (barbastelle, brown long-eared bat, common pipistrelle, Daubenton's bat, Leisler's bat, Nathusius' pipistrelle, Natterer's bat, noctule, serotine and soprano pipistrelle) and four groups of bats which have not been identified down to species level (Pipistrelle species, *Myotis* species, long-eared bat species and unknown bat species) within a 5km search radius of the proposed scheme (Table 5.1).
- 5.1.4 Nine of these bat species have been recorded as roosting within a 5km search radius of the proposed scheme, including barbastelle, serotine and Natterer's bat (Figure 1). All four of the bat groups also recorded roosts within 5km. Eighteen hibernation roosts and 50 maternity roosts were returned. The closest of these high conservation value roosts is located 1.1km from the proposed scheme and is both a hibernation roost for long-eared bat species and a hibernation roost for common pipistrelle. For records shown as being over 5km away, this is due to the large size of the grid square which, for confidentiality reasons, is provided by the biological records centres for sensitive species.
- 5.1.5 The closest bat record is of a common pipistrelle within 12.6m of the POL boundary. The closest recorded roost (including low conservation value roosts) was a common pipistrelle roost located 177.9m from the POL boundary.
- 5.1.6 There is a hotspot of bat activity recorded south-west of junction 25 (TL 9140 2330), within 40.6m of the proposed scheme. This location returned records of eight bat species and two bat groups. No roosts were recorded in this area.
- 5.1.7 A search of MAGIC for EPS records returned 20 protected species bat licence applications within 5km of the proposed scheme.

Table 5.1 Bat and bat roost records within 5km of the POL boundary

Bat species	Total number of records	Date of most recent record	Grid reference of closest bat record	Distance of closest bat and/or roost record to proposed scheme
Barbastelle	67 records including 3 roost records (2 hibernation roosts, 1 not specified)	2020	TL 850 156	963.6m 6.0km roost
Brown long-eared bat	310 records including 47 roost records (11 maternity roosts, 9 hibernation roosts and 3 feeding roosts; remaining not specified)	2020	TL 91400 23300	40.6m 777.9m roost
Common pipistrelle	750 records including 54 roost records (3 maternity roosts)	2019	TL 92200 24100	12.6m 177.9m roost
Daubenton's bat	79 records including 3 hibernation roosts	2020	TL 91400 23300	40.6m 5.02km roost
Leisler's bat	26 records (no roosts)	2019	TL 91400 23300	40.6m
Nathusius' pipistrelle	22 records including 4 roost records (no specified type)	2019	TL 8510 1565	1.0km 6.8km roost
Natterer's bat	75 records including 18 roost records (6 hibernation and 4 maternity roosts)	2020	TL 91400 23300	40.6m 2.9km roost
Noctule	94 records including 1 maternity roost	2019	TL 9140 2330	40.6m 5.3km roost
Serotine	44 records including 7 roost records (no specified type)	2019	TL 9140 2330	40.6m 3.4km roost

Bat species	Total number of records	Date of most recent record	Grid reference of closest bat record	Distance of closest bat and/or roost record to proposed scheme
Soprano pipistrelle	434 records including 61 roost records (26 maternity roosts)	2019	TL 9140 2330	40.6m 1.2km roost
Long-eared bat species	26 records including 23 roost records (1 hibernation and 1 maternity roost)	2018	TL 83500 14700	524.6m roost
Myotis species	7 records including 1 roost record (no specified type)	2018	TL 9140 2330	40.6m 2.5km roost
Pipistrelle species	44 records including 26 roost records (4 maternity roosts)	2016	TL 91400 23300	40.6m 897.0m roost
Unknown bat species	84 records including 12 roost records (no specified types)	2018	TL 9140 2331	82.9m 1.2km roost

5.2 Field study

Ground based bat roost assessments of trees

- 5.2.1 A total of 550 trees were identified for bat roost assessment during the 2019 to 2021 ground-based surveys (this includes all roosts identified during surveys between 2016 and 2018; those that remained in the 2019-2021 survey area were assumed to still be active roosts). Table 5.2 outlines the number of trees assessed within each suitability category. The locations of the trees subject to ground-based assessments are shown in Figure 2.
- 5.2.2 The ground assessments covered approximately 90% of the study area. Access limitations restricted the survey effort for the remaining 10% of trees within the area.
- 5.2.3 The raw data for bat roost suitability of individual trees is shown in Annex B.

Table 5.2 Number of trees identified within the study area

Tree suitability	Total number of trees
Roost	4
High	56
Moderate	232
Low	251
Negligible	7
Total	550

Gas Diversion and Inworth Road

- 5.2.4 A total of 41 trees were identified for bat roost assessment during the 2021 ground-based assessment surveys. Table 5.3 outlines the number of trees assessed within each suitability category. The locations of the trees subject to ground-based assessments are shown in Figure 2.
- 5.2.5 Eight trees have been identified as requiring emergence and re-entry surveys; sixteen trees require climbing surveys; nine trees require ground endoscope surveys; and the remaining eight trees will be subject to pre-work checks. Further surveys are due to take place during summer 2022 where required (following selection of a preferred route for the gas main diversion not all trees may require survey).
- 5.2.6 The raw data for bat roost suitability of individual trees is shown in Annex O.

Table 5.3 Number of trees identified within Gas Diversion and Inworth Road area

Tree suitability	Total number of trees
Roost	0
High	7
Moderate	26
Low	8
Negligible	0
Total	41

Tree climbing, ground endoscope and hibernation surveys

- 5.2.7 Of the 292 trees assessed as moderate potential, high potential or a confirmed roost tree, 62 trees were deemed unsafe or unsuitable for climbing or ground endoscope surveys (and so were subject to dawn emergence / dusk re-entry surveys).

- 5.2.8 Climbing or ground endoscope surveys of the remaining 230 trees were undertaken during 2020 and 2021. During the tree climbing and ground endoscope surveys trees were either upgraded or downgraded as necessary depending on the survey findings.
- 5.2.9 Of these 230 trees subject to tree climbing or ground endoscope surveys; seventy were downgraded to low or negligible potential following the first endoscope survey and so were removed from further surveys as per the guidance Collins (2016). Five high potential trees were also downgraded to moderate potential reducing the survey effort for these trees. Several trees were upgraded including one low potential tree being upgraded to moderate; ten trees being upgraded to high and two additional roosts being identified. The number of trees subject to either tree climbing or ground endoscope surveys and the subsequent changes to assigned bat tree potential are shown in Table 5.4.

Table 5.4 Changes to assigned bat potential based on climbing and ground endoscope surveys in 2020 and 2021

Tree potential	Climb			Ground endoscope			Total
	Down-graded	No change	Upgraded	Down-graded	No change	Upgraded	
Roost	N/A	3	2	N/A	0	0	5
High	0	24	7	0	5	3	39
Moderate	3	55	1*	2	55	0	116
Trees downgraded to low or negligible following first endoscope survey							70
Trees unsafe or unsuitable to climb or ground endoscope assigned to dusk emergence / dawn re-entry surveys							63
Low or negligible trees identified from ground-based assessment *(minus one tree upgraded based on reassessment)							257
Total							550

- 5.2.10 The results from the climbing and ground endoscope surveys have resulted in an overall decrease in trees with bat potential across the proposed scheme with many trees being downgraded. Table 5.5 shows the final number of trees with bat potential and outlines the surveys completed, or to be completed, to characterise their use by bats.

Table 5.5 Trees with bat potential and methods used to characterise use and suitability

Tree potential	Tree climbing or ground endoscope	Emergence / re-entry surveys	Pre-construction checks	No further survey	Total
Roost	5	4	N/A	N/A	9
High	39	8	N/A	N/A	47
Moderate	116	50	N/A	N/A	163
Low	N/A	N/A	298	N/A	298
Negligible	N/A	N/A	N/A	18	18
Total	157	62	298	18	550

- 5.2.11 In total nine bat tree roosts were identified during surveys in 2020 and 2021, including those previously confirmed roosts brought forward from 2016-2018 which remained in the updated survey area (Table 5.6, Figure 6). Tree emergence / re-entry survey results have been summarised in the following section.
- 5.2.12 A total of 105 trees had hibernation surveys undertaken in either January, February or March 2020 or 2021. Each tree received just one survey during this time. No hibernation roosts were identified.

Table 5.6 Summary of confirmed bat tree roosts

Tree number	Tree species	Survey technique	Number of surveys conducted	Species	Count of individuals (max count per survey found in roost)	Roost status	Potential roost feature (PRF) type	Limitations/ further comments	Location
733	Pedunculate oak (<i>Quercus robur</i>)	Emergence/ re-entry surveys in 2017 and 2021	3 in 2017	Soprano pipistrelle	4 recorded in August 2017 0 recorded in 2021	Possible mating roost or daytime roost based on survey data	Lifted bark	Only one survey was conducted during optimum period mid-May to August 2017 (07/08/17) and feature was unable to be endoscoped . Bat emergence recorded in August.	Online within 25m of the road
623	Holm oak (<i>Quercus ilex</i>)	Emergence/ re-entry and climbing survey in 2017	2 in 2017; Hibernation in 2021 (26/01/21); 2 inspections	Soprano and common pipistrelle	2 recorded in August 2017 (1 common pipistrelle and 1	Day roost	Wound	Emergence recorded in August 2017. No signs of bats identified during	Offline within 100m of the road

Tree number	Tree species	Survey technique	Number of surveys conducted	Species	Count of individuals (max count per survey found in roost)	Roost status	Potential roost feature (PRF) type	Limitations/ further comments	Location
			in 2020 (17/06/20; 19/08/20)		soprano pipistrelle)			surveys undertaken in June and August 2020.	
634	Oak (<i>Quercus</i> sp.)	Climb	2 inspections in 2017 (06/09/17 & 04/10/17); Hibernation survey on 26/01/20; 2 inspections in 2020 (17/06/20; 19/08/20).	Soprano pipistrelle	5 (4 females and one male)	Mating roost	Bat box	Two inspections due to seasonal constraints and access issues. No survey during May– August 2017 but no evidence of bats was found during the first check in September suggesting that there was only limited usage prior	Offline within 50m

Tree number	Tree species	Survey technique	Number of surveys conducted	Species	Count of individuals (max count per survey found in roost)	Roost status	Potential roost feature (PRF) type	Limitations/ further comments	Location
								to bats being found in early October 2017. Bats were recorded during mating period as defined by BTHK. A hibernation check was undertaken in 2020 and two inspections undertaken in June and August 2020 with no evidence of bats found.	

Tree number	Tree species	Survey technique	Number of surveys conducted	Species	Count of individuals (max count per survey found in roost)	Roost status	Potential roost feature (PRF) type	Limitations/ further comments	Location
1692	Oak	Ground endoscope	1 in 2017 (05/10/17)	Soprano pipistrelle	1 confirmed. Potential for more based on PRF size.	Unable to confirm based on survey data	Tear out	One survey only was undertaken in October 2017 due to access constraints. One bat recorded but PRF could not be fully inspected due to position of bat.	Offline within 50m of borrow pit
79	White willow (<i>Salix alba</i>)	Climb	3 inspections in 2020 and 1 in 2021 (1/03/20; 27/07/20; 19/08/20 and 29/06/21)	Brown long-eared bat	1	Transitional roost	Woodpecker hole	Surveyed four times at appropriate times of the year. Bat found only once during this time.	Offline within 50m of the road

Tree number	Tree species	Survey technique	Number of surveys conducted	Species	Count of individuals (max count per survey found in roost)	Roost status	Potential roost feature (PRF) type	Limitations/ further comments	Location
Untagged-ex566880-120121-1	Alder (<i>Alnus glutinosa</i>)	Climb	3 inspections 2021 (08/06/21, 25/06/21 and 29/06/21) and hibernation survey (12/01/21)	Brown long-eared bat	3 adults and one pup	Maternity roost	Woodpecker hole	Bats found roosting in apex of feature. At least three adults and pup visible, possibly more.	Online within 25m of the road
17	Beech (<i>Fagus sylvatica</i>)	Emergence/re-entry	3 surveys in 2021 (12/05/2021 03/06/2021, and 22/06/2021)	Soprano pipistrelle	1	Day roost	Woodpecker hole	Surveyed three times at appropriate times of the year.	Offline - 50m Buffer from road
1149	Aspen (<i>Populus tremuloides</i>)	Emergence/re-entry	3 inspections in 2021 (26/05/2021, 15/06/2021 and 07/07/2021)	Soprano pipistrelle	1	Day roost	Woodpecker hole	Surveyed three times at appropriate times of the year.	Online - 25m Buffer from road

Tree number	Tree species	Survey technique	Number of surveys conducted	Species	Count of individuals (max count per survey found in roost)	Roost status	Potential roost feature (PRF) type	Limitations/ further comments	Location
69	Beech	Emergence/ re-entry	3 inspections in 2021 (05/05/2021, 08/07/2021 and 28/07/2021)	Soprano pipistrelle	1	Day roost	Woodpecker hole	Surveyed three times at appropriate times of the year.	Offline - 100m Buffer from POL

Tree emergence / re-entry surveys

- 5.2.13 A total of 63 trees were surveyed within the survey area during the summer of 2021 following best practice guidelines. All trees identified as requiring emergence / re-entry surveys had surveys completed.
- 5.2.14 Three tree roosts were identified as a result of the 2021 emergence / re-entry surveys. All three trees are located within 50m of the proposed scheme and were identified as day roosts for soprano pipistrelles (Table 5.7).
- 5.2.15 A single soprano pipistrelle was recorded emerging from each of the confirmed roosts: T17, T1149, and T69 (Table 5.7).
- 5.2.16 At least 10 bat species were recorded incidentally during the emergence and re-entry surveys, including: brown long-eared bat, common pipistrelle, Daubenton's bat, Leisler's bat, Nathusius' pipistrelle, Natterer's bat, noctule, serotine, soprano pipistrelle and unidentified Myotis species (see Annex D for full results).
- 5.2.17 T1224 was reassessed during a dawn survey and downgraded from moderate to low potential. Thus, further surveys were not required. This tree will now be subject to pre-construction checks.

Table 5.7 Summary of confirmed bat roosts in trees identified during emergence / re-entry surveys in 2021

Tree ID	Tree species	Bat species	Number of individuals	Roost classification
17	Beech	Soprano pipistrelle	1	Day roost
1149	Aspen	Soprano pipistrelle	1	Day roost
69	Beech	Soprano pipistrelle	1	Day roost

Ground-based bat roost assessments of buildings

- 5.2.18 A total of 1033 buildings were identified within the survey area for bat roost assessment. As explained in the methodology (section 4.2), the number of buildings subject to ground-based assessments was later streamlined. After this process, only 734 of the 1033 buildings were brought forward for further survey / inclusion in the results.
- 5.2.19 Table 5.8 outlines the number of buildings within each suitability category. The locations of the buildings subject to ground-based assessments are shown in Figure 3.
- 5.2.20 144 buildings required further emergence / re-entry surveys, thirty required both emergence / re-entry surveys and hibernation surveys, and nine buildings required only hibernation surveys. No further surveys were required for the remaining 551 buildings.
- 5.2.21 The raw data for bat roost suitability of individual buildings is shown in Annex E.

Table 5.8 Number of buildings assessed during the ground-based assessment, along with their bat suitability

Building suitability	Total number of buildings
Roost	40
High	12
Moderate	40
Low	91
Negligible	551
Total	734

Gas Diversion and Inworth Road

- 5.2.22 A total of four buildings were identified for bat roost assessment during the 2021 ground-based assessment surveys. Table 5.9 outlines the number of buildings assessed within each suitability category. The locations of the buildings subject to ground-based assessments are shown in Figure 3.
- 5.2.23 Three of the buildings (B10001, B10004 and B10003) will be subject to emergence and re-entry surveys. Such surveys are due to take place during summer 2022. One building (B10002) received a suitability grade of 'Negligible'. No further survey is required for this building.
- 5.2.24 The raw data for bat roost suitability of individual buildings is shown in Annex O.

Table 5.9 Number of buildings identified within Gas Diversion and Inworth Road area

Building suitability	Total number of buildings
Roost	0
High	1
Moderate	1
Low	1
Negligible	1
Total	4

Building emergence / re-entry surveys

- 5.2.25 Emergence and re-entry surveys on buildings with low, moderate, or high suitability and buildings with previously confirmed roosts were completed during the 2020 and 2021 survey period.

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- 5.2.26 A total of 174 buildings were identified within the survey area that required building emergence / re-entry surveys. Forty-eight of the buildings encountered access issues - twenty-seven of the buildings were refused access entirely and the remaining twenty-one were only partially accessed. Due to on-going boundary changes, a further 15 buildings were later scoped out.
- 5.2.27 Of the 132 buildings surveyed (or partially surveyed), forty confirmed roosts were recorded, see Table 5.10 and Figure 6.
- 5.2.28 Survey metadata is presented in Annex F. Metadata includes buildings that were initially subject to emergence / re-entry surveys but scoped out due to boundary changes. Such buildings were not included in the above results section.

Table 5.10 Summary of confirmed bat roosts in buildings identified during emergence / re-entry surveys

Building ID	Emergence / Re-entry	Species and Max Counts	Roost classification	Date	Notes
B107	Re-entry	2 x soprano pipistrelle	Day roost	01/07/2020	Access issues
B113	Emergence	1 x Common pipistrelle	Day roost	03/08/2021	N/A
B118	Emergence	1 x Common pipistrelle, 1 x Soprano pipistrelle	Day roost	24/08/2020 08/07/2021	Access issues
B1249	Re-entry	1 x Noctule	Day roost	29/07/2020	N/A
B1250	Emergence	1 x Soprano pipistrelle	Day roost	03/09/2020 25/08/2020	N/A
B1252	Emergence and re-entry	1 x Soprano pipistrelle	Day roost	08/07/2020	N/A
B1291	Emergence	1 x Common pipistrelle	Day roost + hibernation roost	24/06/2020	Access issues. 1 x BLE (hibernating) during GBA inspections 27/01/20
B1385	Re-entry	2 x Common pipistrelle	Day roost	15/08/2017	Two bats also seen during bat box check 04/10/2017
B1392	Emergence	1 x Soprano pipistrelle	Day roost	14/07/2020 27/07/2020	N/A

Building ID	Emergence / Re-entry	Species and Max Counts	Roost classification	Date	Notes
B1393	Re-entry	5 x Soprano pipistrelle (2017)	Day roost	31/08/2017	Access issues
B1395	Emergence	1 x Soprano pipistrelle	Day roost	16/07/2020	Access issues
B1397	Emergence	1 x Soprano pipistrelle	Day roost	20/07/2020	Access issues
B1447	Emergence	1 x Soprano pipistrelle	Transitional roost	01/09/2020	Access issues
B1455	Emergence	3 x Soprano pipistrelle	Day roost	26/07/2017 07/08/2017 01/09/2017	Access issues
B1463	Re-entry	1 x Common pipistrelle	Day roost	16/09/2020	N/A
B1522	Emergence and Re-entry	3 x Common pipistrelle, 1 x Soprano pipistrelle	Day roost	20/07/2020 04/08/2020	N/A
B1543	Emergence	1 x <i>Myotis</i> sp. (2021) and 1 x Noctule (2017)	Day roost + hibernation roost	09/08/2017 28/07/2021	Minor Common pipistrelle and Soprano pipistrelle hibernation roost based on static data. See relevant section
B1549	Emergence	2 x Soprano pipistrelle	Transitional roost	03/09/2020	Access issues

Building ID	Emergence / Re-entry	Species and Max Counts	Roost classification	Date	Notes
B1585	Emergence	2 x Soprano pipistrelle	Day roost	07/07/2021 17/08/2021	N/A
B1679	Emergence and Re-entry	3 x Common pipistrelle (2017)	Day roost	16/05/2017 03/08/2017 16/05/2017	Access issues
B1928	Emergence	2 x Common pipistrelle, 1 x Soprano pipistrelle	Day roost	17/08/2020 03/08/2021	N/A
B1928c	Emergence	1 x Common pipistrelle	Day roost	20/08/2020	N/A
B1997	Re-entry	1 x Soprano pipistrelle	Day roost	02/07/2020	N/A
B2042	Emergence and Re-entry	5 x Soprano pipistrelle, 2 x Common pipistrelle	Day roost	13/05/2021 27/05/2021 01/09/2021	N/A
B2046	Emergence	51 x Soprano pipistrelle, 2 x Common pipistrelle	Maternity roost, (Soprano pipistrelle) Day roost (Common pipistrelle)	27/05/2021 31/08/2021	Incidental emergence of 51 x Soprano pipistrelle recorded when surveyor was observing adjacent building 27/05/2021
B2937	Emergence	1 x Soprano pipistrelle	Transitional roost	21/09/2021	N/A

Building ID	Emergence / Re-entry	Species and Max Counts	Roost classification	Date	Notes
B339	Re-entry	1 x Common pipistrelle	Day roost	05/08/2021	Access issues
B3621	Emergence and Re-entry	9 x Soprano pipistrelle 2 x Common pipistrelle	Maternity roost	25/05/2021 04/08/2021 23/08/2021	N/A
B3631	Emergence	1 x Common pipistrelle	Day roost	07/07/2021	N/A
B3638	Emergence	1 x Common pipistrelle	Day Roost	17/06/2021	N/A
B3648	Emergence	Unknown	Day roost + hibernation roost	03/08/2021	Unidentified during emergence. Anecdotal evidence of bats hibernating from landowner.
B3679	Re-entry	1 x Common pipistrelle	Transitional roost	22/09/2021	Access issues
B3709	Re-entry	3 x Common pipistrelle	Day roost	24/06/2021 11/08/2021	N/A
B3739	Emergence and Re-entry	15 x Soprano pipistrelle, 4 x BLE	Maternity roost (Soprano pipistrelle) Day roost (BLE)	06/07/2021 18/08/2021 09/09/2021	N/A
B631	Emergence	1 x Soprano pipistrelle	Day roost	24/06/2020	Access issues

Building ID	Emergence / Re-entry	Species and Max Counts	Roost classification	Date	Notes
B634	Emergence	1 x Common pipistrelle	Day roost	23/06/2020	Access issues
B637	Re-entry	1 x Soprano pipistrelle	Day roost	22/07/2020	N/A
B73	Emergence	5 x Common pipistrelle	Maternity (precautionary)	24/05/2021	N/A
B923	Emergence	2 x Common pipistrelle	Day roost	02/09/2021	Access issues

Building backtracking and forward-tracking surveys

- 5.2.29 Following the ground based-assessments, nineteen high density residential areas were identified for backtracking and forward-tracking surveys.
- 5.2.30 Out of the 19 high density residential areas identified for backtracking and forward-tracking surveys, two areas were identified as having negligible bat suitability, four areas were identified as having low bat suitability, one area identified as having low – moderate bat suitability and twelve areas identified as having moderate bat suitability.
- 5.2.31 Table 5.11 outlines the residential areas and their overall bat suitability.

Table 5.11 Summary of building backtracking and forward-tracking areas and assessment of bat suitability

Area	Bat suitability
Market Lane	Negligible
Bakers Way	Negligible
New Lane	Low
Allan Way	Low
The Rookeries	Low
Freebourne Industrial Estate	Low
London Road	Low - moderate
Hodges Holt / Maldon Drive	Moderate
Benton Close	Moderate
The Crescent	Moderate
Old London Road	Moderate
Hedgelands	Moderate
Station Road	Moderate
The Pines	Moderate
Woodland Close	Moderate
Gleneagles Way	Moderate
Olivers Drive	Moderate
Foxmead Close	Moderate
Pantile Close / Maldon Road	Moderate

- 5.2.32 All surveys were completed in favourable conditions.
- 5.2.33 Five bat roosts were identified during the backtracking and forward-tracking surveys: four maternity roosts and one transitional / occasional roost.
- 5.2.34 Three of the four maternity roosts and the one transitional / occasional roost were identified as common pipistrelle roosts. The species using the fourth maternity roost could not be identified as evidence of roost was through droppings found during a backtracking and forward-tracking survey.
- 5.2.35 Table 5.12 outlines the roosts found during the backtracking and forward-tracking surveys.

Table 5.12 Summary of roosts found during backtracking and forward-tracking surveys

Back-tracking route ID	Bat species	Number of individuals	Roost classification	Date	Notes
The Crescent	Common pipistrelle	7	Maternity	19-20/05/2021 15-16/06/2021	Roost found at apex of B1665. Two common pipistrelle emergences in May. 7 <i>P. pip</i> re-entries in June.
The Pines	Common pipistrelle	1	Day roost	28-29/06/2021	Re-entry of 1 common pipistrelle at B2974.
Woodland Close	Common pipistrelle	4	Day roost	11-12/05/2021	Common pipistrelle roost at B379a. B379a is over 100m from the proposed scheme.
Woodland Close	Common pipistrelle	1	Day roost	09-10/06/2021	Bat droppings found in garage (B350) during transect – species unknown. One potential common pipistrelle re-entry observed in June.
Olivers Drive	Common pipistrelle	22	Maternity	25-26/05/2021 22-23/06/2021	Large <i>common</i> pipistrelle roost at B716 (along transect 2) in May and June. A peak number of 22 emergences was observed in June.

5.2.36 Survey metadata is presented in Annex G.

Building hibernation surveys

- 5.2.37 A total of thirty-nine buildings were identified as requiring hibernation surveys within the survey area. Nineteen of the buildings encountered access issues, with sixteen buildings being refused access entirely. Twenty-three accessible (or partially accessible) buildings were subject to hibernation surveys in the form of endoscopy or automated (static) bat detector surveys.
- 5.2.38 Of the buildings assessed, four were previously categorised as having high suitability to support roosting bats, six as moderate suitability and one with low suitability. Twelve buildings were recorded as confirmed roosts.
- 5.2.39 Endoscopy surveys were carried out on twelve buildings and automated bat detectors were deployed in five buildings. Additionally, six buildings were subject to both endoscopy and automated bat detector surveys.
- 5.2.40 Hibernation data was analysed by named ecologist, Christopher Kerfoot, to determine whether evidence was sufficient to classify buildings as a hibernation roost. A precautionary approach was taken and took into consideration: how likely acoustic data occurred from inside the building; the building type / features; the bat species identified; temperature and relative humidity; and the surrounding habitat to support winter foraging.
- 5.2.41 Two buildings surveyed during the 2020/2021 season were recognised to support hibernating bats –B1543 and B1738a. Common pipistrelle and soprano pipistrelle calls were detected on static detectors for B1543, and numerous species calls detected at B1738a which is a well.
- 5.2.42 Two buildings that were refused access – B1291 and B3648 – were also classified as hibernation roosts. Whilst conducting a ground-based assessment on building 1291 in January 2020, one hibernating brown long-eared bat was found. Building 3648 was determined as a hibernation roost based on anecdotal evidence of hibernating bats from the landowner, the species are however unknown (see Table 5.13 and Figure 6).
- 5.2.43 Survey metadata is presented in Annex H. Metadata includes buildings that were initially subject to hibernation surveys but scoped out. Such buildings were not included in the above results section.

Table 5.13 Hibernation roosts

Feature/ID	Species	Evidence	Notes
B1543	Common pipistrelle Soprano pipistrelle	3 x Common pipistrelle calls and 1 x Soprano pipistrelle call during the survey period.	Building classed as a minor hibernation roost based on Common pipistrelle and Soprano pipistrelle calls.
B1738a	Undetermined	The detector in the well recorded a variety of calls including from <i>Myotis</i> sp., <i>pipistrellus</i> sp. and brown long eared bat. However, the top of the well was open so	Building classified precautionarily as a hibernation roost of undetermined species.

Feature/ID	Species	Evidence	Notes
		some of these calls may well have come from outside. On a precautionary basis it was considered that some of these calls may have come from hibernating bats inside the well so it has been classified as a hibernation roost.	
B1291	Brown long-eared bat	B1291 has been classified as a hibernation roost as one hibernating BLE was found during GBA inspections (27/01/2020)	Access was refused for 2020/2021 further surveys.
B3648	Undetermined	B3648 has been classified as a hibernation roost based on anecdotal evidence from landowner. Species unknown.	Access was refused for 2020/2021 further surveys.

Ground-based bat roost assessments of bridges and culverts

- 5.2.44 Out of the 29 structures identified within the survey area, 18 of these were split into two sections, as they could not be surveyed as a whole; for example, Little Braxted Lane Overbridge BE05 is one structure but with east and west sides. Therefore 47 structure sections were subject to a ground-based assessment (see Table 5.14 and Figure 4).
- 5.2.45 There were no confirmed or high suitability structure sections recorded during the surveys. Nineteen structure sections were recorded as having negligible suitability to support roosting bats. Seventeen structure sections were recorded as having low suitability and nine structure sections were recorded as having moderate suitability. Two structures could not be surveyed. A summary of the structure results is shown in Table 5.14 and the locations of the structures are shown in Figure 4. Descriptions of the structures are presented in Annex I.

Table 5.14 Number of structure sections assessed during the ground-based assessment, along with their bat suitability

Bat roost potential	Number of structure sections
Unknown (not surveyed)	2*
Negligible	19
Low	17
Moderate	9
High	0
Confirmed	0
Total	47

* Structures not surveyed recorded in limitations (section 4.2)

Bridges and culverts emergence / re-entry surveys

- 5.2.46 In total, 23 emergence / re-entry surveys were carried out in 2020 for ten structures (14 structure sections) and two surveys were undertaken on Benton Bridge BE11 north and south in June 2021. Records of bats commuting, foraging, or socialising were recorded at all structures with the exception of Threshelsford Bridge BE23. Results of all raw data are in Annex J.
- 5.2.47 As a result of these surveys, one bridge structure; Benton Bridge (split into two sections; BE11 North and BE11 South) was confirmed as a bat roost, as there were emergences from both the north and the south sides (Figure 6).
- 5.2.48 Common and soprano pipistrelles were recorded emerging from BE11 North: Benton Bridge in 2020 and 2021, and roosting common pipistrelle were also recorded in 2021 within BE11 South: Benton Bridge (Table 5.15).

Table 5.15 Summary of 2020 and 2021 surveys identifying confirmed bat roosts in bridges and culverts



Structure ID	Location of roost	Potential Roost Feature (PRF) type	Survey dates	Survey type	Evidence of bats	Count of individuals (max count per survey)	Roost status
BE11 North; Benton Bridge	TL 82482 13392	Wingwall: A longitudinal crevice is present on the north wingwall, where the brickwork of the wingwall meets the concrete deck.	18/08/2020	Dusk	Yes – one soprano pipistrelle emergence at 20:20 straight out from the north wing wall on west side very close to edge of ivy at corner of bridge entrance.	1	Unable to determine based on survey data
BE11 North; Benton Bridge	TL 82482 13392	as above	01/09/2020	Dusk	Yes – one common and two soprano pipistrelle seen emerging from the northern entrance of the bridge and commuting north at 20:13 and	3	Day roost



Structure ID	Location of roost	Potential Roost Feature (PRF) type	Survey dates	Survey type	Evidence of bats	Count of individuals (max count per survey)	Roost status
					20:14. Neither a sighting nor a recording was picked up from SL02 who was surveying the southern entrance. It can therefore be assumed the bats emerged from the bridge.		
BE11 North; Benton Bridge	TL 82482 13392	as above	14/06/2021	Dusk	Two soprano pipistrelles emerged from wingwall and six common pipistrelles emerged from structure.	2 & 6	Day roosts
BE11 South; Benton Bridge	TL 82478 13342	as above	14/06/2021	Dusk	One common pipistrelle emerged from the wingwall abutment under the bridge.	1	Day roost

Crossing point surveys

5.2.49 The five crossing points and their locations are detailed in Table 5.16. Figure 5 shows the locations of the crossing points alongside the A12 and the surrounding habitats. Crossing point survey information, including timing and weather is presented in Annex K.

Table 5.16 Crossing point locations and habitat features

Crossing point number	Grid reference	Habitat feature	Photograph
CP-A	TL74617 09873	Stream underpass	
CP-B	TL7833111499	River underpass	
CP-C	TL 82860 13726	Stream underpass	

Crossing point number	Grid reference	Habitat feature	Photograph
CP-D	TL8430016733	Hedgerow	
CP- E	TL 8772 1905	Stream underpass	

- 5.2.50 Crossing point surveys were undertaken for longer than the standard 60-minute duration specified in Berthinussen and Altringham (2015). Dusk surveys commenced 15 minutes prior to sunset and continued for an hour and half after sunset.
- 5.2.51 During the crossing point surveys, a total of 635 passes by common pipistrelles, 121 passes by noctule, nine passes by unidentified *Pipistrellus* species, 59 passes by *Myotis* bat species and 12 passes from bats where the species was not identified were recorded.

- 5.2.52 Bats were recorded crossing the route of the proposed new road (Table 5.17). The number of bat passes does not necessarily correlate with number of individual bats crossing the feature; a single bat can cross a feature multiple times during foraging.

Table 5.17 Number of bat species recorded crossing the proposed road at crossing point survey locations

Crossing point location	Common pipistrelle	Soprano pipistrelle	<i>Myotis</i> sp.	Brandt's bat / Whiskered bat	Daubenton's bat	Noctule	Unknown	Total
CP-A	2	1	11	2	0	0	0	16
CP-B	7	6	2	0	0	3	0	18
CP-C	12	18	1	0	1	0	1	33
CP-D	9	12	0	0	0	2	0	23
CP- E	35	57	0	0	1	0	0	93
Total	65	94	14	2	2	5	1	183

- 5.2.53 Table 5.18 and Graph 5.1 show the heights at which different bat species were recorded crossing the proposed road at the crossing point locations.
- 5.2.54 Heights of bats crossing the scheme varied between crossing point locations. Locations CP-A, CP-B, CP-C and CP-E were all located underneath the existing A12 (which is considered to be at 0m height; therefore bats passing under the A12 can be recorded at a negative value height) while location CP-D was located in a field where an offline section of new road is proposed. The average height of all bat species recorded crossing at location CP-D was 4.01m which is below the critical height of 5m: the height below which bats are considered to be 'unsafe' and at risk of collision (Berthinussen and Altringham, 2015). Average heights at the other locations were all below 0m indicating that the majority of bats were crossing safely beneath the existing A12. However, there is considerable variation in height between species. Further details relating to each bat species / species group are detailed below.
- 5.2.55 Common pipistrelle bats were observed at all crossing point locations. At crossing point CP-D the average height of common pipistrelle bats was below 5m making them unsafe if they continue to fly at this height once the road is constructed. At crossing point CP-A the average height of common pipistrelle bats was 9m due to one bat crossing above the road at this location, but at a safe height. At the other locations the average height of common pipistrelle bats was below 0m indicating that the majority of common pipistrelle bats were crossing safely beneath the A12.
- 5.2.56 Soprano pipistrelle bats were also observed at all crossing point locations. As with common pipistrelle, the average height of soprano pipistrelle bats observed at crossing point CP-D was below 5m meaning that they will be unsafe if they continue to fly at this height once the proposed road is constructed. The

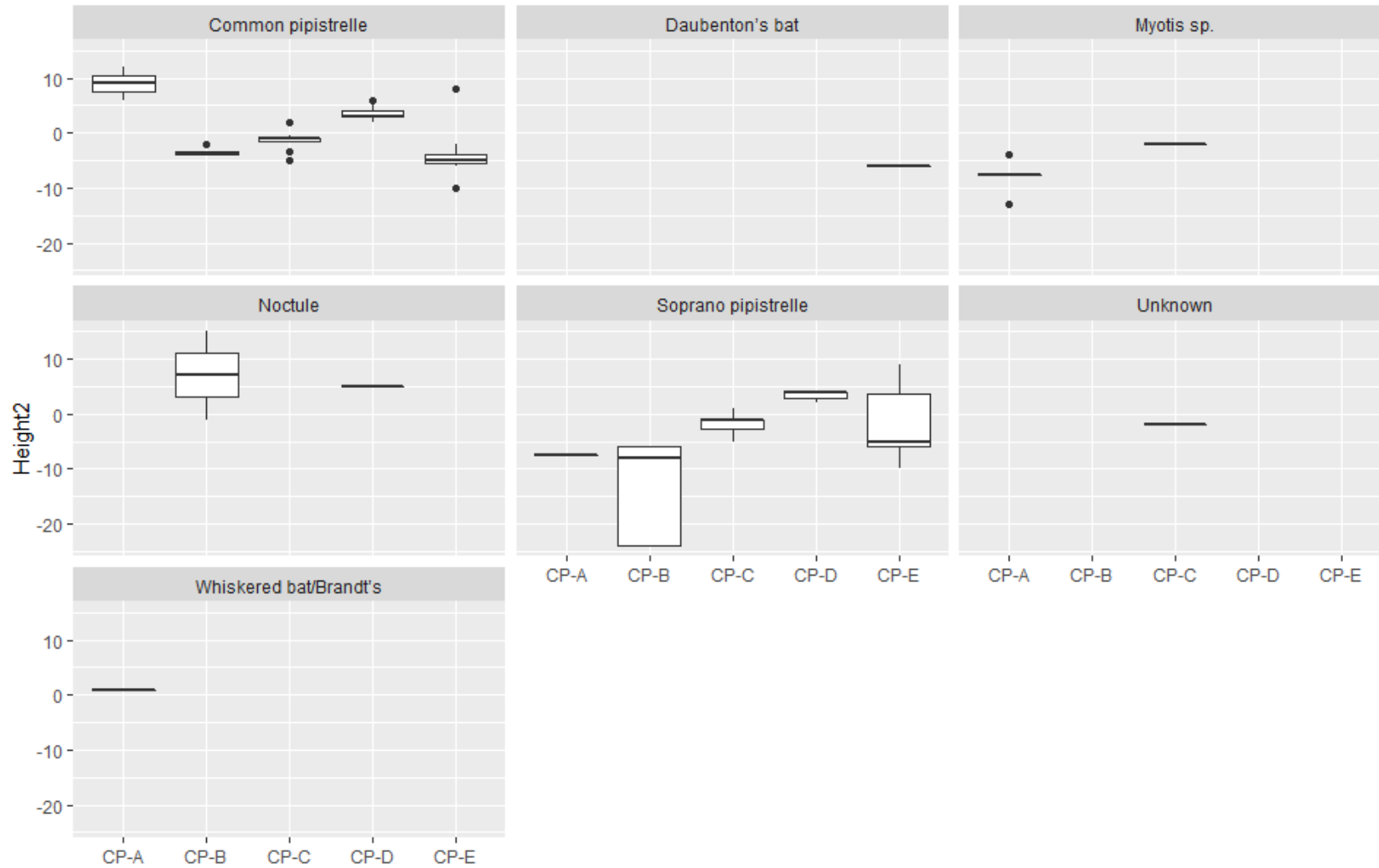
average height of soprano pipistrelle bats at all other locations was below 0m, with the majority of bats crossing safely beneath the A12, however some bats were recorded flying over the road at unsafe heights.

- 5.2.57 *Myotis* species bats were recorded at three crossing point locations. A whiskered bat / Brandt's bat was recorded crossing the A12 at 1m above the road at crossing point location CP-A. This height is unsafe and the bat was at risk of collision with vehicles on the A12. Daubenton's bat was recorded at crossing point location CP-E flying at 6m below the road and unconfirmed *Myotis* species bats were also recorded crossing safely at crossing point location CP-A and CP-C.
- 5.2.58 Noctule were recorded at crossing point locations CP-B and CP-D. At location CP-D their average height was 5m, putting them at risk of collision with vehicles once the road is constructed. At location CP-B their average height was 7m above the A12, which is safe from risk of collision, but individual noctule bats were recording crossing the road at unsafe heights.
- 5.2.59 A single unidentified bat species was recorded at crossing point location CP-C. It crossed beneath the road at a safe height.

Table 5.18 Mean height (m) of bat species recorded at crossing points

Crossing point location	Common pipistrelle	Soprano pipistrelle	<i>Myotis</i> sp.	Whiskered bat / Brandt's bat	Daubenton's bat	Noctule	Unknown	Overall average (m)
CP-A	9.00	-7.50	-8.18	1.00	N/A	N/A	N/A	-1.42
CP-B	-3.50	-13.60	N/A	N/A	N/A	7.00	N/A	-3.37
CP-C	-1.58	-1.72	-2.00	N/A	N/A	N/A	-2.00	-1.83
CP-D	3.67	3.38	N/A	N/A	N/A	5.00	N/A	4.01
CP-E	-3.57	-2.41	N/A	N/A	-6.00	N/A	N/A	-3.99

Graph 5.1 Boxplot of height (m) of bat passes at each crossing point location for each species



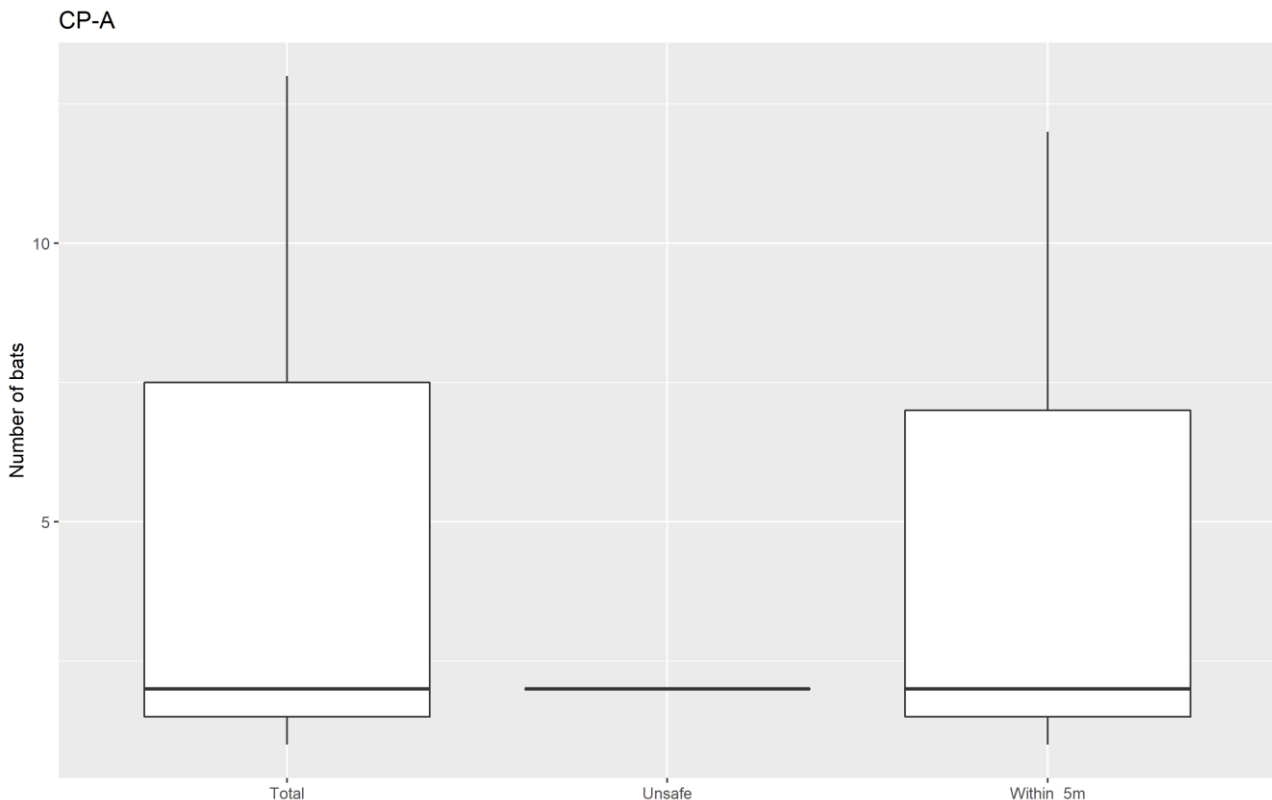
Crossing point locations

5.2.60 This section presents results of the crossing point surveys on a location basis. This is to further highlight and visualise specific locations where bats are or will be in risk of collision with traffic on the proposed scheme.

Crossing point CP-A

5.2.61 At crossing point CP-A, 93.8% of bats were recorded crossing within 5m (of the crossing point location) and 12.5% of bats were recorded flying at unsafe heights (at any distance from the crossing point location) (Graph 5.2; Table 5.19). As can be seen in Graph 5.3, there was a concentration of bats flying underneath the feature at ~10m in height.

Graph 5.2 Boxplot showing total numbers of bats recorded per survey, the number crossing unsafely at crossing point CP-A and the number recorded using the feature (within 5m of the crossing point location)



Graph 5.3 Kernel intensity estimation of the density of crossing bats crossing at CP-A. The density scale indicates where multiple bats are crossing per m².

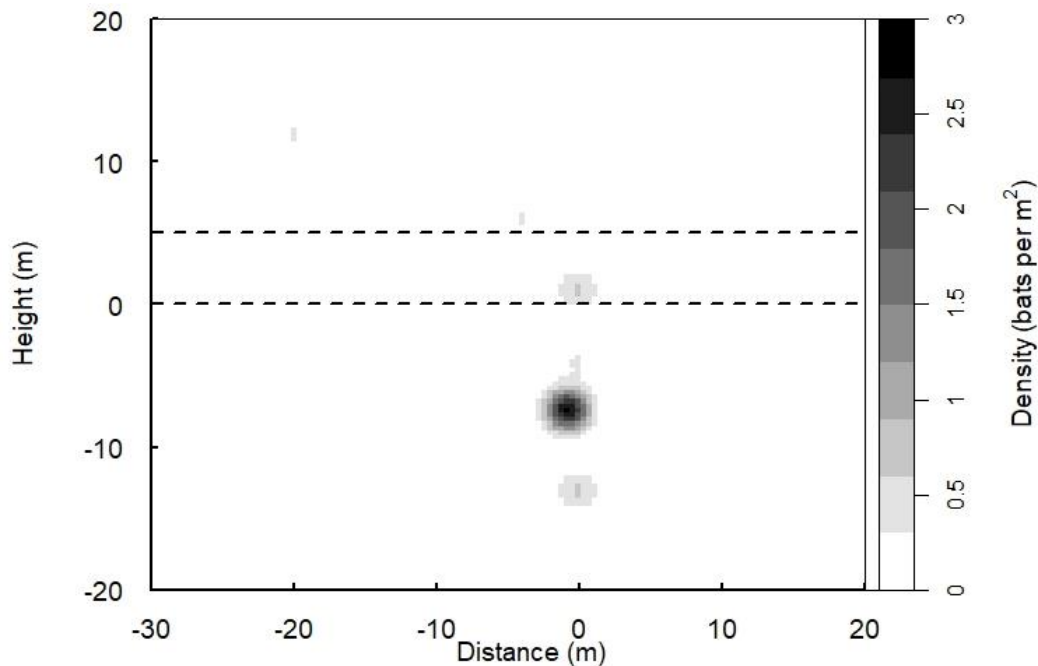


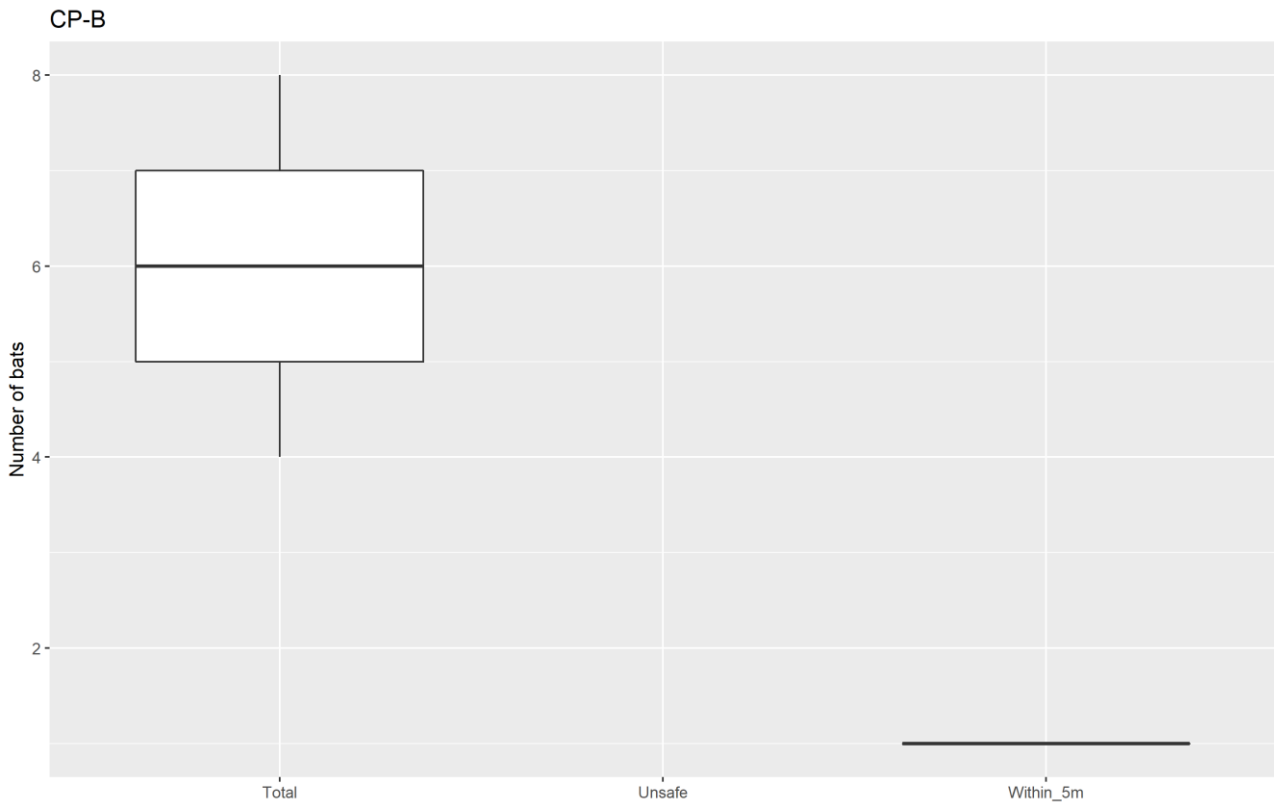
Table 5.19 The number and crossing behaviour for each bat species at crossing point CP-A

Bat species	Total	'Using' feature	Unsafe height over feature ($\leq 5\text{m}$)	% 'Using' feature	% Unsafe height
Common pipistrelle	2	1	0	50.0	0.0
<i>Myotis</i> species	11	11	0	100.0	0.0
Soprano pipistrelle	1	1	0	100.0	0.0
Whiskered bat / Brandt's bat	2	2	2	100.0	100.0
Total	16	15	2	93.8	12.5

Crossing point CP-B

5.2.62 At crossing point CP-B, 100.0% of bats were recorded crossing safely (Graph 5.4). Species-specific numbers and percentages of bats recorded within 5m of the crossing point location and crossing at or below 5m are shown in Table 5.20. The variation in height and distance from feature can be seen in Graph 5.5.

Graph 5.4 Boxplot showing total numbers of bats recorded per survey, the number crossing unsafely at crossing point CP-B and the number recorded using the feature (within 5m of the crossing point location)



Graph 5.5 Kernel intensity estimation of the density of crossing bats crossing at CP-B

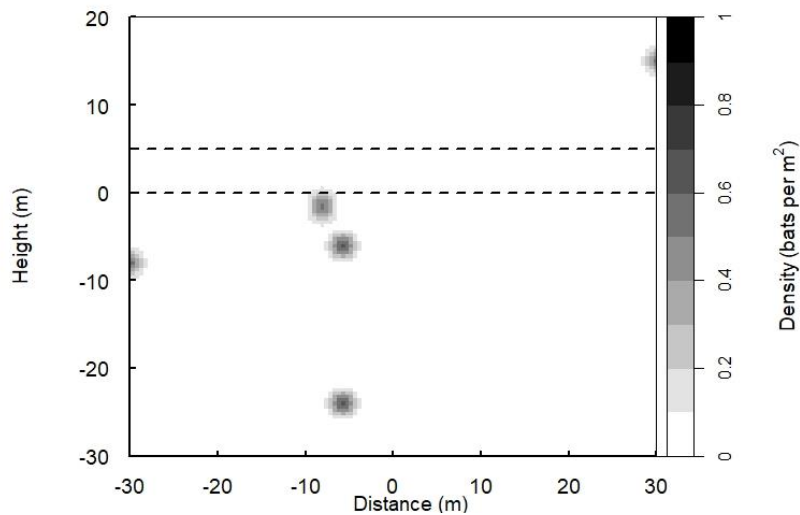


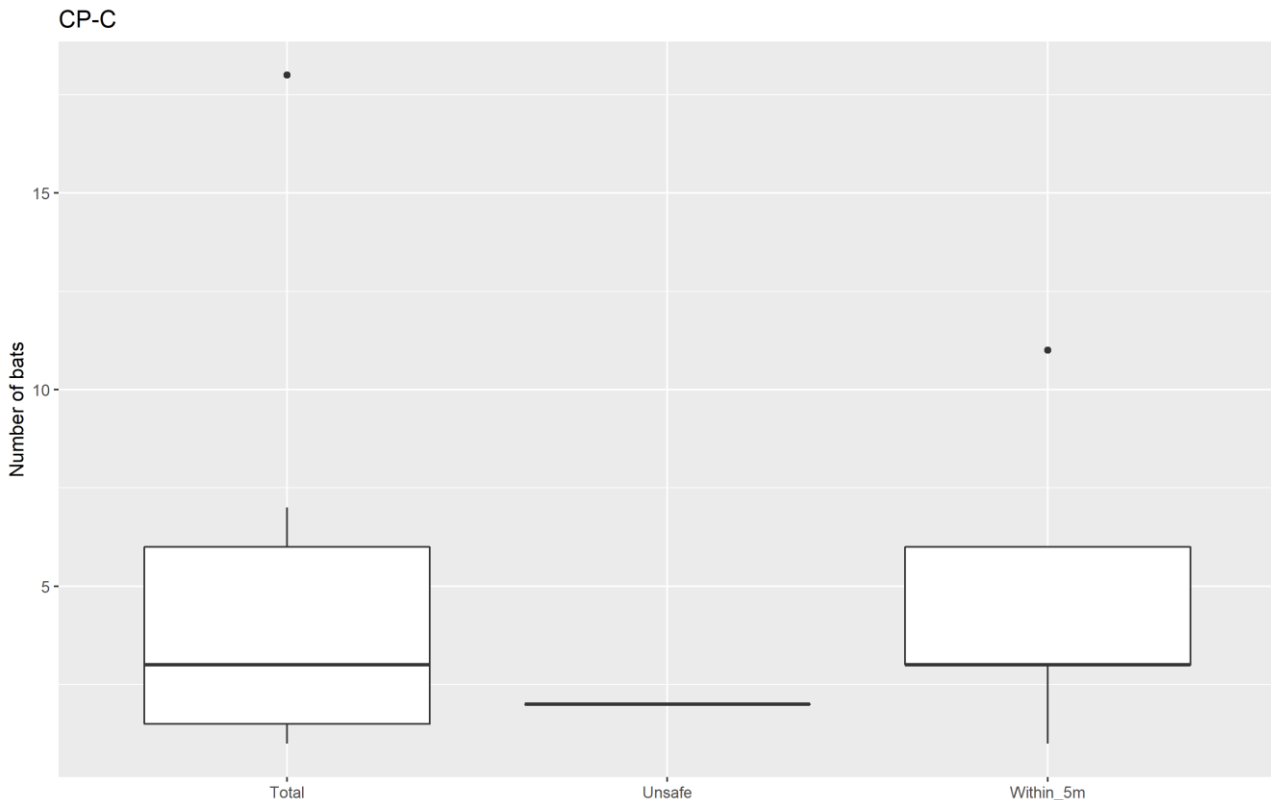
Table 5.20 The number and crossing behaviour for each bat species at crossing point CP-B

Bat species	Total	'Using' feature	Unsafe height over feature ($\leq 5m$)	% 'Using' feature	% Unsafe height
Common pipistrelle	4	0	0	0.0	0.0
<i>Myotis</i> species	1	1	0	100.0	0.0
Noctule	2	0	0	0.0	0.0
Soprano pipistrelle	5	0	0	0.0	0.0
Total	12	1	0	8.33	0.00

Crossing point CP-C

5.2.63 At crossing point CP-C, 6.1% of bats were recorded crossing unsafely (Graph 5.6). Species-specific numbers and percentages of bats recorded within 5m of the crossing point location and crossing at or below 5m are shown in Table 5.21. The variation in height and distance from feature can be seen in Graph 5.7.

Graph 5.6 Boxplot showing total numbers of bats recorded per survey, the number crossing unsafely at crossing point CP-C and the number recorded using the feature (within 5m of the crossing point location)



Graph 5.7 Kernel intensity estimation of the density of crossing bats crossing at location CP-C

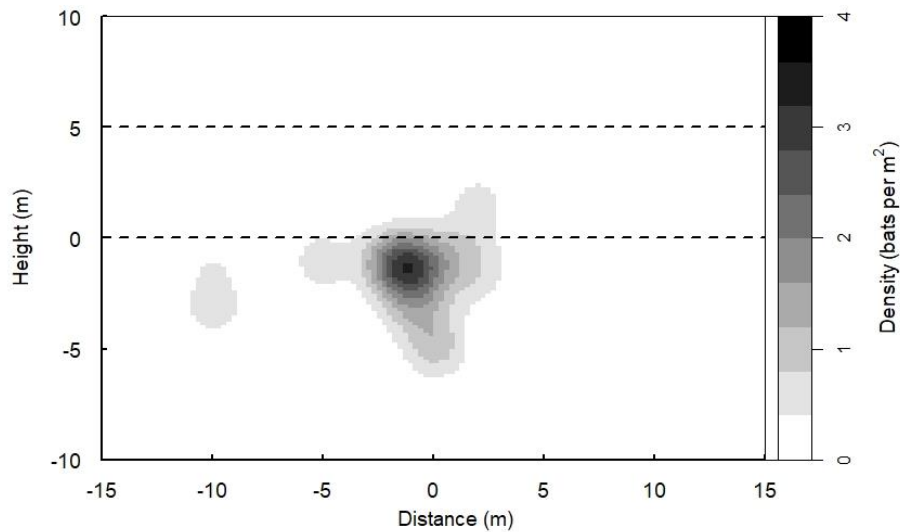


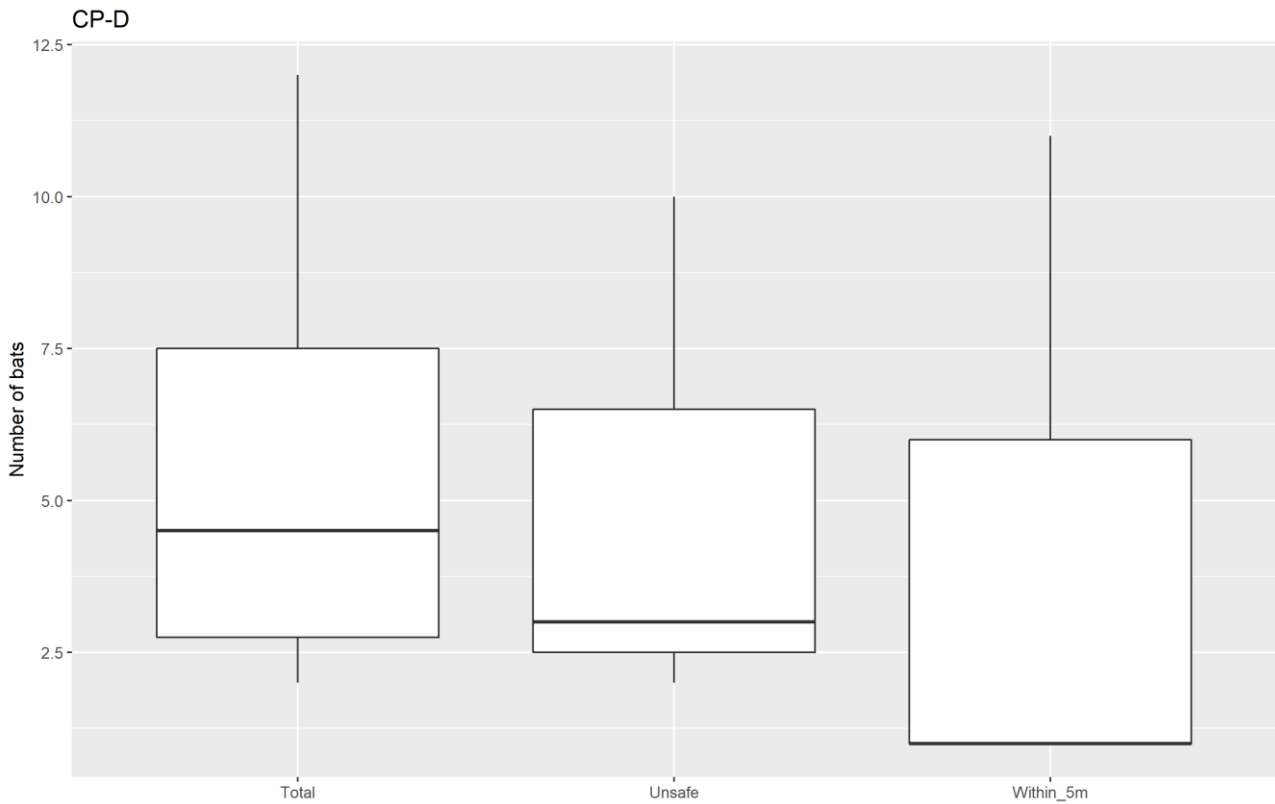
Table 5.21 The number and crossing behaviour for each bat species at crossing point CP-C

Bat species	Total	'Using' feature	Unsafe height over feature ($\leq 5m$)	% 'Using' feature	% Unsafe height
Common pipistrelle	12	11	1	91.7	8.3
Daubenton's bat	1	0	0	0.0	0.0
<i>Myotis</i> sp.	1	1	0	100.0	0.0
Soprano pipistrelle	18	11	1	61.1	5.6
Unknown species	1	1	0	100.0	0.0
Total	33	24	2	72.7	6.1

Crossing point CP-D

5.2.64 At crossing point CP-D, 65.2% of bats were recorded crossing unsafely (Graph 5.8). Species-specific numbers and percentages of bats recorded within 5m of the crossing point location and crossing at or below 5m are shown in Table 5.22. The variation in height and distance from feature can be seen in Graph 5.9.

Graph 5.8 Boxplot showing total numbers of bats recorded per survey, the number crossing unsafely at crossing point CP-D and the number recorded using the feature (within 5m of the crossing point location)



Graph 5.9 Kernel intensity estimation of the density of crossing bats crossing at CP-D

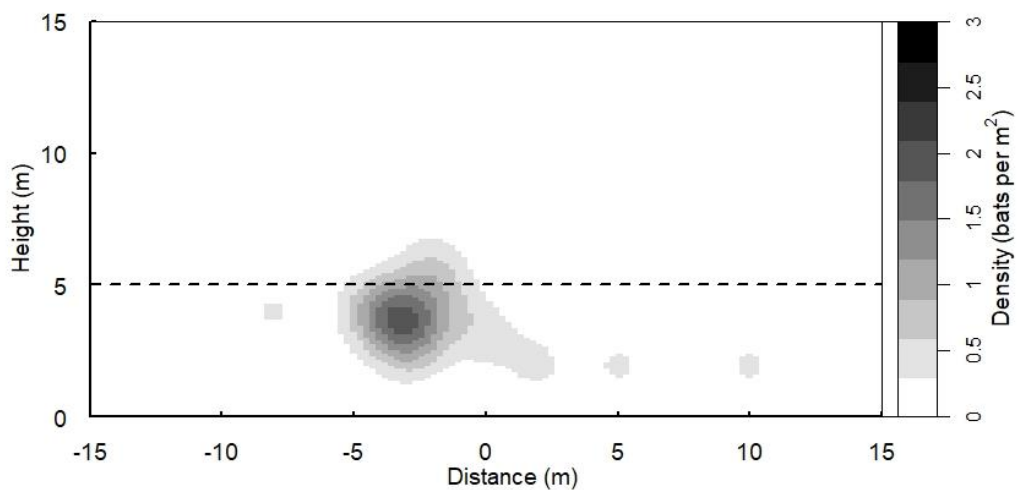


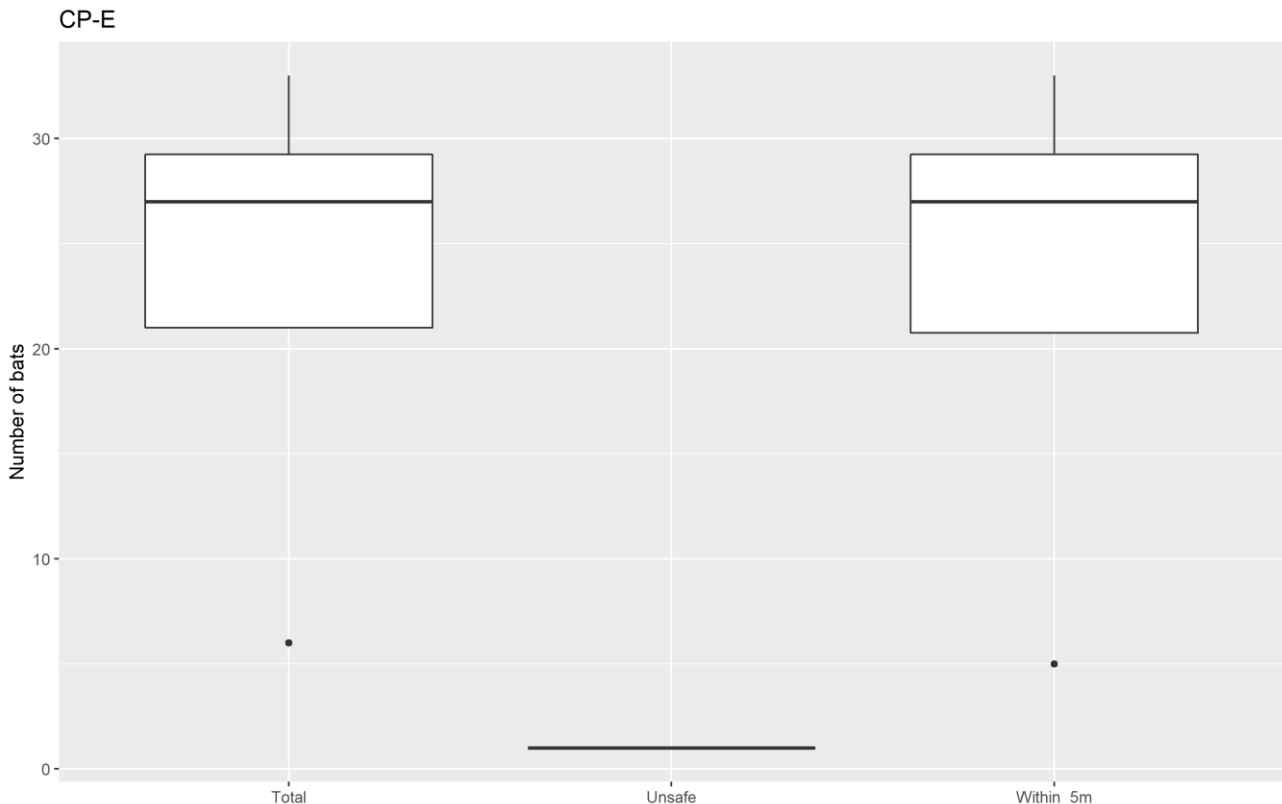
Table 5.22 The number and crossing behaviour for each bat species at crossing point CP-D

Bat species	Total	'Using' feature	Unsafe height over feature ($\leq 5m$)	% 'Using' feature	% Unsafe height
Common pipistrelle	9	8	7	88.9	77.8
Noctule	2	0	0	0.00	0.00
Soprano pipistrelle	12	5	8	41.7	66.7
Total	23	13	15	56.5	65.2

Crossing point CP-E

5.2.65 At crossing point CP-E, 98.9% of bats were recorded crossing safely (Graph 5.10). Species-specific numbers and percentages of bats recorded within 5m of the crossing point location and crossing at or below 5m are shown in Table 5.23. The variation in height and distance from feature can be seen in Graph 5.11.

Graph 5.10 Boxplot showing total numbers of bats recorded per survey, the number crossing unsafely at crossing point CP-E and the number recorded using the feature (within 5m of the crossing point location)



Graph 5.11 Kernel intensity estimation of the density of crossing bats crossing at CP-E

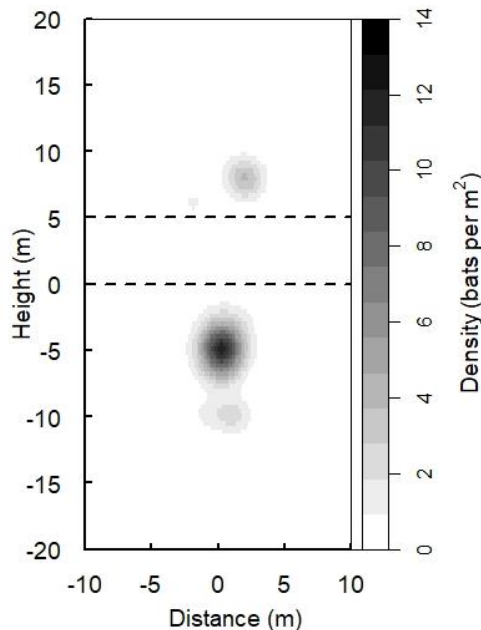


Table 5.23 The number and crossing behaviour for each bat species at crossing point CP-E

Bat species	Total	'Using' feature	Unsafe height over feature (≤ 5 m)	% 'Using' feature	% Unsafe height
Common pipistrelle	35	35	0	100.0	0.0
Daubenton's bat	1	1	0	100.0	0.0
Soprano pipistrelle	57	56	1	98.2	1.8
Total	93	92	1	98.9	1.1

Linear transects

- 5.2.66 Linear transect locations and survey information, including survey timings, weather and transect descriptions are summarised in Annex L.
- 5.2.67 A multiple regression model was built to investigate the relationship between bat activity and distance from the proposed road and at the same time examine the effects of other variables (time and habitat) that could potentially influence bat activity and hence the relationship.
- 5.2.68 A total of 603 bat passes were recorded during the surveys. Distance from the road was found to have a significant positive influence on the number of bat passes (χ^2 5.56, $p = 0.018$). Time was found to have a significant effect on the number of bat passes, with numbers increasing with time after sunset (χ^2 5.49, $p = < 0.019$) (Table 5.24).

Table 5.24 Results from the GEE analysis modelling log (1 + number of bat passes) as a function of distance from the road (m) and time after sunset (min). Signif. Codes (: 0 '**' 0.001 '***' 0.01 '**' 0.05 '.' 0.1 ' ' 1 GEE, generalised estimating equations;)**

Number of clusters: 10 Maximum cluster size: 11

	Estimate	Std.err	Wald	Pr(> W)
(Intercept)	1.506789	0.357387	17.78	2.5×10-05 ***
Distance	0.000557	0.000236	5.56	0.018*
Time	-0.007404	0.003159	5.49	0.019*
	Estimate	Std.err		
(Intercept)	1.11	0.167		
Alpha	0.641	0.16		

Species specific effects

- 5.2.69 A total of six species / species groups were recorded (brown long-eared bat, common pipistrelle, Leisler's bat, noctule, soprano pipistrelle and *Myotis* species). Only common pipistrelle and soprano pipistrelle were recorded at greater than 20% of the point counts and therefore it was only possible to produce a species-specific model for these species.
- 5.2.70 For the common pipistrelle and soprano pipistrelle species models, the best fitting model contained distance and time as explanatory terms.
- 5.2.71 For common pipistrelle distance was not found to have a significant influence on the number of passes recorded (χ^2 1.77, $p=0.18$). Time was not found to have a significant influence on the number of bats recorded (χ^2 2.56, $p = 0.1095$).
- 5.2.72 For soprano pipistrelle, distance had a significant positive effect on the number of soprano pipistrelle passes recorded (χ^2 12.70, $p<0.001$). Time was also found to have a significant negative effect on the number of soprano pipistrelle passes recorded (χ^2 6.63, $p=0.01$).

Effect on the number of species

- 5.2.73 The best fitting model examining the effect of distance on the number of species recorded was the model containing solely distance as an explanatory variable. Distance was found to have a significant effect on the numbers of species recorded (χ^2 4.88, $p= 0.027$).

Manual/automatic activity surveys

Transects

- 5.2.74 Details on timing, dates and weather conditions for traditional transects surveys are found in Annex M.

- 5.2.75 Ten species were recorded during the traditional transect surveys. These were barbastelle, brown long-eared bat, common pipistrelle, Daubenton's bat, Leisler's bat, Nathusius' pipistrelle, Natterer's bat, noctule, serotine and soprano pipistrelle. In addition to these species some bat passes could only be identified to genus, or it was not possible to differentiate between similar calls of different species. These were recorded as *Myotis* species, *Nyctalus* species, pipistrelle species, serotine / *Nyctalus* species, and Whiskered bat / Brandt's bat / Alcathe bat (*Myotis alcathe*).
- 5.2.76 A summary of the index of the number of passes recorded per species per location divided by the number of nights recorded, as well as the total number of species recorded on each transect is shown in Table 5.25. Transect 2 captured the highest diversity of species, with eight species recorded (see Table 5.25). Transects 4, 6 and 7 had the second highest diversity of species, with seven species recorded. Transect D had the lowest diversity, with three species recorded.
- 5.2.77 Transect 5 recorded the highest number of passes by all species, with 240 bat passes recorded. The second highest total was 233 recorded from Transect 4, and the third highest was 175 from Transect 6. The highest number of passes by a single species was recorded from Transect 4, with 86 soprano pipistrelle passes recorded across all surveys. The second and third highest numbers of passes recorded were 48 soprano pipistrelle passes from Transect 5, and 45 common pipistrelle passes recorded from Transect 8. Transect 4 was located partially within Whetmead Local Nature Reserve and near to the Rivers Blackwater and Brain. Transect 5 was located around the quarry near Little Braxted and also included Colemans Reservoir. Transect 6 was located in arable fields, plantation woodland and wet grassland next to the River Blackwater. Transect 8 was located largely in arable fields with an area of scrub and young woodland also present.
- 5.2.78 Transect 1 had the lowest number of passes recorded, with 24 passes recorded from all surveys at this location. Transect 1 was located along arable field margins adjacent to the existing A12, a B road and the edge of Boreham.

Common pipistrelle

- 5.2.79 Common pipistrelle activity was recorded on every transect. The highest level of common pipistrelle activity was recorded from Transect 8, with 45 passes recorded in October. This number of passes was 56% of all the common pipistrelle passes recorded from this transect in total. High levels of common pipistrelle activity were recorded from Transects 6, 7, and 8. Moderate-to-high levels of common pipistrelle activity were recorded from Transects 2, 4 and F. Low-to-moderate levels of common pipistrelle activity were recorded from Transects 1, 5, B, D and G. Low levels of common pipistrelle activity were recorded at Transects 3, A, H, I and J. A summary of the index of the number of calls recorded per species per transect divided by the number of nights recorded, as well as the total number of species on each transect is shown in Table 5.22.

Soprano pipistrelle

- 5.2.80 Soprano pipistrelle activity was also recorded from every transect. The highest level of soprano pipistrelle activity recorded was from Transect 4, point count number 7, where 39 soprano pipistrelle passes were recorded in July. High levels of soprano pipistrelle activity were recorded from Transects 4, 5 and 6; with the highest level being recorded at Transect 5. Moderate-to-high levels of activity were recorded from Transects A, F and H. Low-to-moderate levels of soprano pipistrelle activity were recorded from Transects 2, G and J. Transect 1, 3, 7, 8, B, D and I had low levels of soprano pipistrelle activity.

Nathusius' pipistrelle

- 5.2.81 A single Nathusius' pipistrelle pass was recorded during the transect surveys. It was recorded from Transect 5 in October. It was recorded on the eastern edge of Coleman's Reservoir near Rivenhall End.

Pipistrelle species

- 5.2.82 Two passes of undetermined *Pipistrelle* species were recorded. They were recorded on Transects 3 and 6.

Serotine

- 5.2.83 Serotine activity was recorded from Transects 2, 3, 7, I and J. A single serotine pass was recorded on each transect. Three of the passes were recorded from surveys in July, one pass was recorded in August and one in September. On Transect 2 the serotine was recorded from a tree lined boundary between grass fields, a short distance from the River Ter. On Transect 3 it was recorded on Hadfield Road, adjacent to arable fields with a tree lined boundary to the road. On Transect 7 the serotine was recorded from within an arable field, north-east of Prested Hall. On Transect I the bat was recorded from a location adjacent to a small area of woodland and on the margin of an arable field, on the edge of Rivenhall End. On Transect J the pass was heard from the margin of an arable field, adjacent to a woodland strip between the field and the A12.

Leisler's bat

- 5.2.84 Leisler's bat activity was recorded on seven transects across the scheme. The highest number of passes recorded at any one point count was two passes. Transect 6 had the highest level of Leisler's bat activity, with a total of five passes recorded. Transects 2, 5, 7 and A each had two passes of Leisler's bat recorded. Single Leisler's bat passes were recorded on Transect B and H.

Noctule

- 5.2.85 Noctule activity was recorded from every transect. High levels of noctule activity were recorded from Transects 5 and 8, with Transect 5 recording the highest number of passes (55). Moderate-to-high levels of noctule activity were recorded from Transects 2, 7 and G. Low-to-moderate levels of noctule activity were recorded from Transects 3, 4, F, and H. Low levels of noctule activity were recorded from Transects 1, 6, A, B, D, I and J.

Nyctalus species

- 5.2.86 Two *Nyctalus* species passes were recorded. A single *Nyctalus* species pass was recorded on Transect 4 in July. The other pass was recorded on Transect 8 in September.

Serotine / *Nyctalus* species

- 5.2.87 A single pass was recorded that was identified as being either a serotine or a *Nyctalus* species bat. It was recorded on Transect G in August.

Daubenton's bat

- 5.2.88 Two passes attributed to Daubenton's bat were recorded during the transect surveys. One was recorded from Transect 1, from a location adjacent to an arable field boundary that was lined with mature trees. The other Daubenton's bat pass was recorded on Transect 2 from a location within an amenity grassland field, adjacent to a linear band of trees.

Natterer's bat

- 5.2.89 A single Natterer's bat pass was recorded. It was recorded from Transect 2 from a location within an amenity grassland field, adjacent to a linear band of trees, a short distance from the River Ter.

***Myotis* species including Whiskered bat / Brandt's bat / Alcahoie bat**

- 5.2.90 *Myotis* species passes were recorded on nine transects across the proposed scheme. The highest number of passes recorded from a single point count was six, which was recorded from Transect 1 in May. High *Myotis* activity was also recorded from Transect 5, with moderate-to-high activity at Transect 4. Three Whiskered / Brandt's / Alcahoie passes were recorded from Transect 3, the only transect on the proposed scheme where this species group was recorded.

Brown long-eared bat

- 5.2.91 Brown long-eared bat activity was recorded on Transects 2, 4, 6, 7, A and G. A high level of brown long-eared bat activity was recorded from Transect 2, with eight passes recorded across all surveys. A moderate-to-high level of brown long-eared bat activity was recorded from Transects 6 and A, a low-to-moderate level of activity was recorded on Transects 4 and 7 and a low level of activity was recorded from Transect G.

Barbastelle

- 5.2.92 A single barbastelle pass was recorded during the transect surveys. The pass was recorded from Transect 4 in August. It was recorded near the River Brain south of Blackwater Lane, located south-west of Whetmead Local Nature Reserve.

Table 5.25 Index of the number of passes recorded per species per transect divided by the number of nights recorded.

Transect number	Myotis species	Daubenton's bat	Noctule	Common pipistrelle	Soprano pipistrelle	Serotine	Natterer's bat	Leisler's bat	Brown long-eared bat	Whiskered / Brandt's / Alcaethoe	Pipistrellus species	Barbastelle	Nyctalus species	Nathusius' pipistrelle	Serotine / Nyctalus	sum of index (number of passes/number of surveys)	Number of species
1	1.29	0.14	0.86	4.86	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.86	5
2	0.00	0.14	2.71	10.29	6.14	0.14	0.14	0.29	1.14	0.00	0.00	0.00	0.00	0.00	0.00	20.99	8
3	0.00	0.00	1.00	2.14	3.57	0.14	0.00	0.00	0.00	0.43	0.14	0.00	0.00	0.00	0.00	7.42	6
4	0.86	0.00	1.00	10.57	20.14	0.00	0.00	0.00	0.43	0.00	0.00	0.14	0.14	0.00	0.00	33.28	7
5	1.60	0.00	11.00	7.20	27.60	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.20	0.00	48.00	6
6	0.5	0.00	0.33	10.67	16.17	0.00	0.00	0.83	0.50	0.00	0.17	0.00	0.00	0.00	0.00	29.17	7
7	0.83	0.00	2.83	12.17	3.67	0.17	0.00	0.33	0.33	0.00	0.00	0.00	0.00	0.00	0.00	20.33	7
8	0.00	0.00	4.00	13.33	3.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	20.67	4
A	0.00	0.00	0.50	4.33	11.00	0.00	0.00	0.33	0.67	0.00	0.00	0.00	0.00	0.00	0.00	16.83	5
B	0.33	0.00	0.50	4.83	2.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.83	5
D	0.00	0.00	0.50	7.17	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.67	3
F	0.17	0.00	1.33	8.67	10.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.84	4
G	0.17	0.00	1.83	6.83	4.67	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.17	13.84	6

Transect number	<i>Myotis</i> species	Daubenton's bat	Noctule	Common pipistrelle	Soprano pipistrelle	Serotine	Natterer's bat	Leisler' s bat	Brown long-eared bat	Whiskered / Brandt's / Alcahohoe	Pipistrellus species	Barbastelle	<i>Nyctalus</i> species	Nathusius' pipistrelle	Serotine / <i>Nyctalus</i>	sum of index (number of passes/number of surveys)	Number of species
H	0.5	0.00	1.00	4.33	9.17	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.17	5
I	0.00	0.00	0.67	2.00	1.17	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.01	4
J	0.00	0.00	0.40	4.60	5.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.2	4
	High	Moderate-to-High	Low-to-Moderate	Low													

Static detectors

Overview

- 5.2.93 Eight species were recorded during static detector surveys. These were barbastelle, brown long-eared bat, common pipistrelle, Leisler's bat, Nathusius' pipistrelle, noctule, serotine and soprano pipistrelle. Four species groups were also recorded: *Myotis* species, *Nyctalus* species, pipistrelle species and serotine / *Nyctalus* species. A summary of the index of the number of passes recorded per species per location divided by the number of nights recorded, as well as the total number of species recorded on each static detector is shown in Table 5.26.
- 5.2.94 Static detector (SD) F.2 had the highest species diversity of the 38 locations, with all eight species and four species groups recorded, though only four of the 12 species / species groups had high levels of activity at this location. Static detector F.2 was located on a hedgerow between arable fields to the north of areas of plantation woodland. Four additional SD locations (SD6.1, SDA.1, SDF.1 and SDG.2) recorded activity for 11 species / species groups.
- 5.2.95 Static detector (SD) 6.2 recorded high levels of activity for eight species / species groups (see Figure 5 for SD locations). This detector was placed near woodland, wet grassland and running water.
- 5.2.96 Static detector 7.2 and SD2.2 recorded high levels of activity for seven species. Static detector 7.2 was placed near a hedgerow, arable field, and grassland with parkland a short distance to the south. Static detector 2.2 was located on the wooded margins of edge of a grassland field, a short distance from the River Ter.
- 5.2.97 The highest level of activity recorded for a single species was recorded at SDDE.2, with an average of 130.46 calls per night for common pipistrelle. This SD location was on a hedgerow between arable fields. See Table 5.26.

Common pipistrelle

- 5.2.98 Common pipistrelle was the most frequently recorded species and had the highest levels of activity recorded. It was the only species to be recorded at all 38 SD locations. The highest level of activity recorded across all static detector locations was common pipistrelle activity from SDDE.2 (average nightly passes 130.46). High levels of common pipistrelle activity were recorded at ten locations (see Table 5.26), with the next four highest locations being SDF.2, SD7.1, SD7.2 and SD2.1.

Soprano pipistrelle

- 5.2.99 Soprano pipistrelle activity was recorded at 37 of 38 static detector locations. High levels of soprano pipistrelle activity were recorded from ten locations: SD6.2, SDA.2, SD7.2, SD3.2, SDF.2, SD7.1, SD2.2, SD2.1, SD4.2 and SDA.1. The highest level of soprano pipistrelle activity was recorded at SD6.2 which was located within an area of woodland next to wet grassland and near to the River Blackwater.

Nathusius' pipistrelle

- 5.2.100 Low numbers of Nathusius' pipistrelle passes were recorded across the scheme. Nathusius' pipistrelle activity was recorded at 29 of the 38 static detector locations. The highest average number of Nathusius' pipistrelle passes was recorded from SD7.2 with the second highest average recorded at SDF.1. Static detector 7.2 was located on a hedgerow surrounded by arable fields, to the north-east of Prested Hall. Static detector F.1 was located on a treelined boundary between an arable field and a residential property, largely surrounded by arable fields but with nearby woodland.

Pipistrelle species

- 5.2.101 Pipistrelle species activity that could not be attributed to a specific species was recorded at four locations: SD6.1, SDF.1, SDF.2 and SDG.2. The highest average level of activity for pipistrelle species bats was recorded at SD6.1 which was located on a tree lined field boundary between arable fields and grassland, a short distance north of a wooded area with the River Blackwater flowing through it.

Serotine

- 5.2.102 Serotine activity was recorded at 28 of 38 static detector locations. The highest average number of nightly passes of serotine was recorded at SD7.2. The second highest number was recorded at SM2.3 with high levels of serotine activity also recorded at SD2.1, SD2.2, SD6.2, SD6.1 and SDI.1. Static detector 7.2 was located on a hedgerow surrounded by arable fields, to the north-east of Prested Hall. Static detector 2.1 was located on the edge of a shelter belt of woodland at the edge of a grassland field, a short distance from the River Ter.
- 5.2.103 SD6.2, SD6.1 and SM2.3 were all located within the same area that lies to the north of the River Blackwater where its banks are lined with woodland. SDI.1 was located on a hedgerow in an arable field.

Leisler's bat

- 5.2.104 Leisler's bat activity was recorded at 37 of 38 static detector locations. The highest level of Leisler's bat activity was recorded at SD3.1. Static detector SD3.1 was located on a hedgerow between arable fields a short distance south of the A12 south-west of Witham. A high level of Leisler's bat activity was also recorded at SD7.2, SDI.2, SD2.1, SD2.2, SD3.2, SD5.2, SD6.1, SD8.2 and SD6.2.

Noctule

- 5.2.105 Noctule activity was recorded at 36 of 38 static detector locations. The highest average level of activity was recorded at SD3.2 which was located on the slip road leading onto the A12 from Hatfield Road, Witham. High levels of noctule activity were also recorded at SDH.2, SDG.1, SD7.2, SD6.1, SD8.2, SDI.2, SD2.1 and SDC.1.

Nyctalus species

- 5.2.106 Activity that was attributed to *Nyctalus* bats was recorded from seven locations. The highest level of activity for this species groups was recorded at SD1.1, with high levels also recorded at SDA.1.

Serotine / *Nyctalus* species

- 5.2.107 Activity attributed to serotine / *Nyctalus* species was recorded at 11 of 38 static detector locations. High levels of serotine / *Nyctalus* activity were recorded at SD3.1 and SDA.1, and SM2.1. Moderate-to-high levels were recorded at SDF.2, SDG.1 and SDJ.2. Low-to-moderate levels were recorded at SD5.2 and SDH.1. Low levels were recorded at SD6.1, SD6.2, and SDG.2

***Myotis* species**

- 5.2.108 *Myotis* species activity was recorded at 34 out of 38 static detector locations. High levels of *Myotis* species activity were recorded at SDA.2, SD2.2, SD6.2, SD1.2, SDF.1, SDDE.1, SDG.2, SDH.2 and SD7.2. Static detector A.2 and SD2.2 were both located to the west of the River Ter near to areas of woodland and tree belts around grassland fields. The highest levels of *Myotis* activity were recorded on these two detectors. A high level of *Myotis* activity was also recorded at SD6.2 which within plantation woodland near to the River Blackwater.

Brown long-eared bat

- 5.2.109 Brown long-eared bat activity was recorded at 35 of 38 static detector locations. High levels of brown long-eared bat activity were recorded at SD2.2, SD6.1, SDF.2, SD6.2, SD5.1, SDC.1, SDJ.2, SDA.1 and SDH.2. SD2.2 was located on a shelter belt on the edge of a grassland field close to the River Ter. Static detector 6.1 was located on a tree lined boundary of an arable field to the north of an area of woodland and the River Blackwater. Static detector F.2 was located on a hedgerow between arable fields to the north of areas of plantation woodland.

Barbastelle

- 5.2.110 Barbastelle activity was recorded at 29 out of 38 static detector locations. Low numbers of barbastelle passes were recorded across the scheme (with 38 total passes recorded across all months). The highest average levels of activity were recorded at SD8.1. This detector was located on a hedgerow between an area of scrubby woodland and an arable field. High levels of barbastelle activity were also recorded from SD7.1, SD8.2, SD6.2, SDF.1, SD2.2, SD6.1 and SDF.2.

Table 5.26 Index of the number of passes recorded per species per location divided by the number of nights recorded.

Static detector	Myotis species	Leisler' s bat	Noctule	Nyctalus species	Nathusius' pipistrelle	Common pipistrelle	Soprano pipistrelle	Brown long-eared bat	Serotine	Barbastelle	Serotine / Nyctalus species	Pipistrelle species	Number of species
SD1.1	0.22	1.13	7.55	8.49	0.09	12.92	10.44	0.30	0.00	0.00	0.00	0.00	8
SD1.2	2.05	1.37	2.23	0.16	0.05	21.01	4.06	0.63	0.05	0.00	0.00	0.00	9
SD2.1	0.93	6.61	8.41	0.00	0.45	71.29	27.18	0.59	0.97	0.06	0.00	0.00	9
SD2.2	3.33	6.44	4.95	0.00	0.18	32.39	28.83	5.62	0.78	0.38	0.00	0.00	9
SD3.1	0.29	25.18	5.79	0.54	0.11	19.20	8.02	0.27	0.00	0.00	0.46	0.00	9
SD3.2	0.28	5.81	28.77	0.00	0.38	24.82	32.62	0.59	0.00	0.00	0.00	0.00	7
SD4.1	0.40	1.38	6.54	0.00	0.10	12.67	18.59	0.14	0.05	0.00	0.00	0.00	8
SD4.2	0.56	0.93	3.75	0.00	0.05	11.13	24.92	0.81	0.23	0.14	0.00	0.00	9
SD5.1	0.13	2.56	5.84	0.00	0.06	15.82	19.87	1.67	0.19	0.06	0.00	0.00	9
SD5.2	0.35	4.25	6.79	0.00	0.00	11.01	17.79	0.27	0.00	0.14	0.05	0.00	8
SD6.1	1.00	4.06	12.62	0.00	0.03	19.36	21.93	5.11	0.61	0.31	0.03	14.78	11
SD6.2	2.86	2.62	6.57	0.00	0.19	47.52	44.69	2.14	0.67	0.43	0.02	0.00	10
SD7.1	0.26	1.42	4.41	0.00	0.21	79.27	29.13	0.63	0.21	1.00	0.00	0.00	9

Static detector	Myotis species	Leisler' s bat	Noctule	Nyctalus species	Nathusius' pipistrelle	Common pipistrelle	Soprano pipistrelle	Brown long-eared bat	Serotine	Barbastelle	Serotine / Nyctalus species	Pipistrelle species	Number of species
SD7.2	1.11	13.09	12.90	0.00	0.58	75.94	32.78	1.21	4.85	0.11	0.00	0.00	9
SD8.1	0.14	1.21	5.84	0.00	0.00	24.91	5.54	1.24	0.24	1.31	0.00	0.00	8
SD8.2	0.28	2.79	10.86	0.00	0.03	27.35	3.72	1.21	0.10	0.64	0.00	0.00	9
SDA.1	0.40	2.35	3.89	1.63	0.08	13.51	22.06	1.35	0.18	0.05	0.27	0.00	11
SDA.2	4.32	1.18	0.84	0.00	0.11	31.60	38.21	1.05	0.05	0.05	0.00	0.00	9
SDB.1	0.11	1.01	0.65	0.15	0.00	51.62	6.74	0.25	0.00	0.00	0.00	0.00	7
SDB.2	0.10	0.46	0.78	0.00	0.03	31.30	1.91	0.08	0.00	0.00	0.00	0.00	7
SDC.1	0.38	2.33	7.85	0.00	0.14	20.18	3.92	1.50	0.02	0.02	0.00	0.00	9
SDC.2	0.40	2.52	2.23	0.00	0.06	21.55	3.14	0.19	0.21	0.29	0.00	0.00	9
SDDE.1	1.30	1.25	2.67	0.00	0.00	32.74	5.74	0.29	0.06	0.18	0.00	0.00	8
SDDE.2	0.52	0.56	1.23	0.00	0.03	130.46	17.88	0.30	0.03	0.03	0.00	0.00	9
SDF.1	1.51	2.51	3.51	1.11	0.47	16.66	8.96	1.06	0.13	0.38	0.00	5.79	11
SDF.2	0.97	0.89	6.07	0.15	0.23	85.50	29.53	3.63	0.23	0.30	0.14	2.17	12
SDG.1	0.19	1.41	13.59	0.00	0.03	7.46	18.73	0.41	0.03	0.03	0.22	0.00	10

Static detector	Myotis species	Leisler' s bat	Noctule	Nyctalus species	Nathusius' pipistrelle	Common pipistrelle	Soprano pipistrelle	Brown long-eared bat	Serotine	Barbastelle	Serotine / Nyctalus species	Pipistrelle species	Number of species
SDG.2	1.30	0.78	0.81	0.00	0.05	8.96	8.35	0.78	0.06	0.12	0.02	0.10	11
SDH.1	0.88	2.19	2.28	0.00	0.19	5.06	5.23	0.94	0.03	0.09	0.09	0.00	10
SDH.2	1.14	1.23	16.39	0.00	0.14	6.00	15.86	1.29	0.00	0.03	0.00	0.00	8
SDI.1	0.38	0.44	3.17	0.00	0.00	4.31	5.85	0.00	0.31	0.06	0.00	0.00	7
SDI.2	0.76	9.74	10.18	0.00	0.08	8.58	6.66	0.32	0.13	0.11	0.00	0.00	9
SDJ.1	0.36	1.27	2.77	0.00	0.05	9.85	6.47	0.32	0.00	0.14	0.00	0.00	8
SDJ.2	0.20	0.34	2.49	0.00	0.03	39.37	13.06	1.40	0.11	0.14	0.14	0.00	10
SM2.1	0.00	0.45	1.64	0.00	0.00	3.64	7.91	0.73	0.00	0.00	1.18	0.00	6
SM2.2	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1
SM2.3	0.00	0.86	1.29	0.00	0.00	18.64	21.62	0.14	1.43	0.29	0.00	0.00	7
SM2.4	0.00	0.27	0.00	0.00	0.00	0.82	1.91	0.00	0.27	0.09	0.00	0.00	5
	High		Moderate-to-High		Low-to-Moderate		Low						

6 Discussion

6.1 Summary

Bat species

- 6.1.1 The results of the desktop study and comprehensive bat surveys conducted over multiple years throughout the proposed scheme have confirmed the presence of ten bat species and two bat species groups listed in Table 6.1.
- 6.1.2 Greater and lesser horseshoe bats were absent from the proposed scheme, however this is unsurprising as the site is outside the known range of these species.

Table 6.1 Species of bat recorded within the study area

Species	Abundance (<i>Wray et al. 2010</i>)	Distribution (<i>Essex Bat Group, 2021</i>)
Common pipistrelle	Common	Widespread across the UK
Soprano pipistrelle	Common	Widespread across the UK
Nathusius' pipistrelle	Rare	Widespread through British Isles
<i>Myotis</i> species (assumed rarer)	Scarce	Widespread through England and Wales
Brown long-eared bat	Common	Widespread across UK
Noctule	Scarce	Widespread through England and Wales
Leisler's bat	Scarce	Widespread through England and Wales
Barbastelle	Rare	Restricted to southern and central England and Wales
Serotine	Uncommon	Mainly restricted to southern England and Wales
Whiskered / Brandt's / Alcathoe bat	Scarce	Widespread throughout England and Wales and into Scotland and Northern Ireland
Daubenton's bat	Common	Widespread across the UK
Natterer's bat	Uncommon	Widespread across the UK

Roosts

- 6.1.3 Field surveys undertaken for the proposed scheme identified nine tree roosts, forty-nine building roosts (including backtracking and hibernation roosts) and two roosts in a bridge.

- 6.1.4 In addition, 56 roosts are known to be located within 2km of the proposed scheme through desktop studies. The closest roost records to the site boundary include common pipistrelle and long-eared bat species roosts located 177.9m and 524.6m from the proposed scheme, respectively.
- 6.1.5 The value of these roosts has been assigned based on the species of bat and the type of roost in accordance with Wray *et al.* (2010) (Table 6.2). Where there is uncertainty about the species present, it has been assumed the least common of the possible species was present (i.e. for *Myotis* species it is assumed the detected bats were scarce).

Table 6.2 Summary of confirmed roosts.

ID reference/feature	Species	Species status*	Evidence	Roost type	Value
733 – Oak tree	Soprano pipistrelle	Common	Emergence/Re-entry surveys in 2017	Day roost	Local
623 – Holm oak tree	Common pipistrelle	Common	Emergence/re-entry and climbing survey in 2017	Day roost	Local
	Soprano pipistrelle	Common			
634 – Oak tree	Soprano pipistrelle	Common	Found on a climbing survey	Mating roost	Local
1149 - Aspen	Soprano pipistrelle	Common	Emergence/re-entry surveys in 2021	Day roost	Local
1692 – Oak tree	Soprano pipistrelle	Common	Ground endoscope	Day roost	Local
17- Beech tree	Soprano pipistrelle	Common	Emergence/re-entry surveys in 2021	Day roost	Local
69- Beech tree	Soprano pipistrelle	Common	Emergence/re-entry surveys in 2021	Day roost	Local
79 – White willow tree	Brown long-eared bat	Common	Found on a climbing survey	Day roost	Local
Untagged-ex566880-120121-1 – alder tree	Brown long-eared bat	Common	Found on a climbing survey	Maternity roost	County
BE11 Benton Bridge	Common pipistrelle	Common	Emergence	Day roost	Local
	Soprano pipistrelle	Common	Emergence		

ID reference/feature	Species	Species status*	Evidence	Roost type	Value
Building B73	Common pipistrelle	Common	Emergence	Maternity precautionarily	County
Building B107	Soprano pipistrelle	Common	Re-entry	Day roost	Local
Building B113	Common pipistrelle	Common	Emergence	Day roost	Local
Building B118	Common pipistrelle	Common	Emergence	Day roost	Local
	Soprano pipistrelle	Common	Emergence		
Building B350	Common pipistrelle	Common	Re-entry and droppings found during back-tracking survey	Day roost	Local
Building B387	Pipistrelle sp.	Common	Droppings found during back-tracking survey	Undetermined	Local
Building B339	Common pipistrelle	Common	Re-entry	Day roost	Local
Building B631	Soprano pipistrelle	Common	Emergence	Day roost	Local
Building B634	Common pipistrelle	Common	Emergence	Day roost	Local
Building B637	Soprano pipistrelle	Common	Re-entry	Day roost	Local
Building B716	Common pipistrelle	Common	Found during back-tracking surveys	Maternity	County
Building B923	Common pipistrelle	Common	Emergence	Day roost	Local
Building B1249	Noctule	Common	Re-entry	Day roost	Local
Building B1250	Soprano pipistrelle	Common	Emergence	Day roost	Local
Building B1252	Soprano pipistrelle	Common	Emergence and re-entry	Day roost	Local
Building B1291	Common pipistrelle	Common	Emergence	Day roost (Common pipistrelle) + hibernation roost (P.aur)	Local
	Brown long-eared bat	Common	One hibernating bat during GBA inspections 27/01/20		

ID refence/feature	Species	Species status*	Evidence	Roost type	Value
Building B1371	Undetermined	Species unknown	Droppings collected during hibernation surveys. Unknown species	Undetermined	Likely Local
Building B1385	Common pipistrelle	Common	Re-entry	Day roost	Local
Building B1392	Soprano pipistrelle	Common	Emergence	Day roost	Local
Building B1393	Soprano pipistrelle	Common	Re-entry	Day roost	Local
Building B1395	Soprano pipistrelle	Common	Emergence	Day roost	Local
Building B1397	Soprano pipistrelle	Common	Emergence	Day roost	Local
Building B1447	Soprano pipistrelle	Common	Emergence	Transitional Roost	Local
Building B1455	Soprano pipistrelle	Common	Emergence	Day roost	Local
Building B1463	Common pipistrelle	Common	Re-entry	Day roost	Local
Building B1522	Common pipistrelle	Common	Emergence	Day roost	Local
	Soprano pipistrelle	Common	Re-entry		
Building B1531	Undetermined	Species Unknown	Droppings found during ground-based assessment	Undetermined	Likely local
Building B1543	<i>Myotis sp.</i>	Common	Emergence	Day roost + hibernation roost	Local
	Noctule	Common	Re-entry		
	Common pipistrelle	Common	Minor Common pipistrelle and Soprano pipistrelle hibernation roost based on static data		
	Soprano pipistrelle	Common			
Building B1549	Soprano pipistrelle	Common	Emergence	Transitional roost	Local
Building B1585	Soprano pipistrelle	Common	Emergence	Day roost	Local

ID reference/feature	Species	Species status*	Evidence	Roost type	Value
Building B1665	Common pipistrelle	Common	Roost found during back-tracking surveys	Maternity roost	County
Building B1679	Common pipistrelle	Common	Emergence and Re-entry	Day roost	Local
Building B1738a	Undetermined	Species Unknown	Found during hibernation monitoring surveys	Hibernation roost	Likely County
Building B1928	Common pipistrelle	Common	Emergence	Day roost	Local
	Soprano pipistrelle	Common	Emergence		
Building B1928c	Common pipistrelle	Common	Emergence	Day roost	Local
Building B1992d	<i>Pipistrelle sp.</i> or <i>Myotis sp.</i>	Common	One bat dropping found inside container during hibernation surveys - Common pipistrelle. or M.sp.	Transitional/ occasional roost	Local
Building B1997	Soprano pipistrelle	Common	Re-entry	Day roost	Local
Building B2042	Common pipistrelle	Common	Emergence	Day roost	Local
	Soprano pipistrelle	Common	Emergence and Re-entry		
	Brown long-eared bat	Common	Static droppings in roof		
Building B2046	Soprano pipistrelle	Common	Emergence	Maternity roost, (Soprano pipistrelle) Day roost (Common pipistrelle)	County
	Common pipistrelle	Common	Emergence		
Building B2937	Soprano pipistrelle	Common	Emergence	Transitional roost	Local

ID reference/feature	Species	Species status*	Evidence	Roost type	Value
Building B2944	Undetermined	Species Unknown	Droppings found during hibernation surveys	Undetermined	Likely Local
Building B2974	Common pipistrelle	Common	Found on back- tracking survey	Day roost	Local
Building B3621	Common pipistrelle	Common	Emergence	Maternity roost	County
	Soprano pipistrelle	Common	Emergence and Re-entry		
Building B3631	Common pipistrelle	Common	Emergence	Day roost	Local
Building B3638	Common pipistrelle	Common	Emergence	Day roost	Local
Building B3648	Undetermined	Common	Unidentified bat during emergence. Anecdotal evidence of bats hibernating from landowner.	Day roost + hibernation roost	Likely County
Building B3679	Common pipistrelle	Common	Re-entry	Transitional roost	Local
Building B3709	Common pipistrelle	Common	Emergence	Day roost	Local
Building B3739	Soprano pipistrelle	Common	Emergence and Re-entry	Maternity roost (Soprano pipistrelle) Day roost (BLE)	County
	Brown long-eared bat	Common			

* as per Wray et al. (2010)

- 6.1.6 The level of survey effort undertaken for buildings and structures gives high confidence that all bat roosts within these structures would have been identified. Possible exceptions are where access restrictions occurred or the occasional day roost used at low frequencies, however these are of low value to bats and are unlikely to alter the results of the evaluation of the site for bats.
- 6.1.7 Tree roosts are highly transitional (BTHK, 2018) and therefore the chance of tree roost detection is reduced in comparison to other structures as the likelihood of bat presence during any one survey is reduced. Further, tree roosts are more changeable given they are exposed to weather and tree use by bats changes from year to year.

- 6.1.8 In total, survey effort on trees within the survey buffers was high with 550 trees being identified and the majority of these having at least one follow up survey.
- 6.1.9 Data from crossing points, static detectors and transects surveys suggest that barbastelle, Brandt's bat / whiskered bat, brown long-eared bat, common pipistrelle, Nathusius' pipistrelle, Natterer's bat, noctule, serotine and soprano pipistrelle are all in the area and likely to use potential tree roosts identified within the survey buffers. These potential roost site trees are considered of local value to the local bat population.

Bat activity

- 6.1.10 Bats were recorded crossing beneath the A12 through culverts and under bridges. The highest levels of crossing activity were recorded underneath large structures carrying rivers beneath the road. At crossing point location CP-D, where a section of new road is proposed to be located, bats were recorded flying at an average height of 4m, which puts bats at risk of collision with vehicles if they continue to fly at these heights.
- 6.1.11 Bats recorded onsite away from the existing A12 therefore have potential to be impacted by collisions from road traffic along the offline sections of the proposed scheme. Areas with high levels of foraging and commuting habitat that have potential for fragmentation by the proposed scheme should therefore be considered in the impact assessment and design of mitigation; see Table 6.3 for evaluation of commuting and foraging habitats for individual bat species.
- 6.1.12 Bat activity and species diversity were seen to increase with distance from the existing A12. Offline sections of road may therefore be expected to lead to a reduction in bat activity and species diversity within habitats around it over time.
- 6.1.13 The high level of bat activity recorded for seven species, including the rare barbastelle and Nathusius' pipistrelle at SD7.2, indicate that this area is important for bats. Static detector 7.1 was located around 825m south-west of SD7.2 and surrounded by similar habitat to SD7.2 (hedgerow leading out of an area of woodland next to a young plantation woodland on rough grassland and an arable field). Static detector 7.1 however only recorded high levels of activity for four species. It would therefore appear that the hedgerows to the north-east of Prested Hall provide key foraging and commuting habitat, and that they may be used by bats that are roosting within the buildings of Prested Hall. The proposed road will pass within 37m of SD7.2's location and will sever connections between habitats.
- 6.1.14 Static detector SD6.2 was paired with SD6.1, which recorded high levels of activity for six species. Nathusius' pipistrelle activity was high at SD6.2 but low at SD6.1 and *Myotis* species activity was high at SD6.2 and moderate-to-high at SD6.1. Static detector 6.2 was located approximately 100m from the River Blackwater, within an area of woodland. Static detector 6.1 was located on a tree line between arable fields. Nathusius' pipistrelle bats are known to use watercourses to aid navigation and waterbodies are an important foraging resource for the species. The woodland around the River Blackwater is a key foraging and commuting resource for multiple species, including the rare Nathusius' pipistrelle and barbastelle. Hedgerows and tree lines leading from

the woodland into the wider landscape are also an important feature for bats travelling across the landscape.

- 6.1.15 Habitats to the west of the River Ter were also found to support high levels of bat activity. Activity levels were higher closest to the river, but areas of woodland further west were also found to support high levels of activity.
- 6.1.16 The highest level of barbastelle activity was recorded from a SD placed in a hedgerow between an arable field and an area of scrubby woodland east of Doggett's Lane. The hedgerow and ditch network between arable fields in this area appear to be well used by barbastelle for foraging and commuting.

Table 6.3 Valuation of commuting and foraging habitats across the proposed scheme according to Wray *et al.* (2010)

Species	Commuting	Foraging
Common pipistrelle	County	County
Soprano pipistrelle	County	County
Nathusius' pipistrelle	County	County
<i>Myotis</i> species (assumed rarer)	Regional	Regional
Brown long-eared bat	County	County
Noctule	Regional	Regional
Leisler's bat	Regional	Regional
Barbastelle	Regional	Regional
Serotine	County	County

6.2 Evaluation

- 6.2.1 All bat species are UK and EPS; several bat species are also species of principal importance under Section 41 of the NERC Act. Bat populations are stabilising across England; however, this follows a significant decline from the 1970s and some of this stabilisation may be attributed to the fact that bat recording equipment has developed significantly in those intervening years. Bat populations are particularly affected by habitat loss and fragmentation due to loss of roosting potential and commuting corridors. In Essex ten bat species are regularly recorded (Essex Bat Group, 2021); surveys for the proposed scheme recorded all ten of these, suggesting that the survey effort was effective at determining bat diversity in the area. The numbers of confirmed roosts found along the scheme also suggests effective survey effort, as according to desk study data there were only five roosts noted within 1km previously.
- 6.2.2 Barbastelle bats have been assigned County level importance based on the resulting score from 'Valuing bats in Ecological Impact Assessment' by Wray *et al.*, 2010. This takes into consideration the rarity of species, numbers of individuals present, roosts or potential roosts nearby and the type and

complexity of commuting/foraging habitats. The scores for barbastelles for commuting and foraging were 30 and 29 respectively. A score of 21-30 falls within County level importance, and therefore for the purposes of this assessment barbastelle are considered to be of County level importance.

- 6.2.3 The overall bat population in the study area is considered to be of **County Importance** for Biodiversity.

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Annex A Figures

Figure 1: Desk study – bat roosts

Figure 2: Results of ground-based bat roost assessment (trees)

Figure 3: Results of ground-based bat roost assessment (buildings)

Figure 4: Results of ground-based bat roost assessment (bridges and culverts)

Figure 5: Locations of crossing point, transect and static detector surveys

Figure 6: Confirmed bat roosts

APPENDIX 9.4 - FIGURE 1

Legend

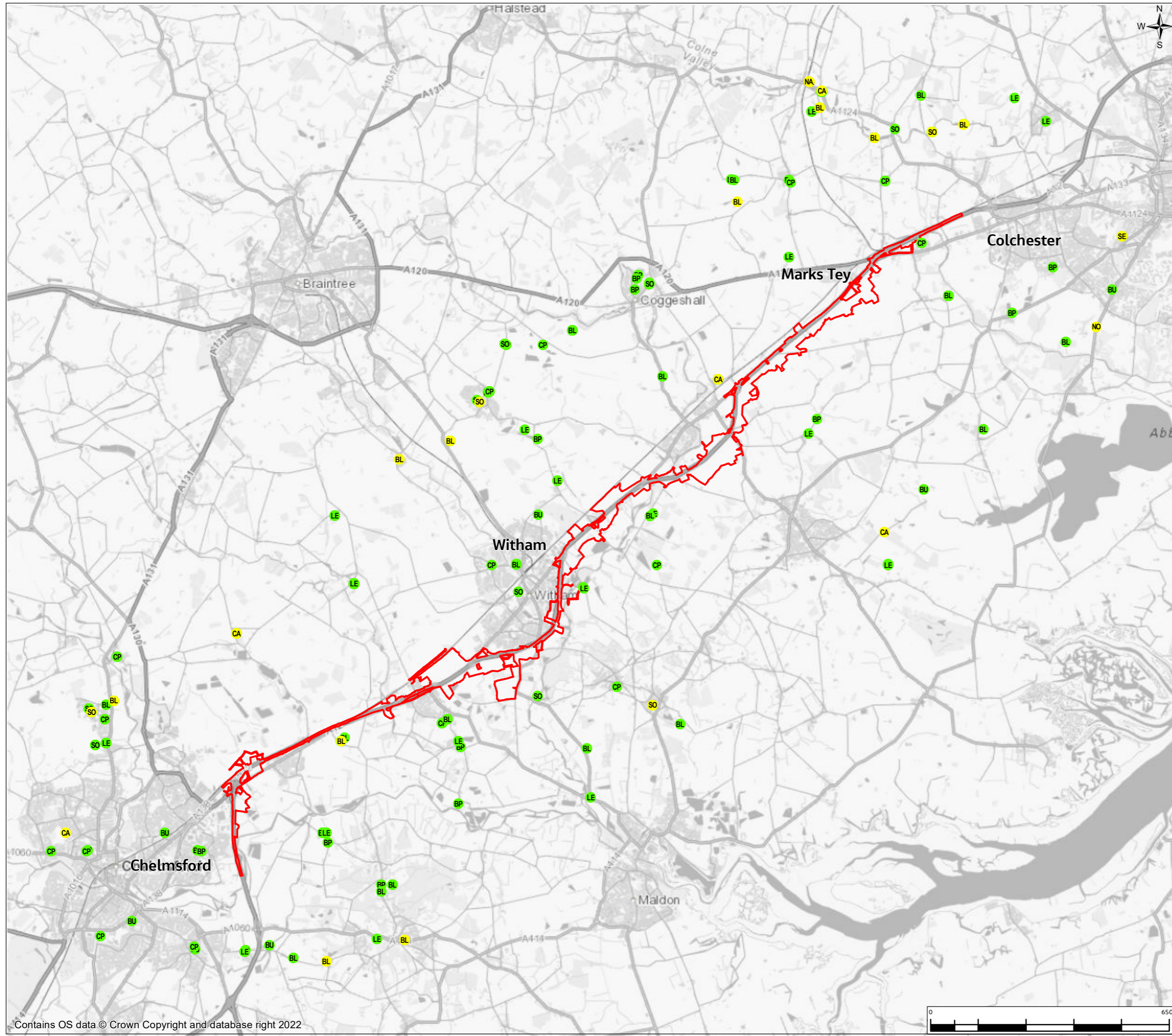
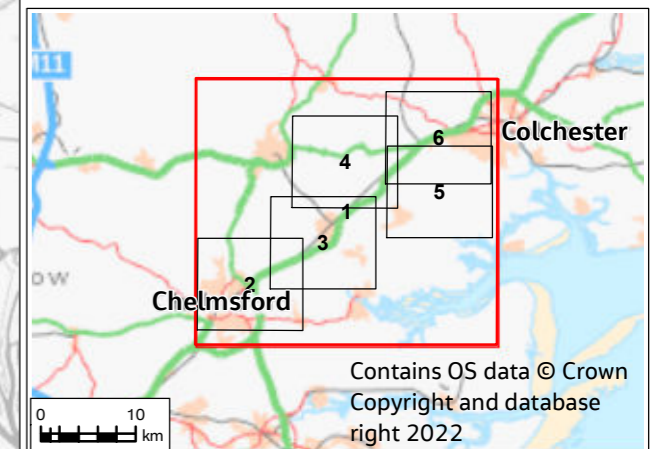
Provisional Order Limits - Design Fix 1

Confirmed roosts from Essex Field Club dataset

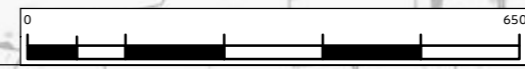
- BL Brown Long-eared Bat
- CA Common Pipistrelle
- DA Daubenton's Bat
- NA Natterer's Bat
- NO Noctule
- SE Serotine
- SO Soprano Pipistrelle

Confirmed roosts from Essex Wildlife Trust dataset

- BU Bat (species unknown)
- BL Brown Long-eared Bat
- CP Common Pipistrelle
- DA Daubenton's Bat
- LE Long-eared Bat species
- NA Natterer's Bat
- NO Noctule
- BP Pipistrelle Bat species
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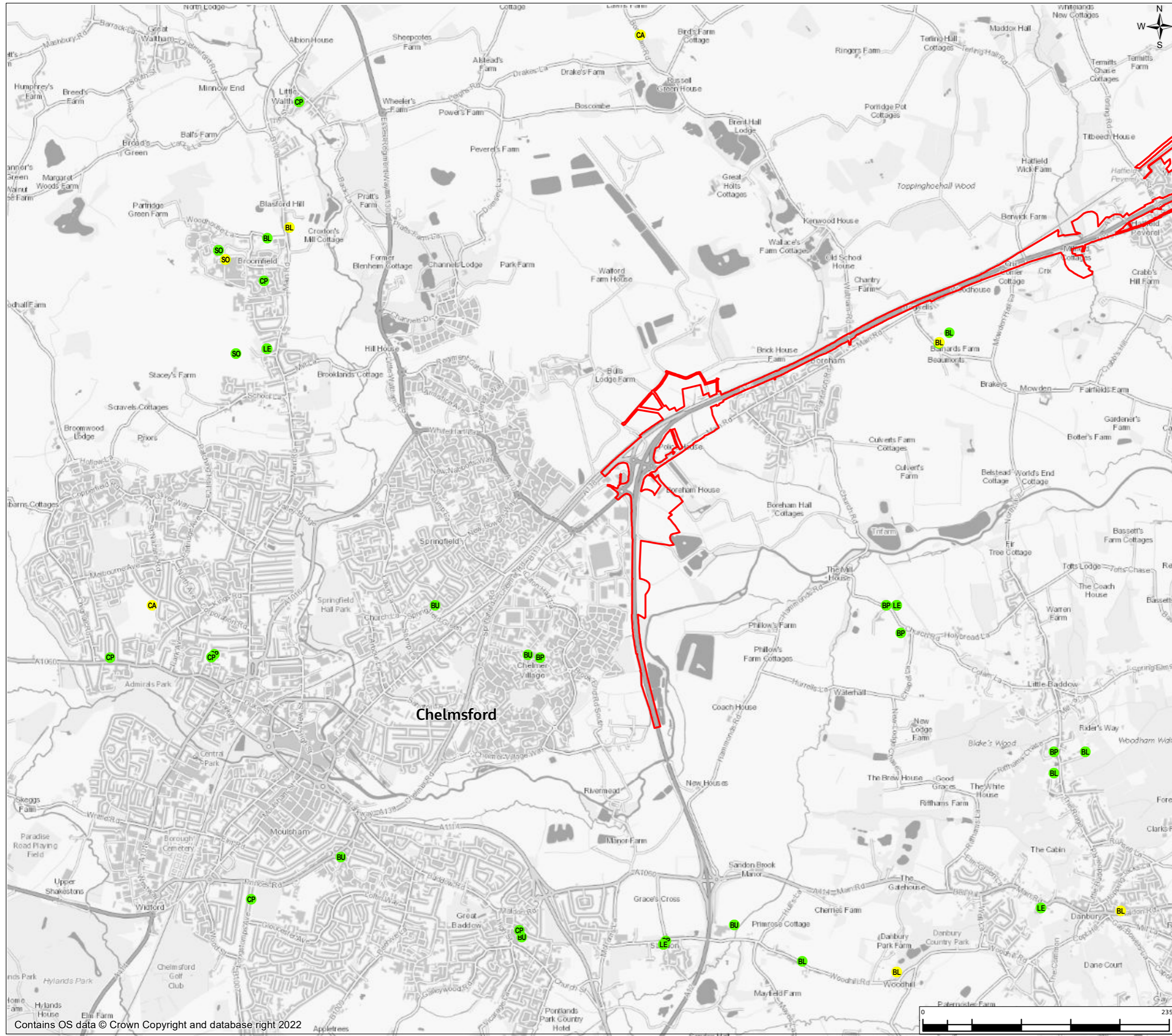


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Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
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Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT DESK STUDY RECORDS – BAT ROOSTS SHEET 1 OF 6						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3	1:100000					DO NOT SCALE
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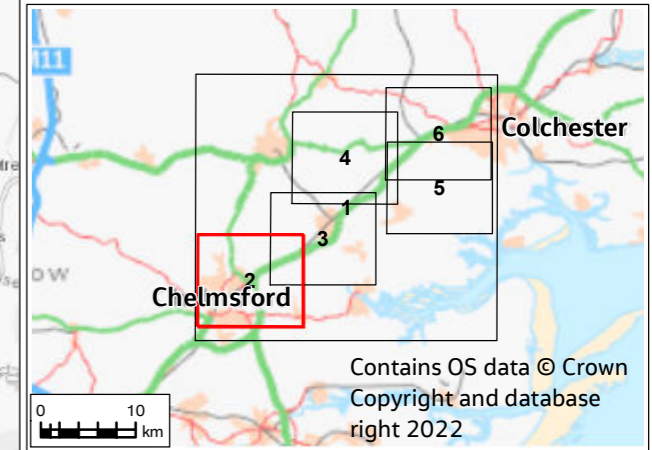



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APPENDIX 9.4 - FIGURE 1

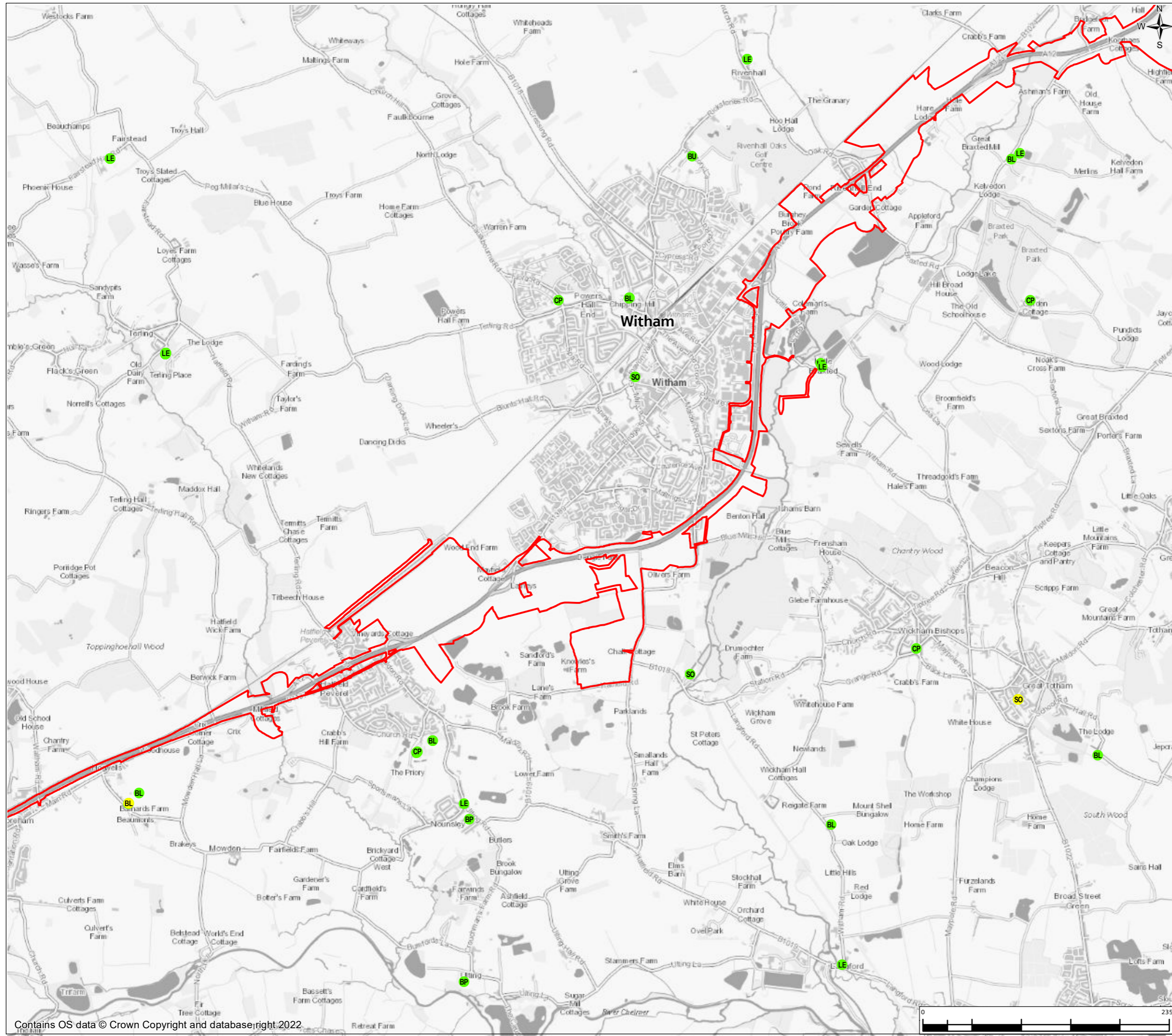


- Legend**
- Provisional Order Limits - Design Fix 1
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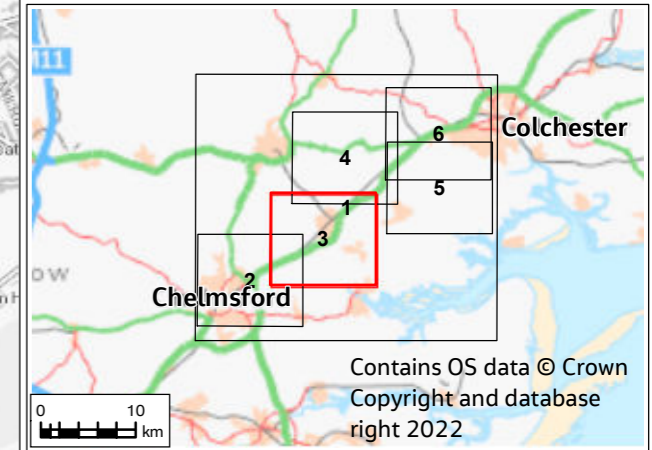


PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
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ENVIRONMENTAL STATEMENT DESK STUDY RECORDS – BAT ROOSTS SHEET 2 OF 6						
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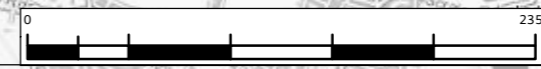
APPENDIX 9.4 - FIGURE 1



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 - SE Serotine
 - SO Soprano Pipistrelle

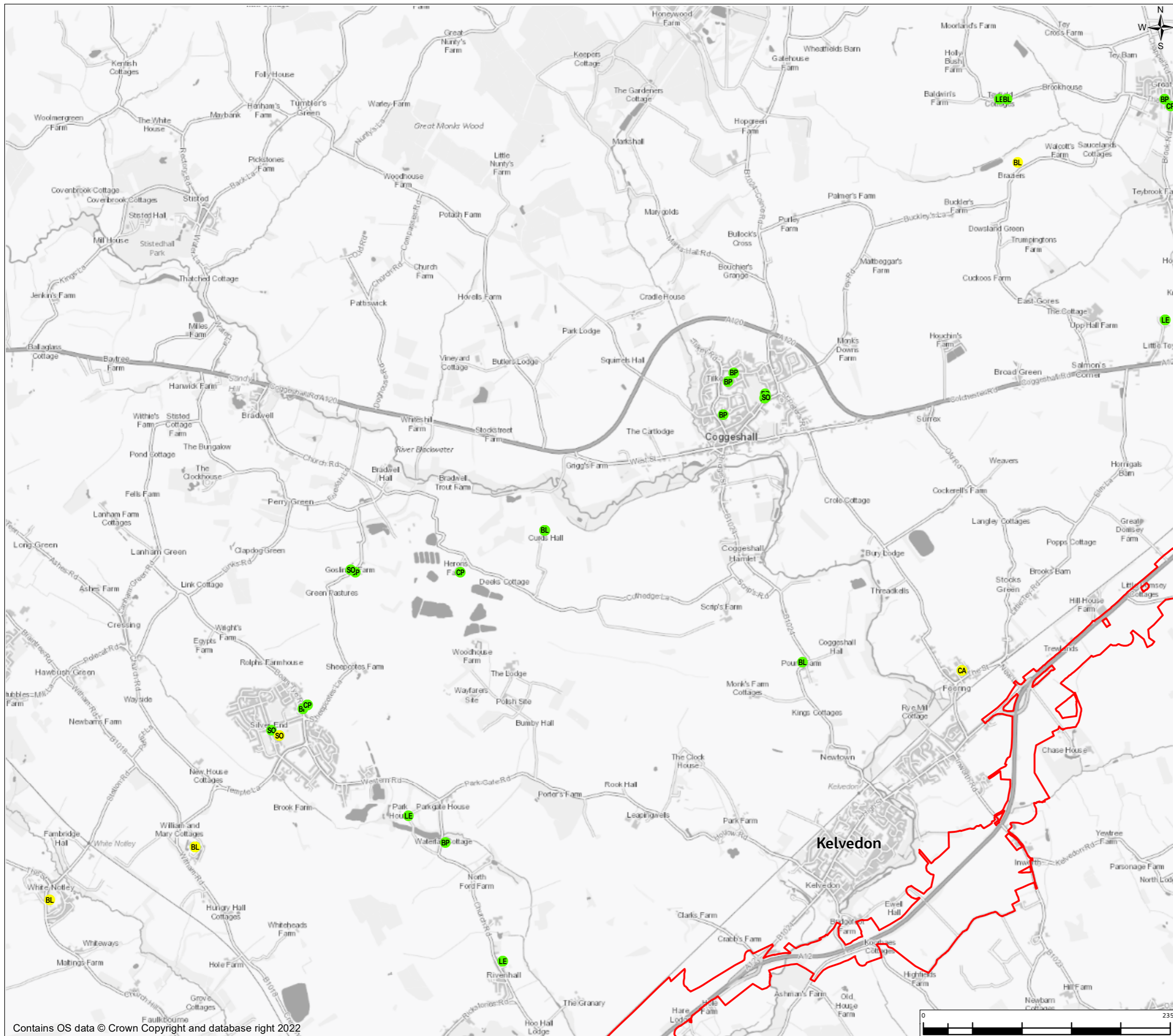


PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
ENVIRONMENTAL STATEMENT DESK STUDY RECORDS - BAT ROOSTS SHEET 3 OF 6						
Drawing Status: S4 - SUITABLE FOR STAGE APPROVAL						
Scale @ A3	1:35000				DO NOT SCALE	
Jacobs No.	B36601D1				Rev P01	
Client No.	HE551497					
Drawing Number: HE551497-JAC-LDC-SCHW-SK-GI-0532						

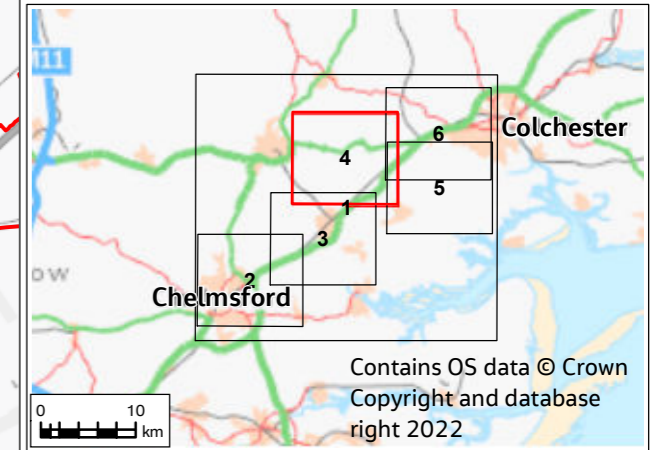


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APPENDIX 9.4 - FIGURE 1

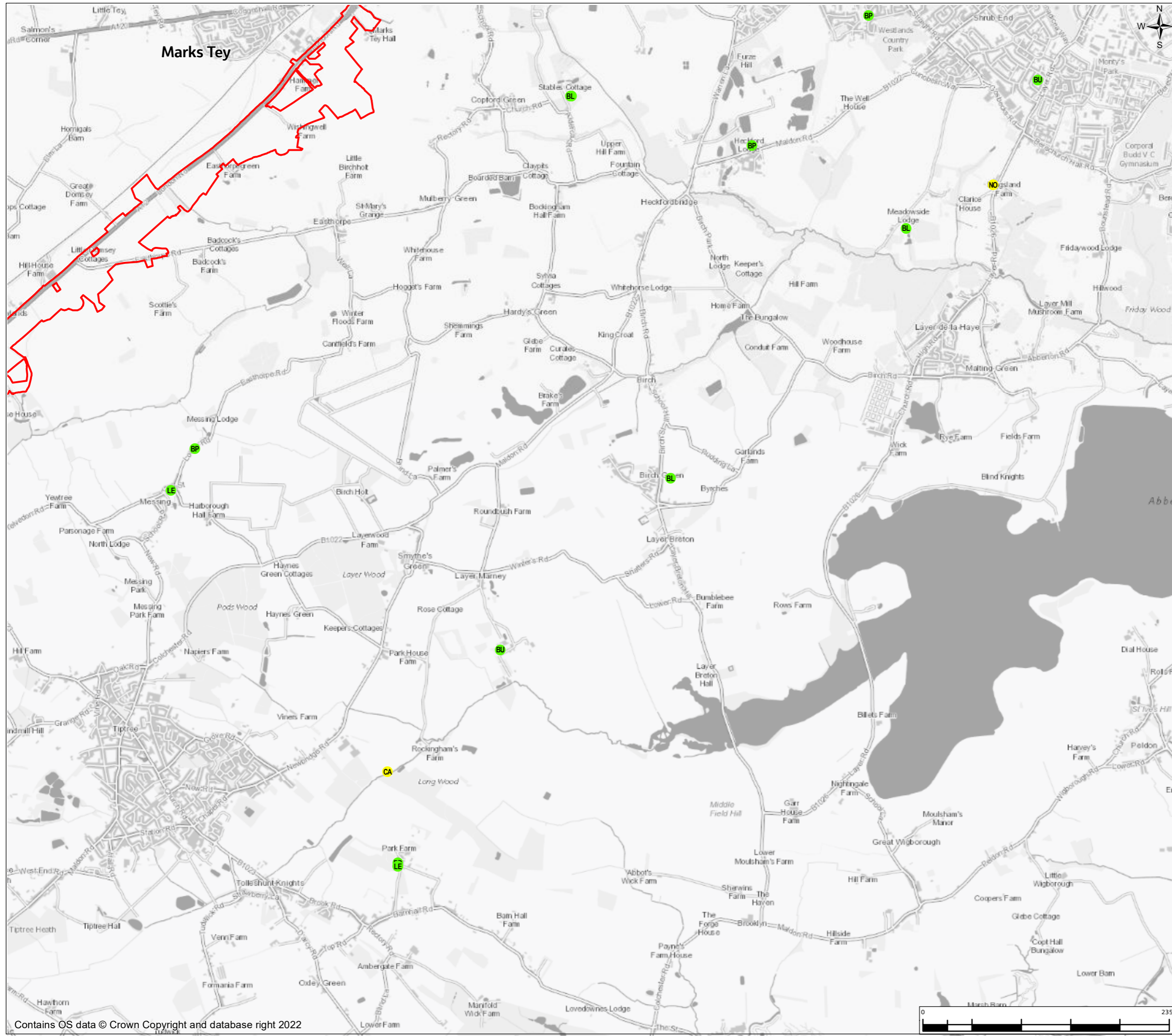


- Legend**
- Provisional Order Limits - Design Fix 1
 - Confirmed roosts from Essex Field Club dataset**
 - BL Brown Long-eared Bat
 - CA Common Pipistrelle
 - DA Daubenton's Bat
 - NA Natterer's Bat
 - NO Noctule
 - SE Serotine
 - SO Soprano Pipistrelle
 - Confirmed roosts from Essex Wildlife Trust dataset**
 - BU Bat (species unknown)
 - BL Brown Long-eared Bat
 - CP Common Pipistrelle
 - DA Daubenton's Bat
 - LE Long-eared Bat species
 - NA Natterer's Bat
 - NO Noctule
 - BP Pipistrelle Bat species
 - SE Serotine
 - SO Soprano Pipistrelle

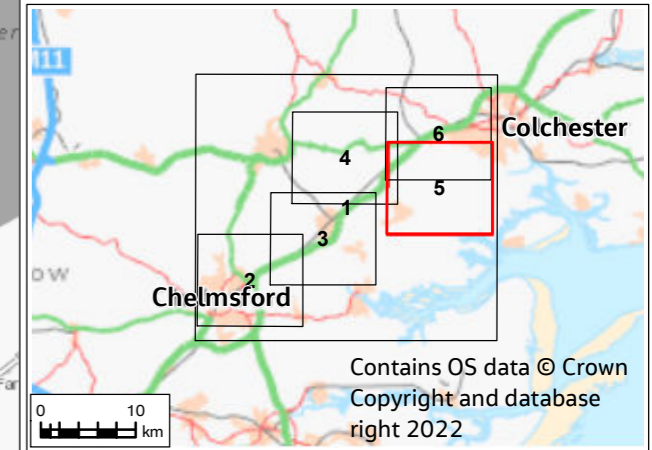


PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT DESK STUDY RECORDS - BAT ROOSTS SHEET 4 OF 6						
Drawing Status S4 - SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:35000	DO NOT SCALE			
Jacobs No.		B36601D1	Rev P01			
Client No.		HE551497				
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0533						

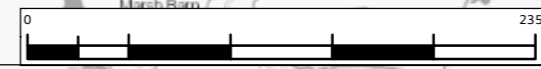
APPENDIX 9.4 - FIGURE 1



- Legend**
- Provisional Order Limits - Design Fix 1
 - Confirmed roosts from Essex Field Club dataset**
 - BL Brown Long-eared Bat
 - CA Common Pipistrelle
 - DA Daubenton's Bat
 - NA Natterer's Bat
 - NO Noctule
 - SE Serotine
 - SO Soprano Pipistrelle
 - Confirmed roosts from Essex Wildlife Trust dataset**
 - BU Bat (species unknown)
 - BL Brown Long-eared Bat
 - CP Common Pipistrelle
 - DA Daubenton's Bat
 - LE Long-eared Bat species
 - NA Natterer's Bat
 - NO Noctule
 - BP Pipistrelle Bat species
 - SE Serotine
 - SO Soprano Pipistrelle

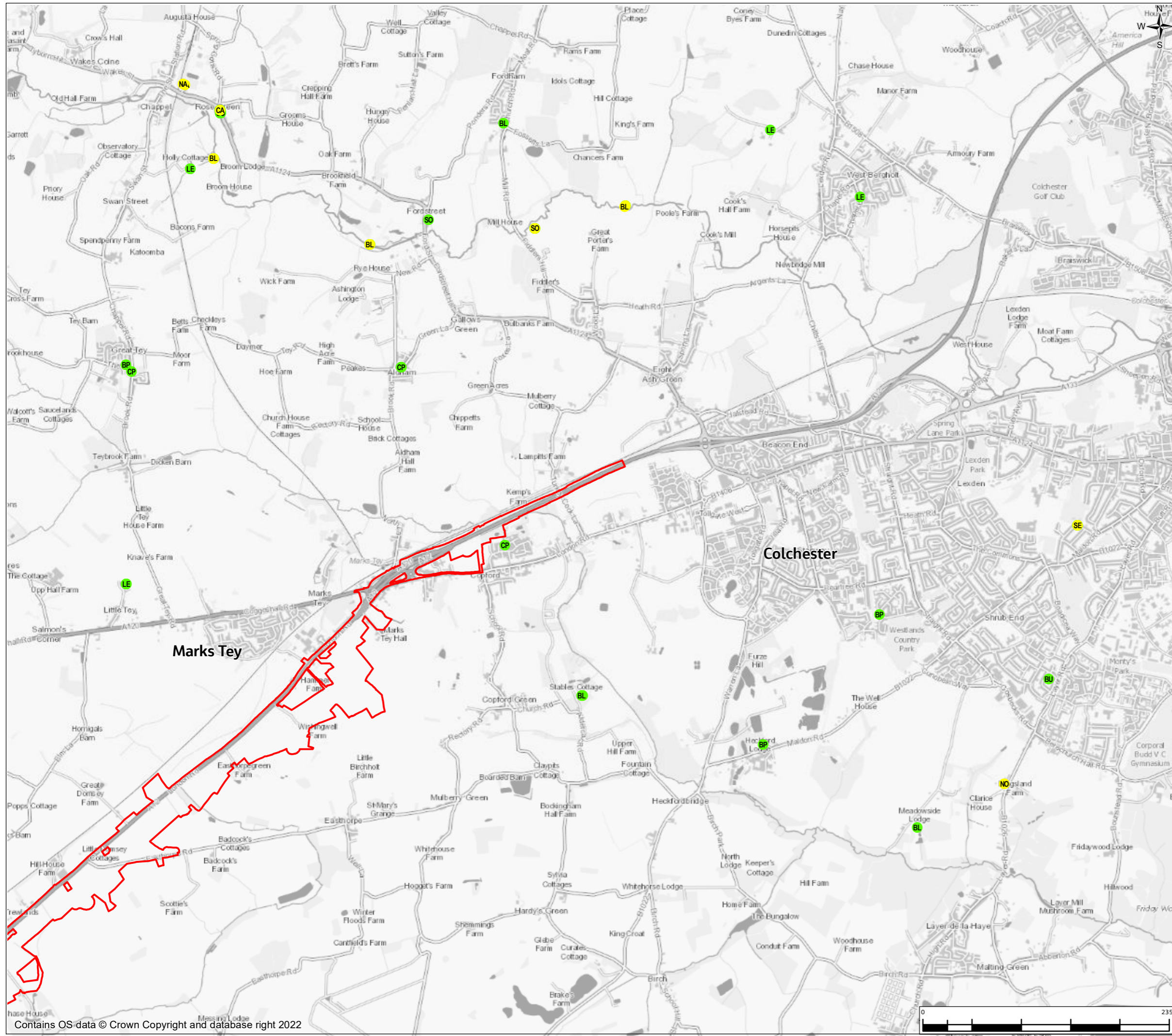


PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT DESK STUDY RECORDS - BAT ROOSTS SHEET 5 OF 6						
Drawing Status S4 - SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:35000	DO NOT SCALE			
Jacobs No.		B36601D1	Rev P01			
Client No.		HE551497				
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0534						

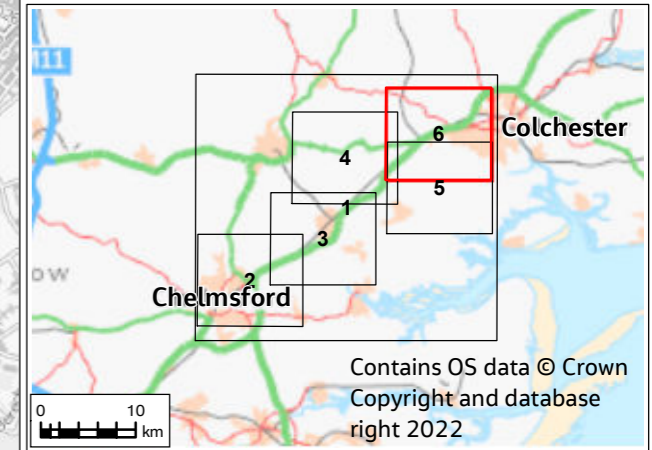


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APPENDIX 9.4 - FIGURE 1



- Legend**
- Provisional Order Limits - Design Fix 1
 - Confirmed roosts from Essex Field Club dataset**
 - BL Brown Long-eared Bat
 - CA Common Pipistrelle
 - DA Daubenton's Bat
 - NA Natterer's Bat
 - NO Noctule
 - SE Serotine
 - SO Soprano Pipistrelle
 - Confirmed roosts from Essex Wildlife Trust dataset**
 - BU Bat (species unknown)
 - BL Brown Long-eared Bat
 - CP Common Pipistrelle
 - DA Daubenton's Bat
 - LE Long-eared Bat species
 - NA Natterer's Bat
 - NO Noctule
 - BP Pipistrelle Bat species
 - SE Serotine
 - SO Soprano Pipistrelle



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT DESK STUDY RECORDS - BAT ROOSTS SHEET 6 OF 6						
Drawing Status S4 - SUITABLE FOR STAGE APPROVAL						
Scale @ A3	1:35000		DO NOT SCALE			
Jacobs No.	B36601D1		Rev		P01	
Client No.	HE51497					
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0535						

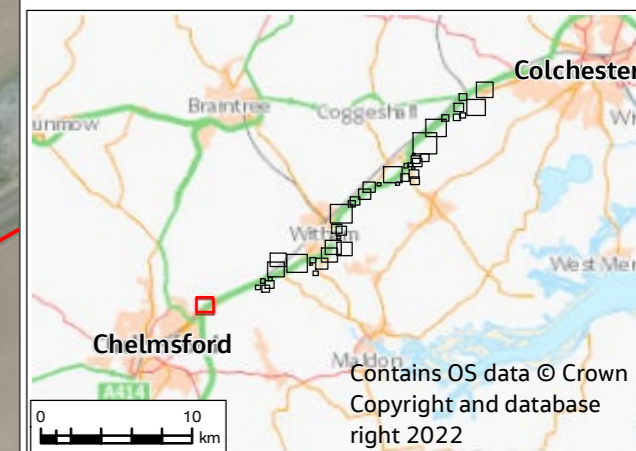
APPENDIX 9.4 - FIGURE 2

Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

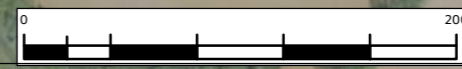
Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 1 OF 46

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:3500	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE55 1497-JAC-LDC-SCHW-SK-GI-0536

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APPENDIX 9.4 - FIGURE 2

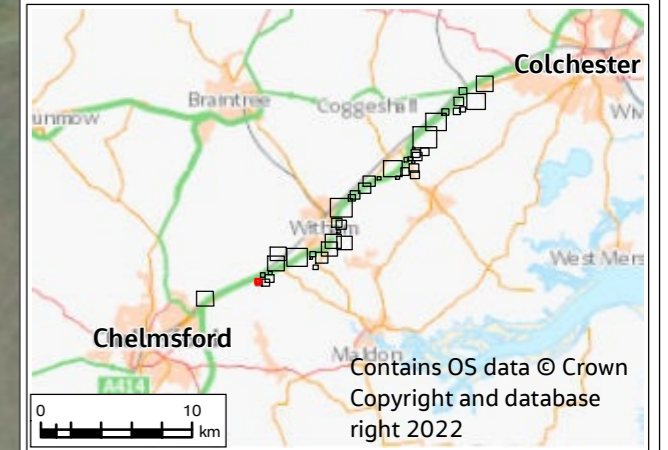


Legend

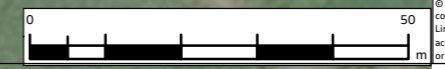
Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APFP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (TREES) SHEET 2 OF 46						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:1000	DO NOT SCALE			
Jacobs No.		B36601D1	Rev P01			
Client No.		HE551497				
Drawing Number HE55 1497-JAC-LDC-SCHW-SK-GI-0537						



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APPENDIX 9.4 - FIGURE 2

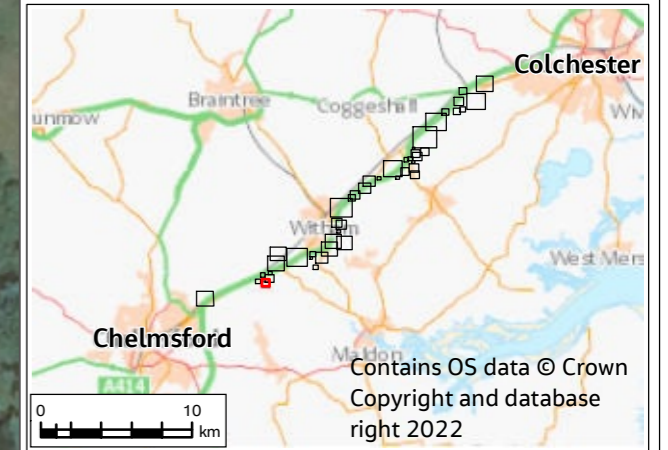


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

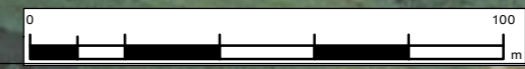
Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 3 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1600	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0538

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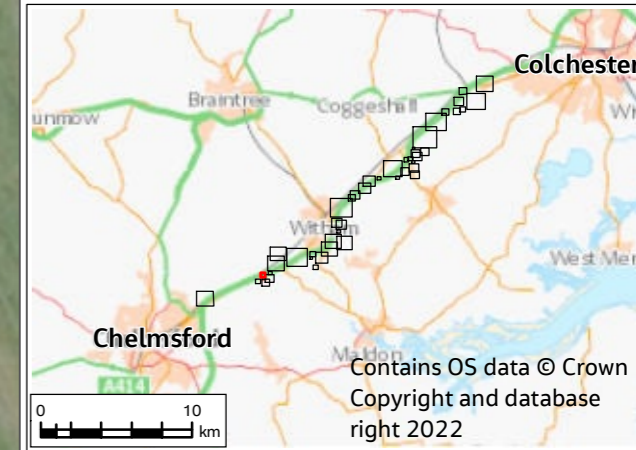
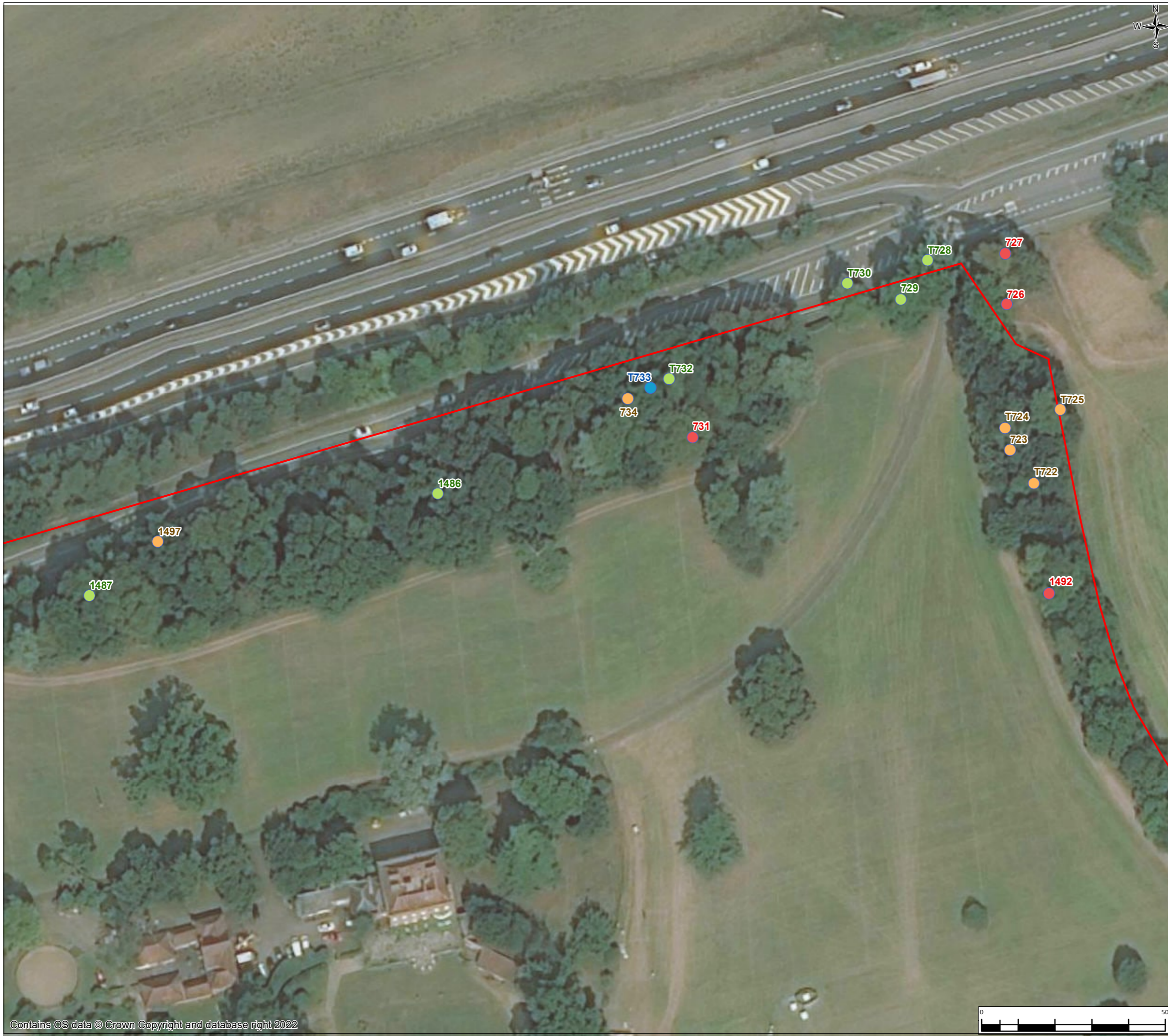


APPENDIX 9.4 - FIGURE 2



Legend

- Provisional Order Limits - Design Fix 1
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



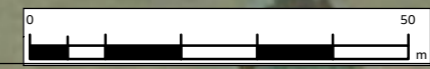
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 4 OF 46

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE55 1497-JAC-LDC-SCHW-SK-GI-0539



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APPENDIX 9.4 - FIGURE 2

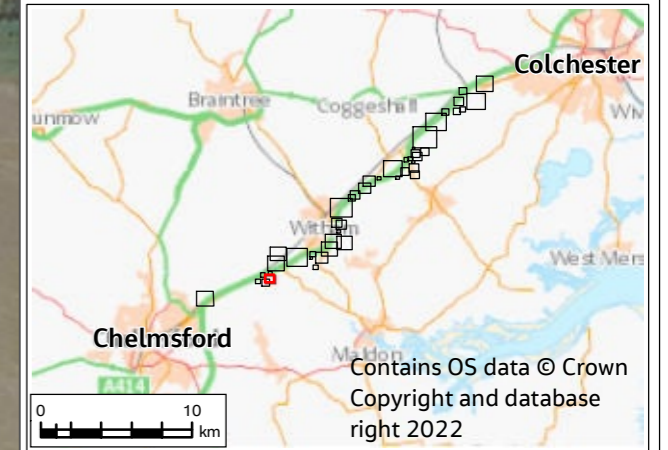


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

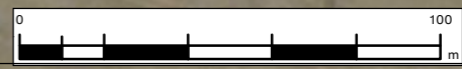
Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 5 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1800	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0540

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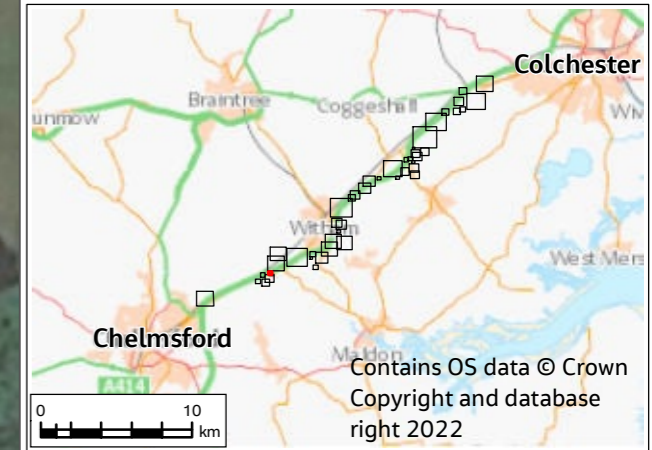
APPENDIX 9.4 - FIGURE 2

Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)

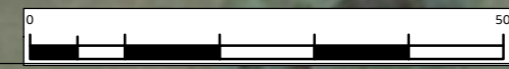


Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 6 OF 46**

Drawing Status	S4 – SUITABLE FOR STAGE APPROVAL		
Scale @ A3	1:800	DO NOT SCALE	
Jacobs No.	B36601D1	Rev	PO1
Client No.	HE551497		
Drawing Number	HE55 1497-JAC-LDC-SCHW-SK-GI-0541		

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APPENDIX 9.4 - FIGURE 2

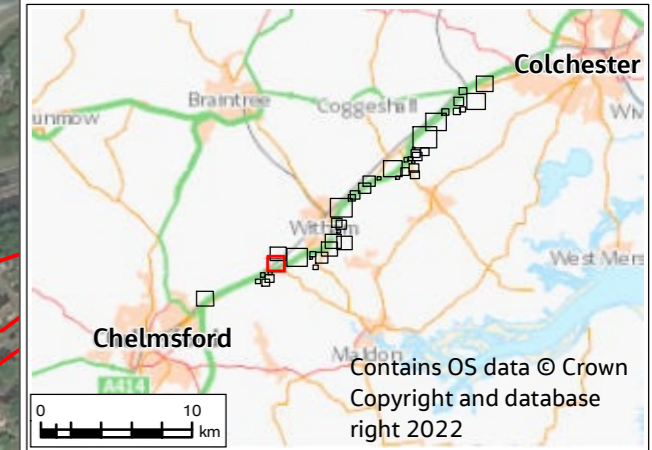


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

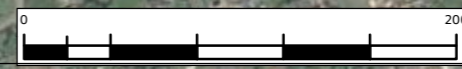
Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 7 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:3500	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0542

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APPENDIX 9.4 - FIGURE 2

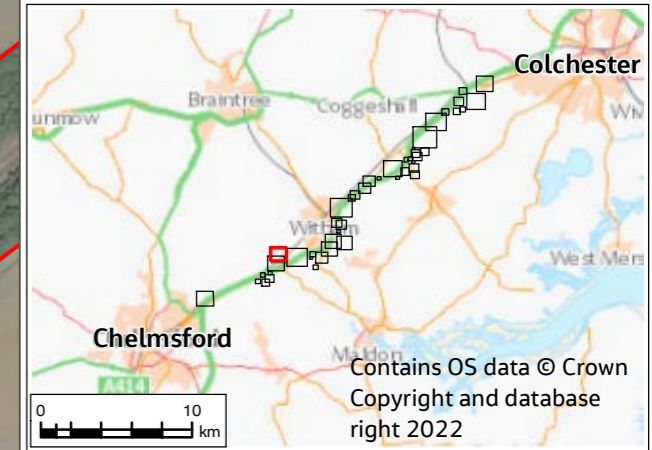


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



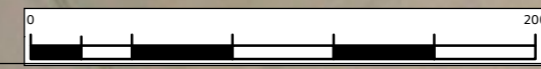
Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 8 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:3000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0543



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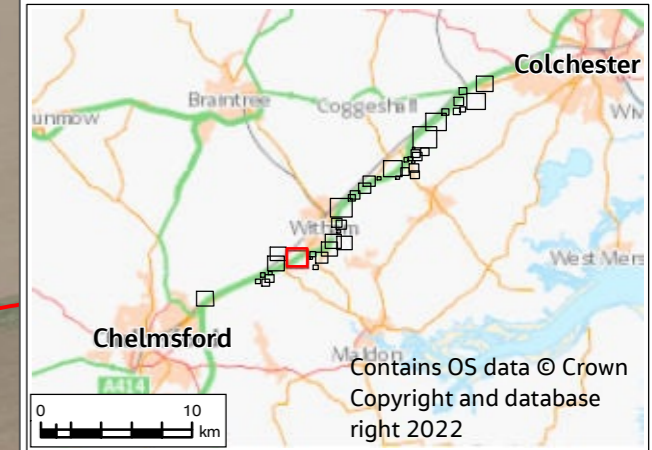
APPENDIX 9.4 - FIGURE 2

Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

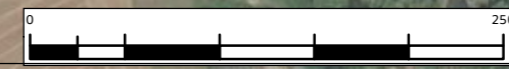
Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 9 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:4000	DO NOT SCALE
Jacobs No.	B36601D1	Rev
Client No.	HE551497	PO1

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0544

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APPENDIX 9.4 - FIGURE 2

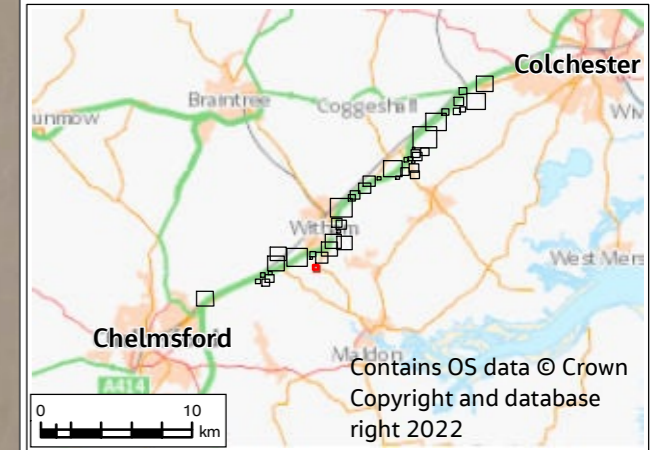


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

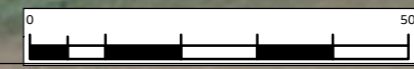
Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 10 OF 46

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE55 1497-JAC-LDC-SCHW-SK-GI-0545

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APPENDIX 9.4 - FIGURE 2

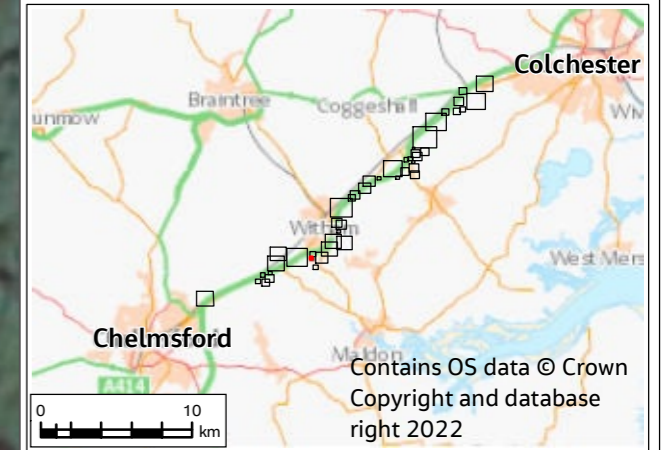
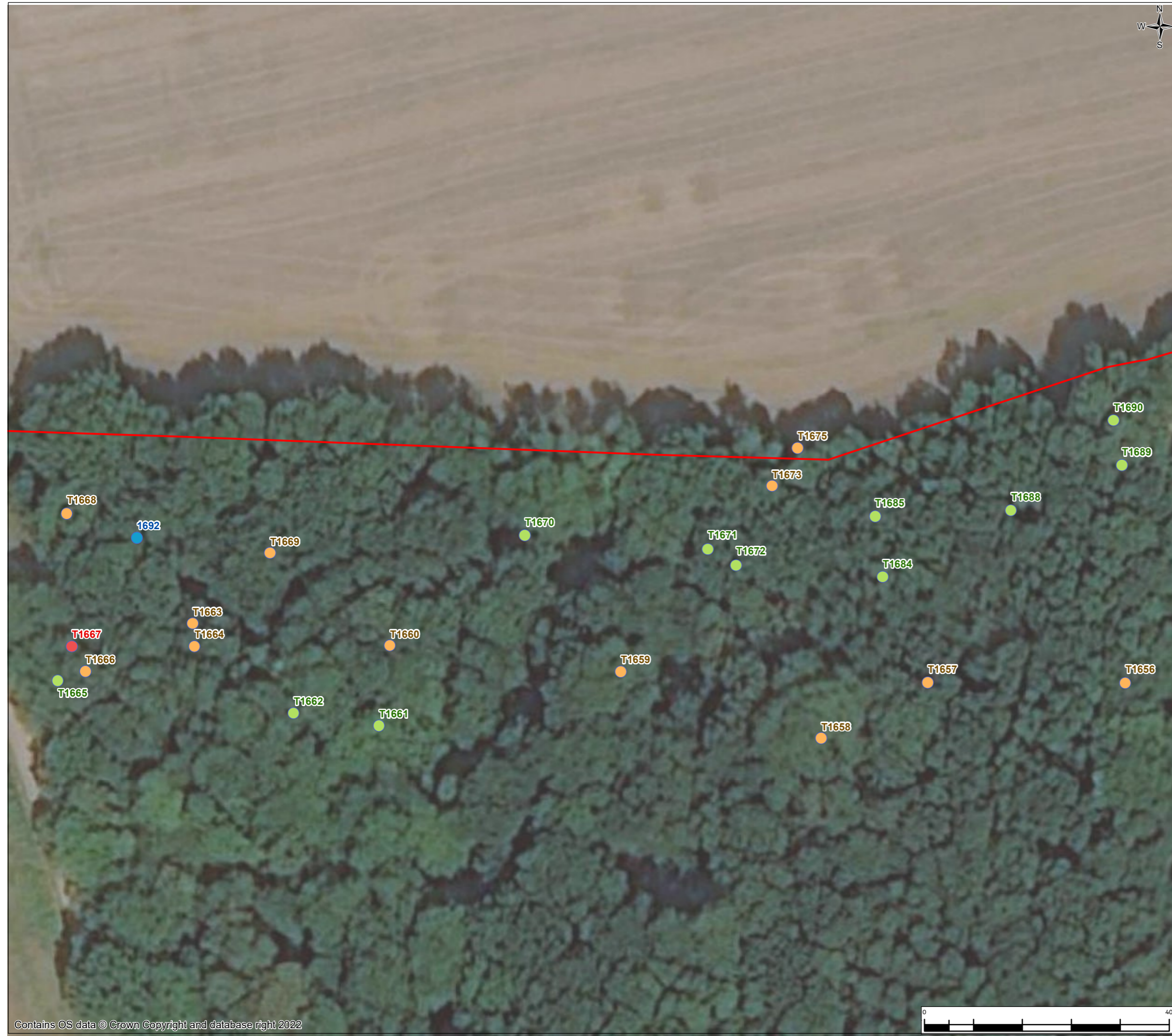


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



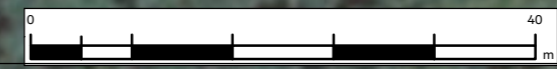
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 11 OF 46

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:600	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE55 1497-JAC-LDC-SCHW-SK-GI-0546



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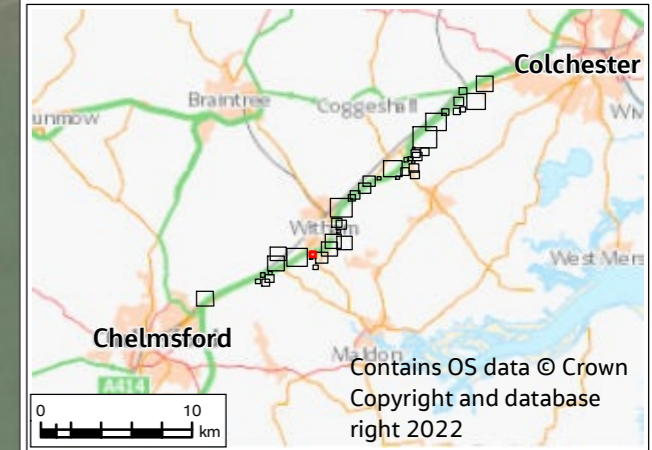
APPENDIX 9.4 - FIGURE 2

Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



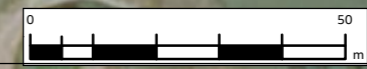
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 12 OF 46

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1200	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE55 1497-JAC-LDC-SCHW-SK-GI-0547



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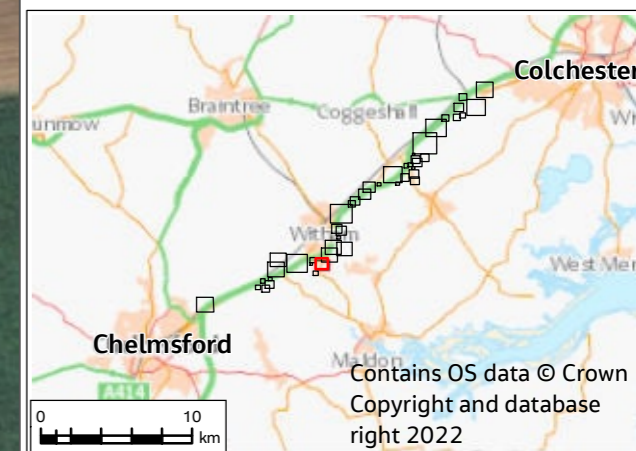
APPENDIX 9.4 - FIGURE 2

Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

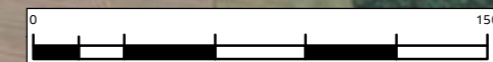
Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 13 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:2500	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0548

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APPENDIX 9.4 - FIGURE 2

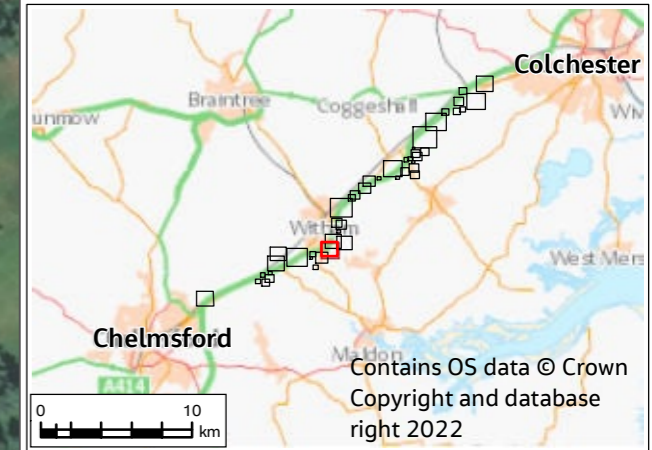


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)

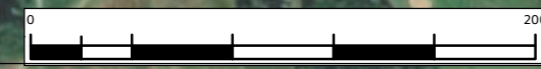


Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 14 OF 46

Drawing Status	S4 – SUITABLE FOR STAGE APPROVAL		
Scale @ A3	1:3000	DO NOT SCALE	
Jacobs No.	B36601D1	Rev	P01
Client No.	HE551497		
Drawing Number	HE55 1497-JAC-LDC-SCHW-SK-GI-0549		

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APPENDIX 9.4 - FIGURE 2

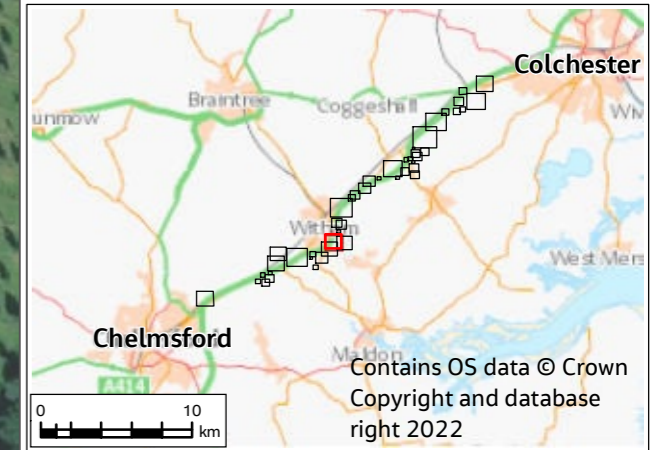
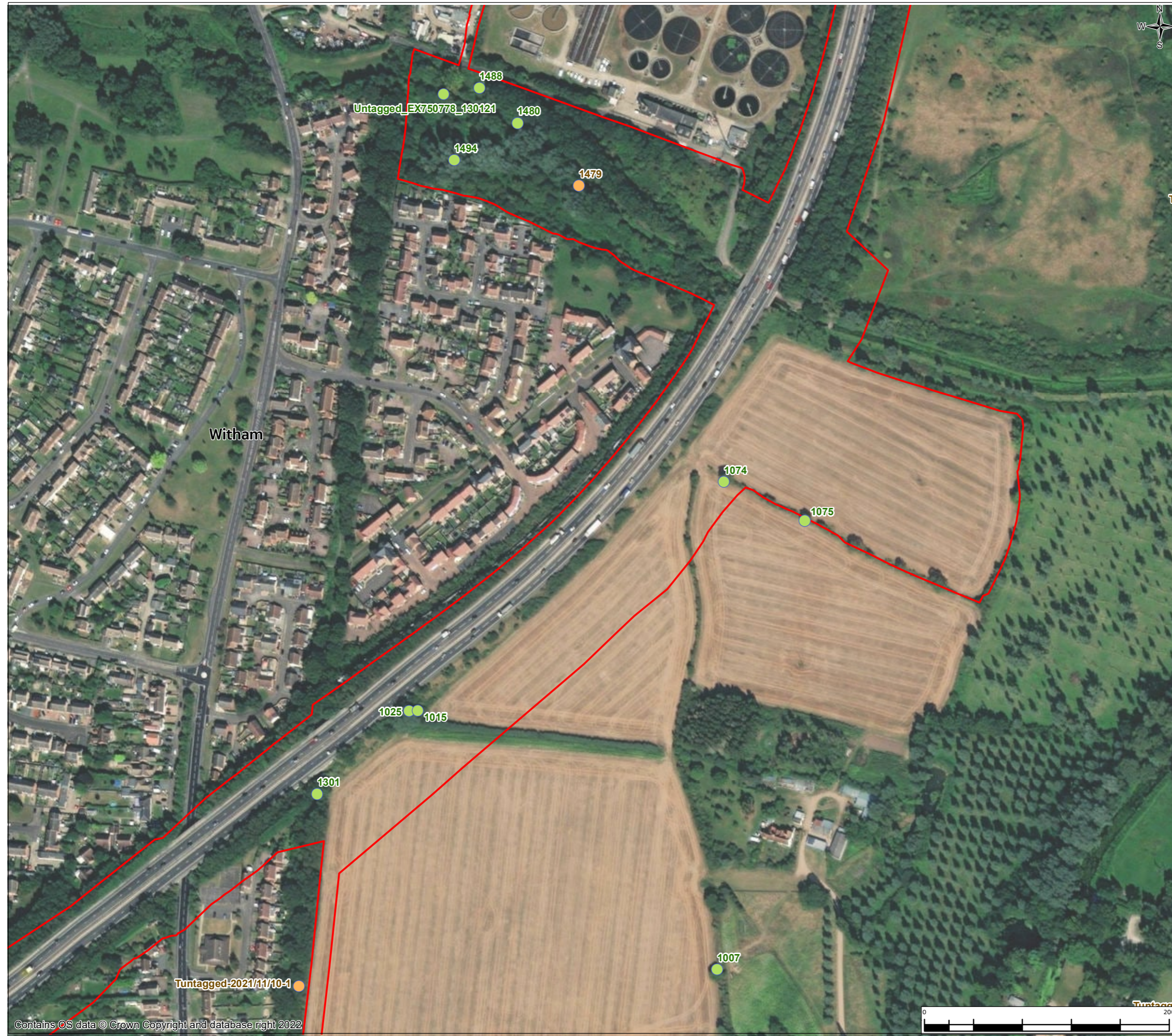


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 15 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:3000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0550

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APPENDIX 9.4 - FIGURE 2

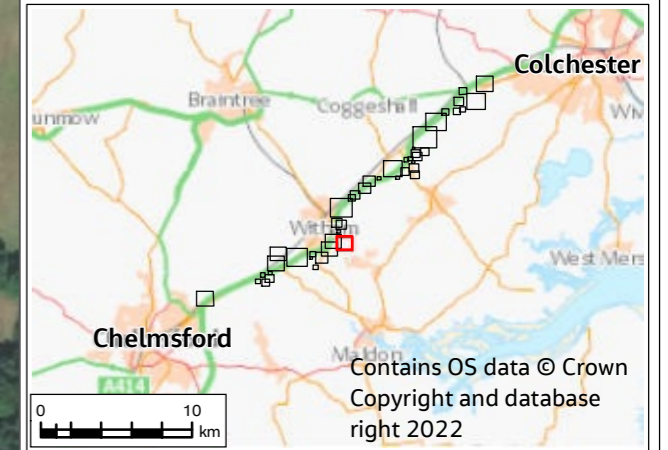


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



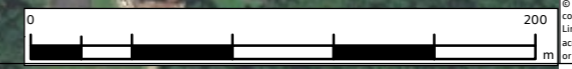
Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 16 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:3000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-055 1



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APPENDIX 9.4 - FIGURE 2

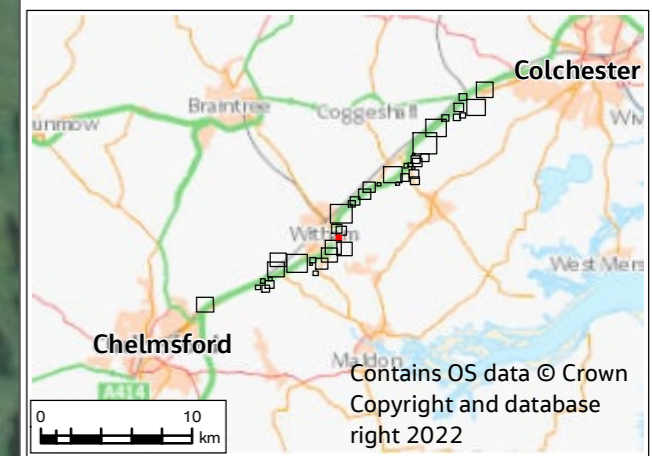
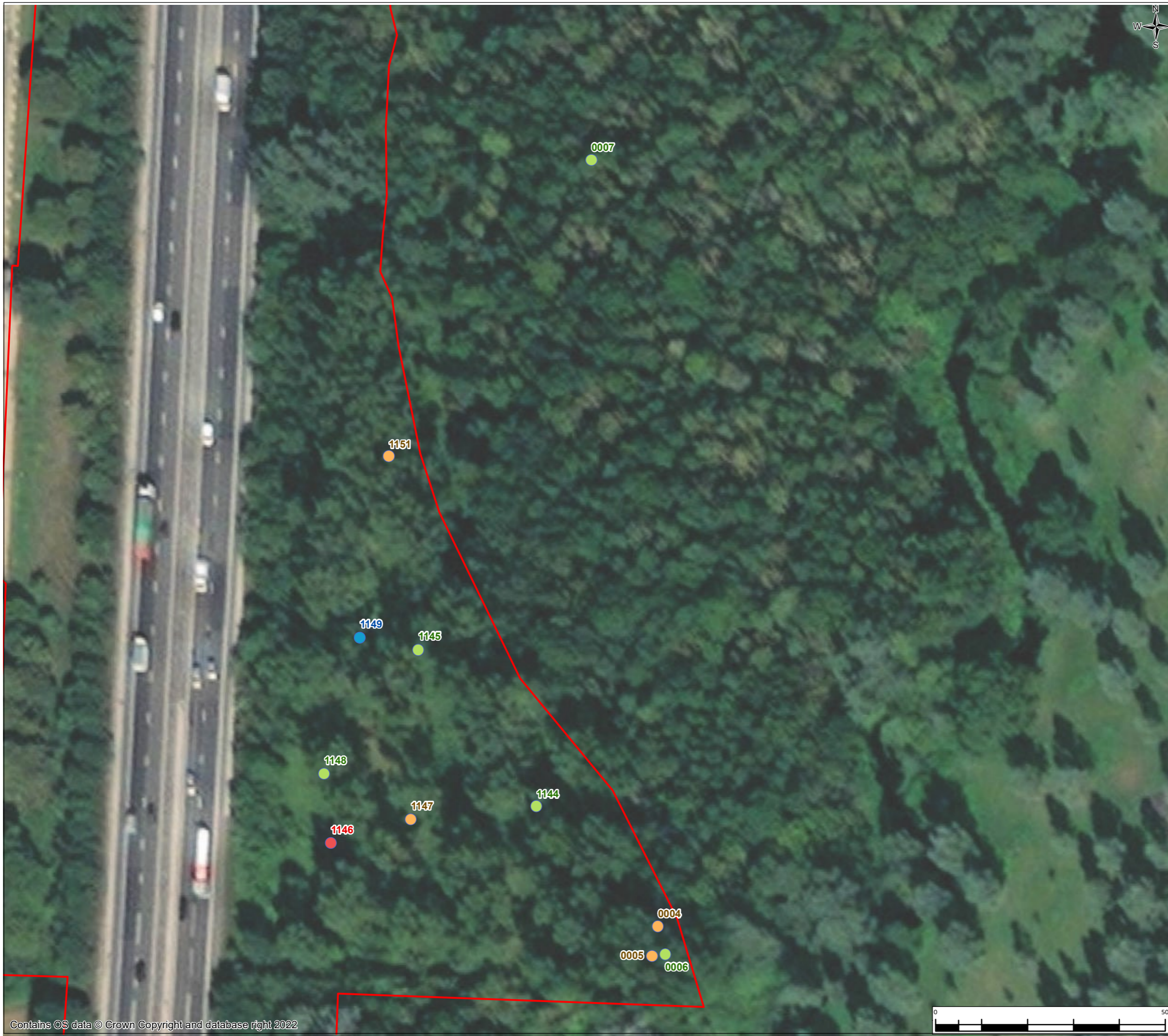


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

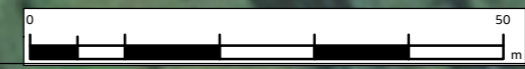
Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 17 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:800	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0552

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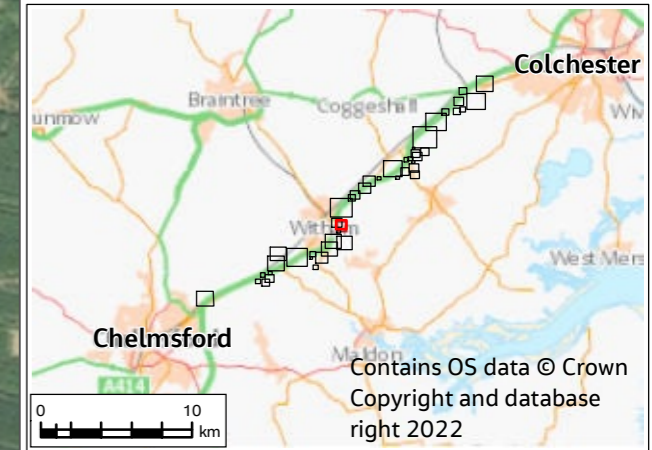


APPENDIX 9.4 - FIGURE 2



Legend

- Provisional Order Limits - Design Fix 1
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

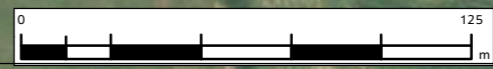
Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 18 OF 46**

Drawing Status	S4 - SUITABLE FOR STAGE APPROVAL		
Scale @ A3	1:2100	DO NOT SCALE	
Jacobs No.	B36601D1	Rev	P01
Client No.	HE551497		
Drawing Number	HE55 1497-JAC-LDC-SCHW-SK-GI-0553		



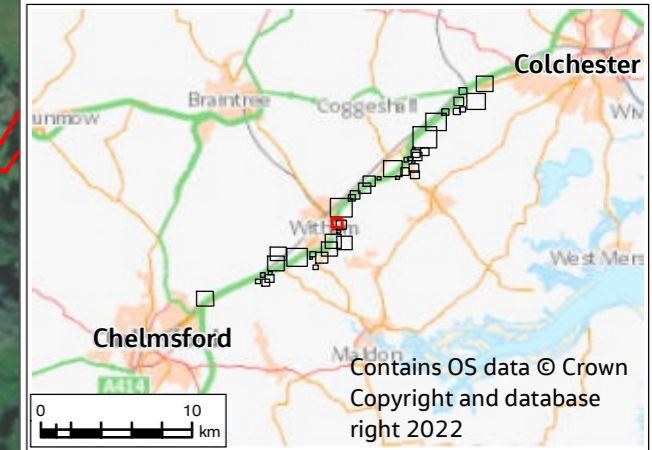
APPENDIX 9.4 - FIGURE 2

Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

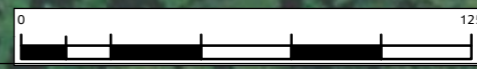
Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 19 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:2100	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE551497-JAC-LDC-SCHW-SK-GI-0554

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APPENDIX 9.4 - FIGURE 2

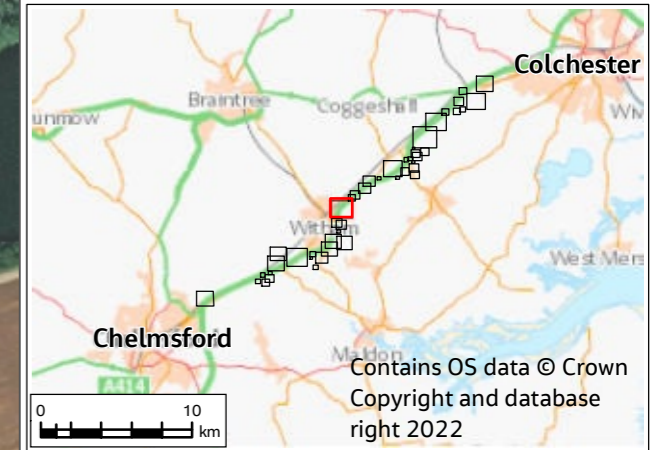


Legend

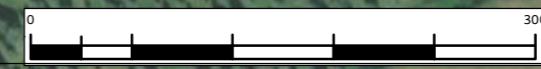
Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APFP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (TREES) SHEET 20 OF 46						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:4500	DO NOT SCALE			
Jacobs No.		B36601D1	Rev P01			
Client No.		HE551497				
Drawing Number HE55 1497-JAC-LDC-SCHW-SK-GI-0555						



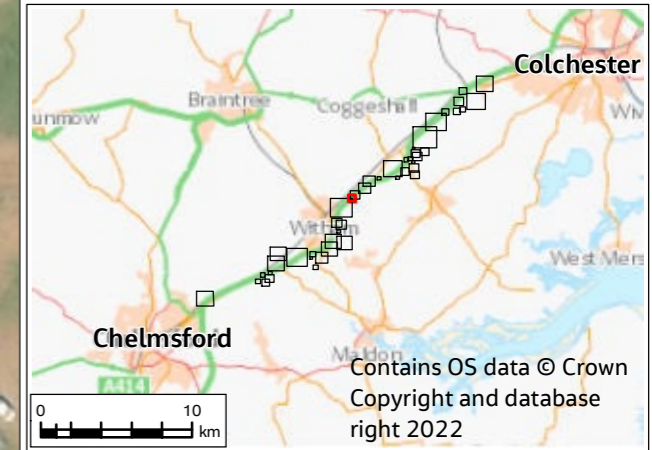
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APPENDIX 9.4 - FIGURE 2



Legend

- Provisional Order Limits - Design Fix 1
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)

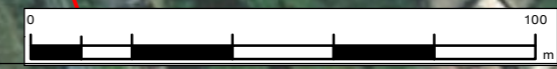


Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 21 OF 46

Drawing Status	S4 - SUITABLE FOR STAGE APPROVAL		
Scale @ A3	1:1500	DO NOT SCALE	
Jacobs No.	B36601D1	Rev	P01
Client No.	HE551497		
Drawing Number	HE55 1497-JAC-LDC-SCHW-SK-GI-0556		

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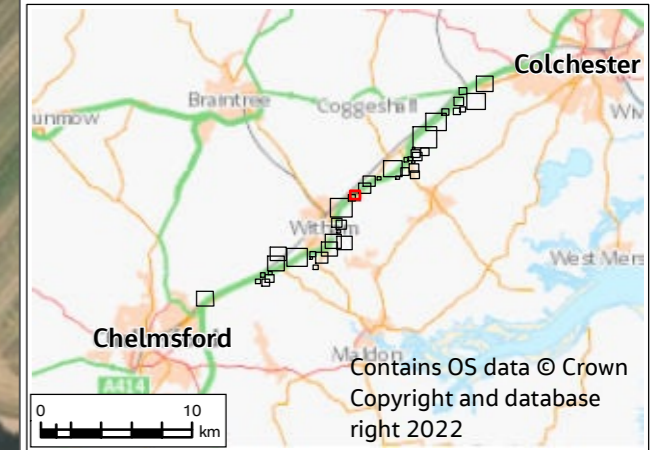


APPENDIX 9.4 - FIGURE 2



Legend

- Provisional Order Limits - Design Fix 1
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)

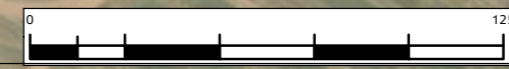


Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 22 OF 46

Drawing Status	S4 – SUITABLE FOR STAGE APPROVAL		
Scale @ A3	1:2000	DO NOT SCALE	
Jacobs No.	B36601D1	Rev	P01
Client No.	HE551497		
Drawing Number	HE55 1497-JAC-LDC-SCHW-SK-GI-0557		

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APPENDIX 9.4 - FIGURE 2

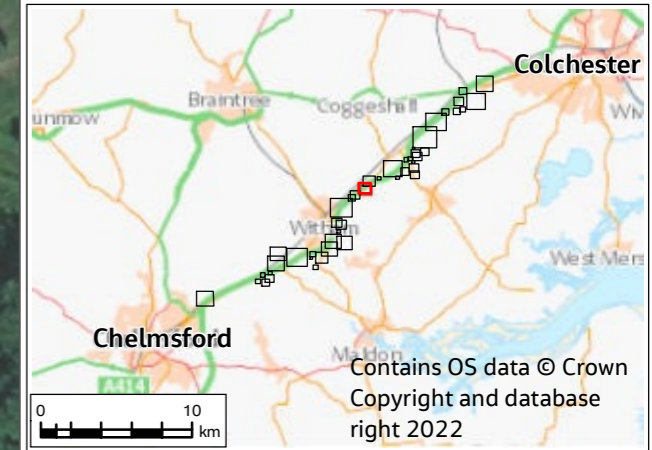


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			

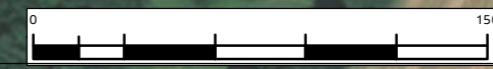


Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 23 OF 46**

Drawing Status	S4 – SUITABLE FOR STAGE APPROVAL		
Scale @ A3	1:2500	DO NOT SCALE	
Jacobs No.	B36601D1	Rev	P01
Client No.	HE551497		
Drawing Number	HE55 1497-JAC-LDC-SCHW-SK-GI-0558		

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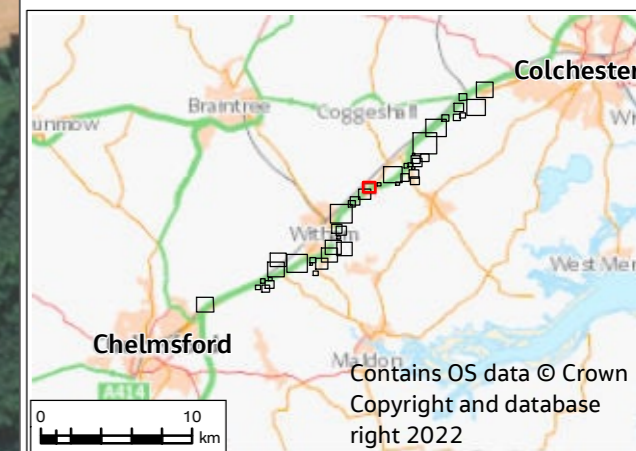


APPENDIX 9.4 - FIGURE 2



Legend

- Provisional Order Limits - Design Fix 1
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



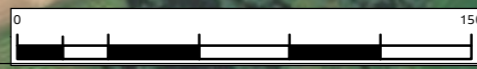
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 24 OF 46

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:2500	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE55 1497-JAC-LDC-SCHW-SK-GI-0559



APPENDIX 9.4 - FIGURE 2

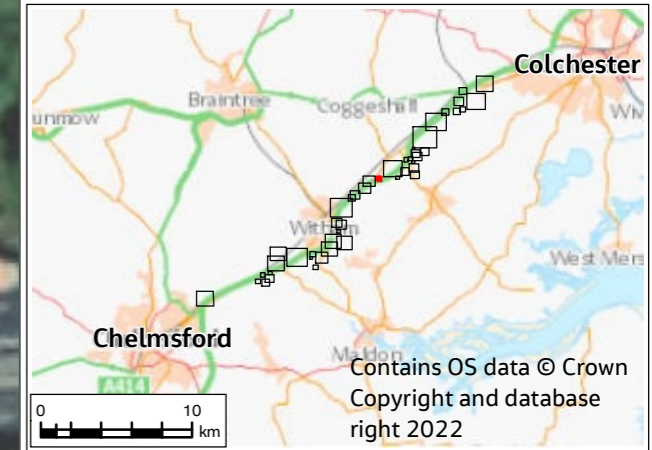


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

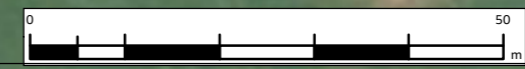
Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 25 OF 46

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:800	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE55 1497-JAC-LDC-SCHW-SK-GI-0560

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APPENDIX 9.4 - FIGURE 2



Legend

- Provisional Order Limits - Design Fix 1
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible

1429

1430

1436

1437

1438

1435

1439

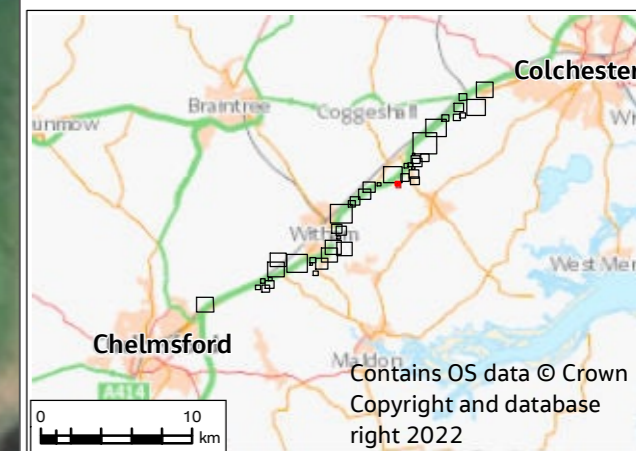
1434

1433

1440

1432

1431



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 26 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:800	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0561

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APPENDIX 9.4 - FIGURE 2

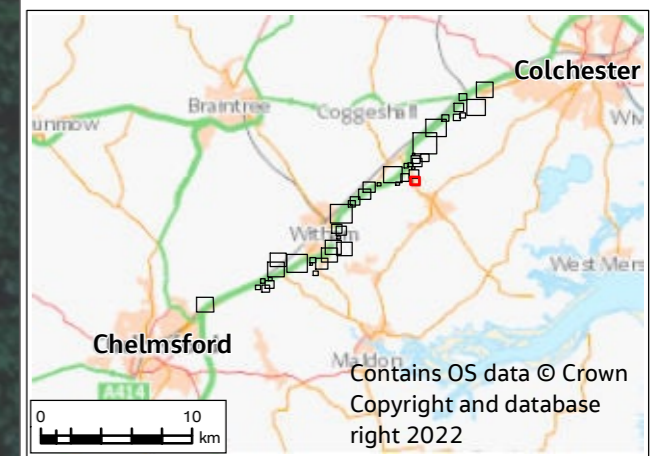


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project: REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

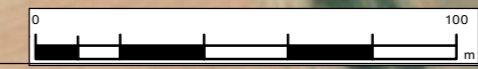
Drawing Title: ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 27 OF 46

Drawing Status: S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1800	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number: HE55 1497-JAC-LDC-SCHW-SK-GI-0562

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APPENDIX 9.4 - FIGURE 2

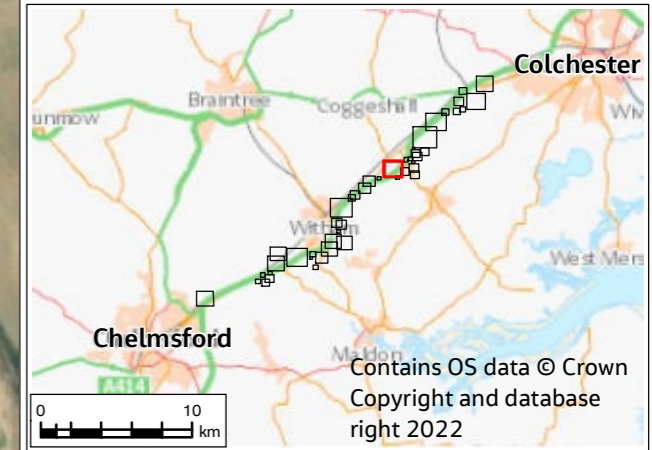


Legend

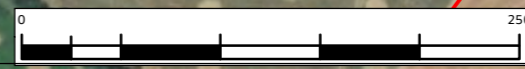
Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APFP Regulation: Regulation 5(2)(l)			
Project						
REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title						
ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (TREES) SHEET 28 OF 46						
Drawing Status						
S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3	1:3800					DO NOT SCALE
Jacobs No.	B36601D1					Rev P01
Client No.	HE551497					
Drawing Number						
HE55 1497-JAC-LDC-SCHW-SK-GI-0563						



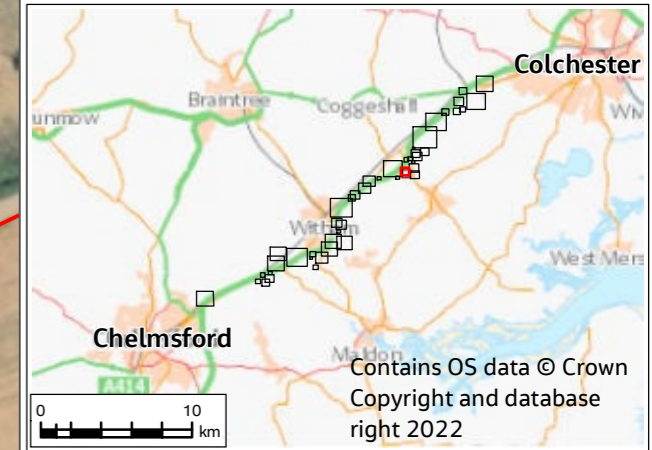
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APPENDIX 9.4 - FIGURE 2



Legend

- Provisional Order Limits - Design Fix 1
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 29 OF 46

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1800	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE55 1497-JAC-LDC-SCHW-SK-GI-0564

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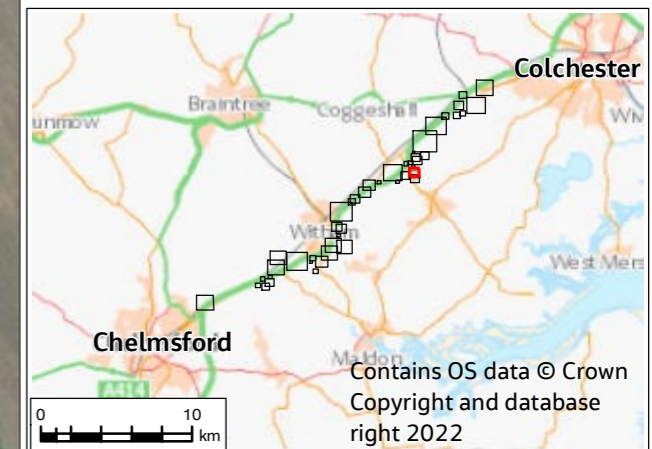
APPENDIX 9.4 - FIGURE 2

Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

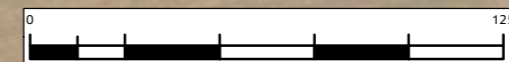
Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 30 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:2000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0565

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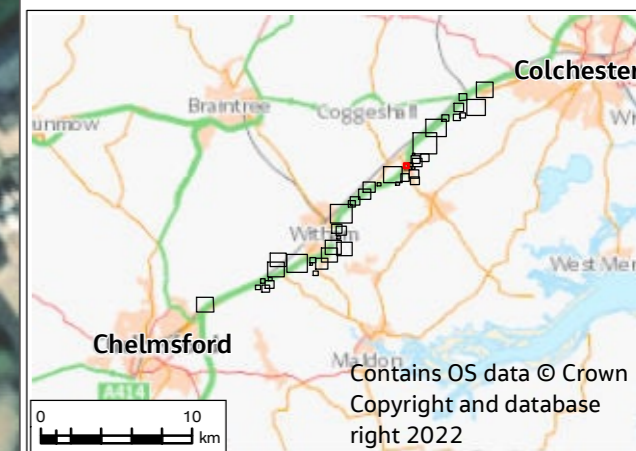


APPENDIX 9.4 - FIGURE 2



Legend

- Provisional Order Limits - Design Fix 1
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



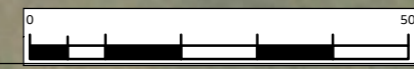
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 31 OF 46

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE55 1497-JAC-LDC-SCHW-SK-GI-0566



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APPENDIX 9.4 - FIGURE 2

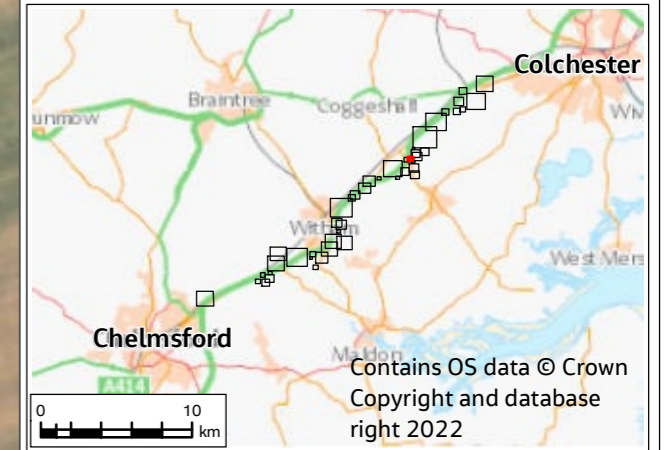


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



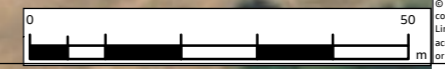
Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 32 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0567



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APPENDIX 9.4 - FIGURE 2

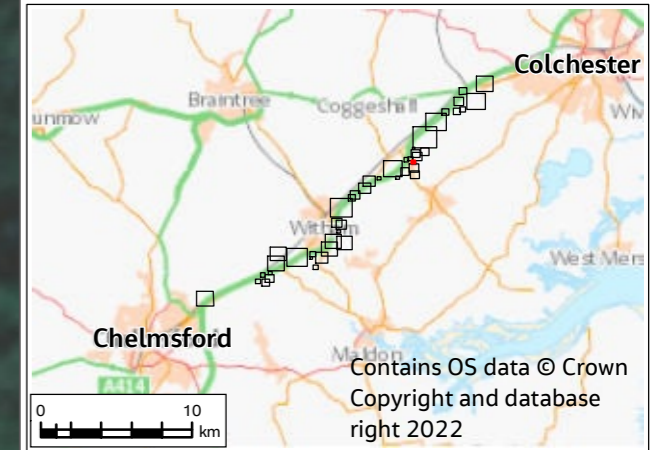


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



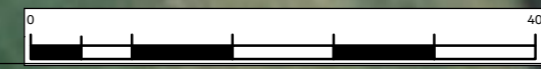
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 33 OF 46

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:600	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE55 1497-JAC-LDC-SCHW-SK-GI-0568



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APPENDIX 9.4 - FIGURE 2



Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

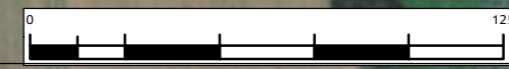
- Confirmed roost
- High
- Moderate
- Low
- Negligible

Chelmsford Colchester

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0 10 km

PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APFP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (TREES) SHEET 34 OF 46						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:2000	DO NOT SCALE			
Jacobs No.		B36601D1	Rev P01			
Client No.		HE551497				
Drawing Number HE55 1497-JAC-LDC-SCHW-SK-GI-0569						



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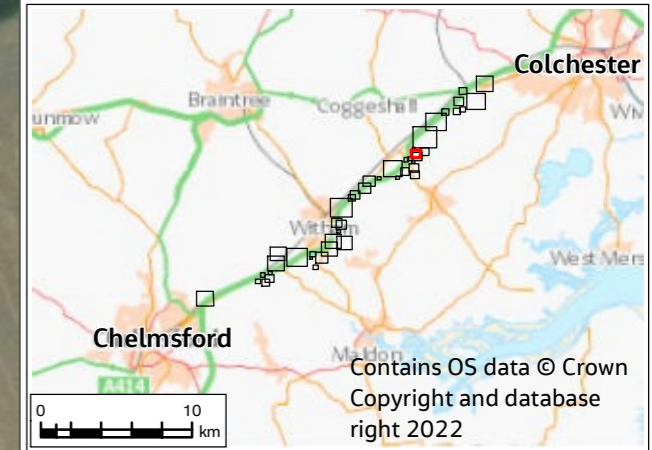
APPENDIX 9.4 - FIGURE 2

Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

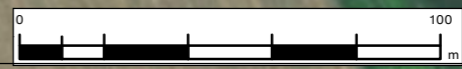
Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 35 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1800	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0570

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APPENDIX 9.4 - FIGURE 2

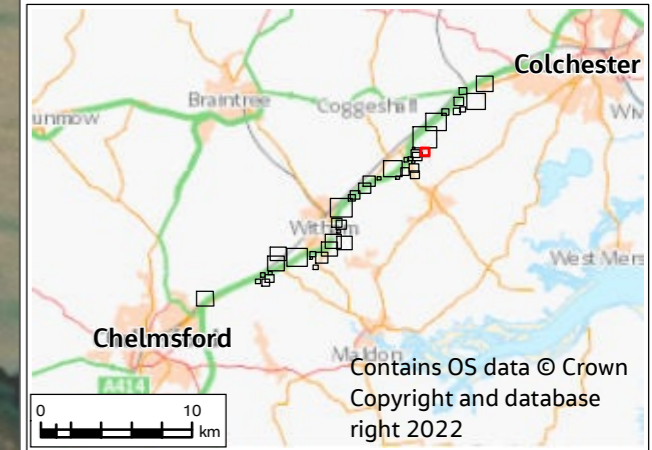


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



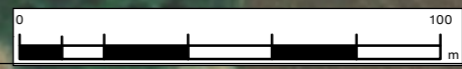
Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 36 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

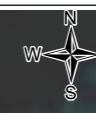
Scale @ A3	1:1800	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0571



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APPENDIX 9.4 - FIGURE 2

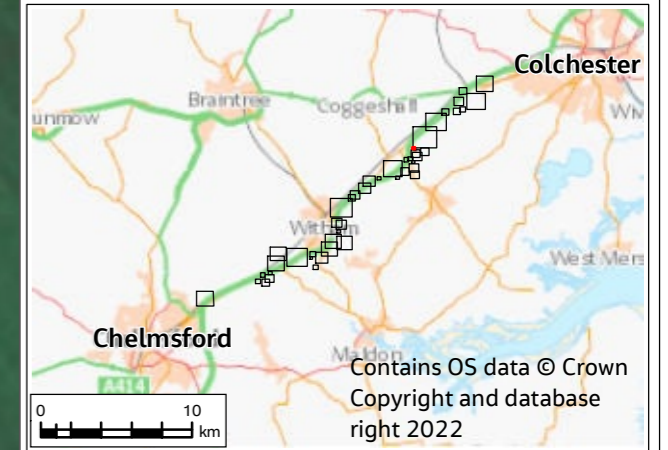


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 37 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:600	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0572



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APPENDIX 9.4 - FIGURE 2

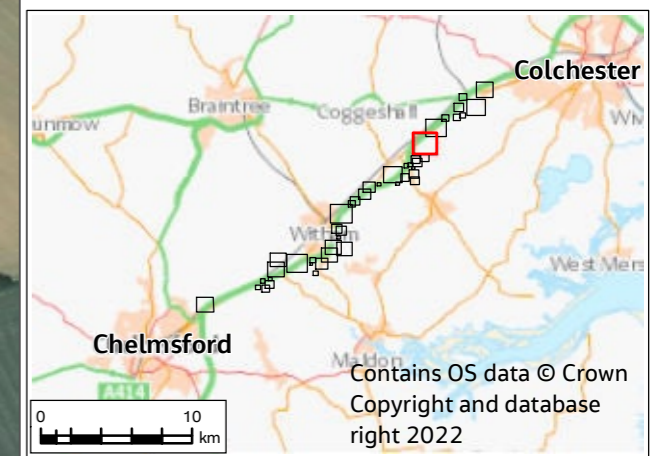


Legend

Provisional Order Limits - Design Fix 1

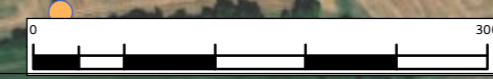
Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (TREES) SHEET 38 OF 46						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:5000	DO NOT SCALE			
Jacobs No.		B36601D1	Rev P01			
Client No.		HE551497				
Drawing Number HE55 1497-JAC-LDC-SCHW-SK-GI-0573						
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APPENDIX 9.4 - FIGURE 2

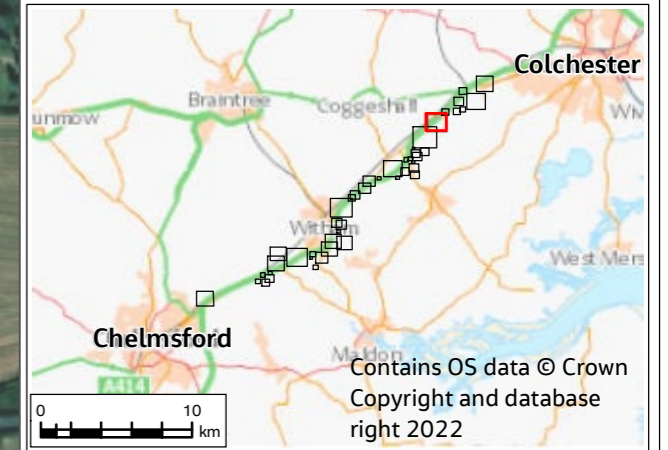


Legend

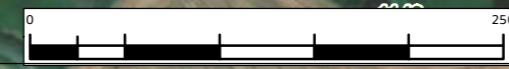
Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APFP Regulation: Regulation 5(2)(l)			
Client 						
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (TREES) SHEET 39 OF 46						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3	1:4000		DO NOT SCALE			
Jacobs No.	B36601D1		Rev P01			
Client No.	HE551497					
Drawing Number HE55 1497-JAC-LDC-SCHW-SK-GI-0574						



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APPENDIX 9.4 - FIGURE 2

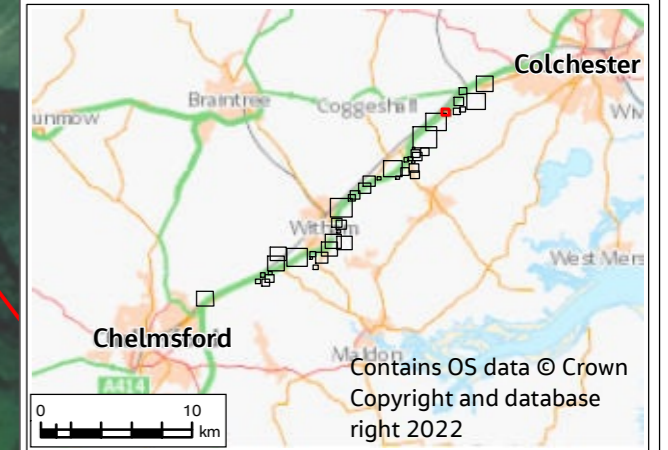


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

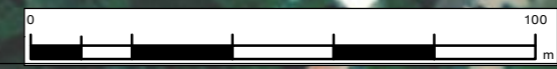
Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 40 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1500	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0575

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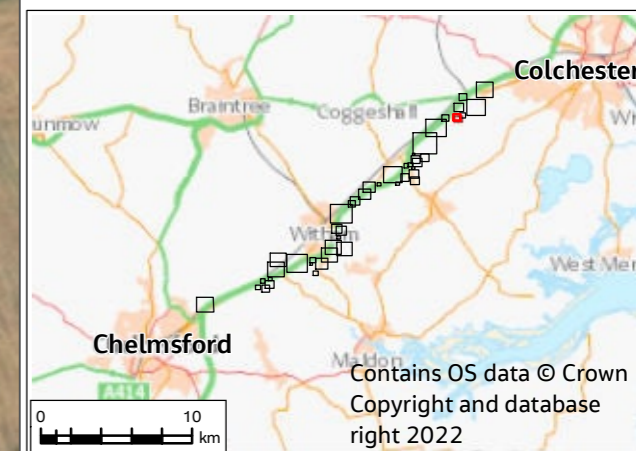


APPENDIX 9.4 - FIGURE 2



Legend

- Provisional Order Limits - Design Fix 1
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



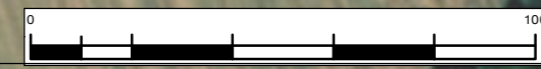
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 41 OF 46

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1500	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE55 1497-JAC-LDC-SCHW-SK-GI-0576



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APPENDIX 9.4 - FIGURE 2

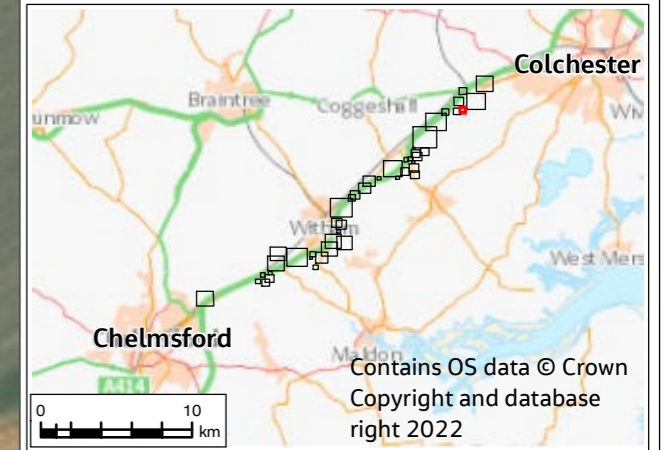


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



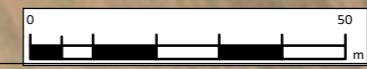
Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 42 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1200	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0577



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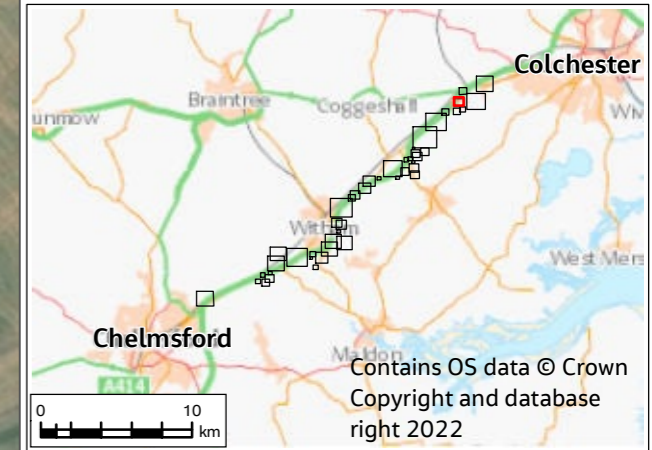
APPENDIX 9.4 - FIGURE 2



Legend

- Provisional Order Limits - Design Fix 1

- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)

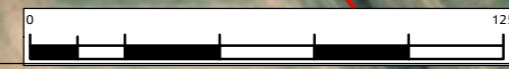


Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 43 OF 46

Drawing Status	S4 – SUITABLE FOR STAGE APPROVAL		
Scale @ A3	1:2000	DO NOT SCALE	
Jacobs No.	B36601D1	Rev	P01
Client No.	HE551497		
Drawing Number	HE55 1497-JAC-LDC-SCHW-SK-GI-0578		

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APPENDIX 9.4 - FIGURE 2

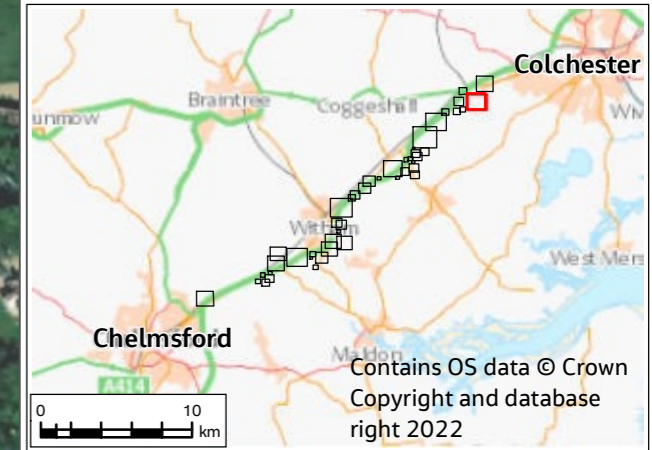


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APPF Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 44 OF 46

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:3800	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE55 1497-JAC-LDC-SCHW-SK-GI-0579

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APPENDIX 9.4 - FIGURE 2

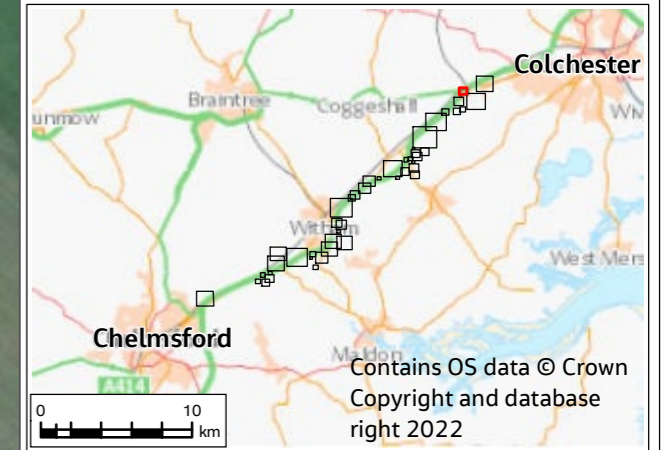


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

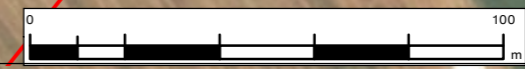
Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 45 OF 46**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1600	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE55 1497-JAC-LDC-SCHW-SK-GI-0580

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APPENDIX 9.4 - FIGURE 2

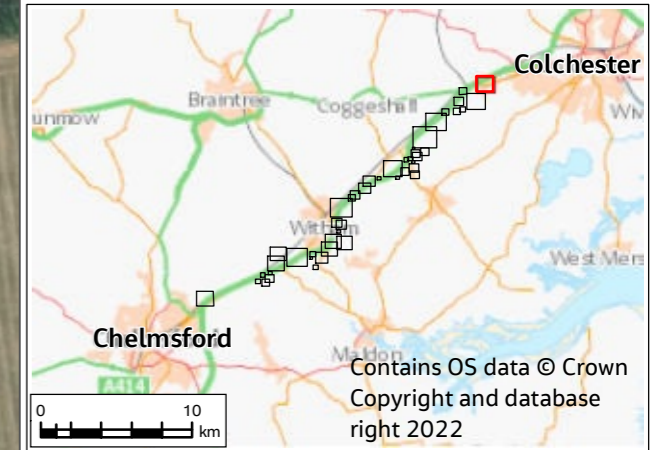


Legend

Provisional Order Limits - Design Fix 1

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

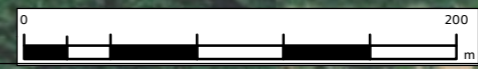
Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (TREES)
 SHEET 46 OF 46

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:3500	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE55 1497-JAC-LDC-SCHW-SK-GI-0581

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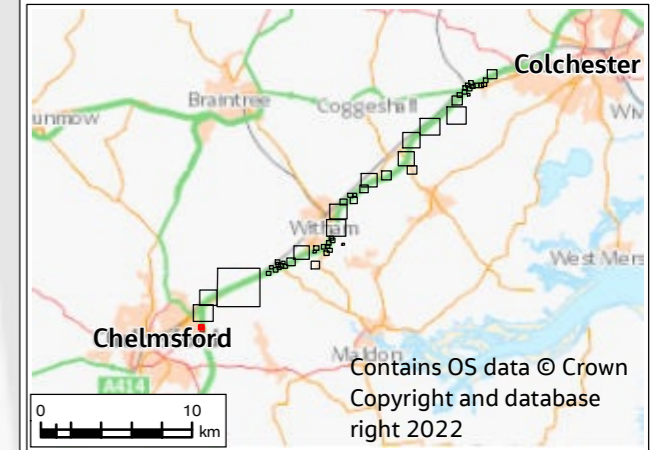


APPENDIX 9.4 - FIGURE 3



Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



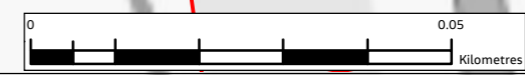
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

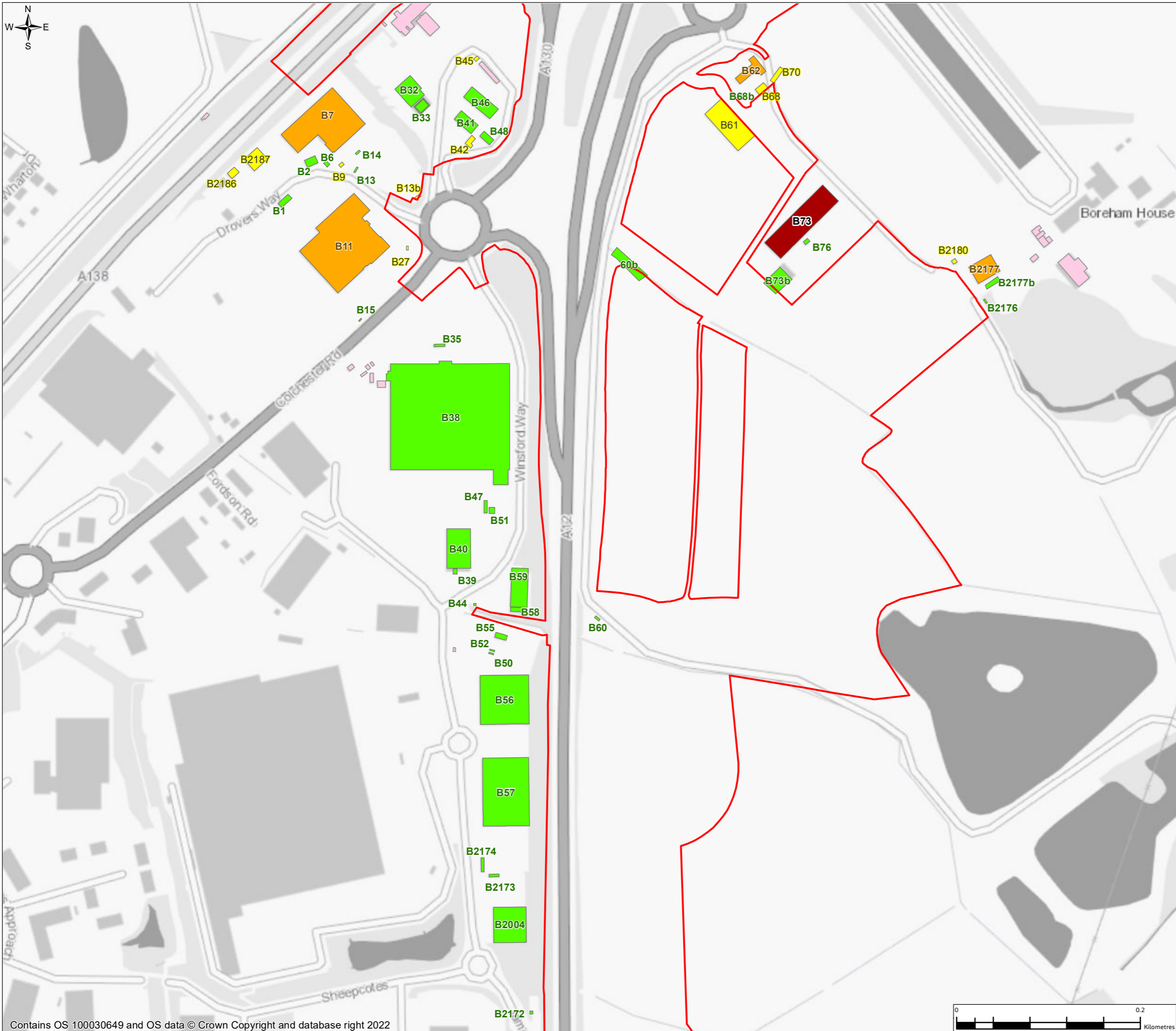
Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 1 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:900	DO NOT SCALE
Jacobs No.	B36601D1	
Client No.	HE551497	Rev P01

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0582





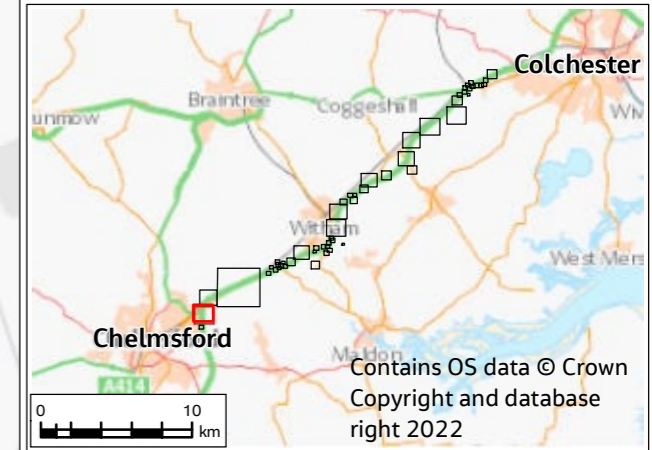
APPENDIX 9.4 - FIGURE 3

Legend

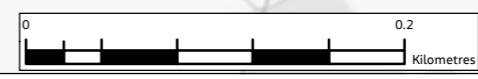
- Provisional Order Limits - Design Fix 2

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access

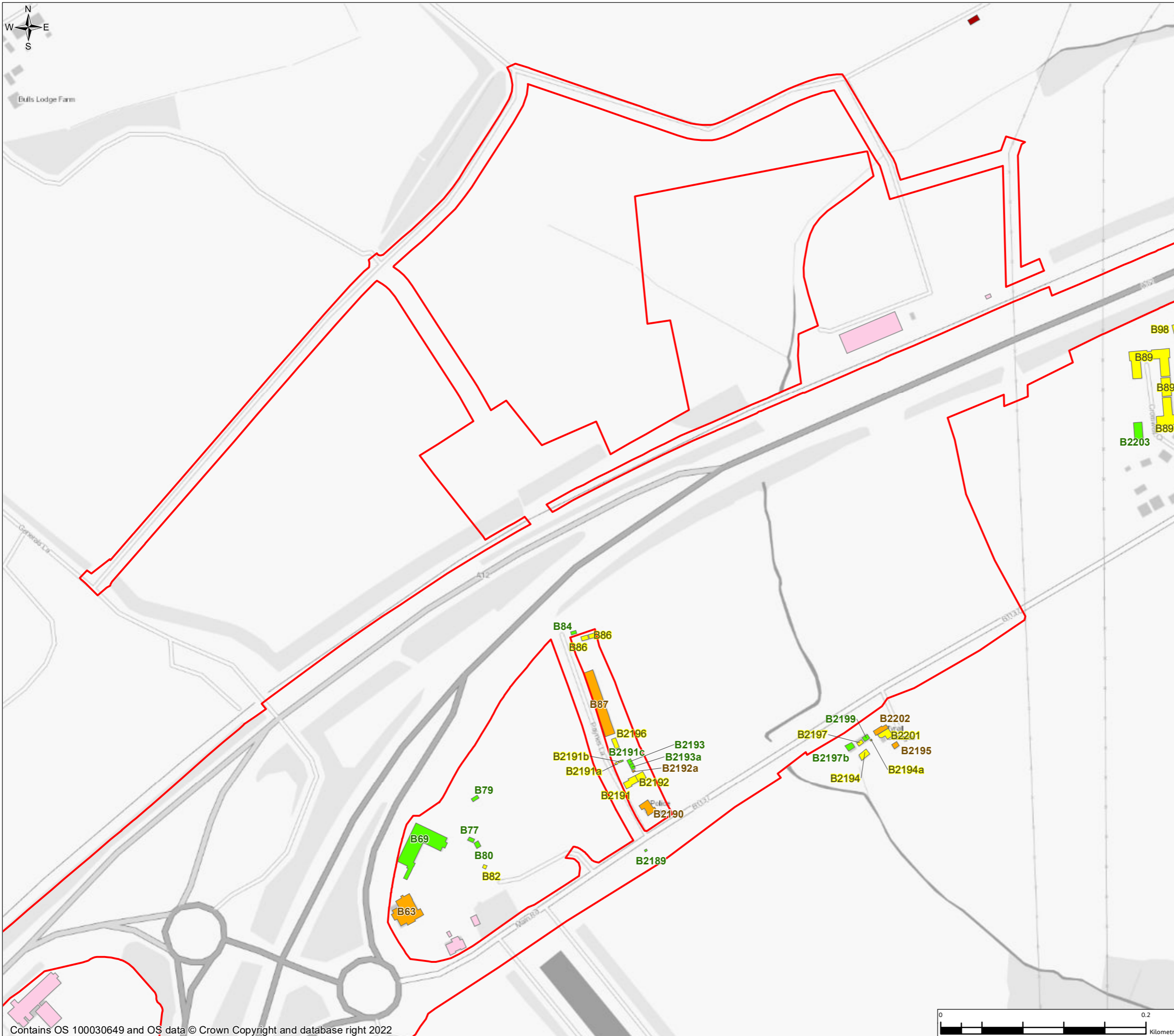


P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APFP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BUILDINGS) SHEET 2 OF 54						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:4000	DO NOT SCALE			
Jacobs No.		B36601D1	Rev		P01	
Client No.		HE551497				
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0583						



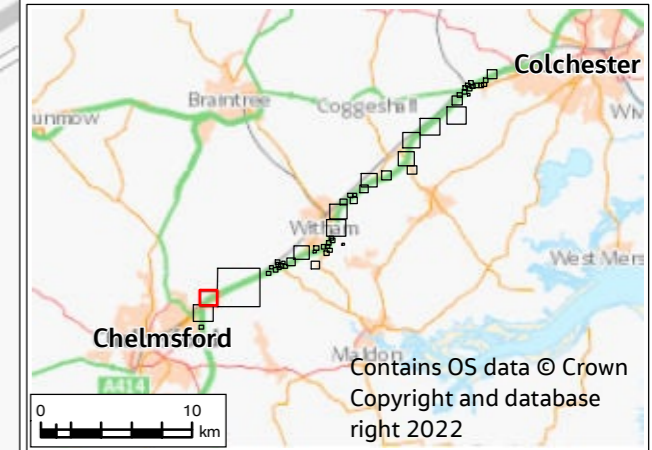
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APPENDIX 9.4 - FIGURE 3



Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



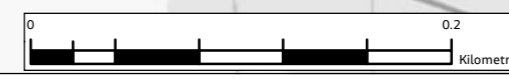
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 3 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:3600	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0584

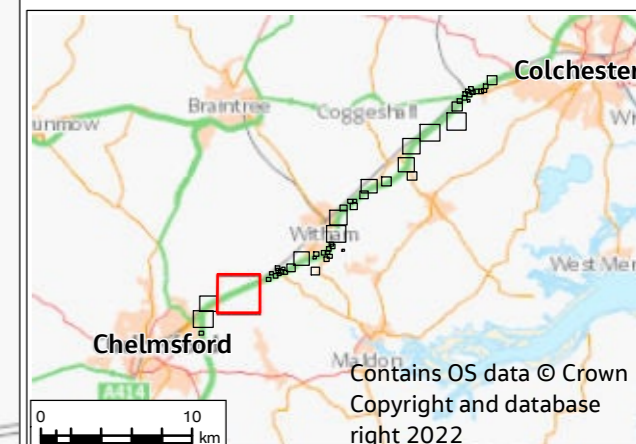


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APPENDIX 9.4 - FIGURE 3

- Legend
- Provisional Order Limits - Design Fix 2
 - Bat roost potential**
 - Confirmed roost
 - High
 - Moderate
 - Low
 - Negligible
 - N/A – no impact
 - N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



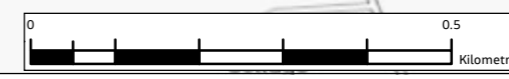
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 4 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:9000	DO NOT SCALE
Jacobs No.	B36601D1	Rev
Client No.	HE551497	PO1

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0585



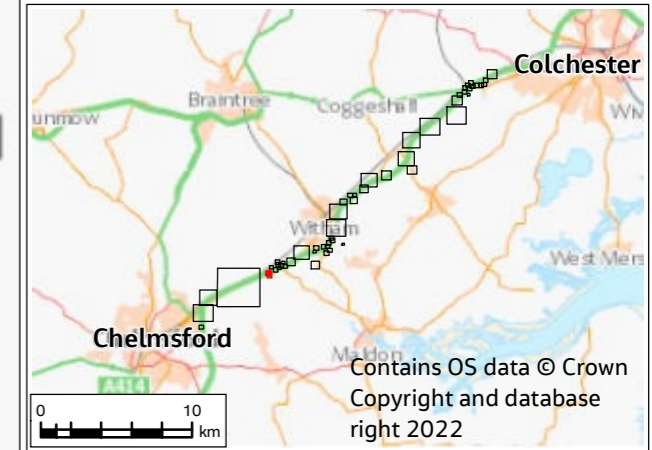
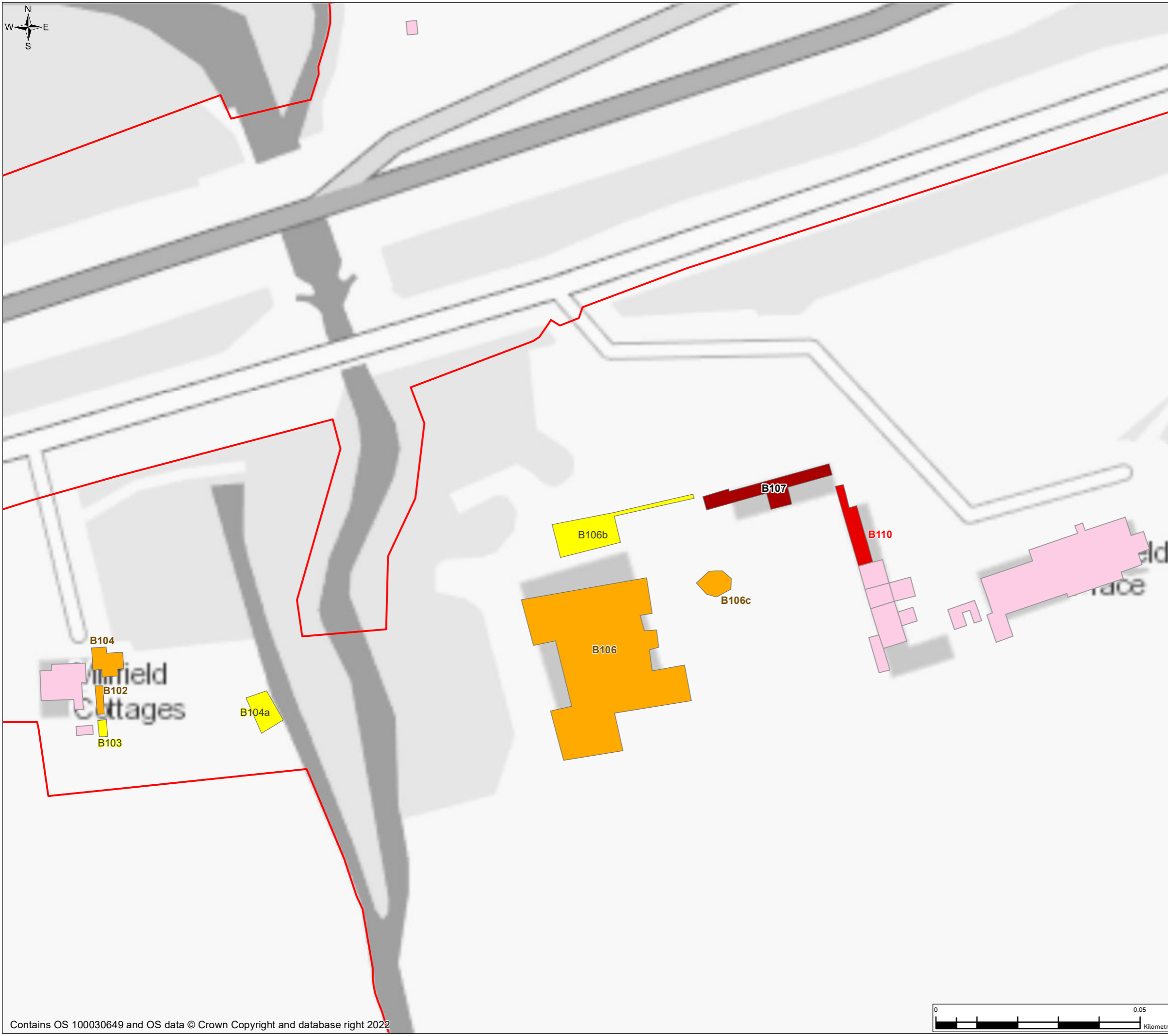
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APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 5 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:900	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0586



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APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access

B2957

B2944

B2939

B2942

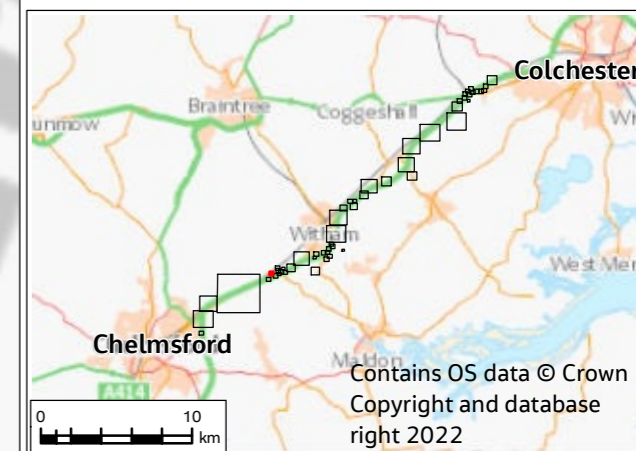
B2955
B2953

B2937b

B2937

B2937a

B113



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



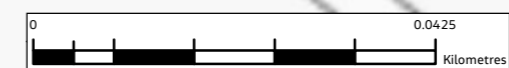
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 6 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

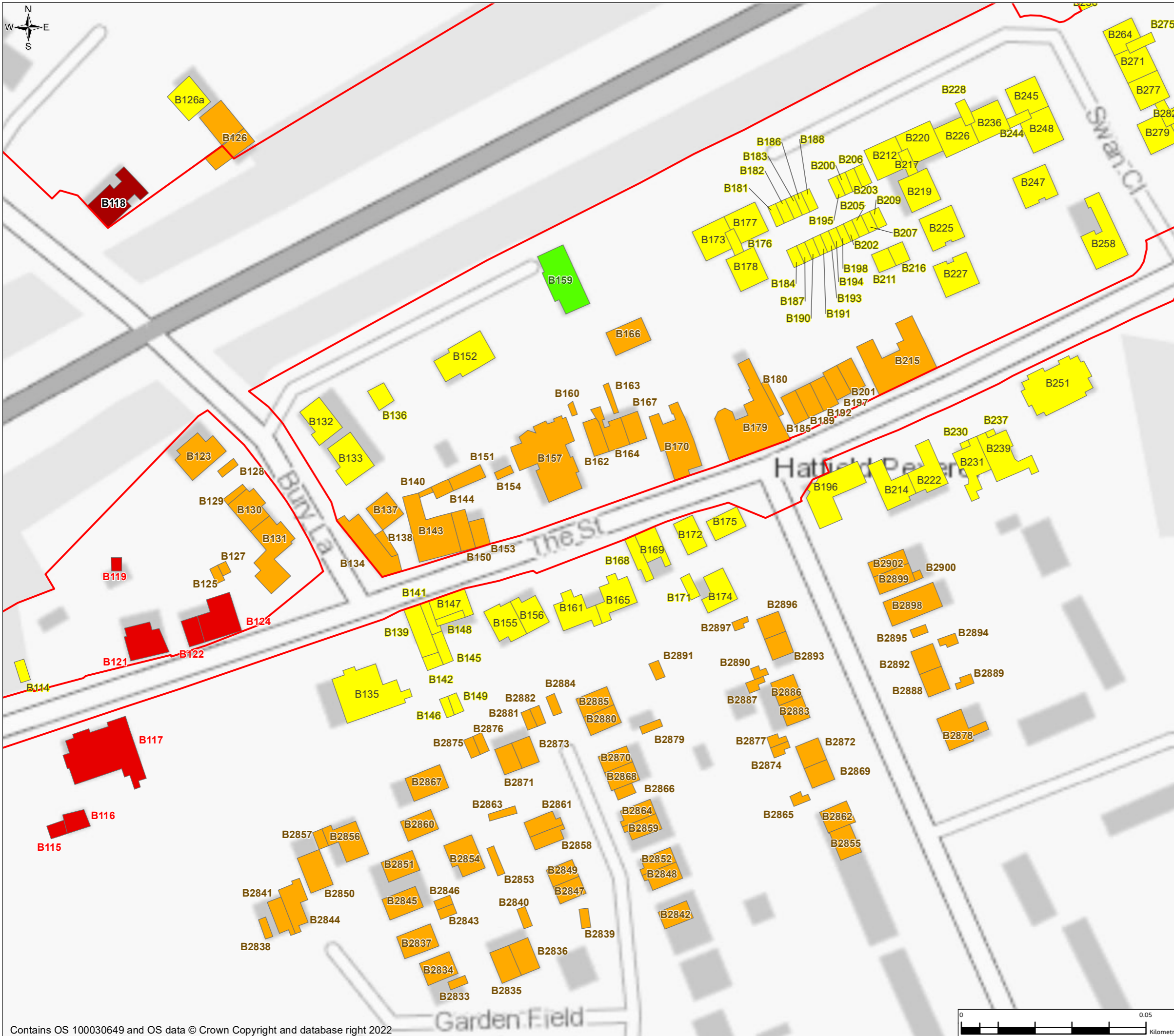
Scale @ A3	1:800	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0587



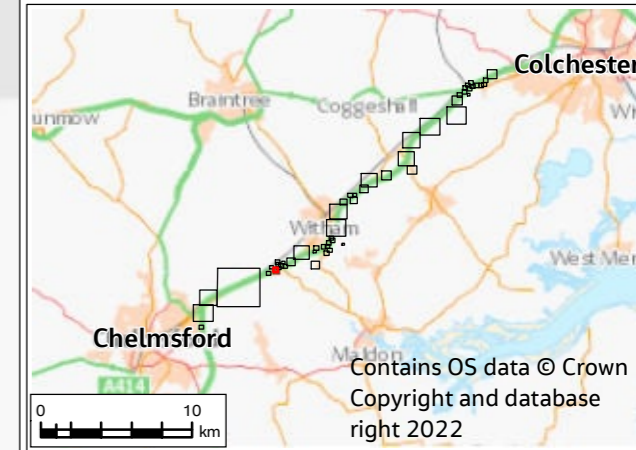
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APPENDIX 9.4 - FIGURE 3

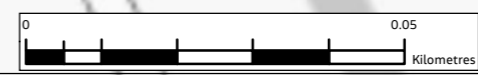


Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BUILDINGS) SHEET 7 OF 54						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3	1:1000		DO NOT SCALE			
Jacobs No.	B36601D1		Rev		PO1	
Client No.	HE551497					
Drawing Number	HE551497-JAC-LDC-SCHW-SK-GI-0588					



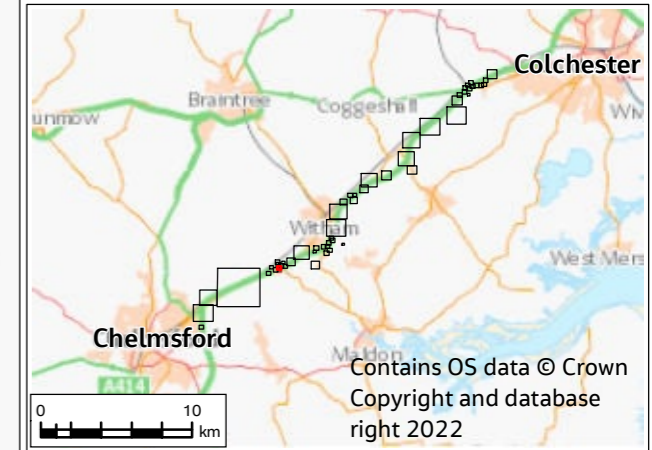
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APPENDIX 9.4 - FIGURE 3

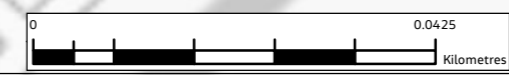


Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access

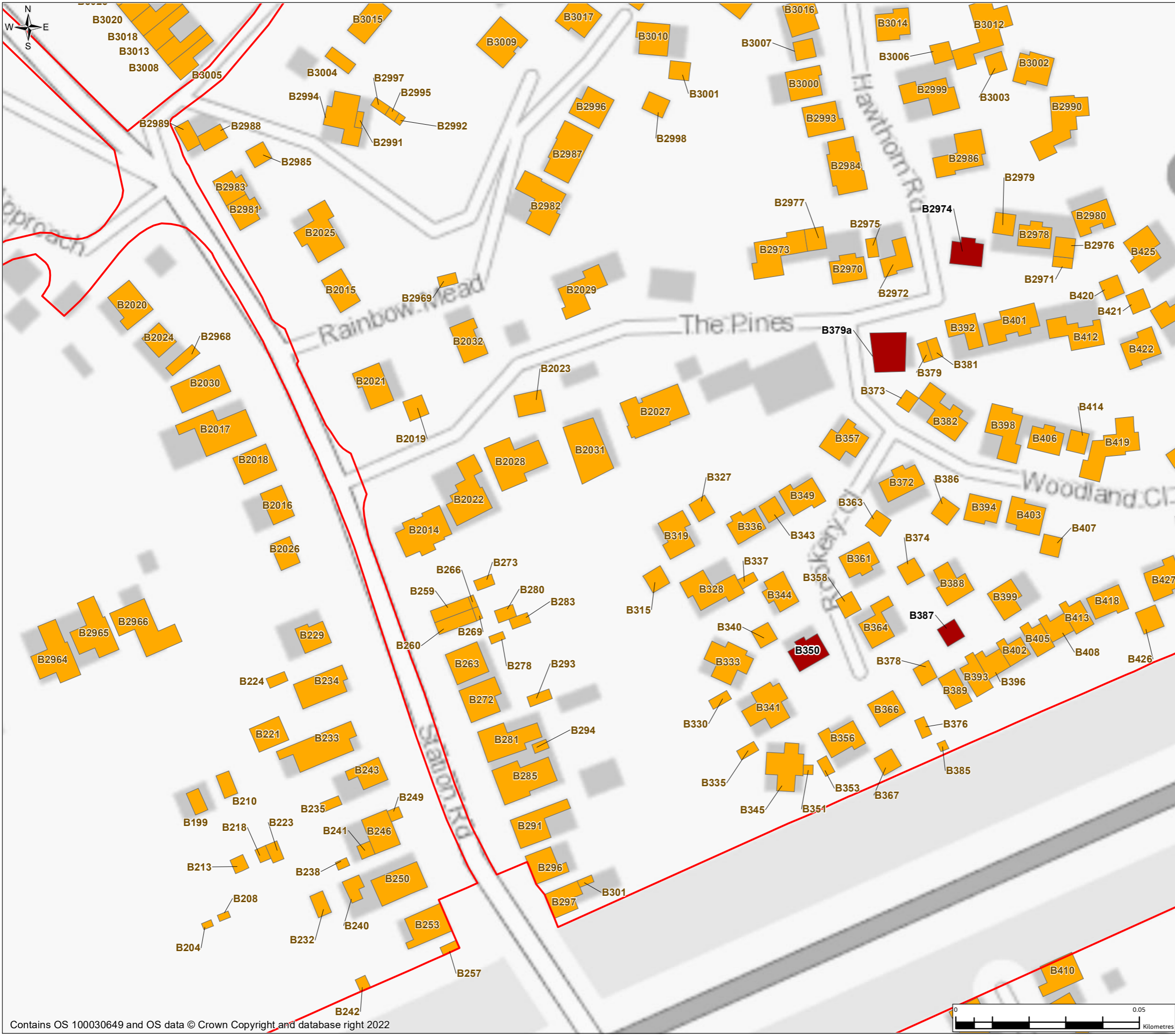


P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
<p>Project</p> <p>REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME</p>						
<p>Drawing Title</p> <p>ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BUILDINGS) SHEET 8 OF 54</p>						
<p>Drawing Status</p> <p>S4 – SUITABLE FOR STAGE APPROVAL</p>						
Scale @ A3	1:800		DO NOT SCALE			
Jacobs No.	B36601D1		Rev		P01	
Client No.	HE551497					
<p>Drawing Number</p> <p>HE551497-JAC-LDC-SCHW-SK-GI-0589</p>						



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APPENDIX 9.4 - FIGURE 3

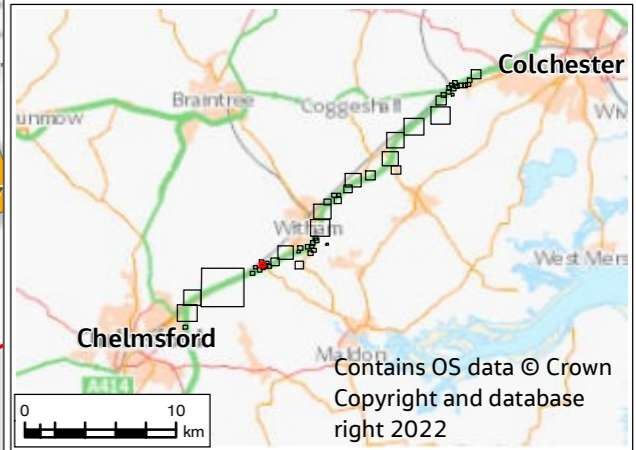


Legend

- Provisional Order Limits - Design Fix 2

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number:	TR010060/APP/6.3	APFP Regulation:	Regulation 5(2)(l)
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Client

Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

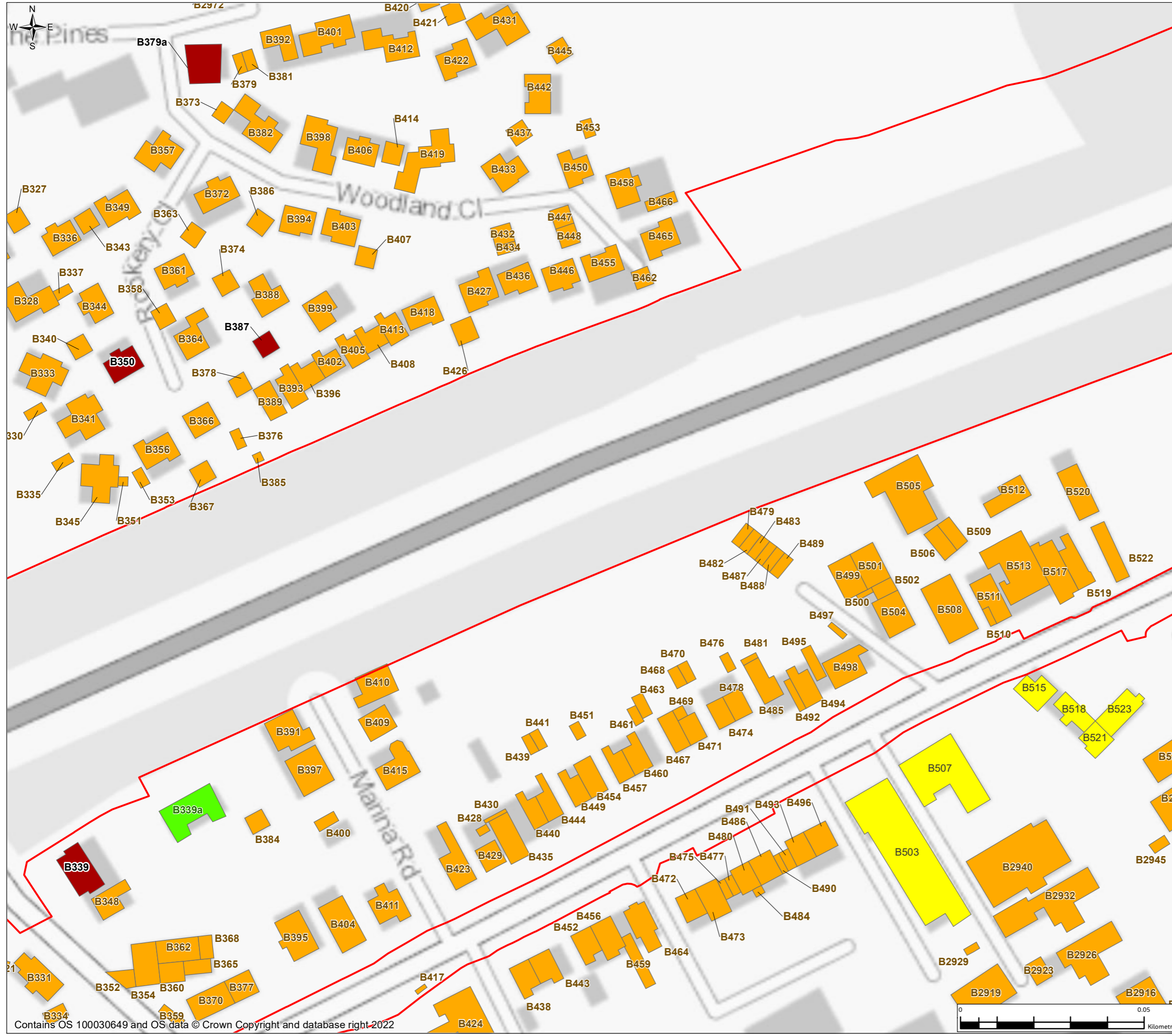
Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 9 OF 54**

Drawing Status	S4 – SUITABLE FOR STAGE APPROVAL		
Scale @ A3	1:1000	DO NOT SCALE	
Jacobs No.	B36601D1	Rev	P01
Client No.	HE551497		
Drawing Number	HE551497-JAC-LDC-SCHW-SK-GI-0590		



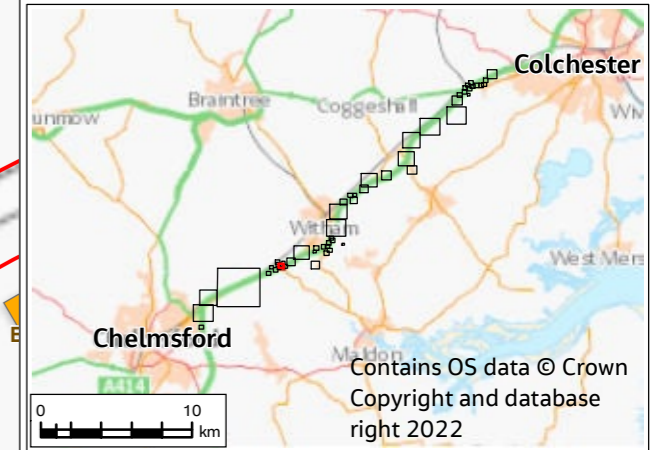
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APPENDIX 9.4 - FIGURE 3

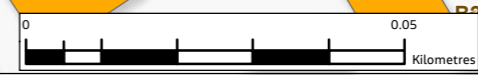


Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
						
REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BUILDINGS) SHEET 10 OF 54						
Drawing Status: S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3: 1:1000		DO NOT SCALE				
Jacobs No.: B36601D1		Rev: P01				
Client No.: HE551497						
Drawing Number: HE551497-JAC-LDC-SCHW-SK-GI-0591						

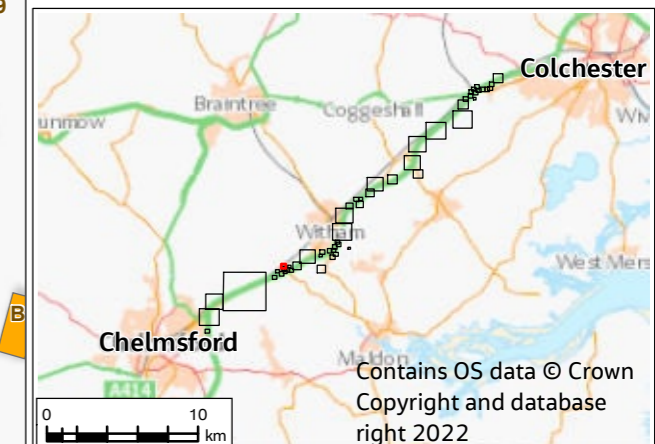
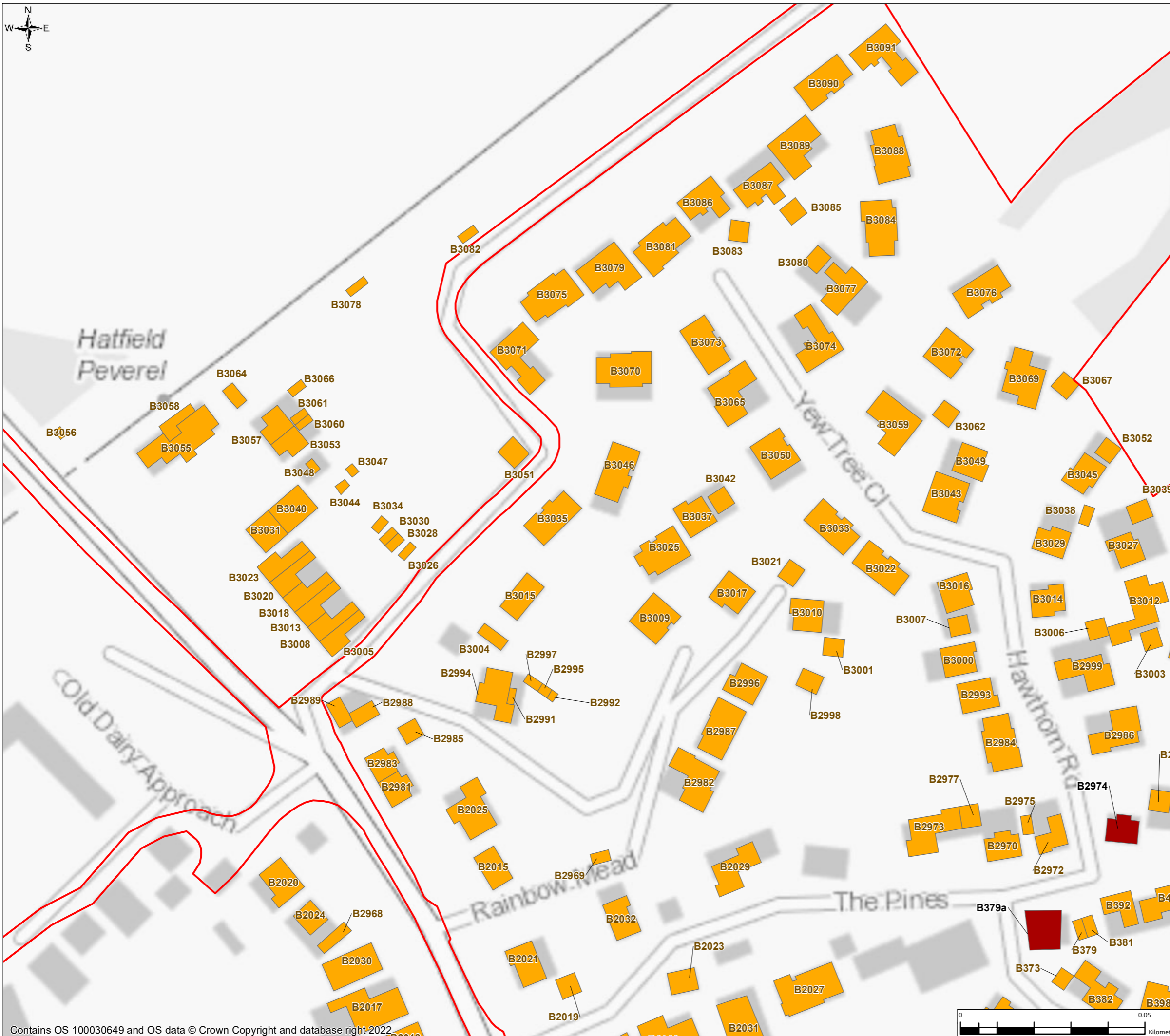




APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)

Client

Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

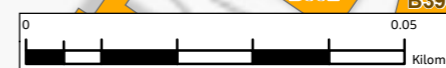
Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 12 OF 54**

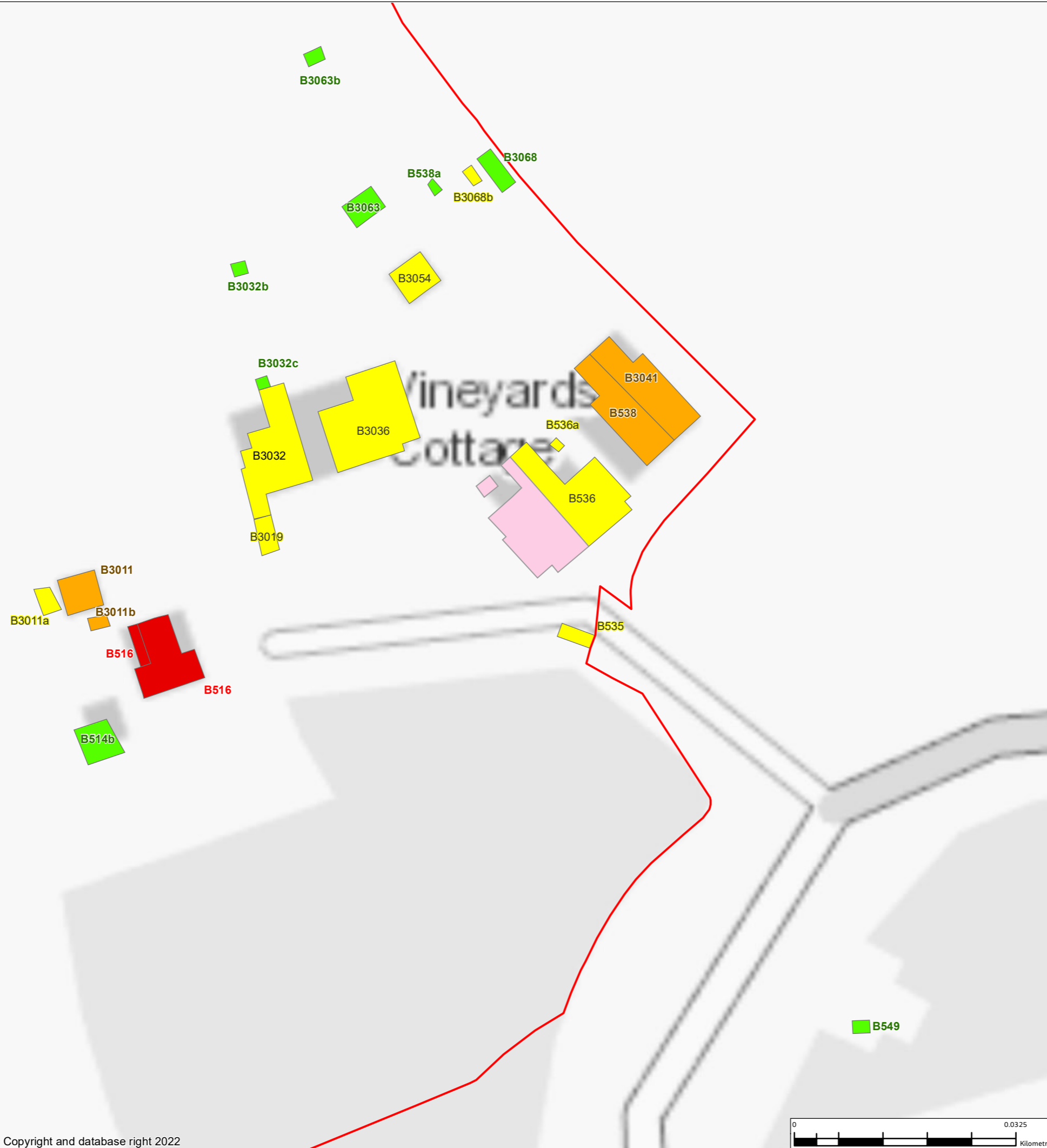
Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev
Client No.	HE551497	PO1

Drawing Number
HE551497-JAC-LDC-SCHW-SK-GI-0593

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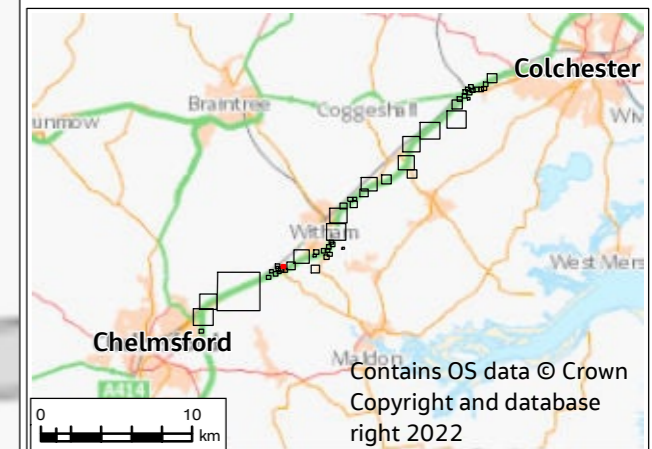




APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



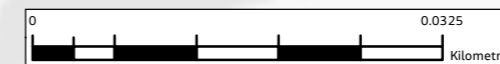
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 13 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:600	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0594

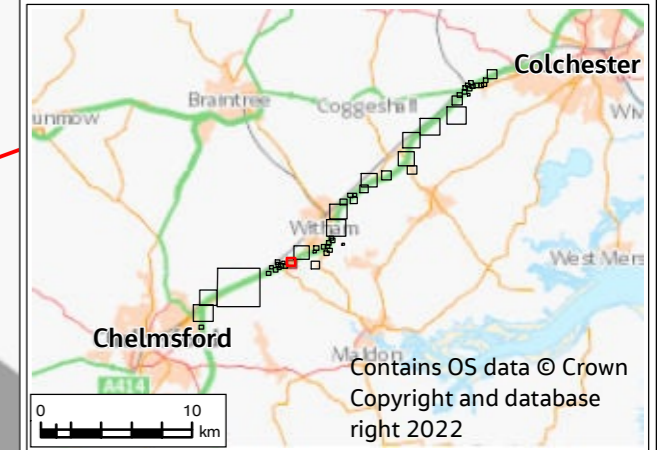
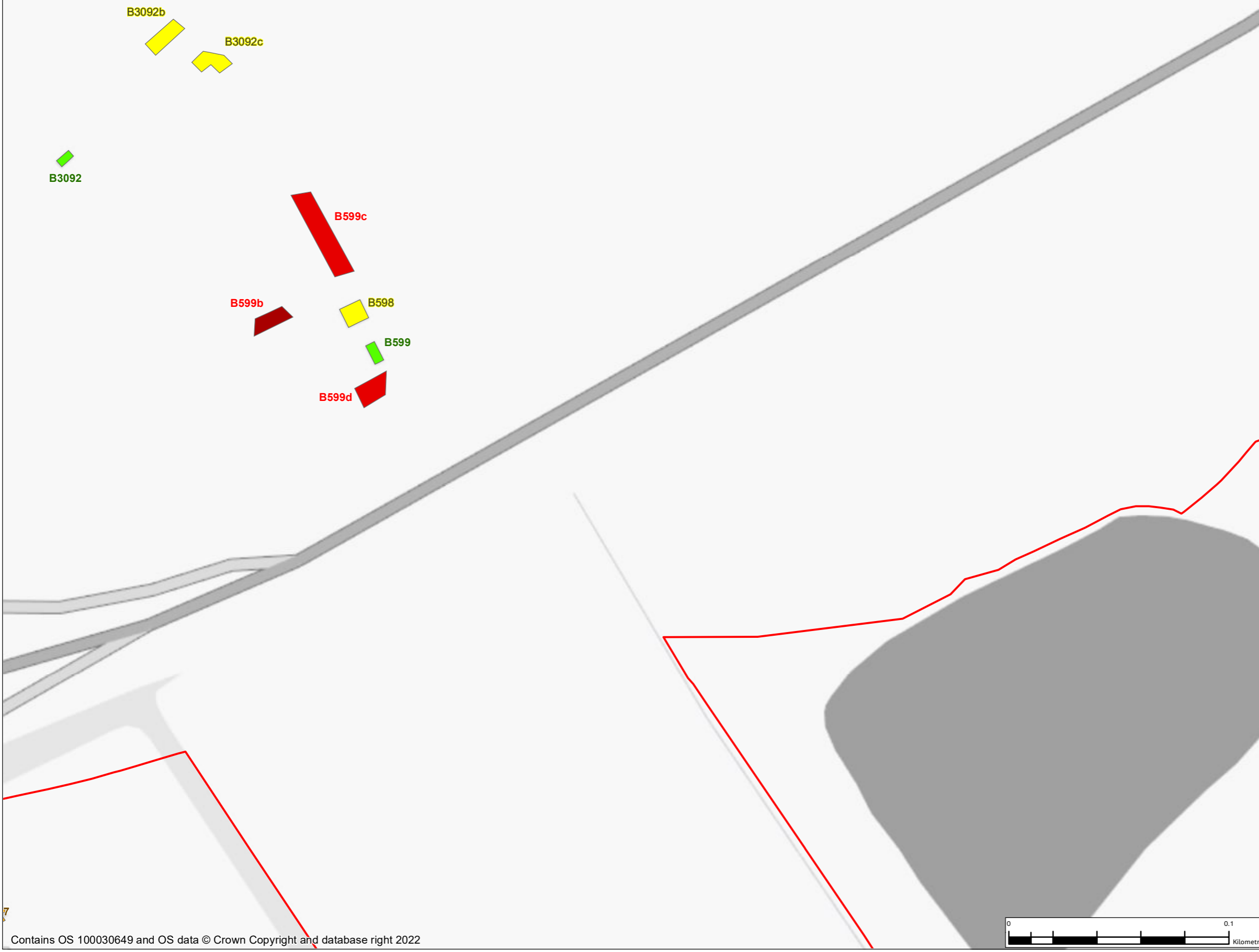




APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 14 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1800	DO NOT SCALE
Jacobs No.	B36601D1	
Client No.	HE551497	Rev P01

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0595



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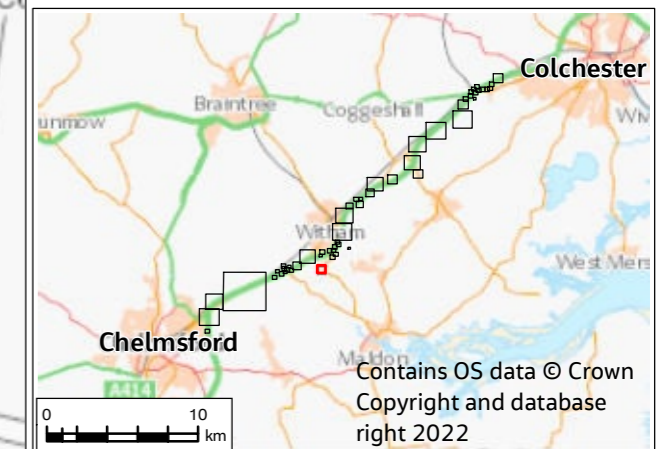
APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access

B2967c
B2967d
B2967b
B2967a
B2967

B2960
B2961
Knowles's Farm



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



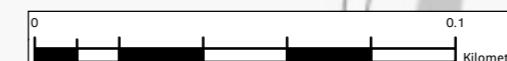
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 16 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1800	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0597

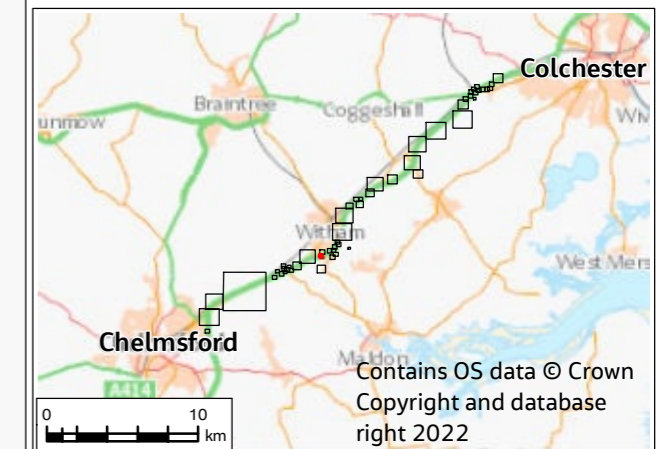
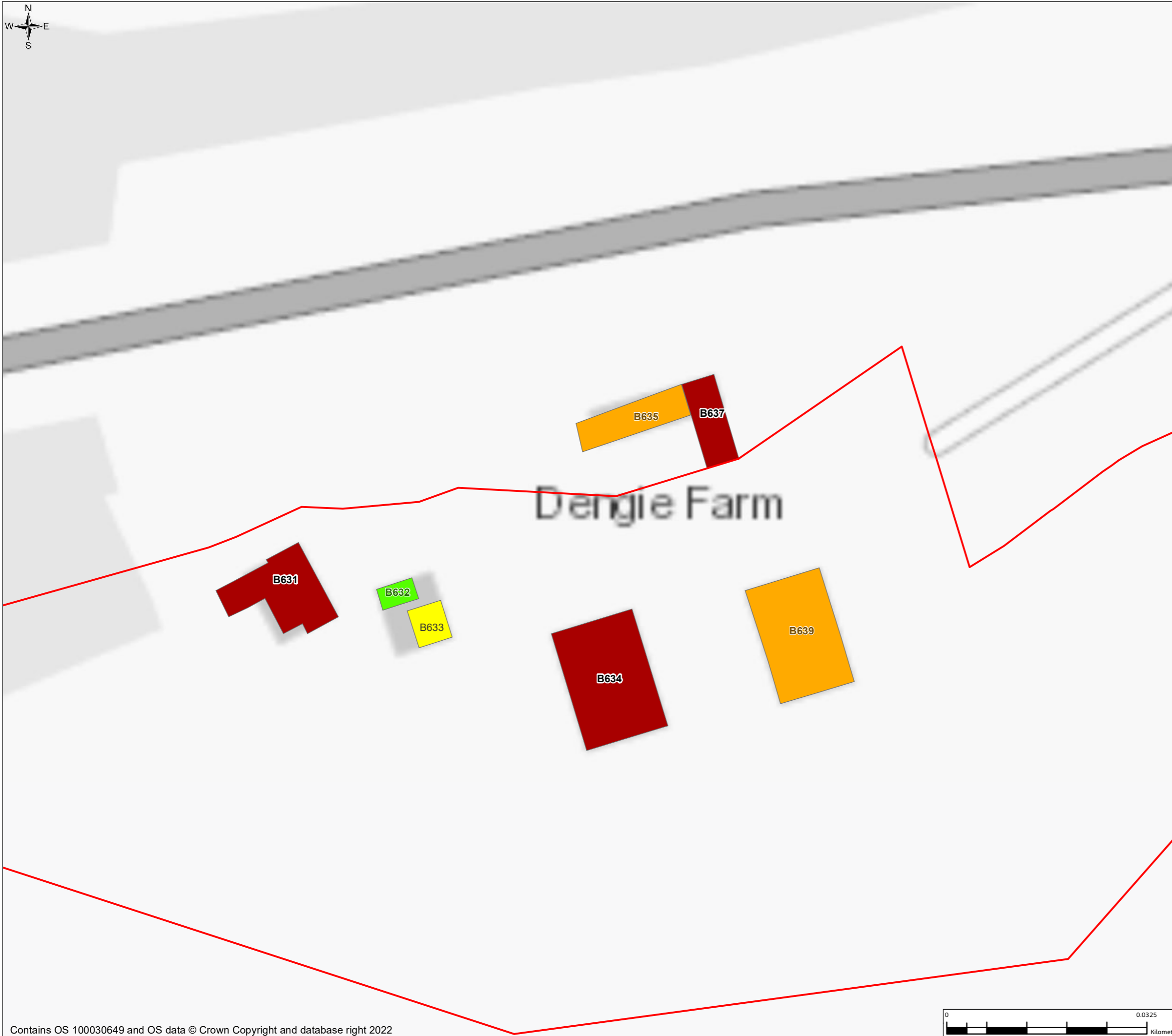




APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



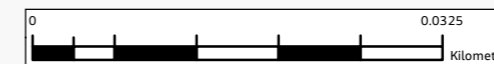
Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 17 OF 54**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:600	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

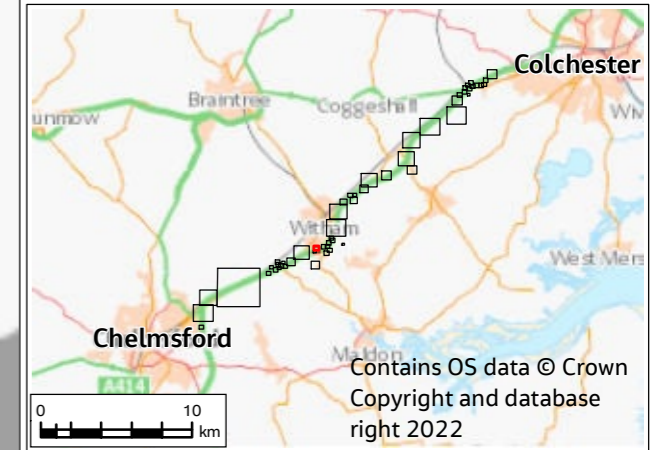
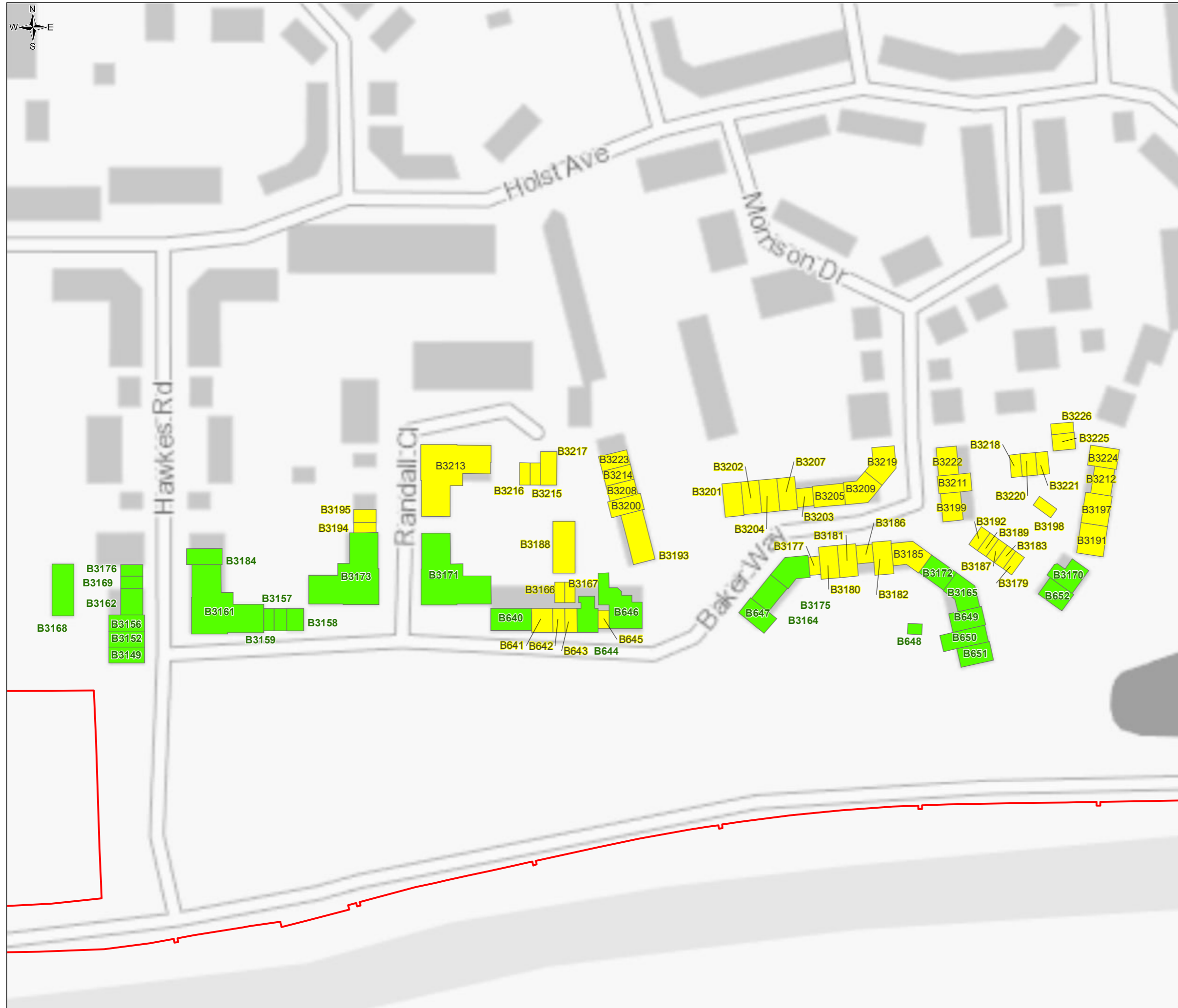
Drawing Number
HE551497-JAC-LDC-SCHW-SK-GI-0598



APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 18 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0599



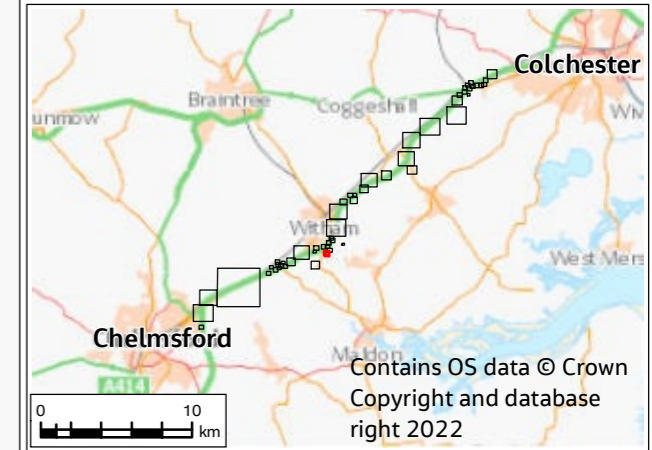
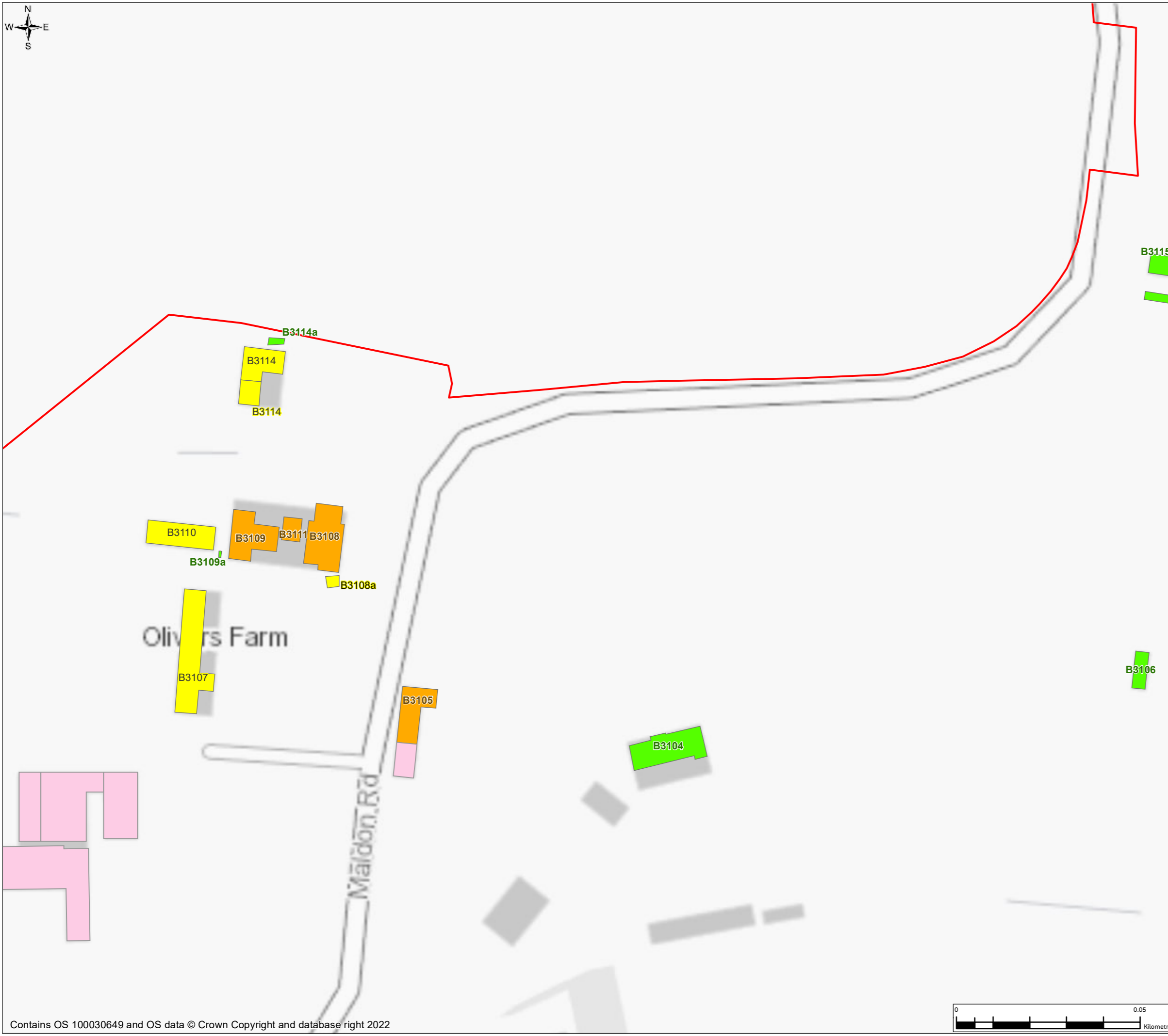
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APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



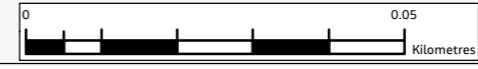
Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 19 OF 54**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE551497-JAC-LDC-SCHW-SK-GI-0600

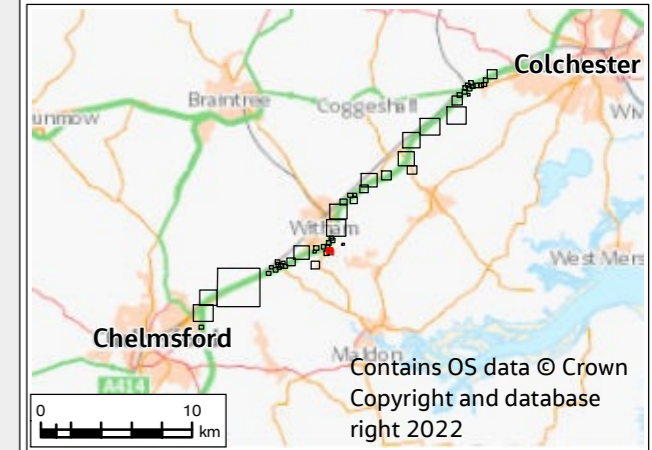
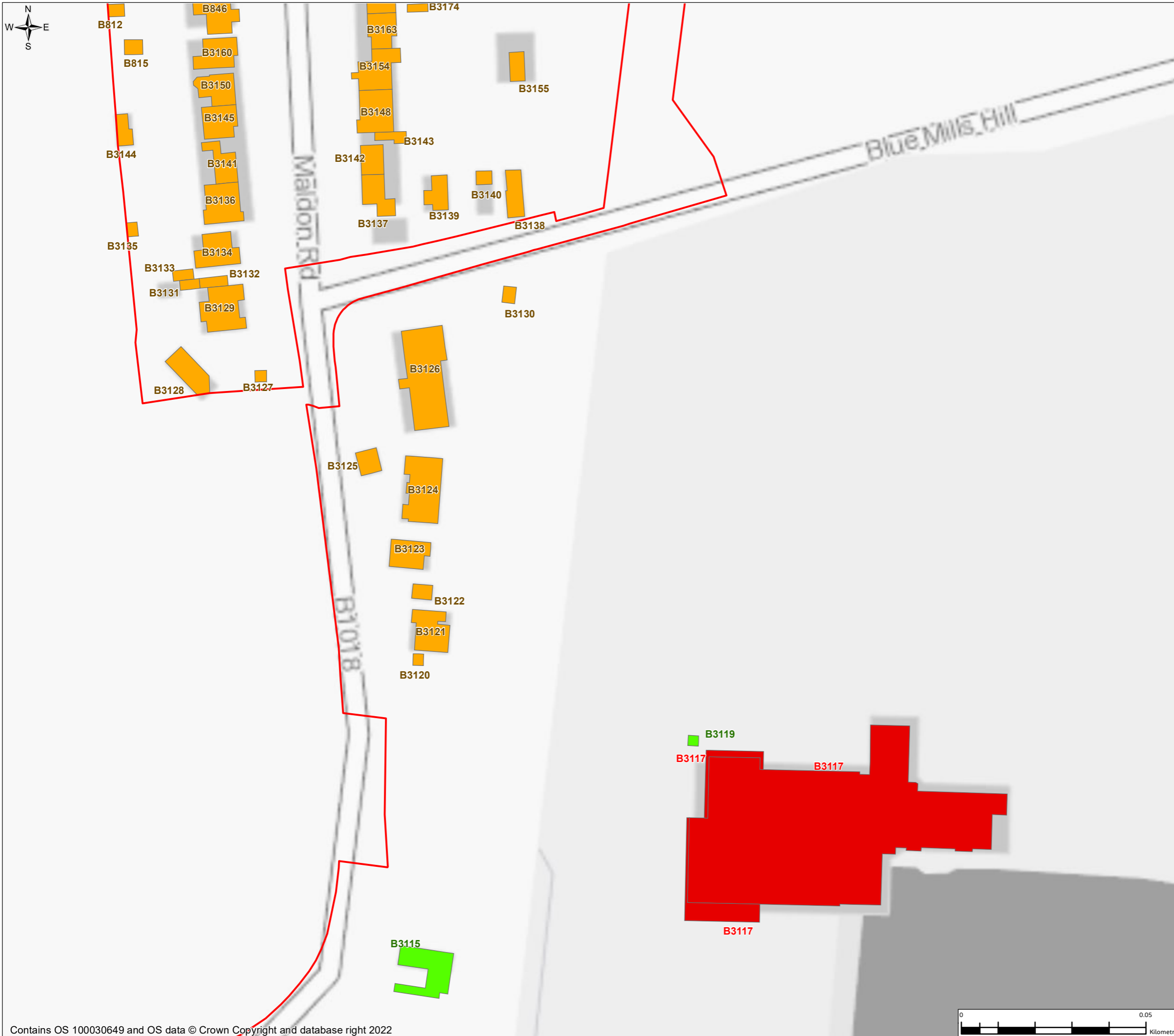


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APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 20 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

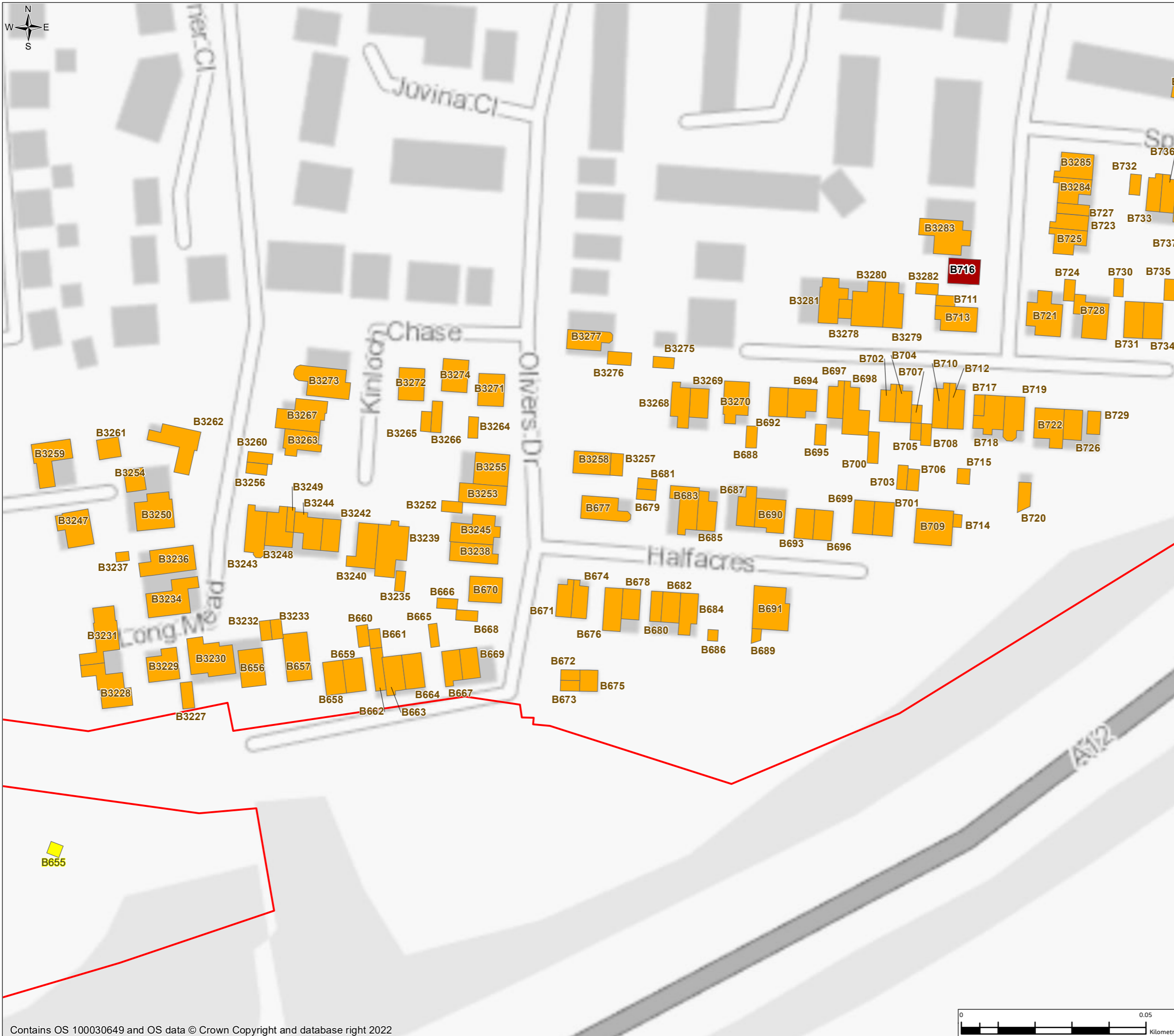
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Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0601



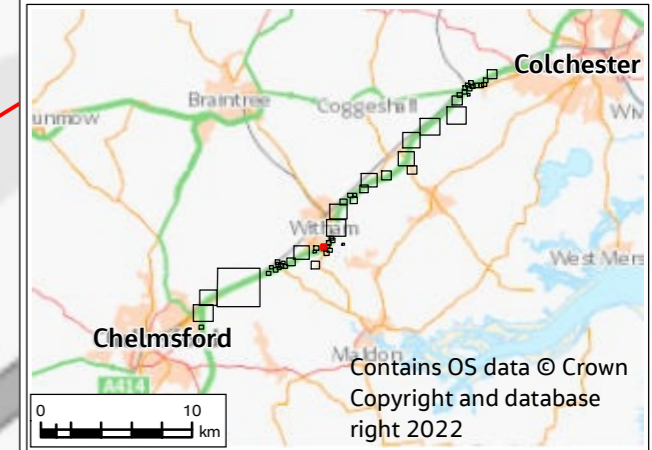
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APPENDIX 9.4 - FIGURE 3



Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



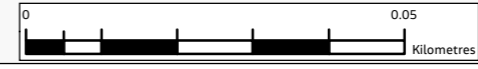
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 21 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0602



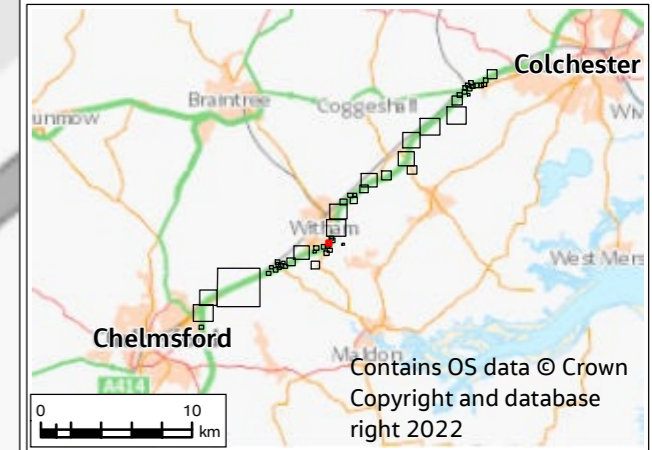
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APPENDIX 9.4 - FIGURE 3

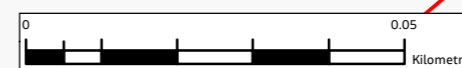


Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APFP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BUILDINGS) SHEET 23 OF 54						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:1000	DO NOT SCALE			
Jacobs No.		B36601D1	Rev			
Client No.		HE551497	PO1			
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0604						

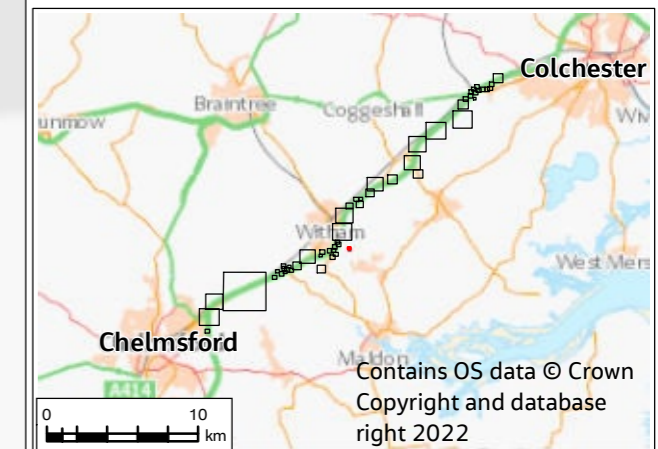
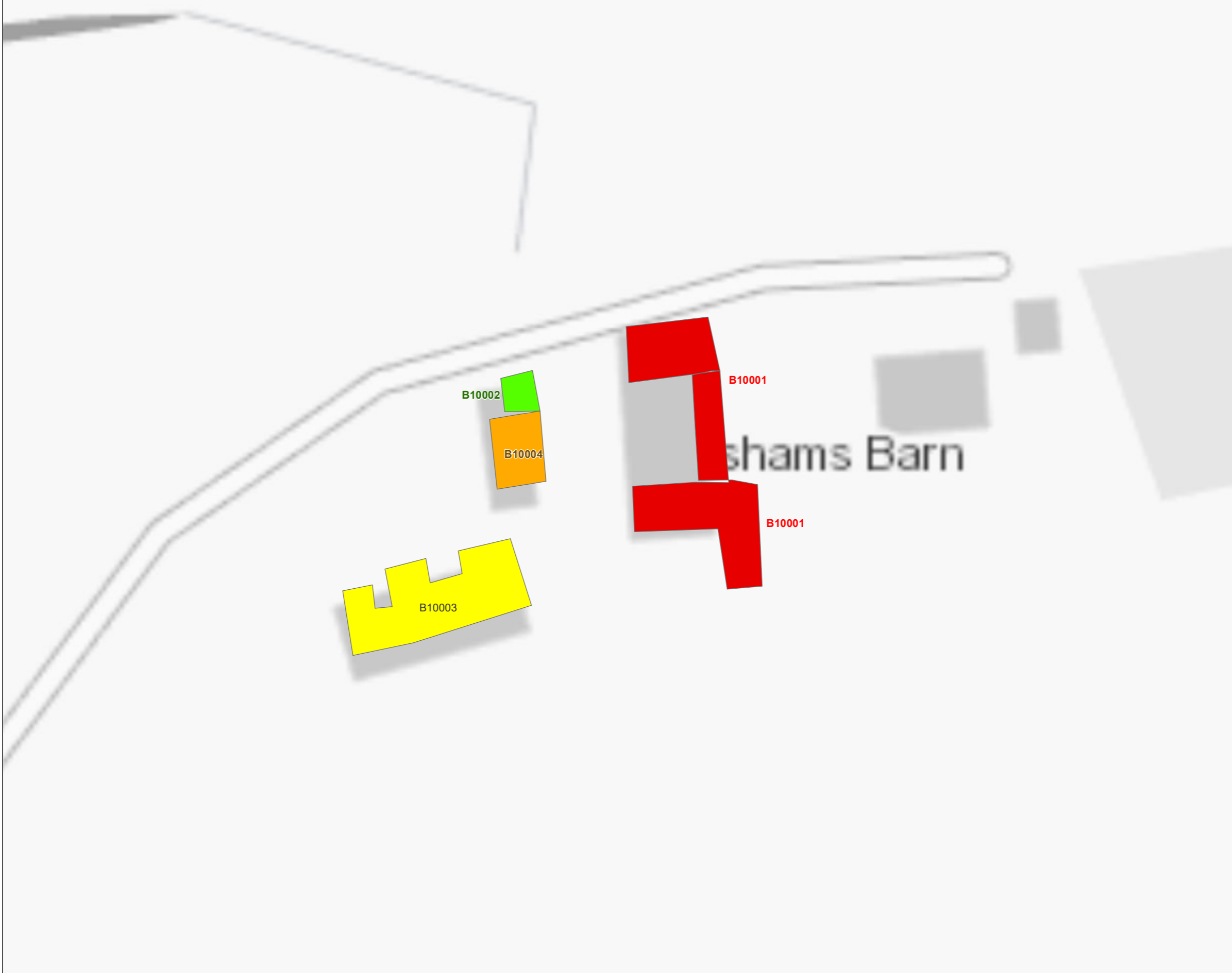




APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



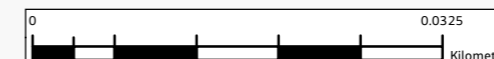
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 24 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:600	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0605



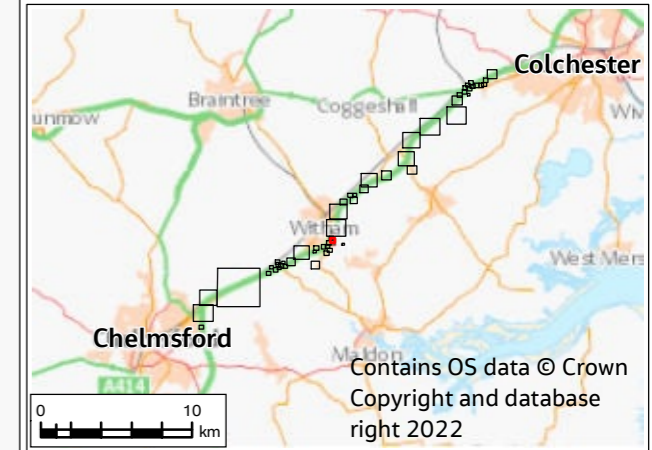
APPENDIX 9.4 - FIGURE 3

Legend

Provisional Order Limits - Design Fix 2

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



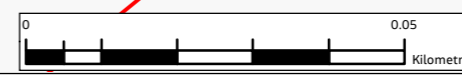
Project: REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title: ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 25 OF 54

Drawing Status: S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev
Client No.	HE551497	P01

Drawing Number: HE551497-JAC-LDC-SCHW-SK-GI-0606

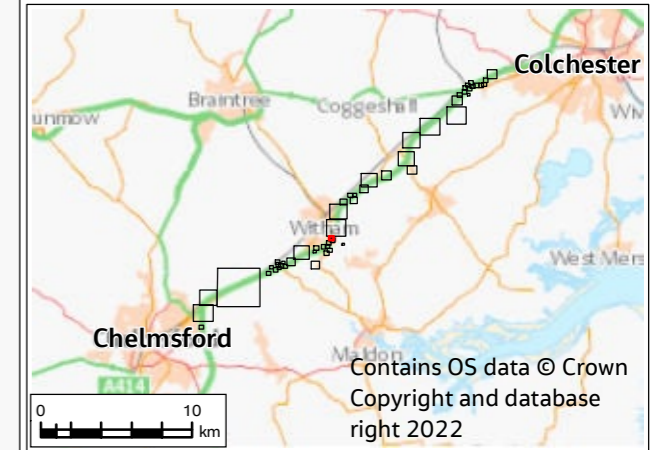



APPENDIX 9.4 - FIGURE 3



Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



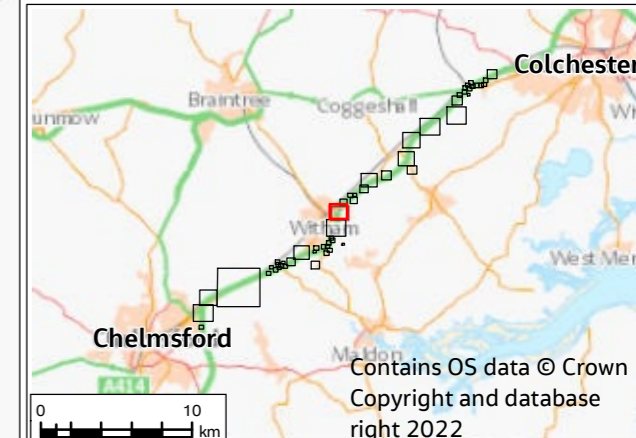
P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
						
REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BUILDINGS) SHEET 26 OF 54						
Drawing Status: S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3	1:1000		DO NOT SCALE			
Jacobs No.	B36601D1		Rev		P01	
Client No.	HE551497					
Drawing Number: HE551497-JAC-LDC-SCHW-SK-GI-0607						
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APPENDIX 9.4 - FIGURE 3



Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



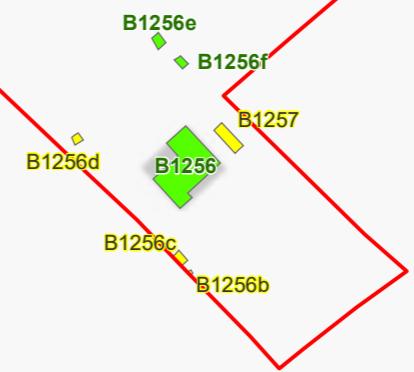
PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APFP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BUILDINGS) SHEET 28 OF 54						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:3500	DO NOT SCALE			
Jacobs No.		B36601D1	Rev		PO1	
Client No.		HE551497				
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0609						



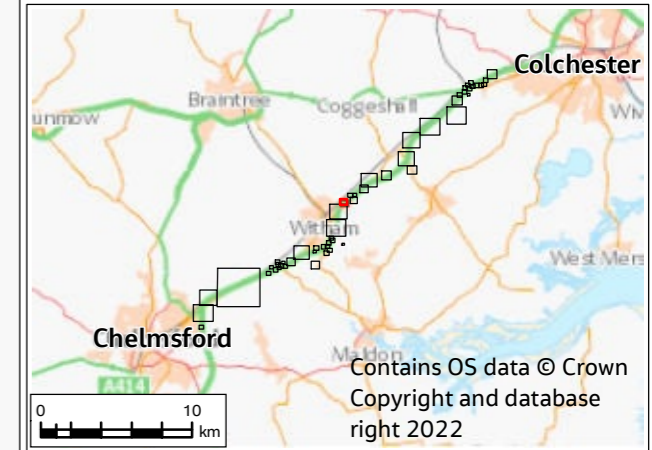
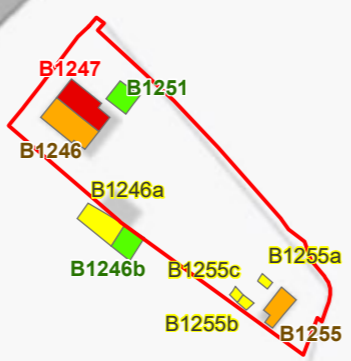
APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



Dunley Brook
Foultry Farm



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



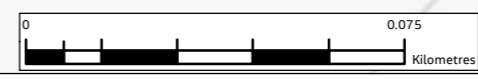
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 29 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1500	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0610

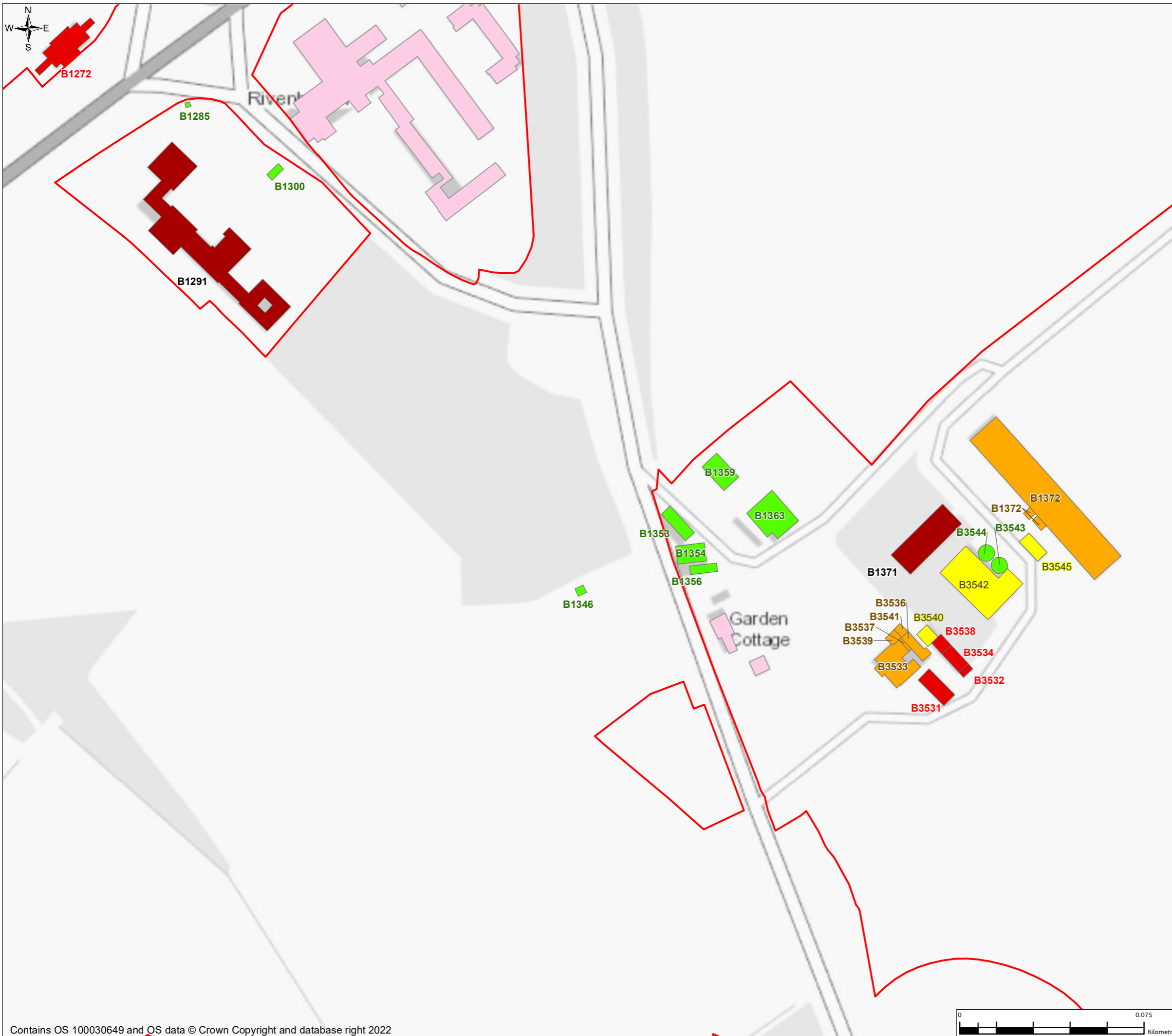
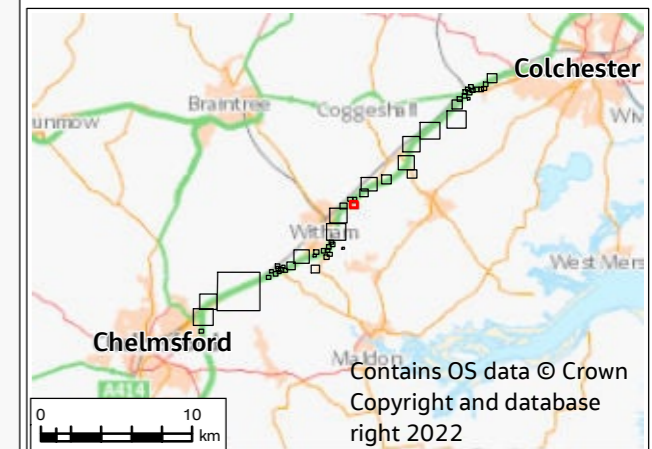


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APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
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- Negligible
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- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



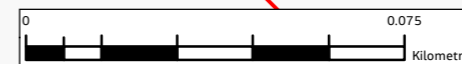
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 30 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1500	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0611



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APPENDIX 9.4 - FIGURE 3

Legend

Provisional Order Limits - Design Fix 2

Bat roost potential

Confirmed roost

High

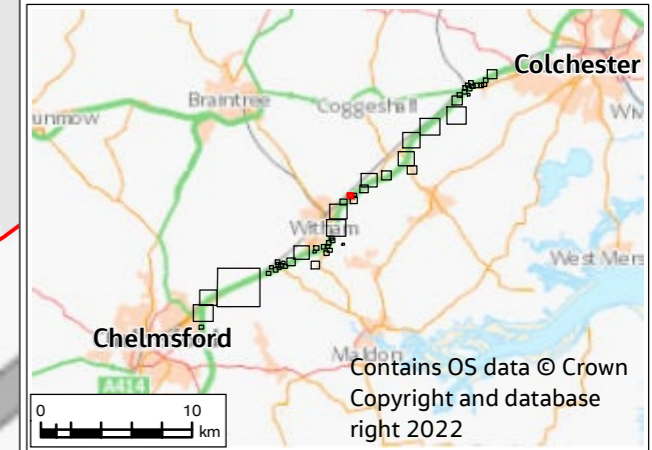
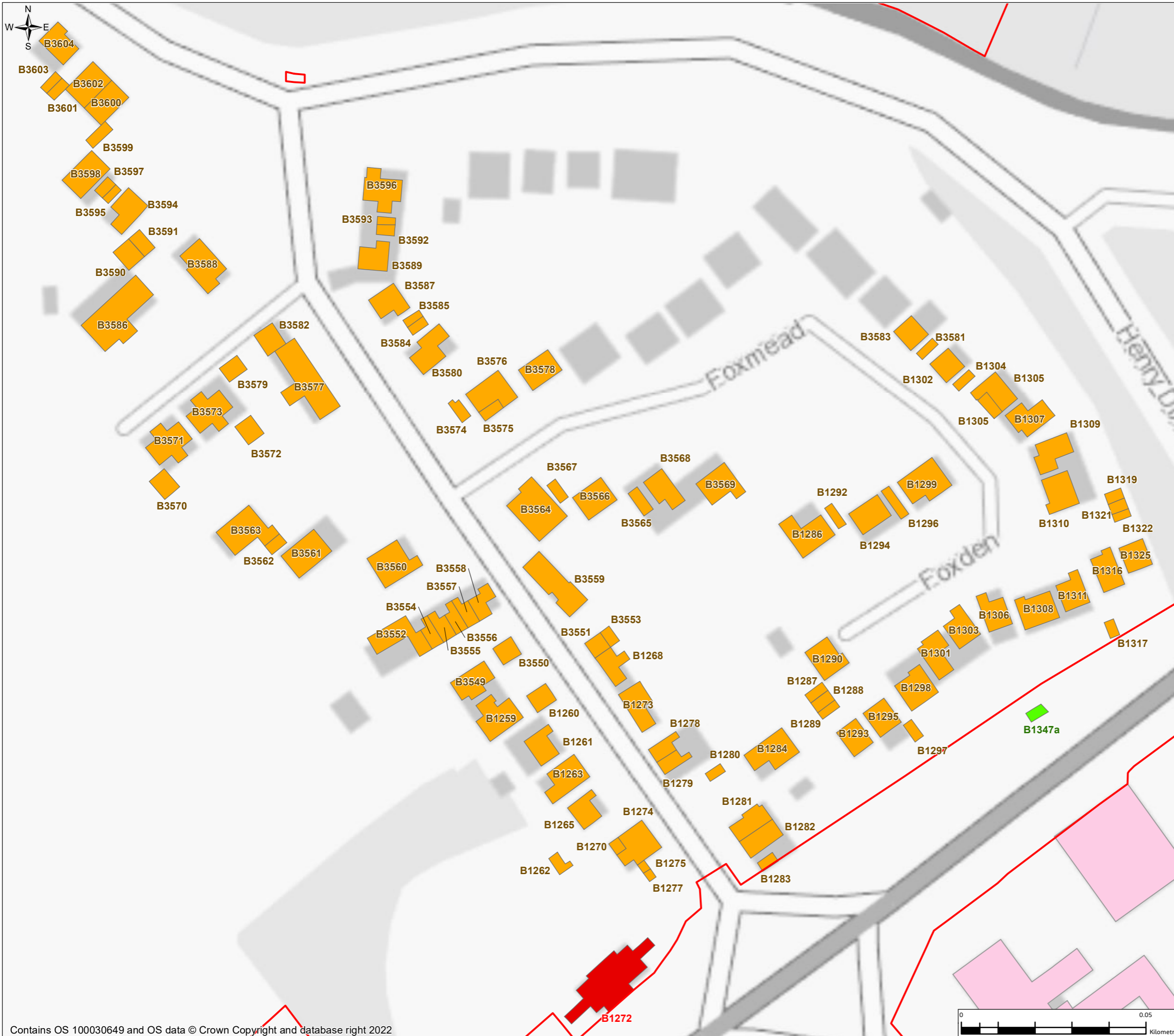
Moderate

Low

Negligible

N/A – no impact

N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 31 OF 54**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

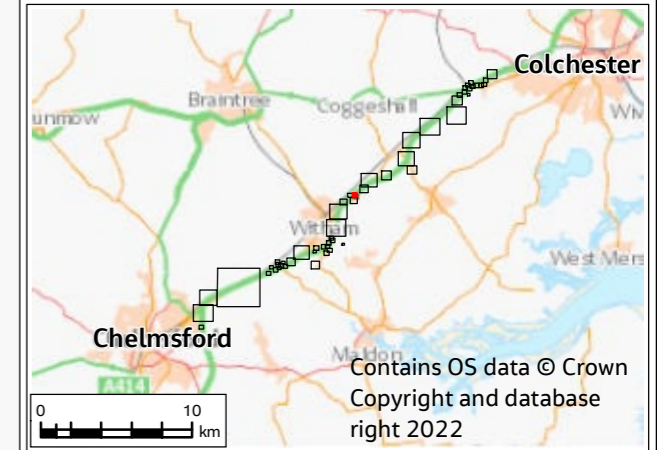
Drawing Number
HE551497-JAC-LDC-SCHW-SK-GI-0612

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APPENDIX 9.4 - FIGURE 3

- Legend**
- Provisional Order Limits - Design Fix 2
 - Bat roost potential**
 - Confirmed roost
 - High
 - Moderate
 - Low
 - Negligible
 - N/A – no impact
 - N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



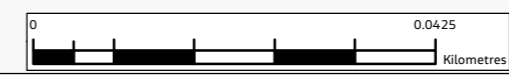
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 32 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:800	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0613



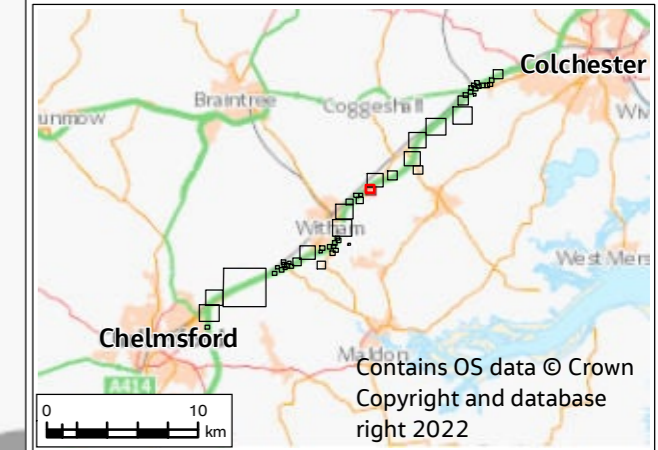
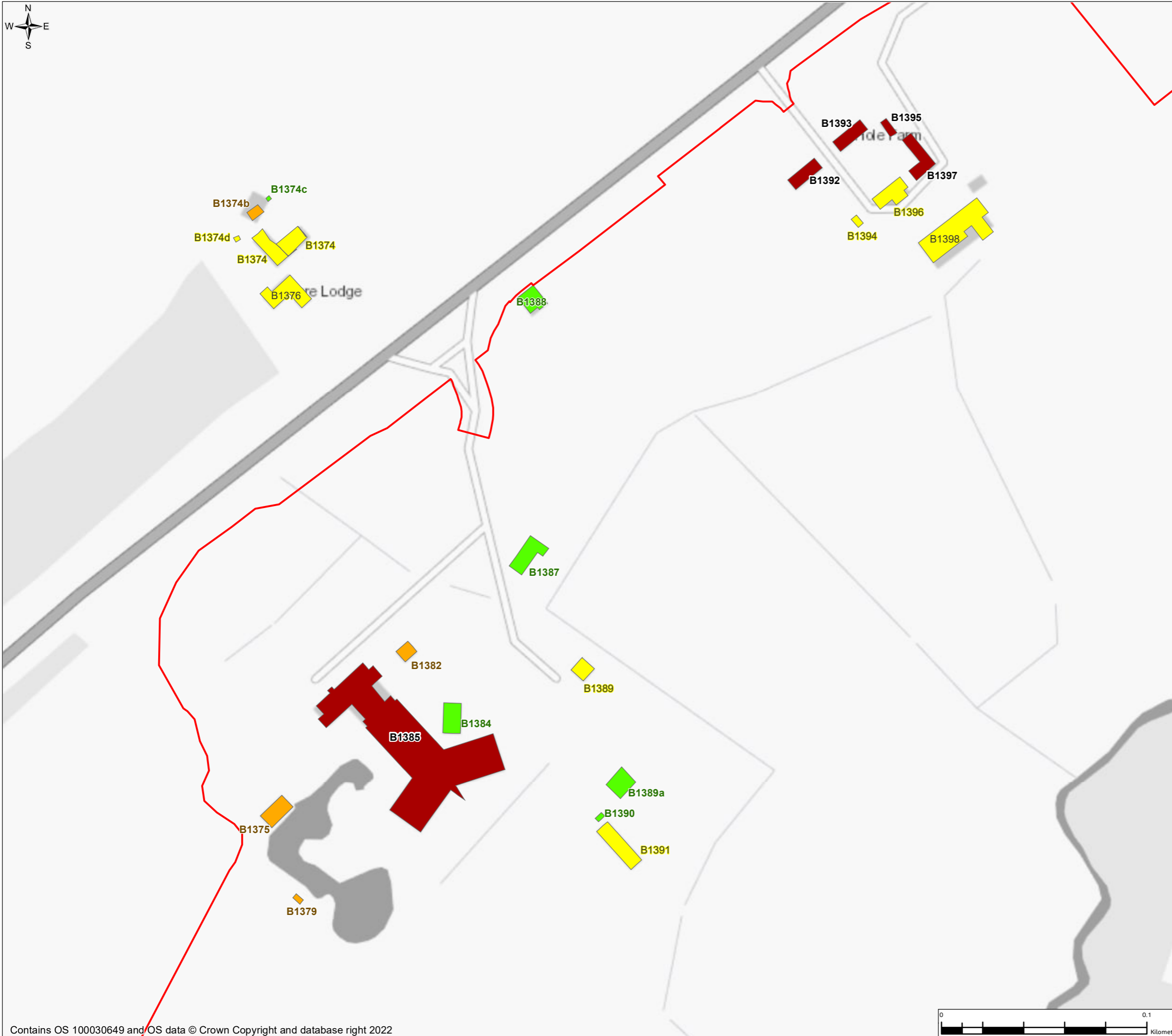
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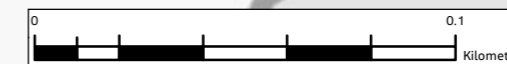
APPENDIX 9.4 - FIGURE 3

Legend

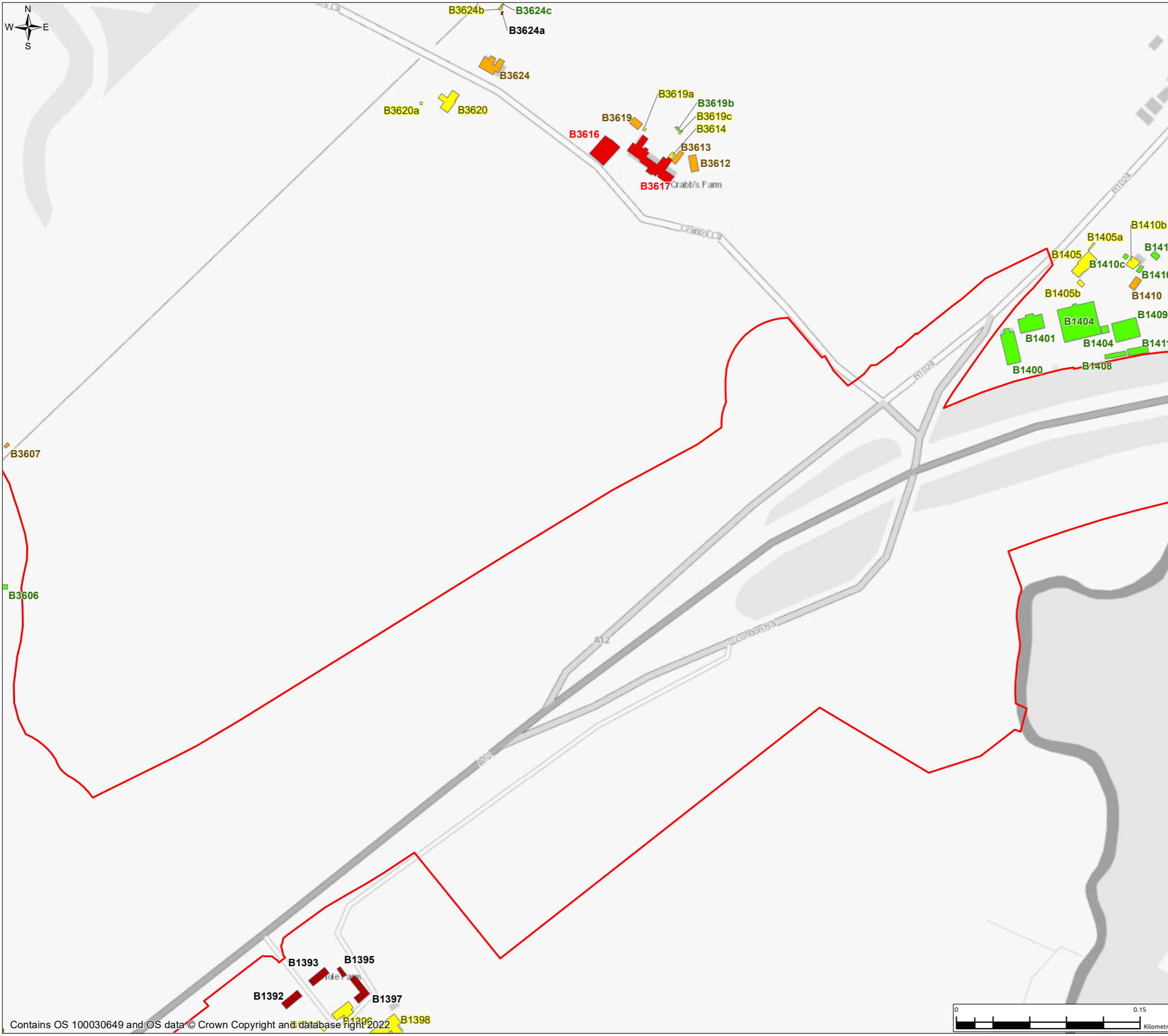
- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APFP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BUILDINGS) SHEET 33 OF 54						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:1800	DO NOT SCALE			
Jacobs No.		B36601D1	Rev P01			
Client No.		HE551497				
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0614						



APPENDIX 9.4 - FIGURE 3

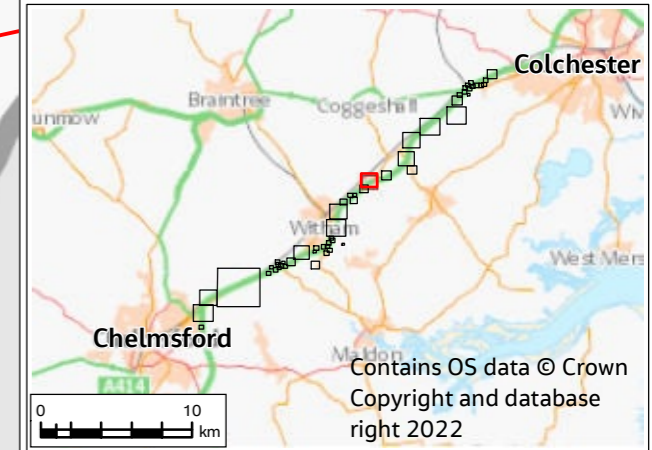


Legend

- Provisional Order Limits - Design Fix 2

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



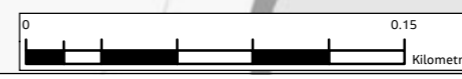
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 34 OF 54

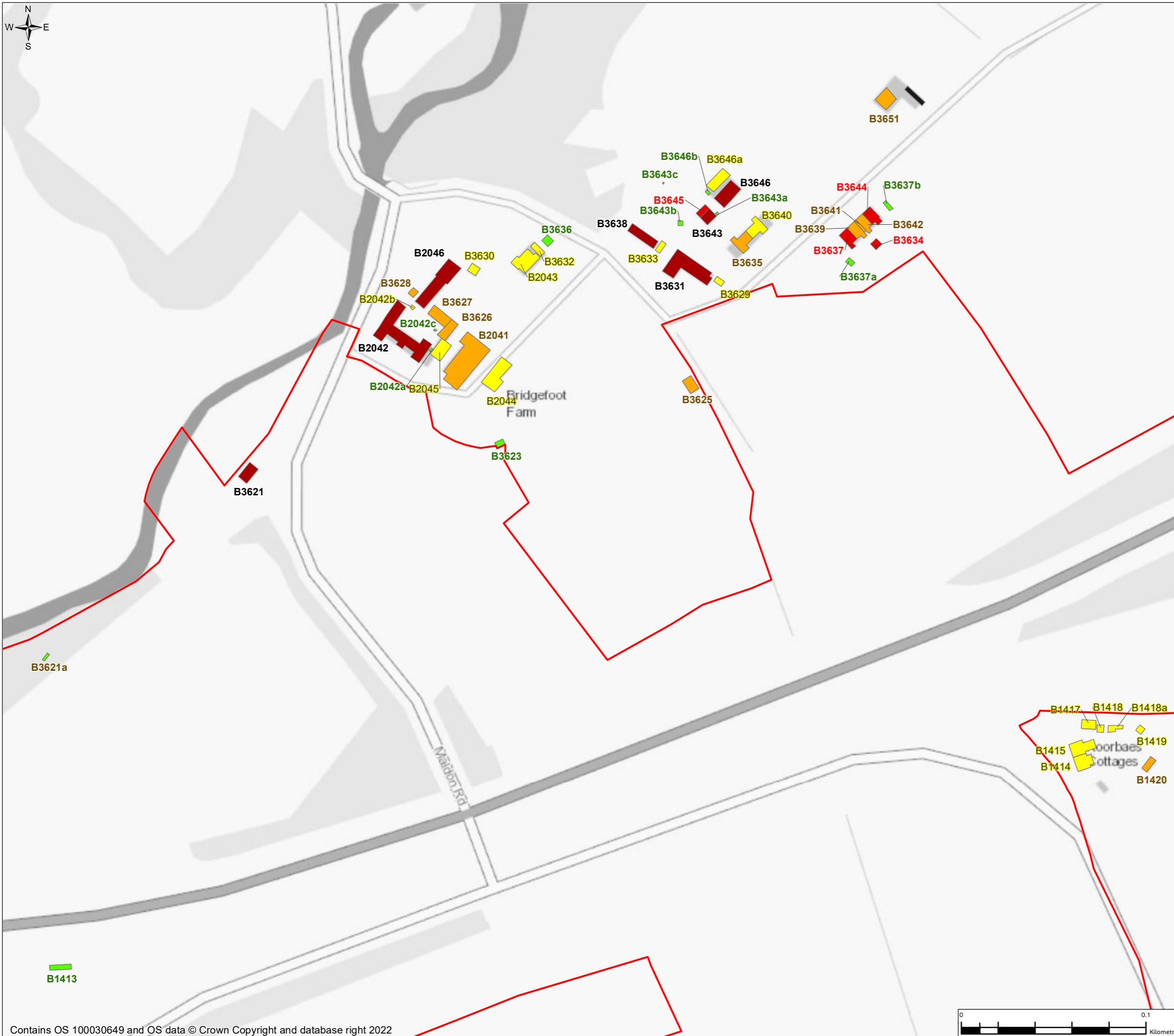
Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:3000	DO NOT SCALE
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Client No.	HE551497	

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0615

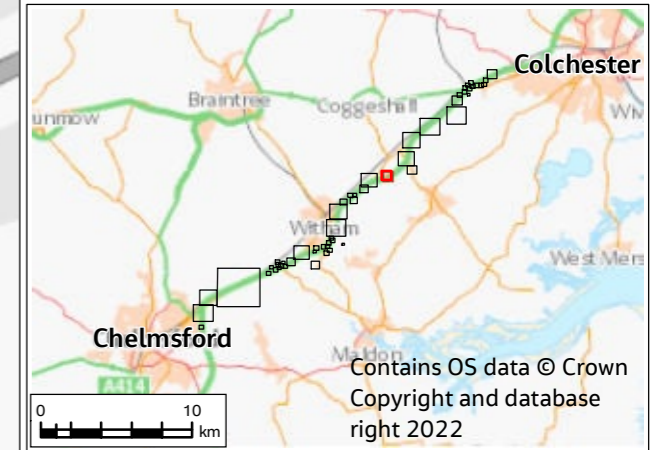


APPENDIX 9.4 - FIGURE 3

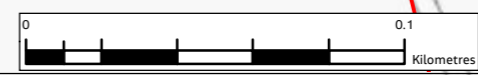


Legend

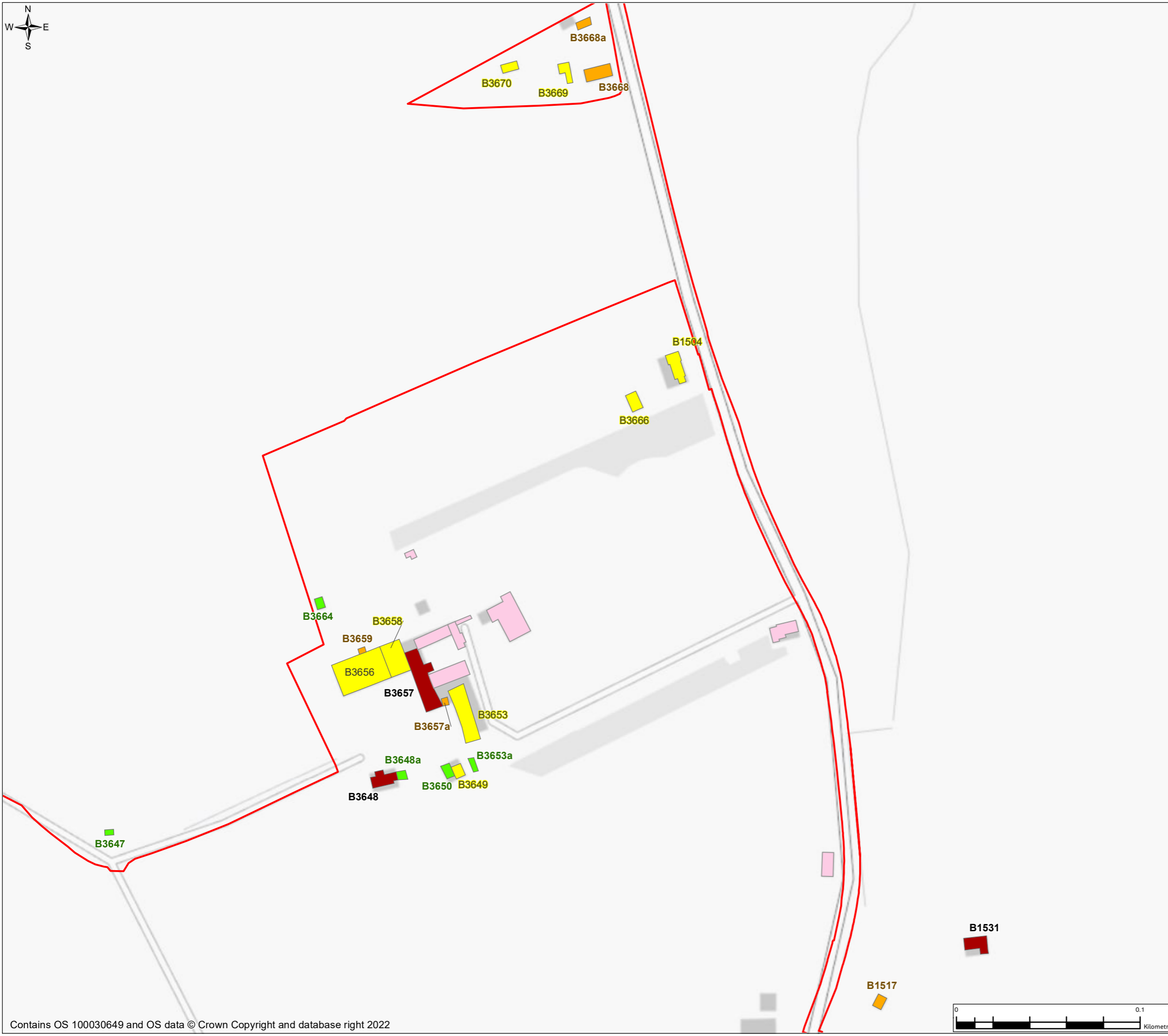
- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APFP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BUILDINGS) SHEET 35 OF 54						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:2000	DO NOT SCALE			
Jacobs No.		B36601D1	Rev			
Client No.		HE551497	PO1			
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0616						

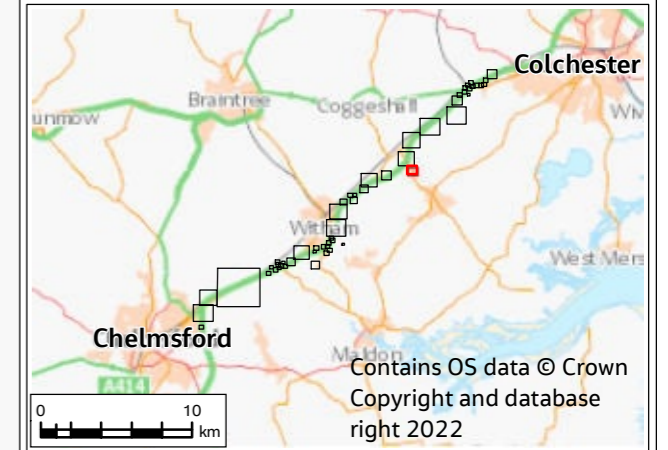



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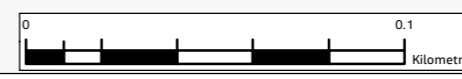


APPENDIX 9.4 - FIGURE 3

- Legend
- Provisional Order Limits - Design Fix 2
 - Bat roost potential**
 - Confirmed roost
 - High
 - Moderate
 - Low
 - Negligible
 - N/A – no impact
 - N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APFP Regulation: Regulation 5(2)(l)			
						
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BUILDINGS) SHEET 36 OF 54						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:2000	DO NOT SCALE			
Jacobs No.		B36601D1	Rev		PO1	
Client No.		HE551497				
Drawing Number		HE551497-JAC-LDC-SCHW-SK-GI-0617				





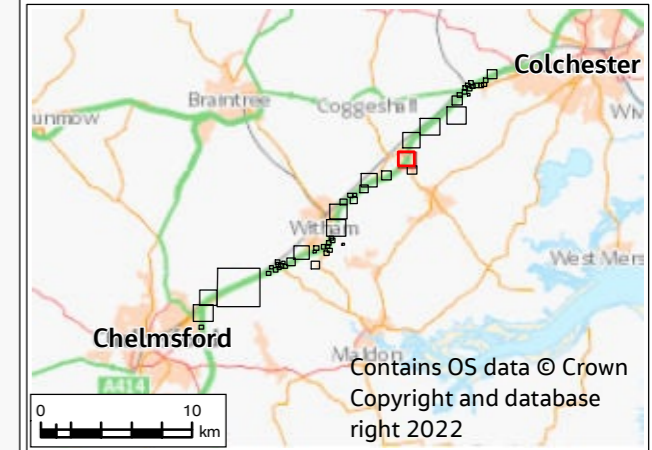
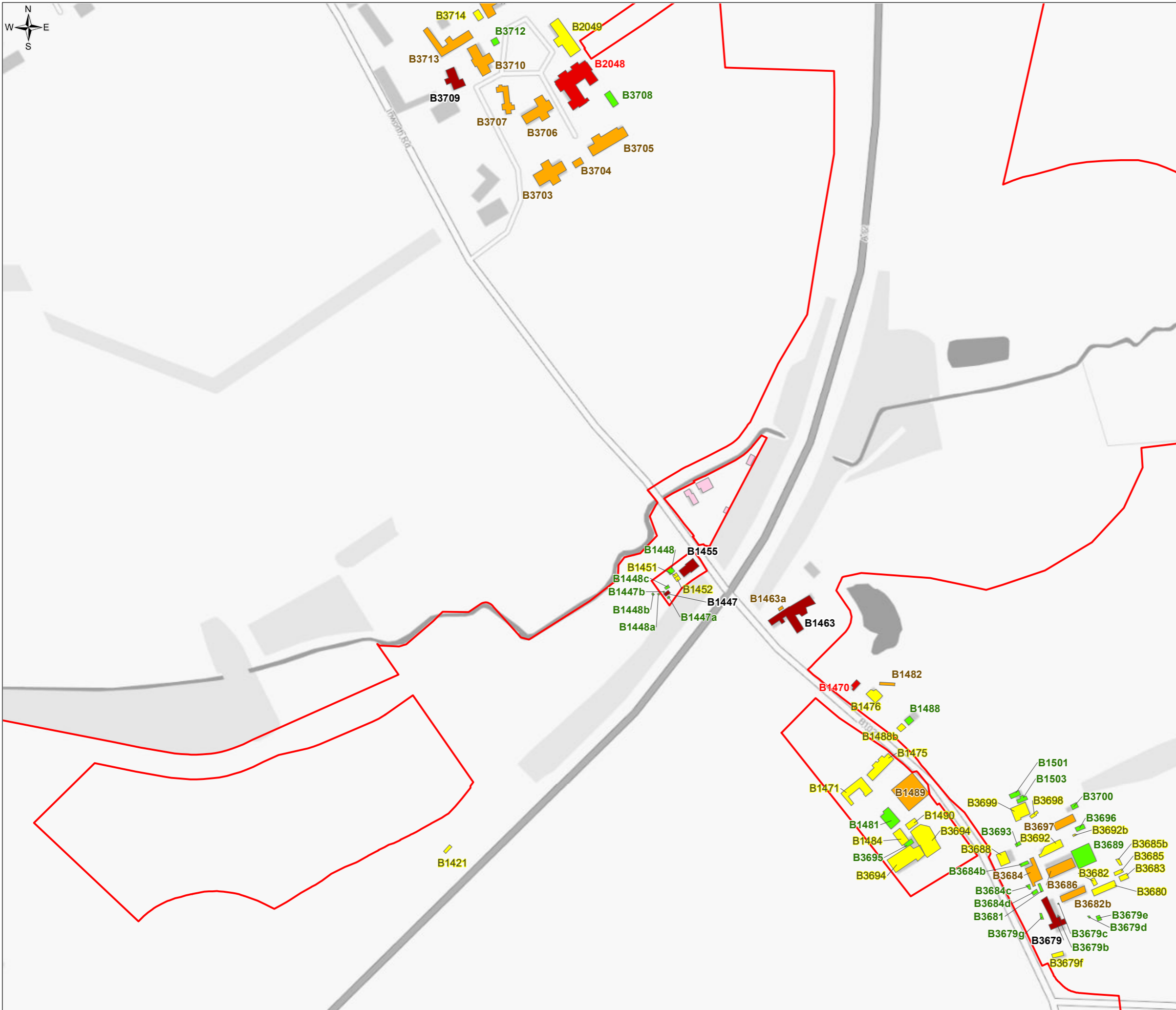
APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APFP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BUILDINGS) SHEET 37 OF 54						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3	1:3000		DO NOT SCALE			
Jacobs No.	B36601D1		Rev		PO1	
Client No.	HE551497					
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0618						



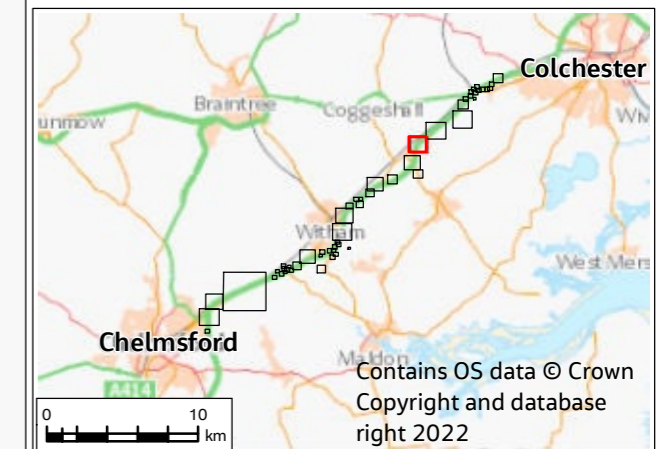
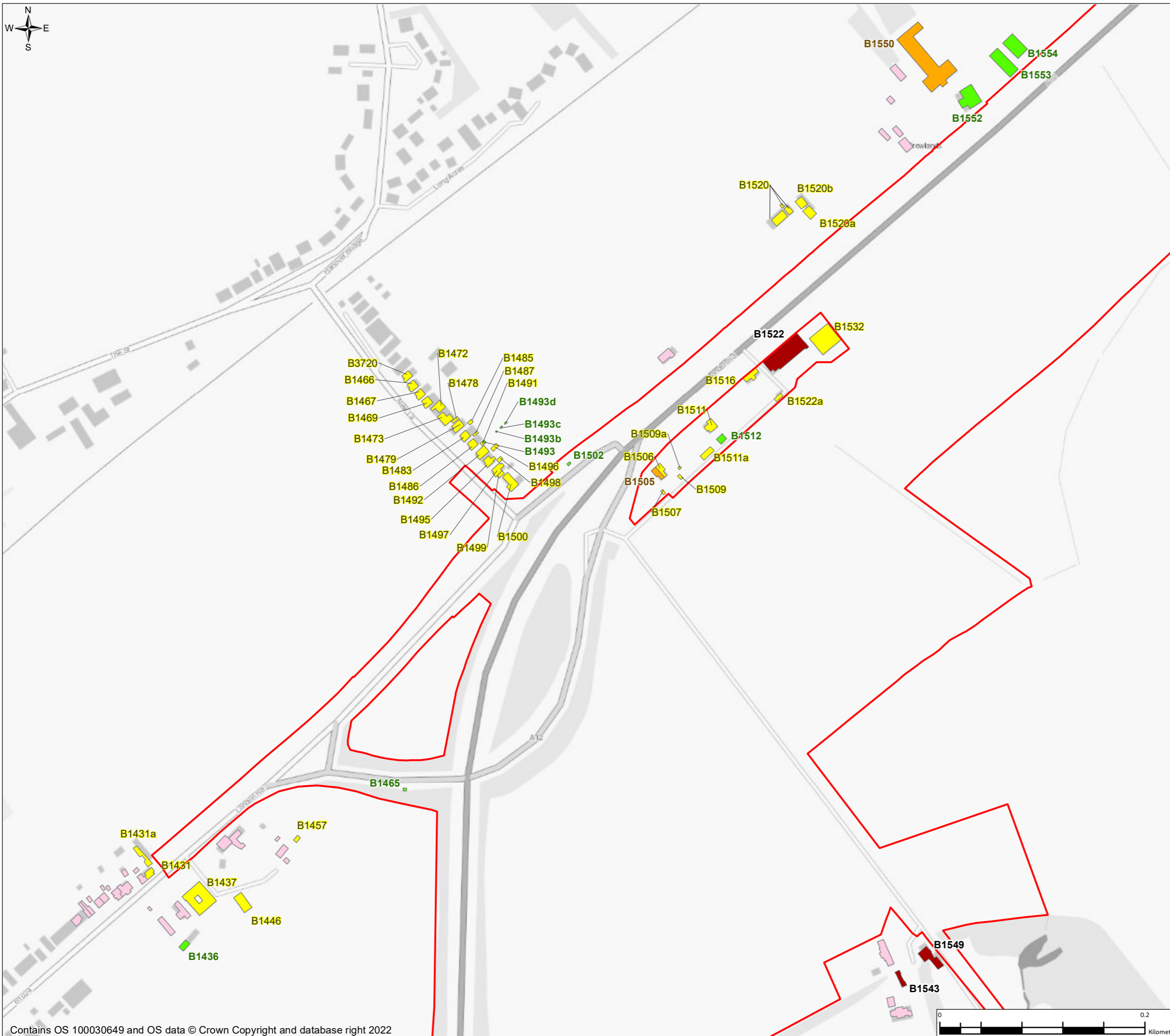
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APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

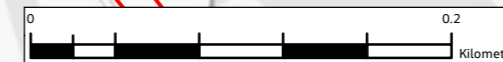
Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 38 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:3600	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0619

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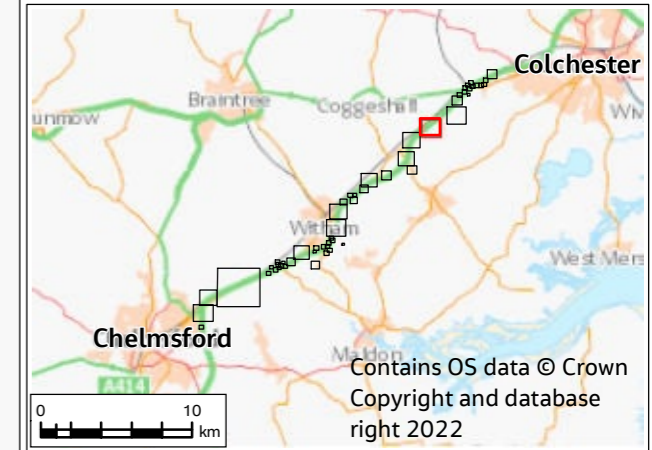
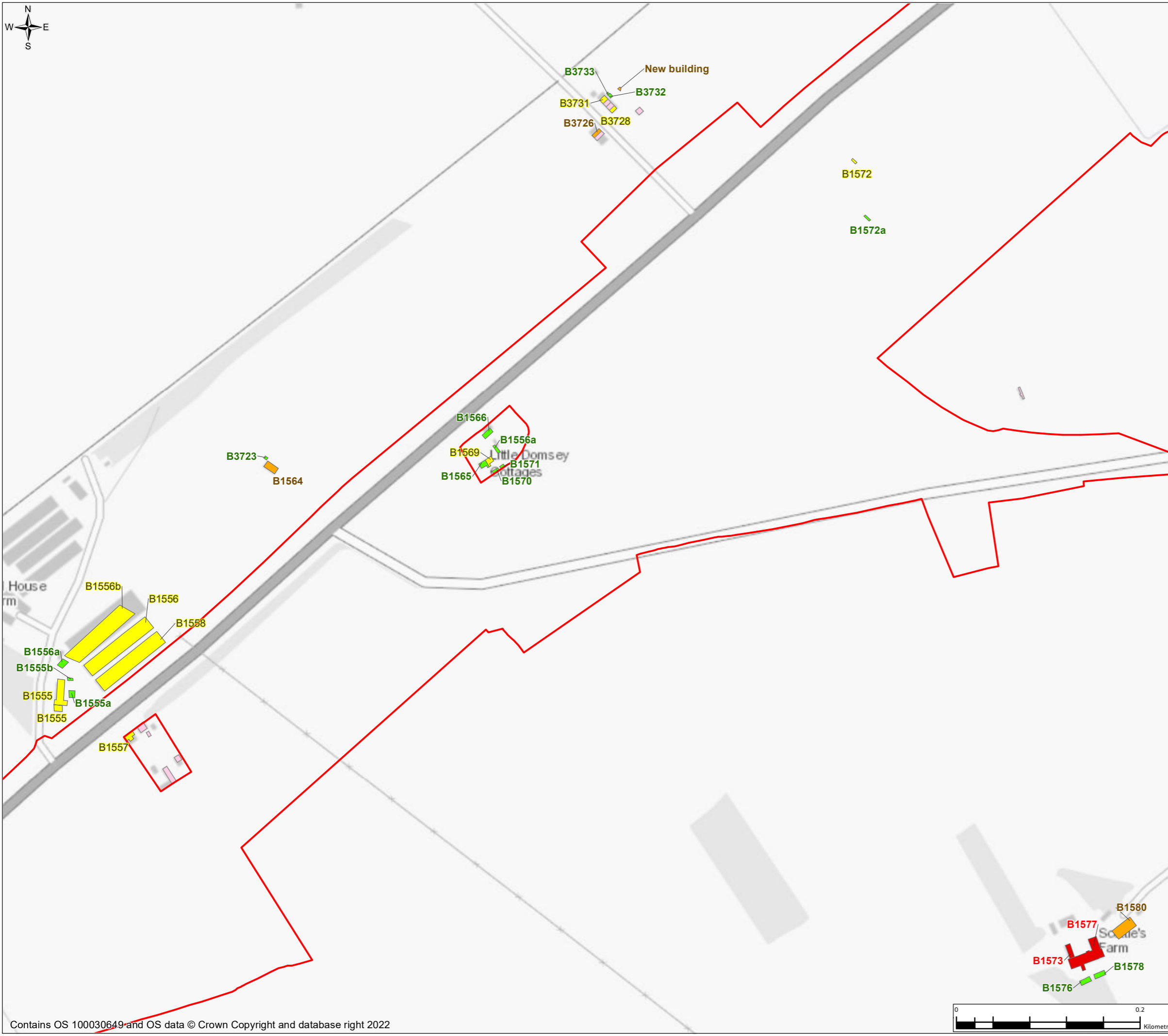




APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project: REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title: ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 39 OF 54

Drawing Status: S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:4000	DO NOT SCALE
Jacobs No.	B36601D1	Rev
Client No.	HE551497	PO1

Drawing Number: HE551497-JAC-LDC-SCHW-SK-GI-0620

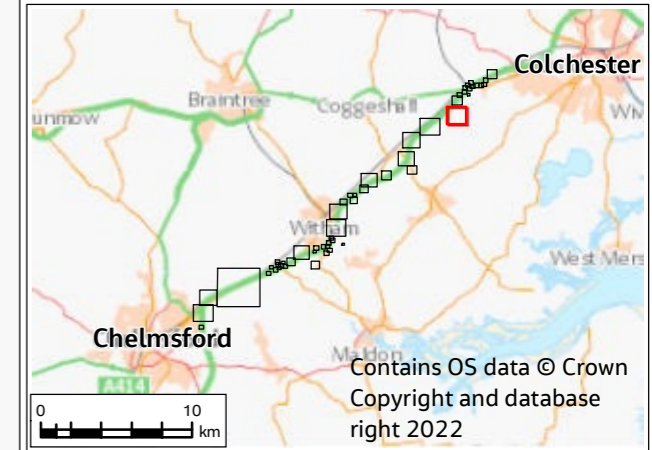
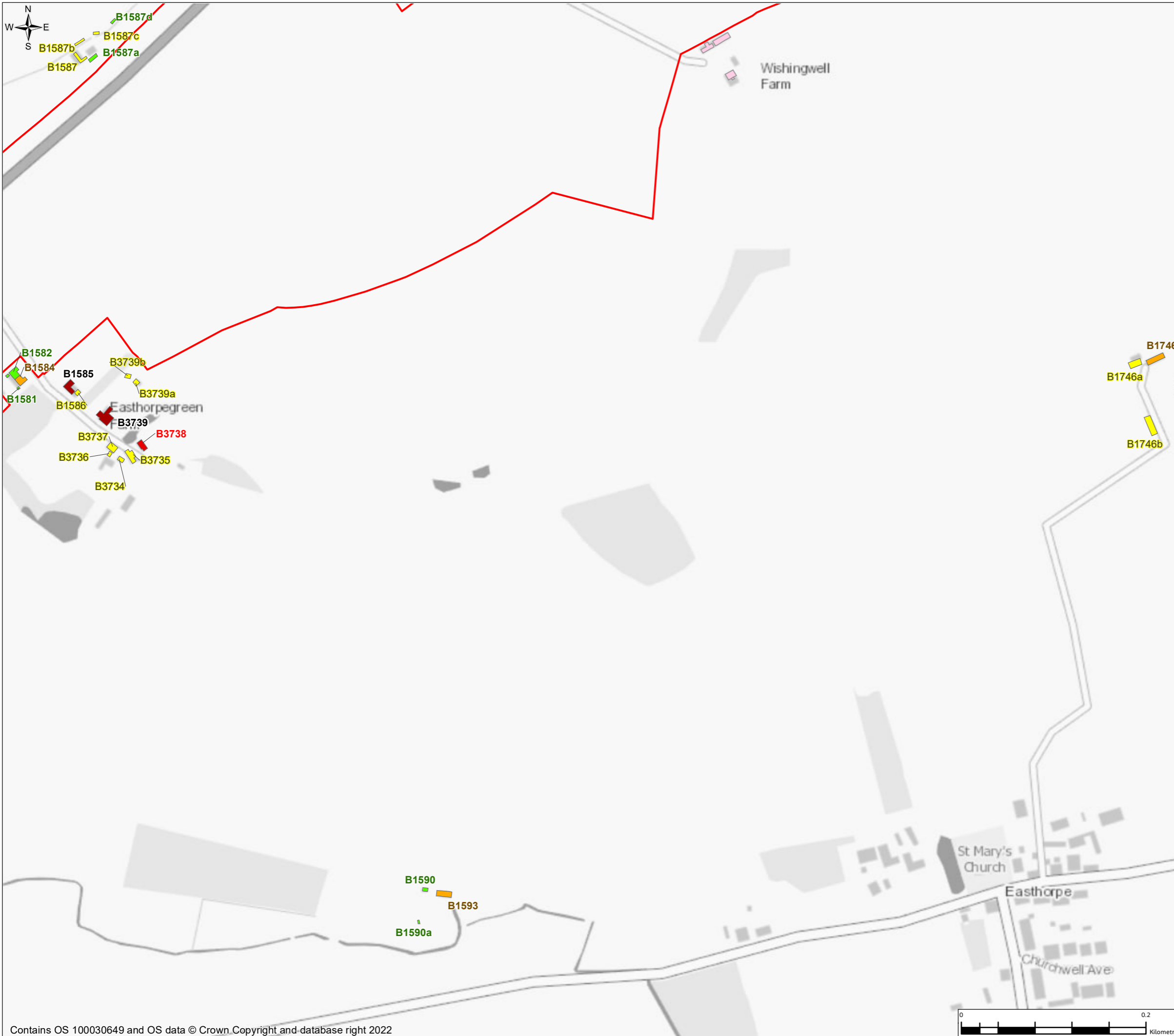


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APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 40 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:4000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0621

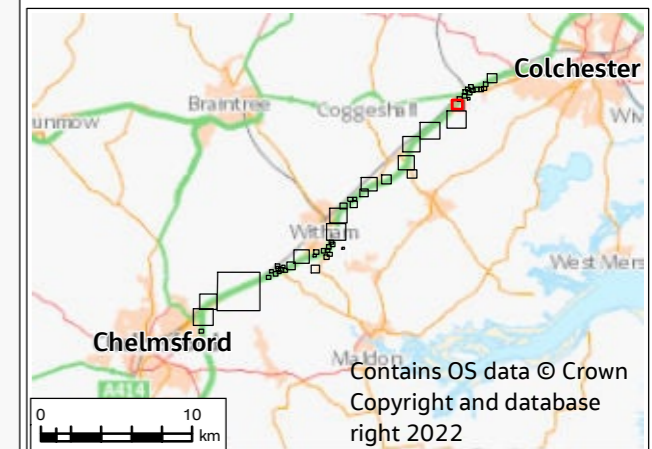


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APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

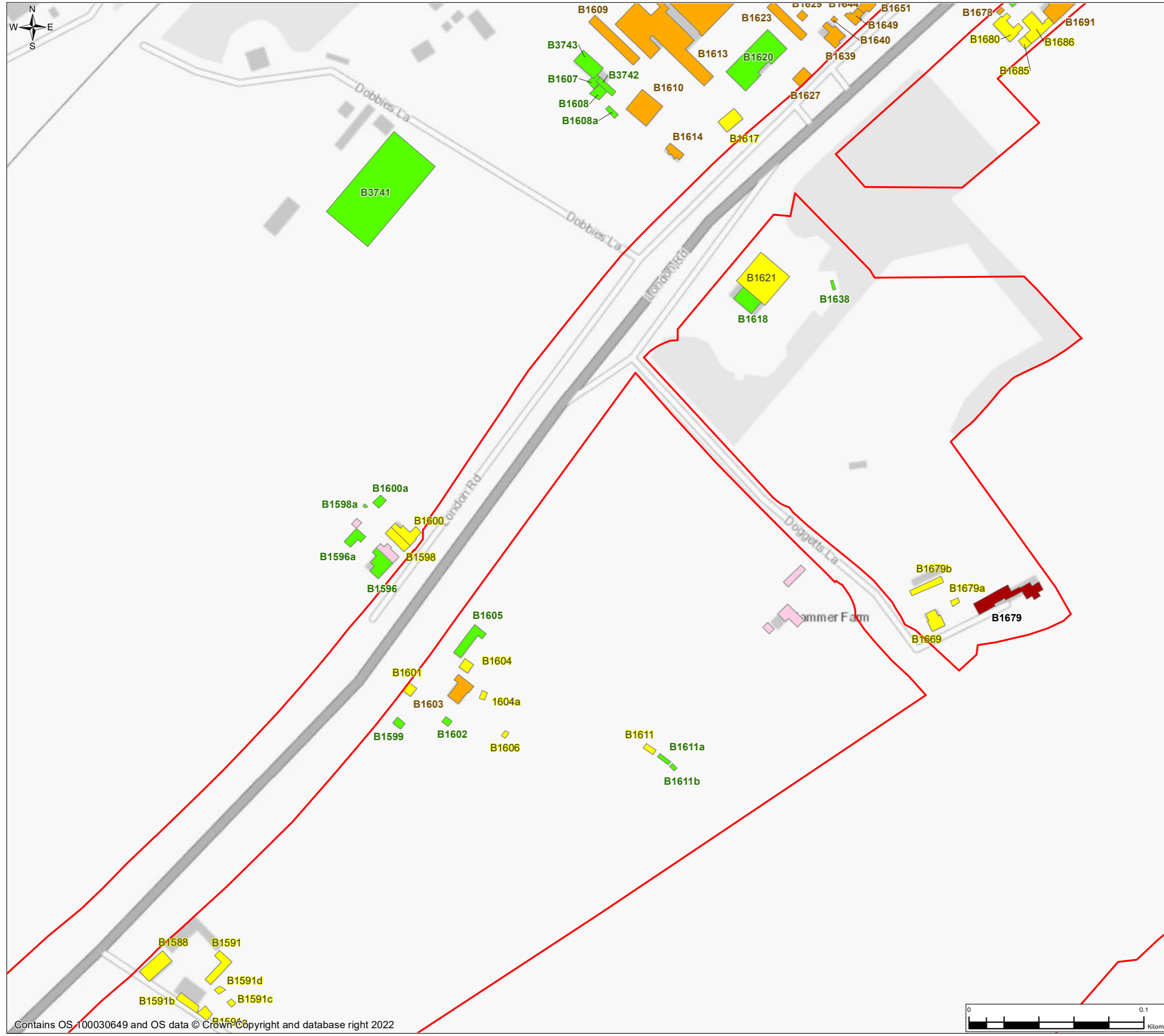
Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 41 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:2100	DO NOT SCALE
Jacobs No.	B36601D1	Rev
Client No.	HE551497	PO1

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0622

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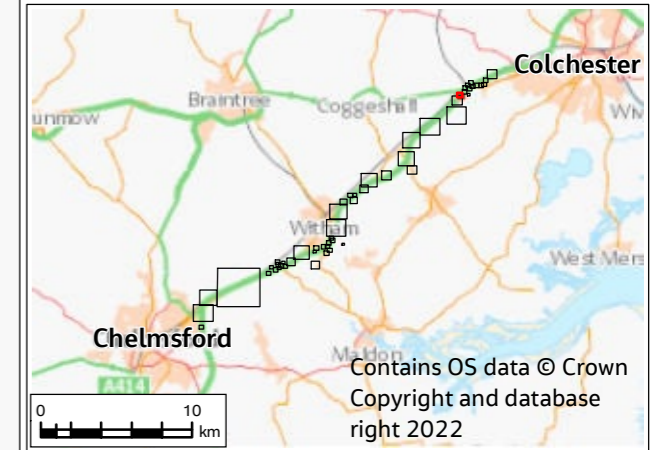
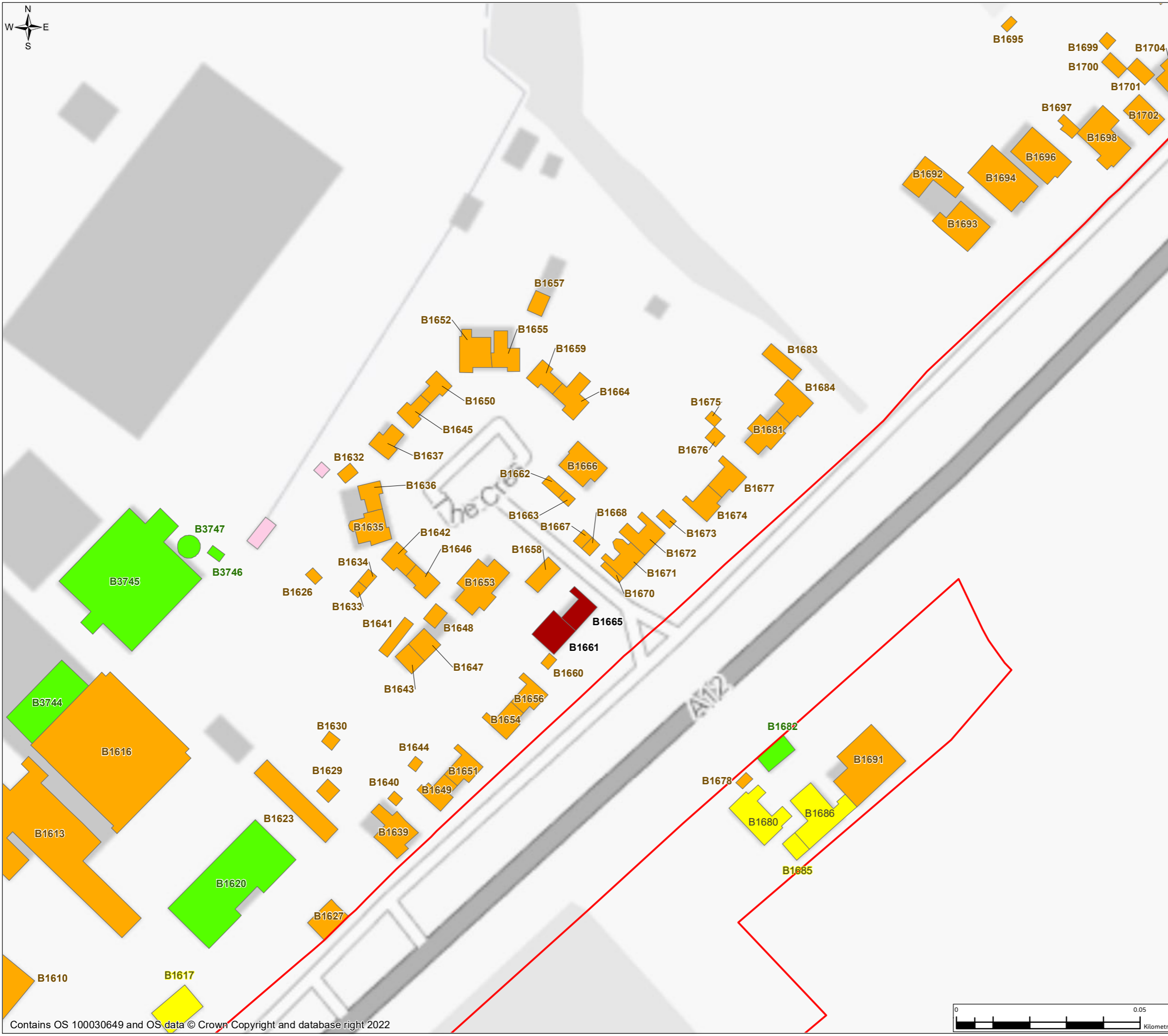
APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



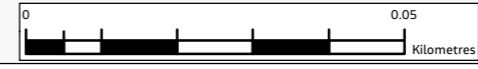
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 42 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev PO1
Client No.	HE551497	

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0623

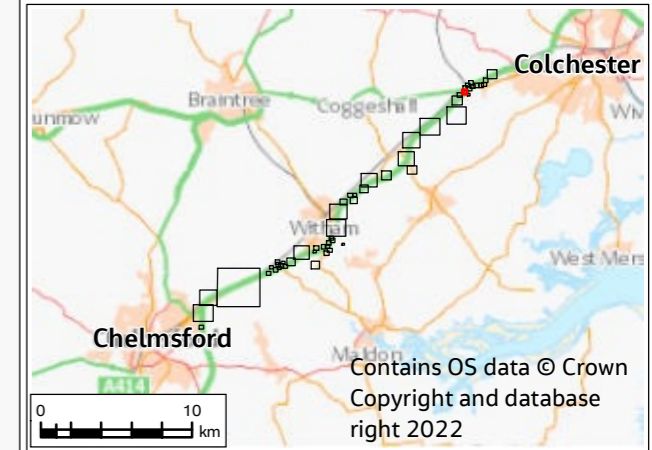


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APPENDIX 9.4 - FIGURE 3

- Legend**
- Provisional Order Limits - Design Fix 2
 - Bat roost potential**
 - Confirmed roost
 - High
 - Moderate
 - Low
 - Negligible
 - N/A – no impact
 - N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 43 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev
Client No.	HE551497	PO1

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0624

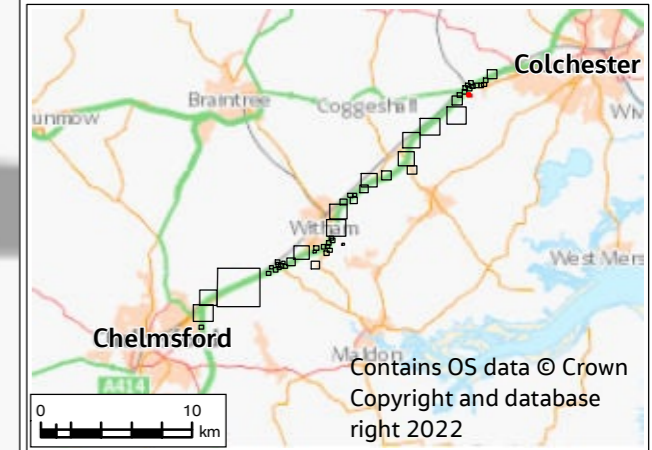
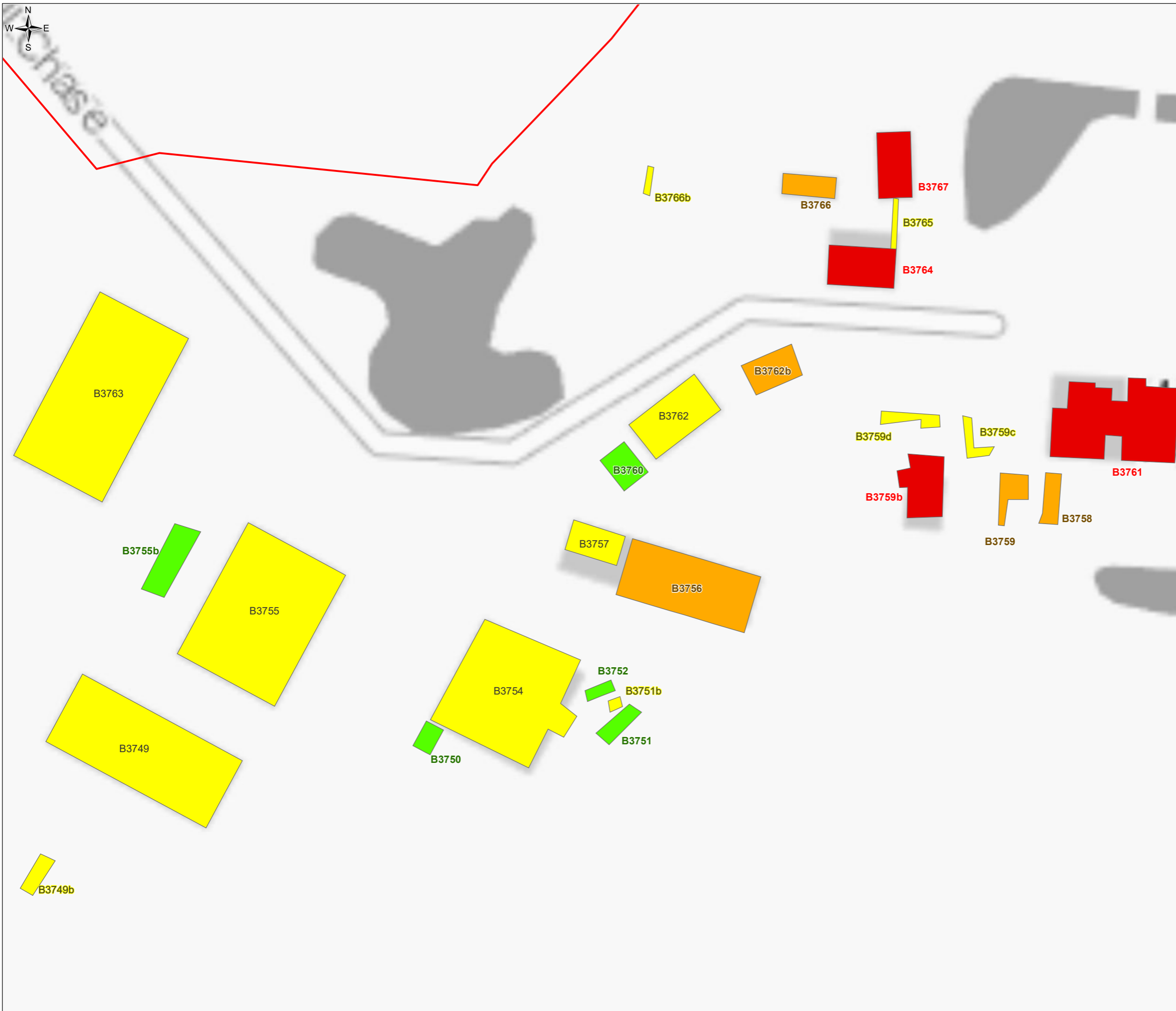


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APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 44 OF 54

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:600	DO NOT SCALE
Jacobs No.	B36601D1	Rev
Client No.	HE551497	P01

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0625



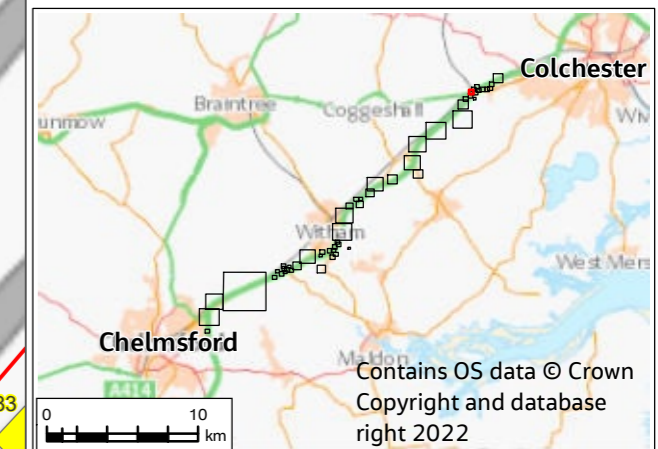
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APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Client: **national highways**

Project: **REGIONAL DELIVERY PARTNERSHIP
A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title: **ENVIRONMENTAL STATEMENT
BAT SURVEY RESULTS (BUILDINGS)
SHEET 45 OF 54**

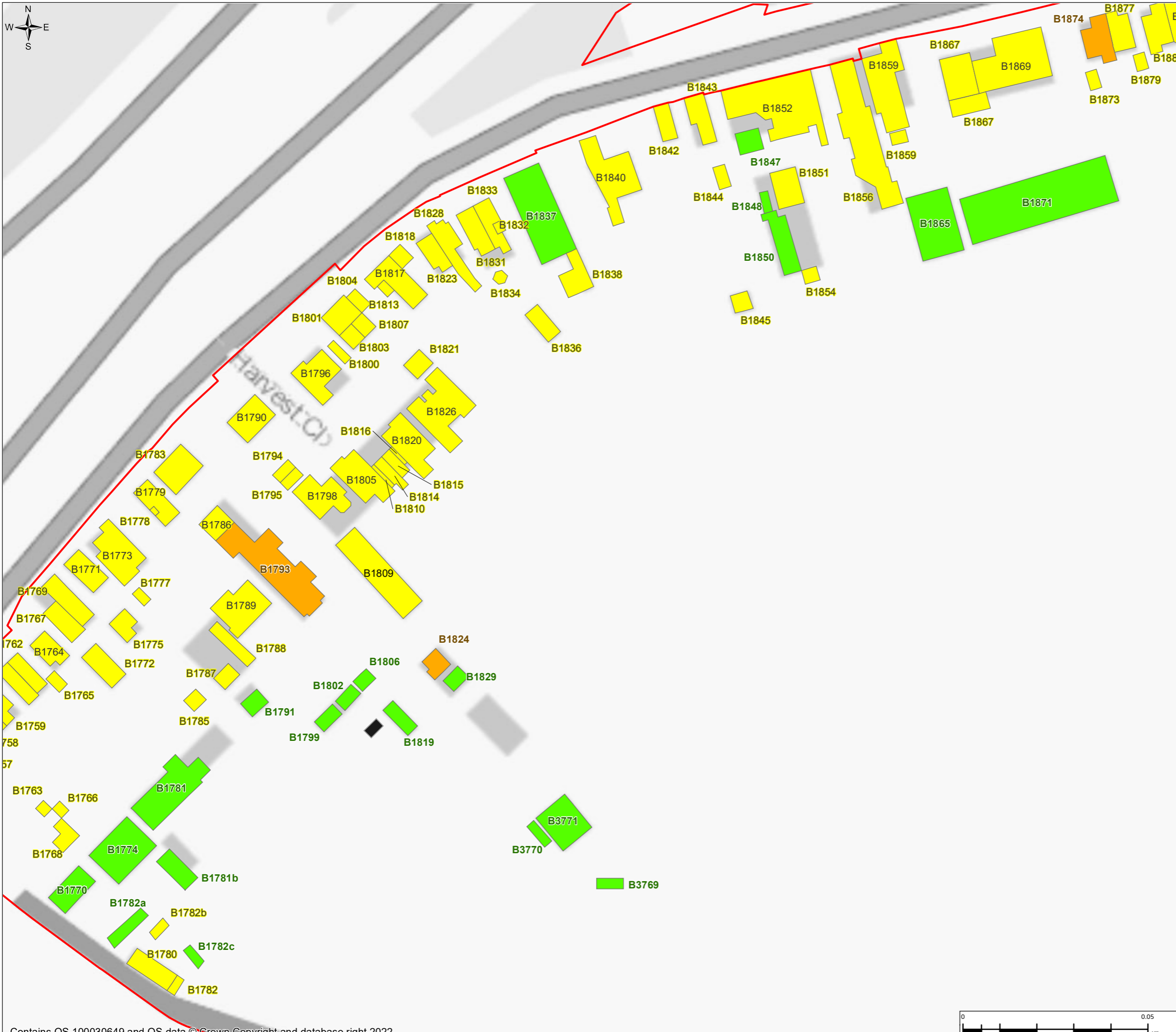
Drawing Status: **S4 – SUITABLE FOR STAGE APPROVAL**

Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number: **HE551497-JAC-LDC-SCHW-SK-GI-0626**

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APPENDIX 9.4 - FIGURE 3

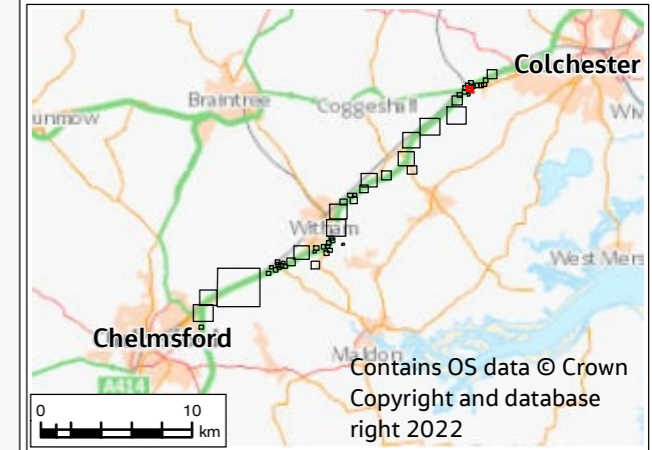


Legend

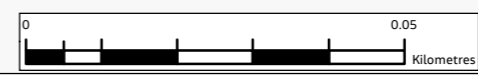
- Provisional Order Limits - Design Fix 2

Bat roost potential

- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



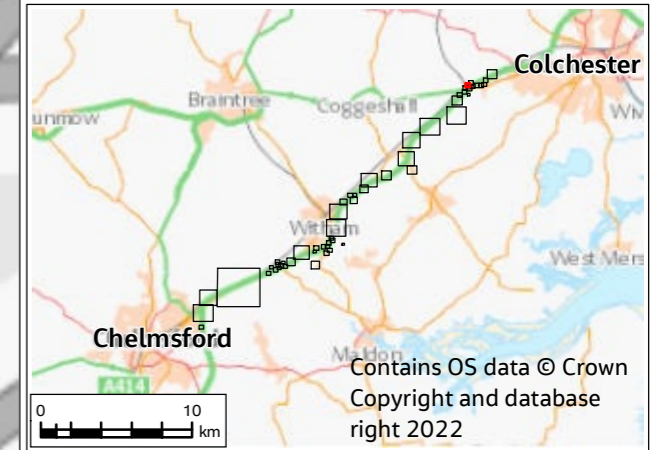
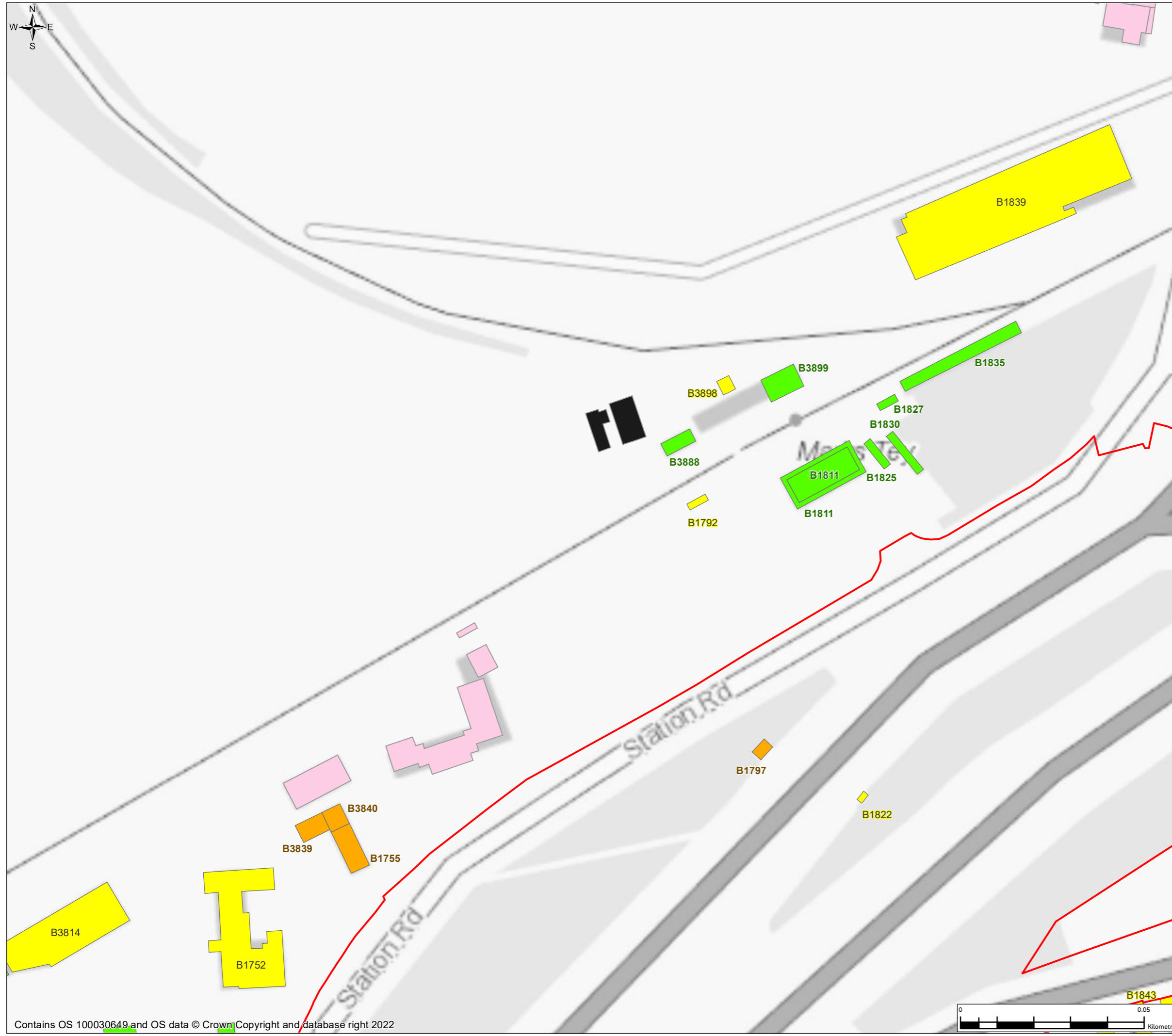
PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APFP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BUILDINGS) SHEET 46 OF 54						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3	1:1000		DO NOT SCALE			
Jacobs No.	B36601D1		Rev P01			
Client No.	HE551497					
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0627						



APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)

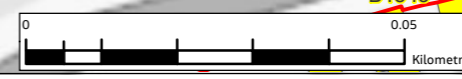


Project: REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title: ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 47 OF 54

Drawing Status	S4 – SUITABLE FOR STAGE APPROVAL		
Scale @ A3	1:1000	DO NOT SCALE	
Jacobs No.	B36601D1	Rev	P01
Client No.	HE551497		
Drawing Number	HE551497-JAC-LDC-SCHW-SK-GI-0628		

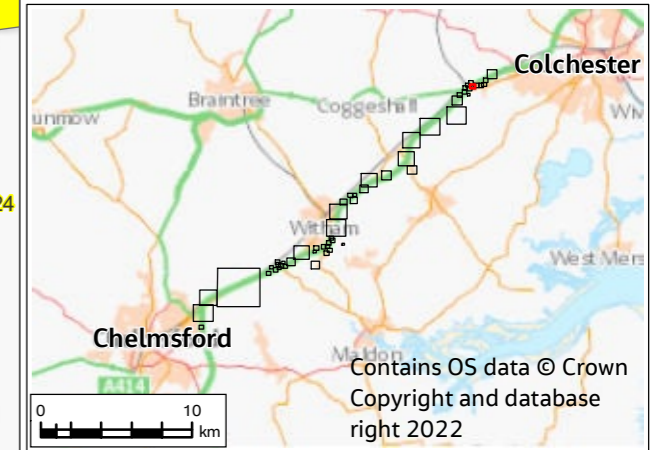
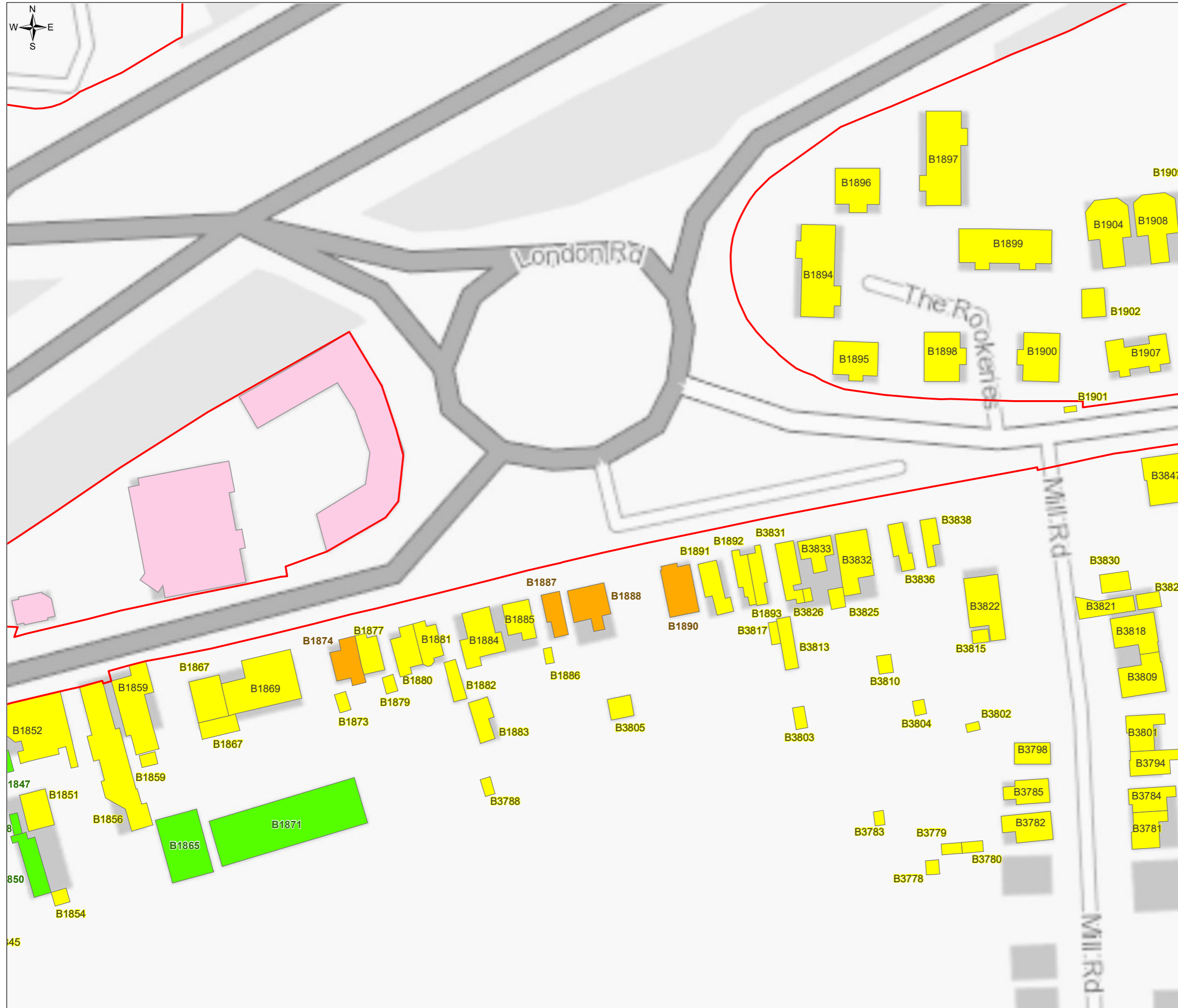
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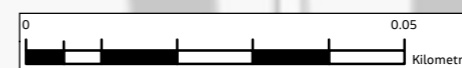
APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BUILDINGS) SHEET 48 OF 54						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:1000	DO NOT SCALE			
Jacobs No.		B36601D1	Rev P01			
Client No.		HE551497				
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0629						

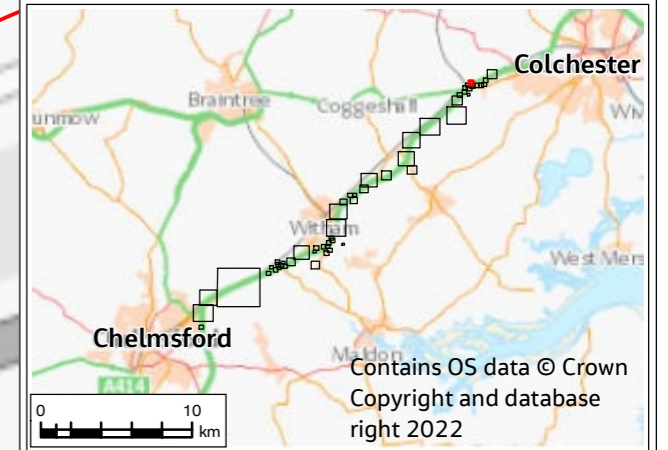
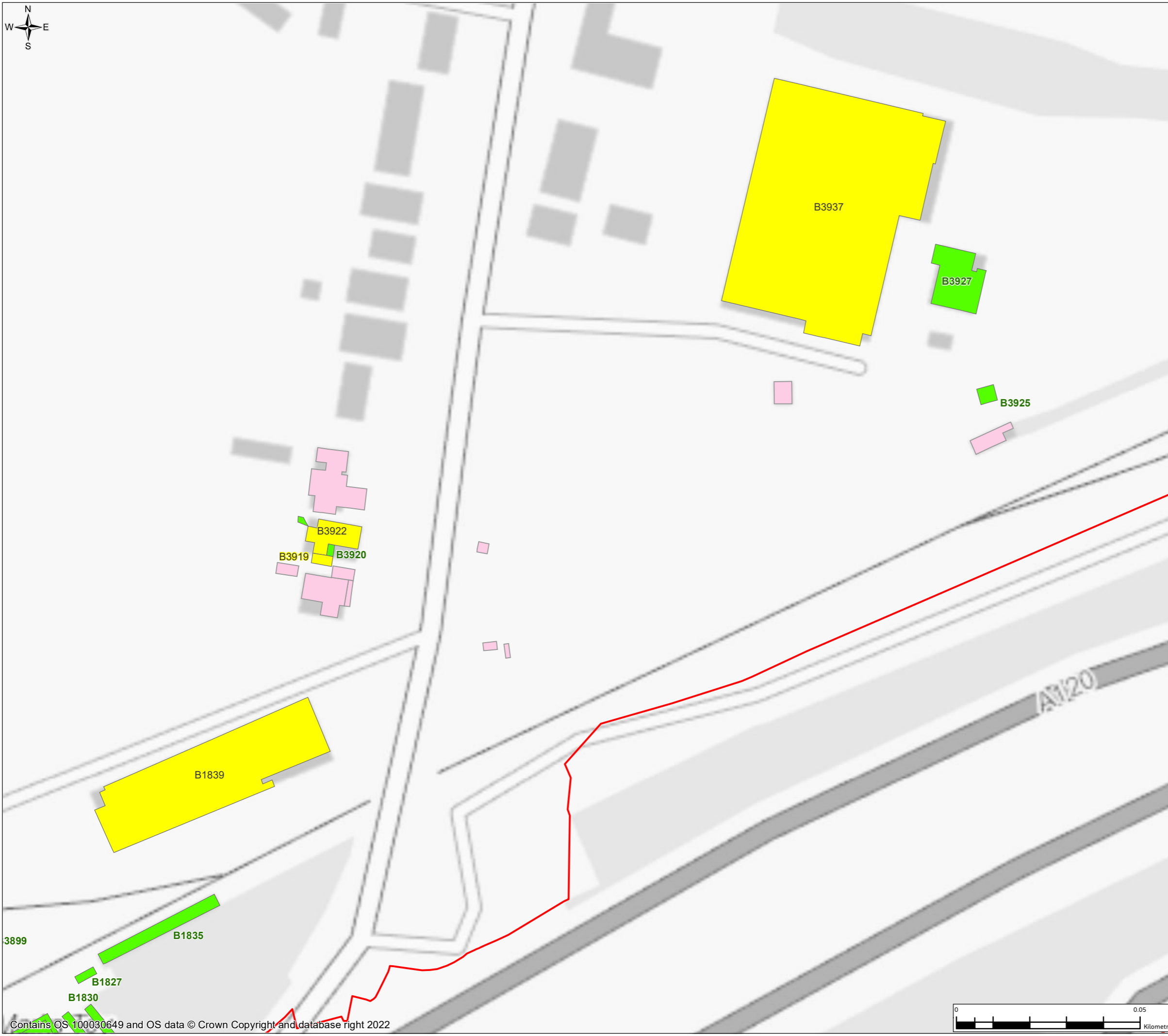




APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3 APFP Regulation: Regulation 5(2)(l)



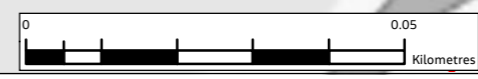
Project
REGIONAL DELIVERY PARTNERSHIP
A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
ENVIRONMENTAL STATEMENT
BAT SURVEY RESULTS (BUILDINGS)
SHEET 49 OF 54

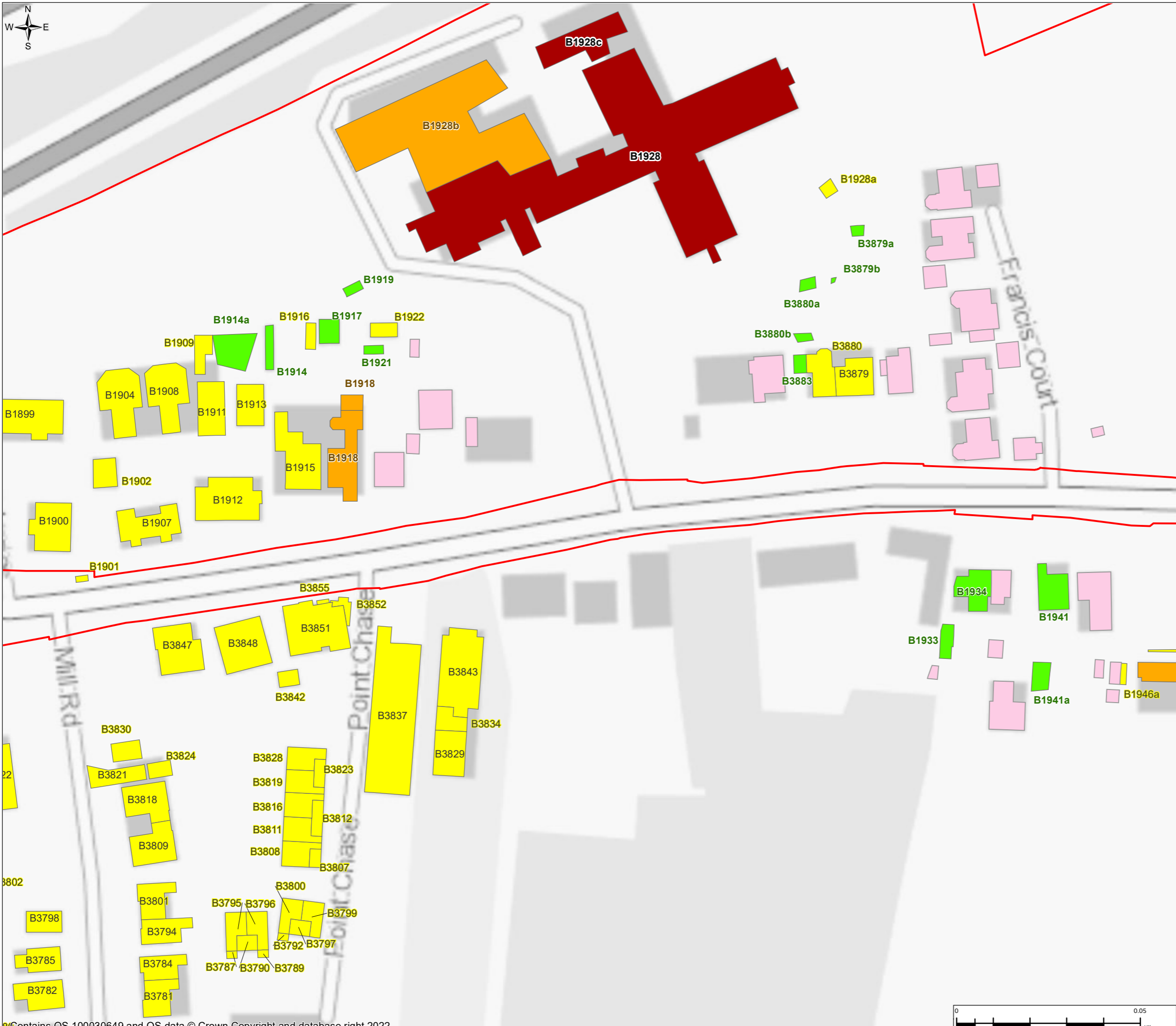
Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE551497-JAC-LDC-SCHW-SK-GI-0630



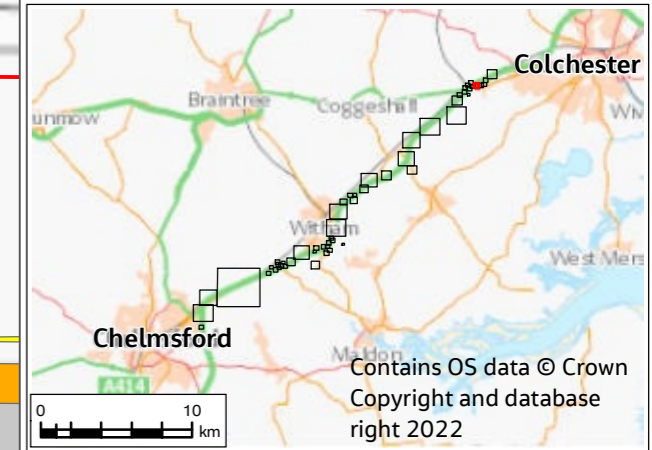
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APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



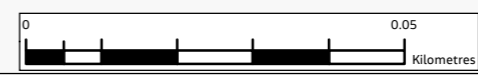
Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 50 OF 54**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev
Client No.	HE551497	PO1

Drawing Number
HE551497-JAC-LDC-SCHW-SK-GI-0631

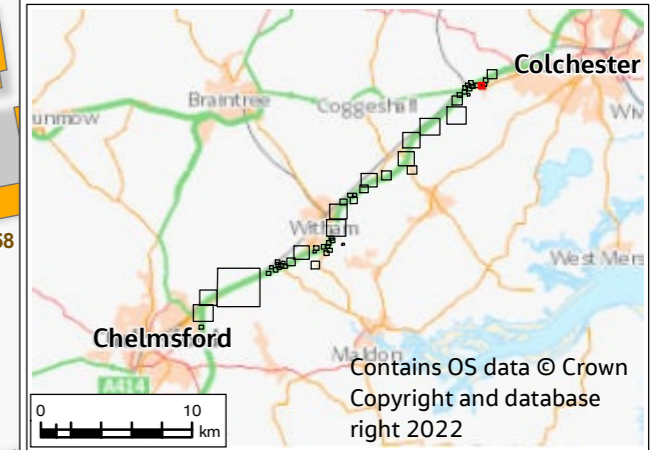
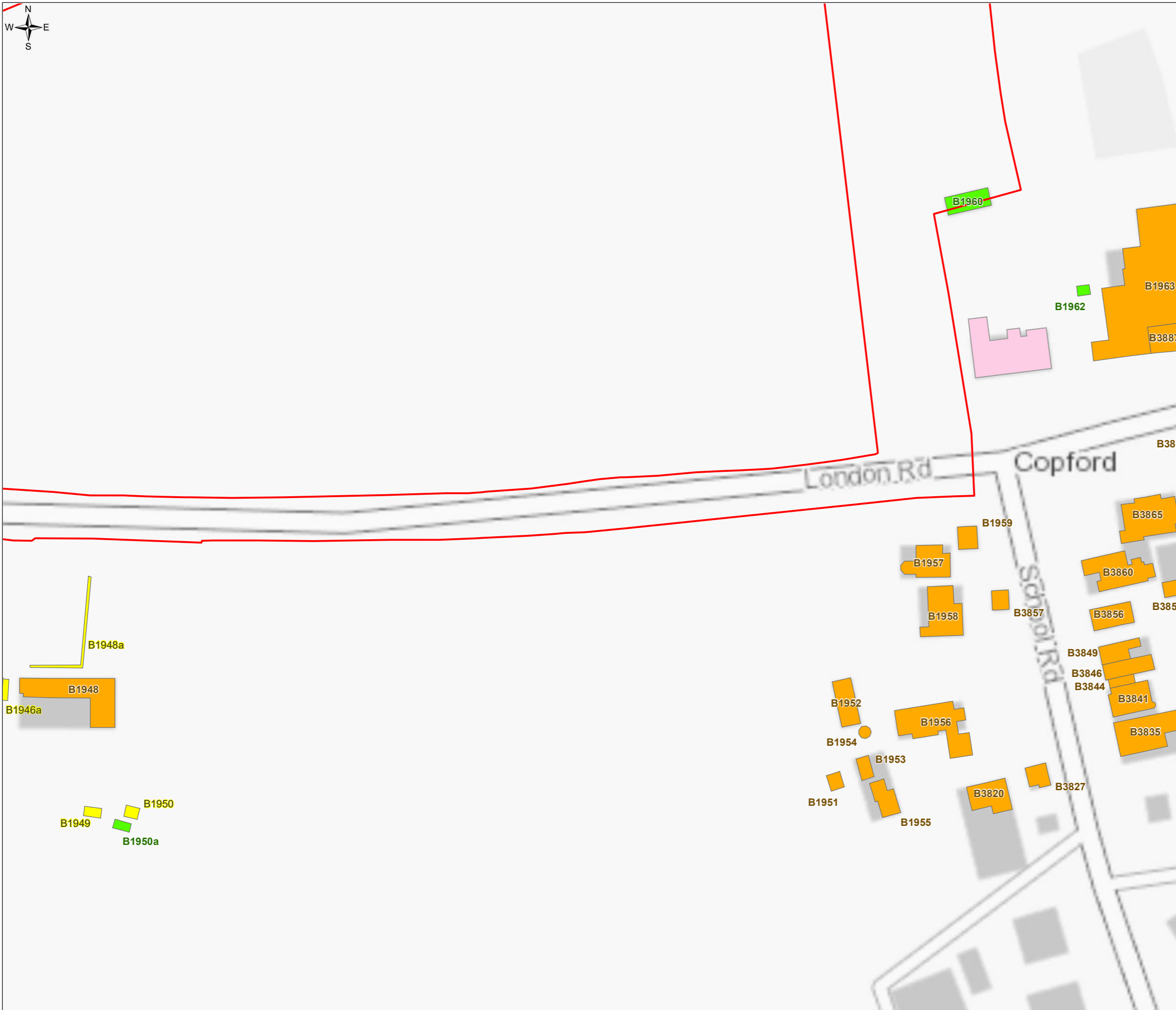


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APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Client: **national highways**

Project: **REGIONAL DELIVERY PARTNERSHIP
A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title: **ENVIRONMENTAL STATEMENT
BAT SURVEY RESULTS (BUILDINGS)
SHEET 51 OF 54**

Drawing Status: **S4 – SUITABLE FOR STAGE APPROVAL**

Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

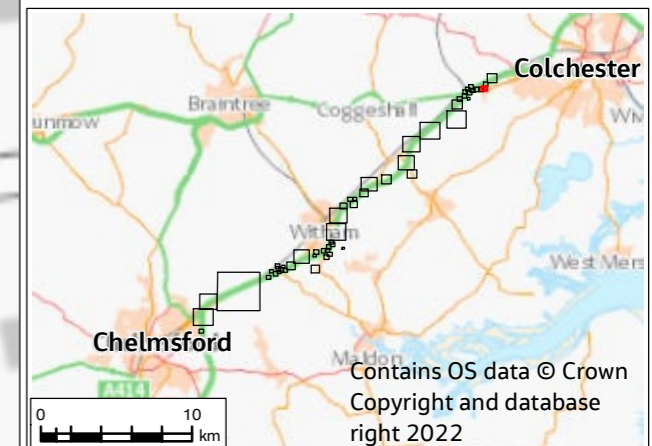
Drawing Number: **HE551497-JAC-LDC-SCHW-SK-GI-0632**



APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project: REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

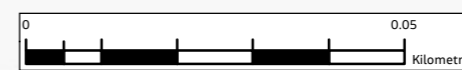
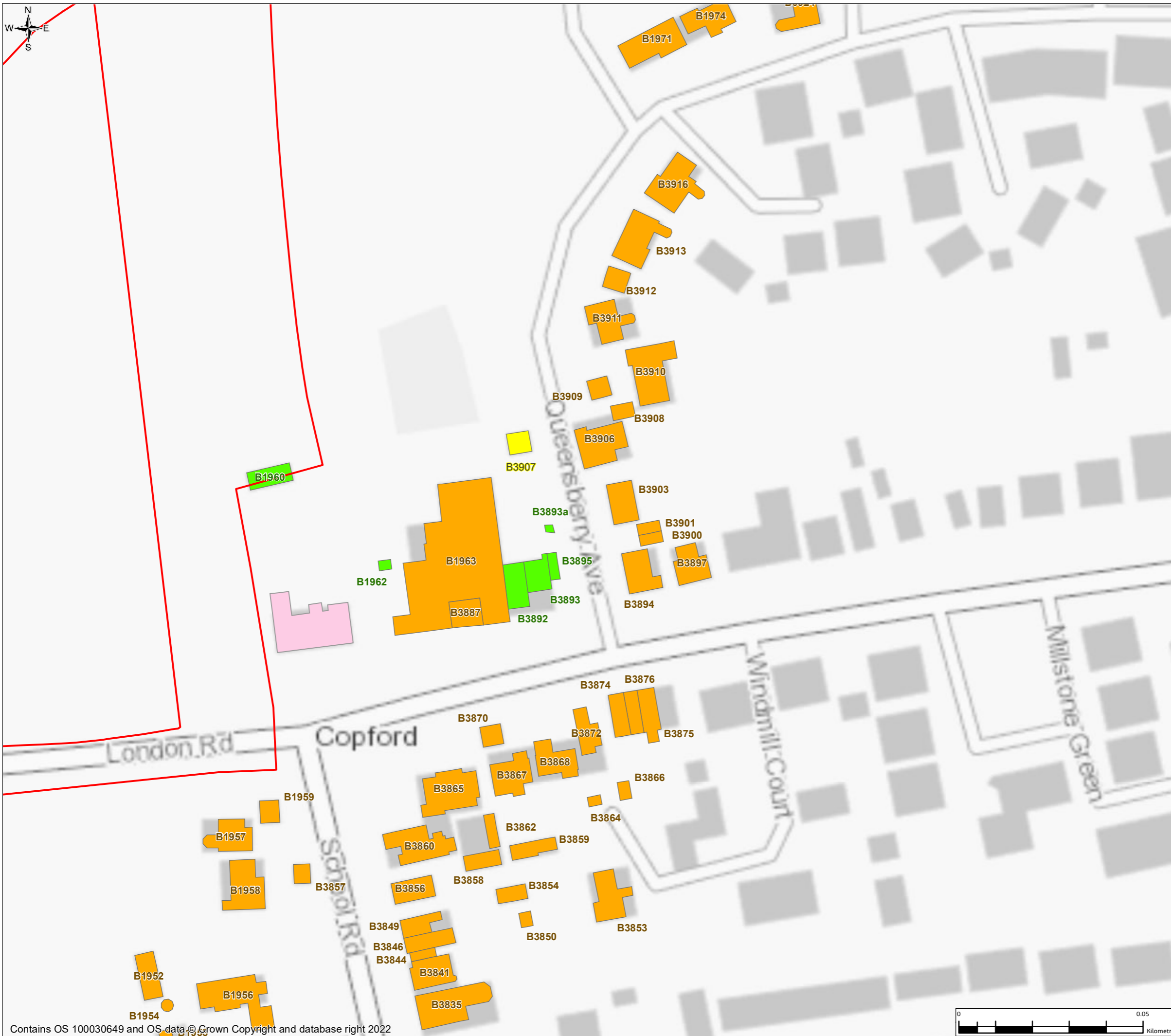
Drawing Title: ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 52 OF 54

Drawing Status: S4 – SUITABLE FOR STAGE APPROVAL

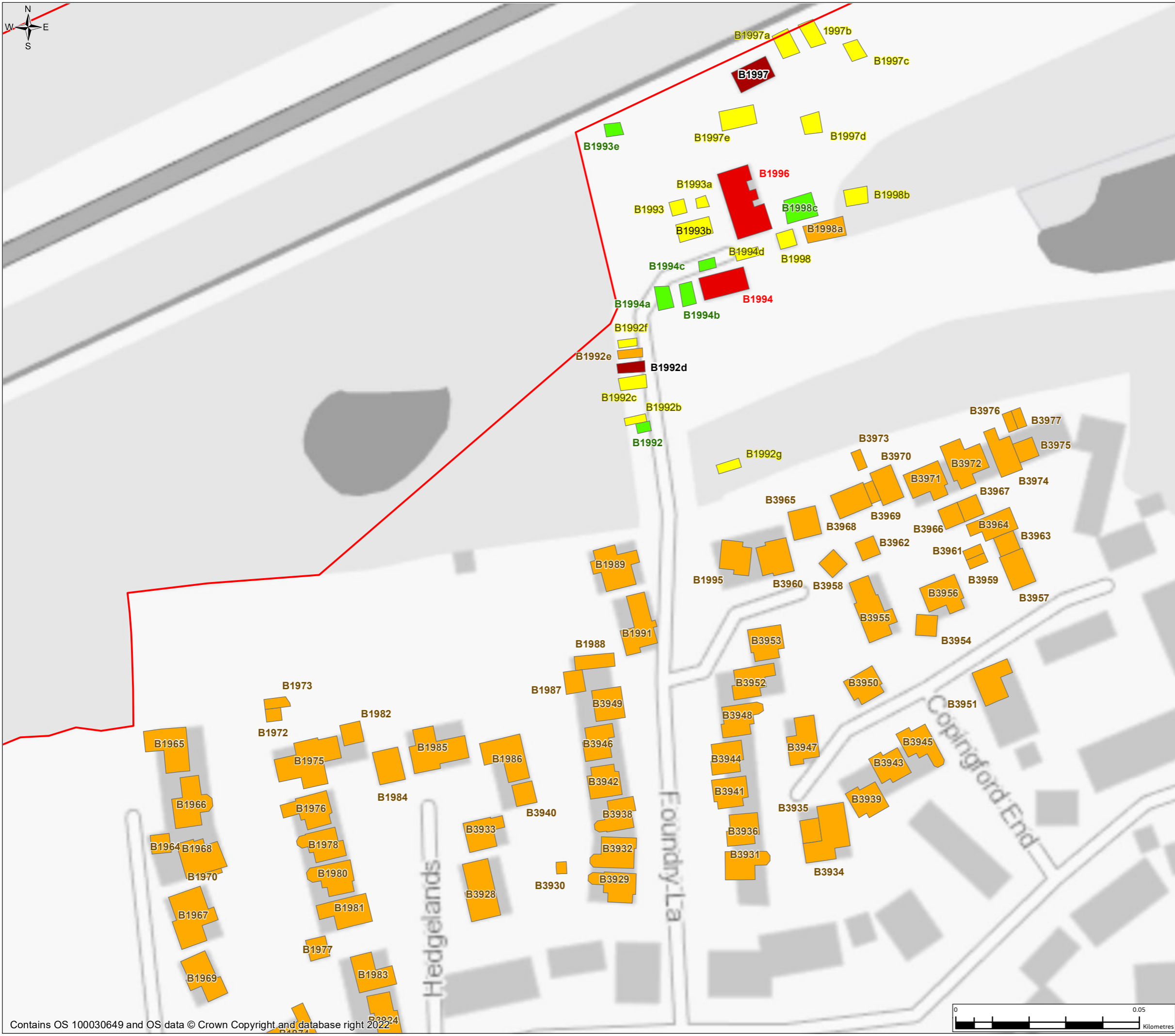
Scale @ A3	1:1000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number: HE551497-JAC-LDC-SCHW-SK-GI-0633

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APPENDIX 9.4 - FIGURE 3



Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
 - Confirmed roost
 - High
 - Moderate
 - Low
 - Negligible
 - N/A – no impact
 - N/A – no access

PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BUILDINGS) SHEET 53 OF 54						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:1000		DO NOT SCALE		
Jacobs No.		B36601D1		Rev P01		
Client No.		HE551497				
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0634						

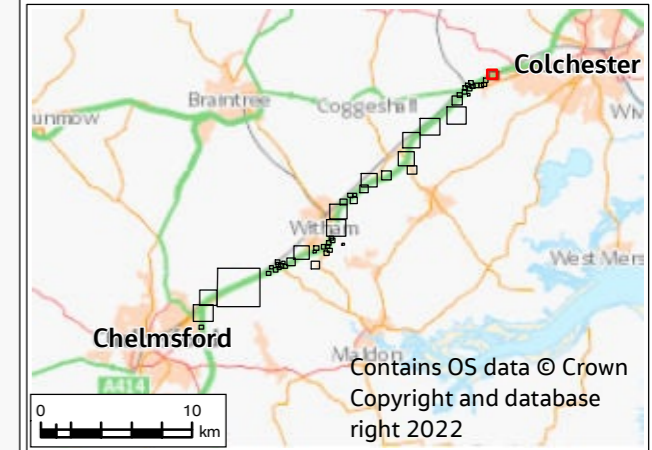
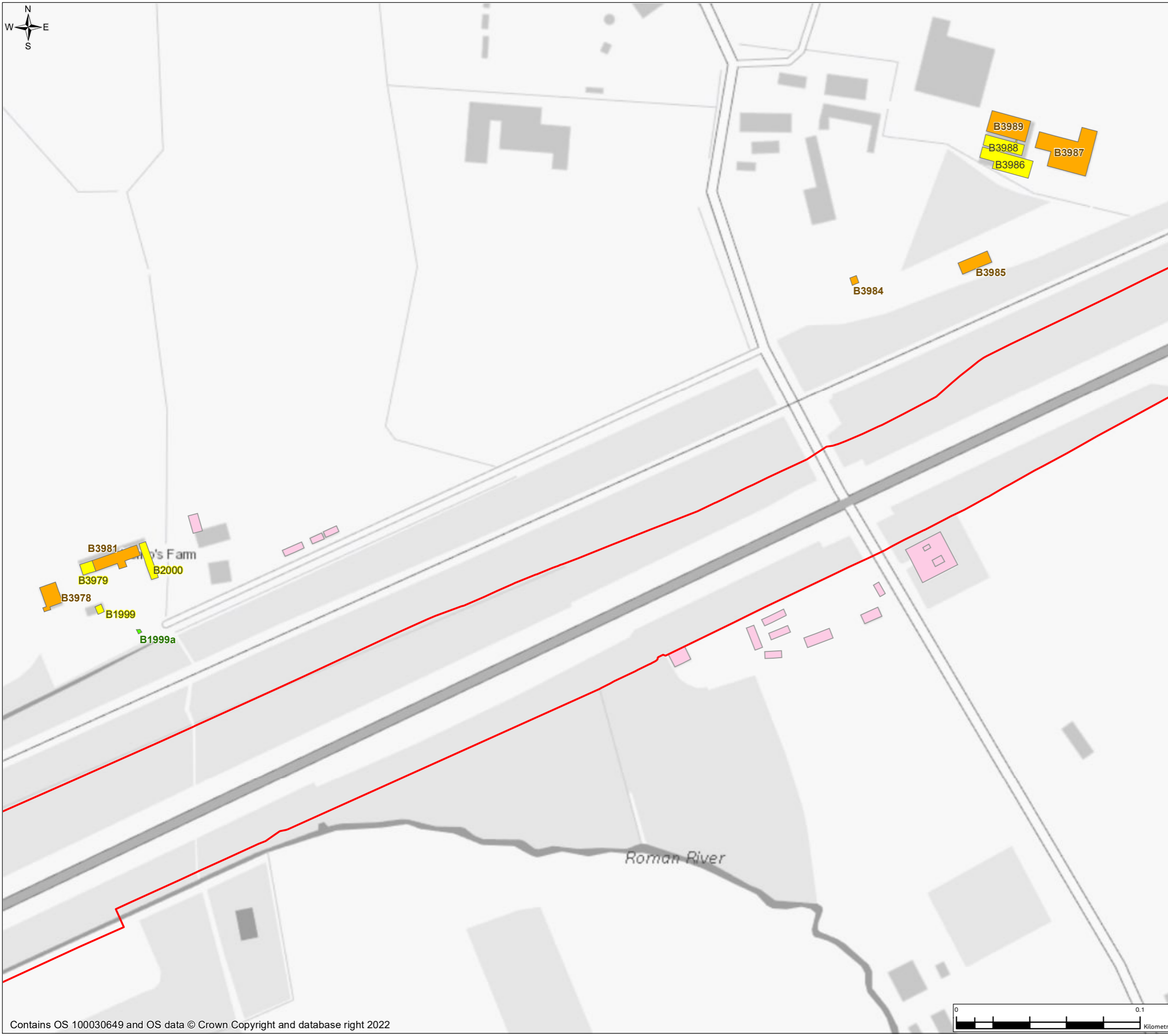
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APPENDIX 9.4 - FIGURE 3

Legend

- Provisional Order Limits - Design Fix 2
- Bat roost potential**
- Confirmed roost
- High
- Moderate
- Low
- Negligible
- N/A – no impact
- N/A – no access



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

Drawing Title
**ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BUILDINGS)
 SHEET 54 OF 54**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

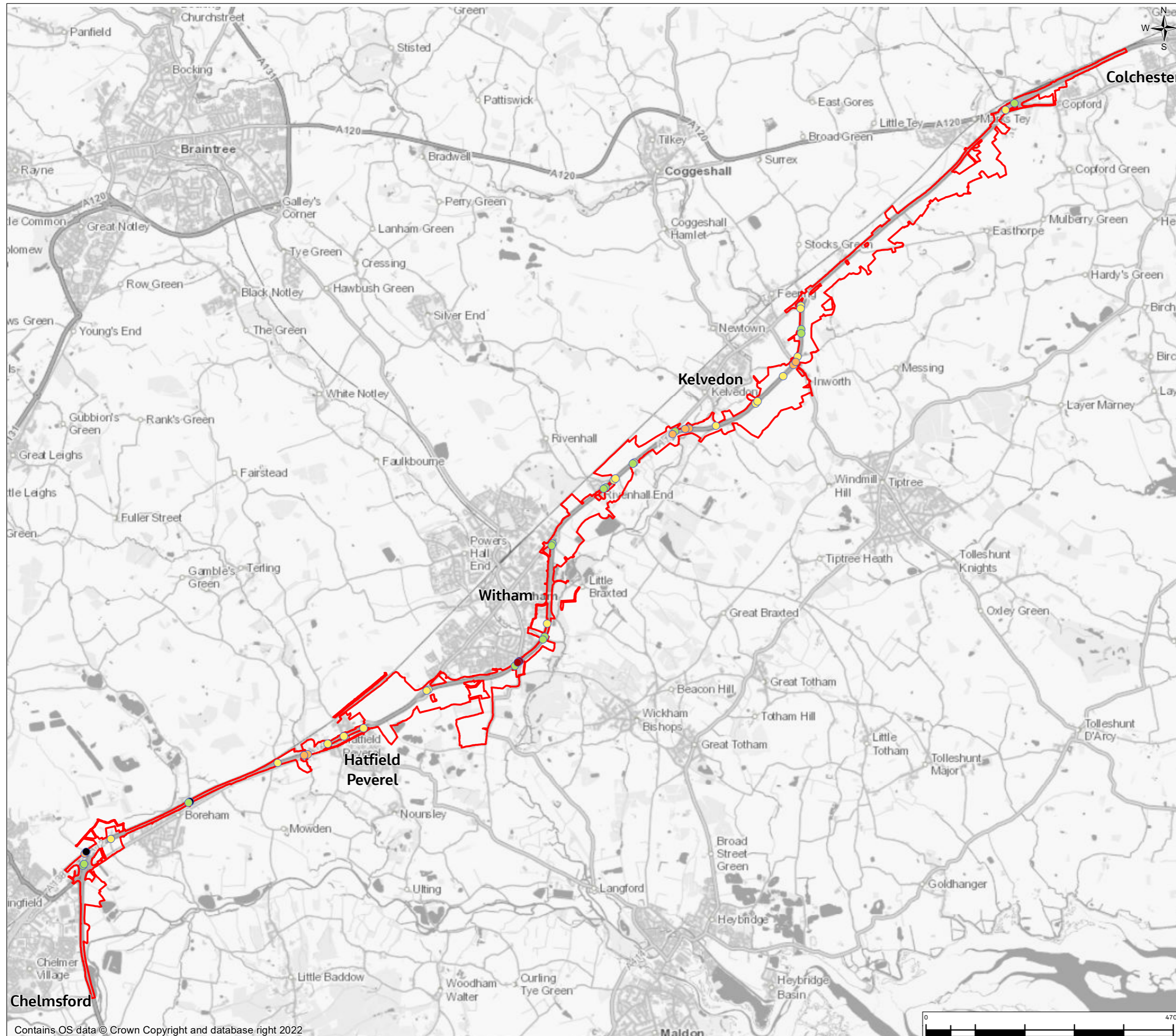
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Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE551497-JAC-LDC-SCHW-SK-GI-0635

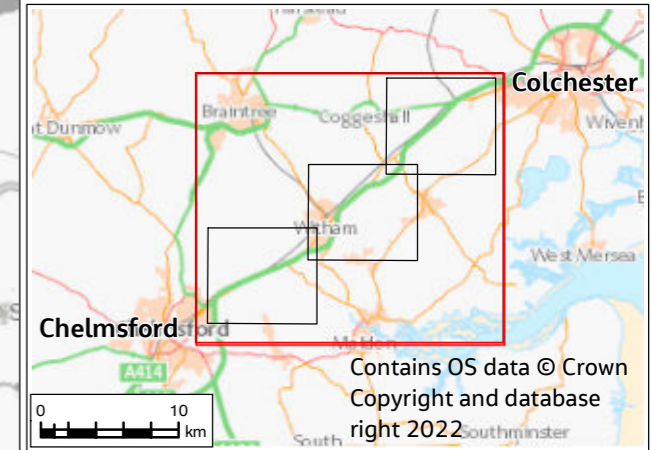


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APPENDIX 9.4 - FIGURE 4

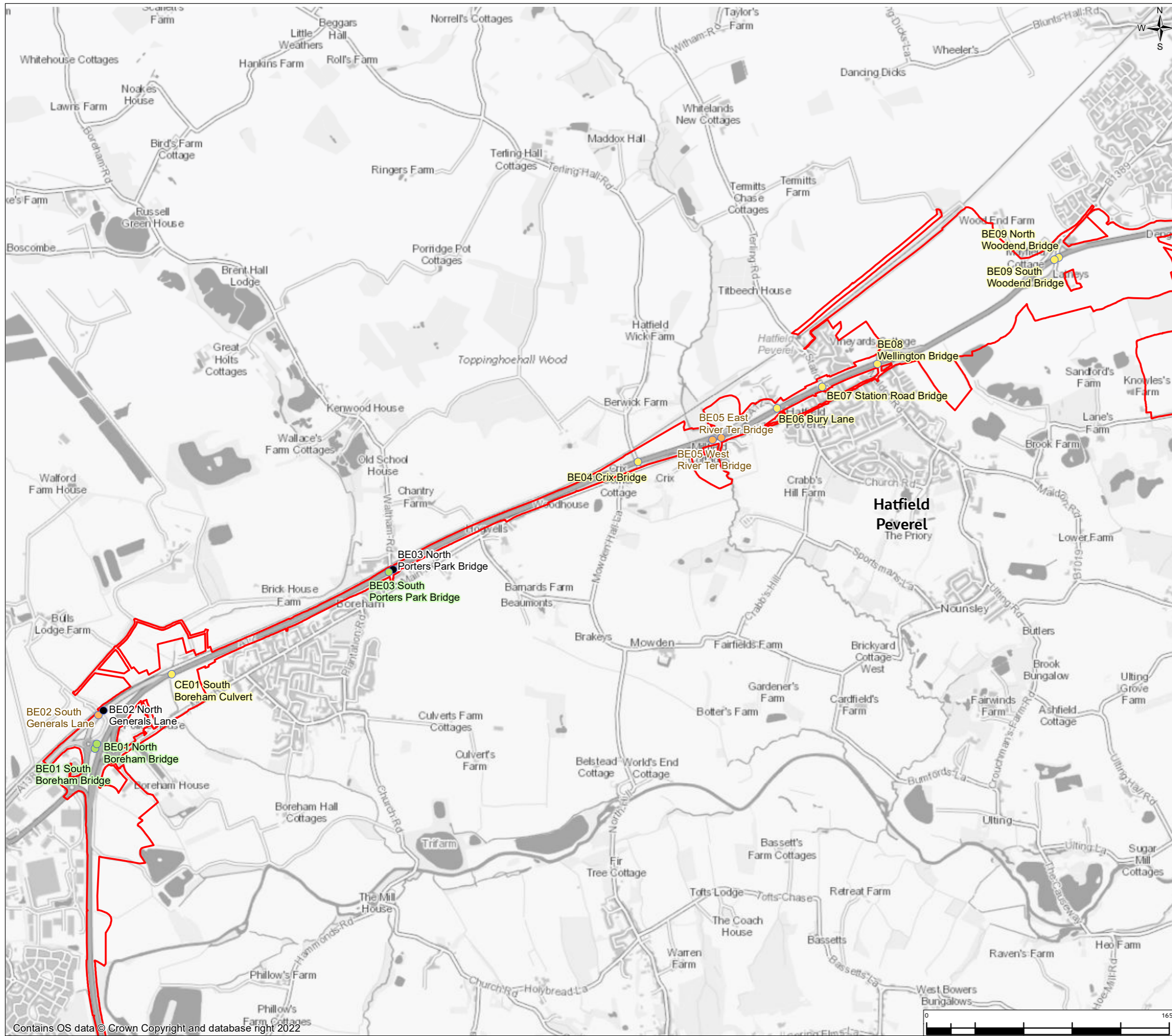


- Legend
- Provisional Order Limits - Design Fix 1
- Bat roost potential**
- Confirmed roost
 - Moderate
 - Low
 - Negligible
 - Not Surveyed



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
<p>Project</p> <p>REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME</p>						
<p>Drawing Title</p> <p>ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BRIDGES AND CULVERTS) SHEET 1 OF 4</p>						
<p>Drawing Status</p> <p>S4 - SUITABLE FOR STAGE APPROVAL</p>						
Scale @ A3		1:70000	DO NOT SCALE			
Jacobs No.		B36601D1	Rev P01			
Client No.		HE551497				
Drawing Number		HE551497-JAC-LDC-SCHW-SK-GI-0636				

APPENDIX 9.4 - FIGURE 4

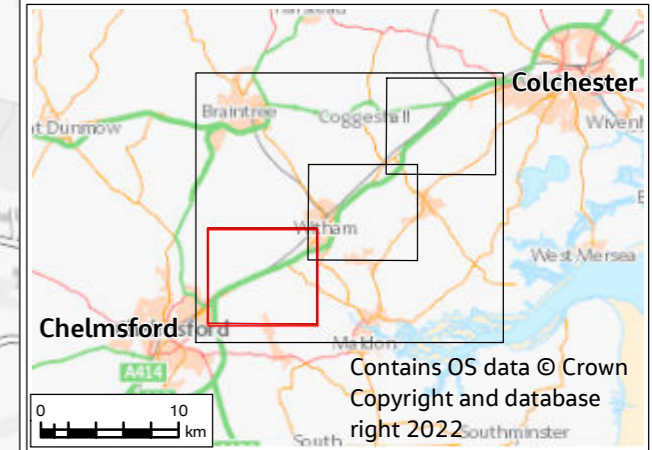



Legend

- Provisional Order Limits - Design Fix 1

Bat roost potential

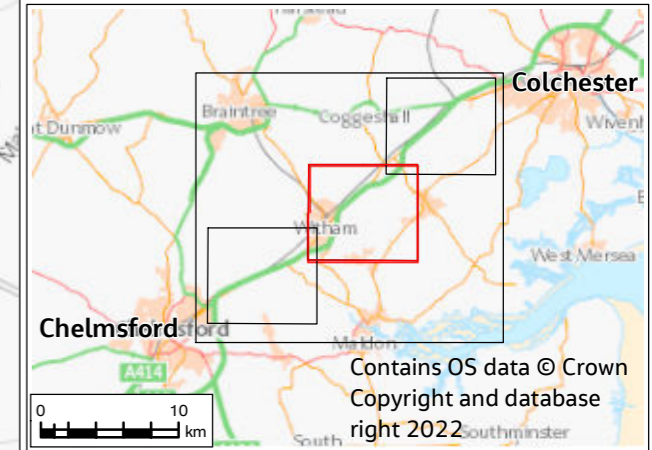
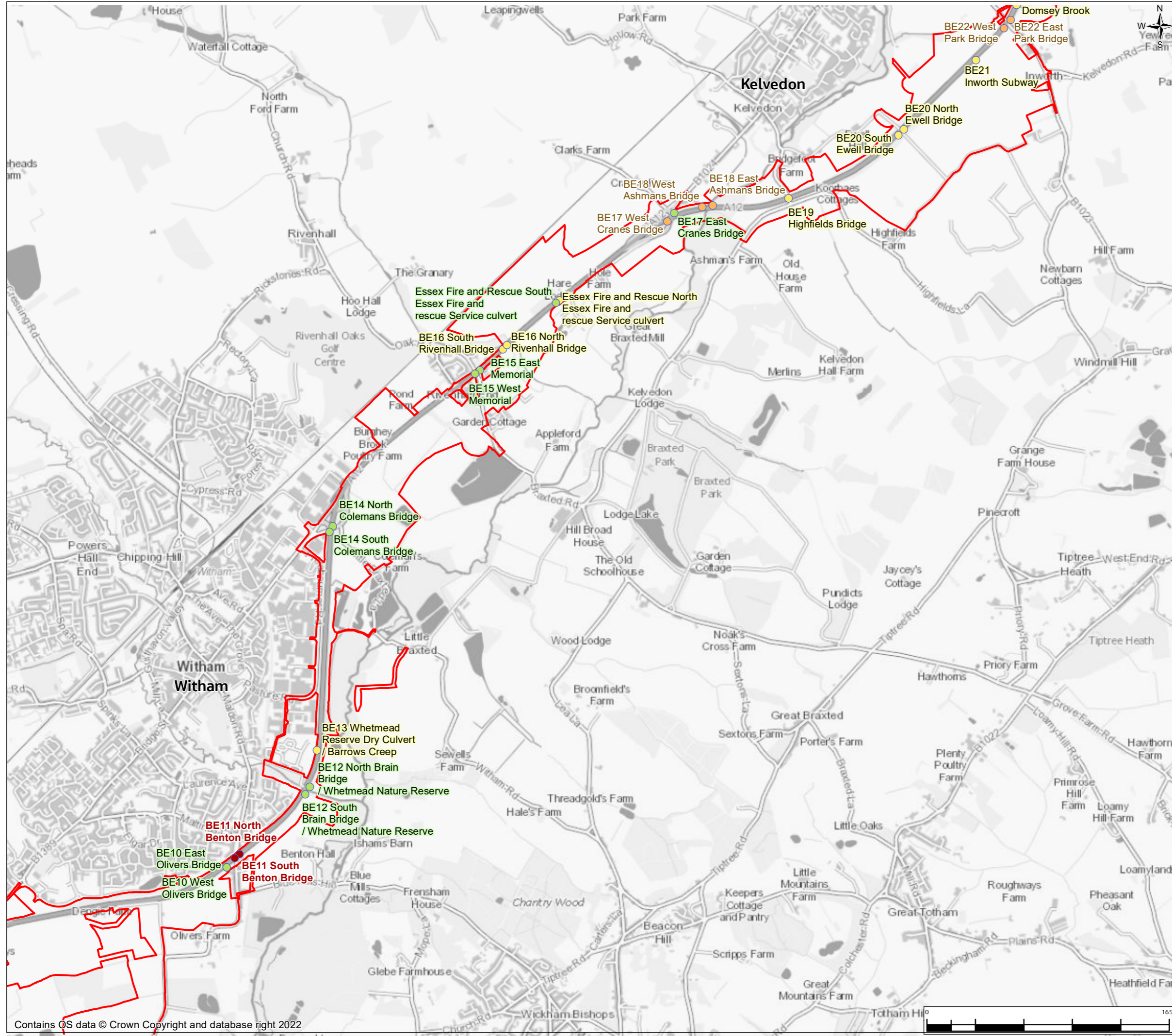
- Confirmed roost
- Moderate
- Low
- Negligible
- Not Surveyed



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
						
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BRIDGES AND CULVERTS) SHEET 2 OF 4						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3	1:25000		DO NOT SCALE			
Jacobs No.	B36601D1		Rev		P01	
Client No.	HE551497					
Drawing Number: HE55 1497-JAC-LDC-SCHW-SK-GI-0636						

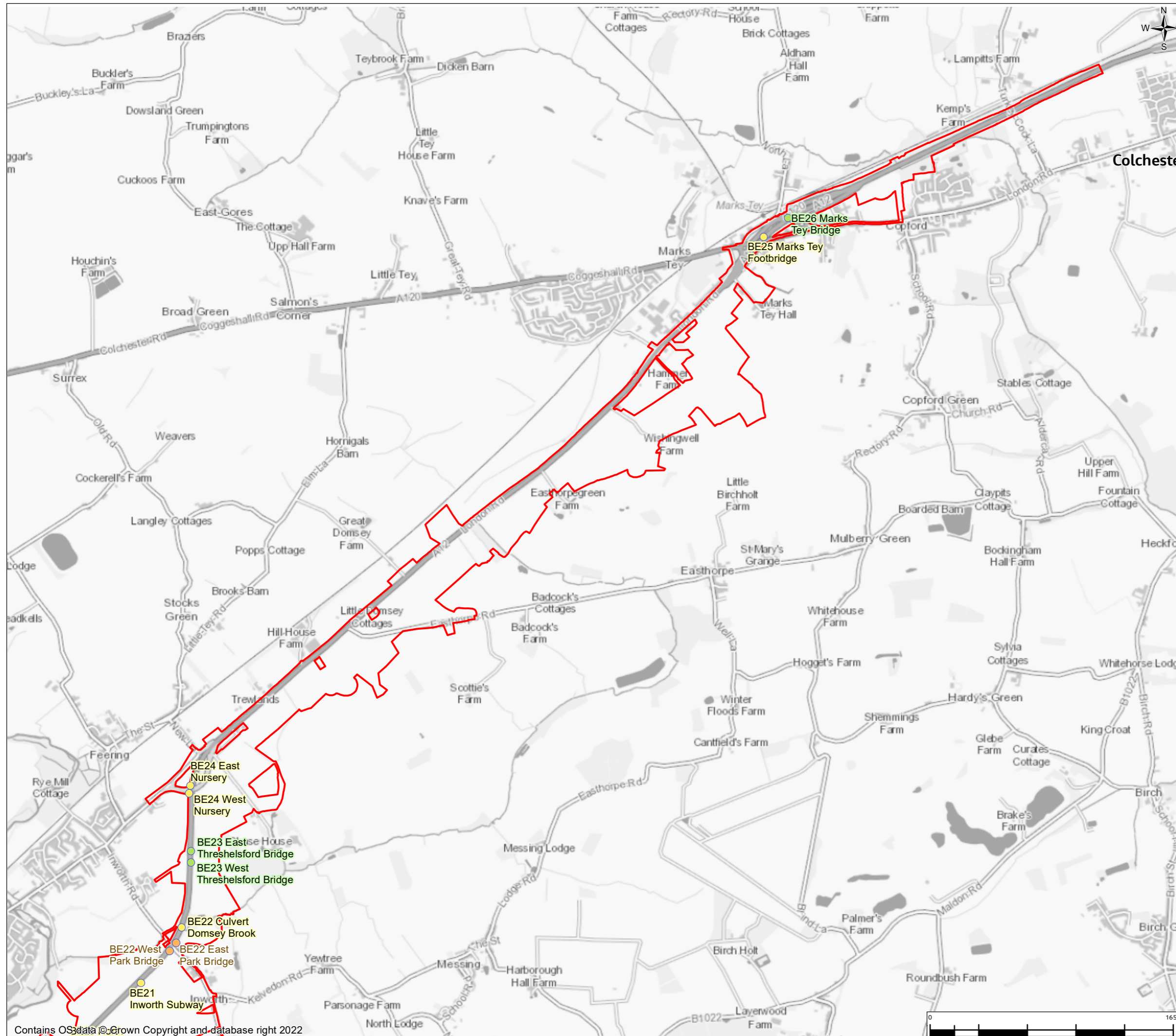
APPENDIX 9.4 - FIGURE 4

- Legend**
- Provisional Order Limits - Design Fix 1
- Bat roost potential**
- Confirmed roost
 - Moderate
 - Low
 - Negligible
 - Not Surveyed

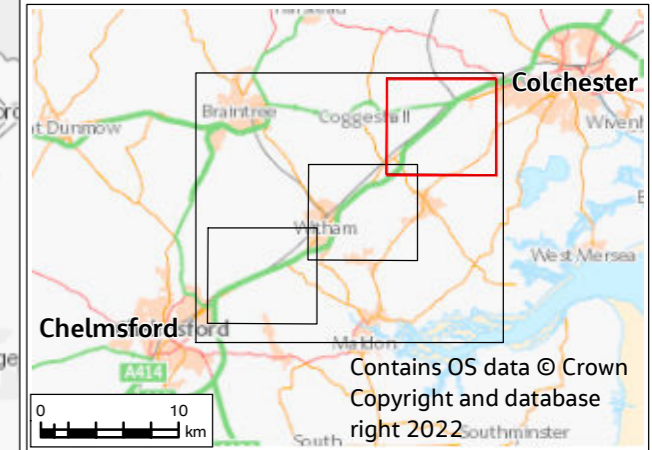


PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
<p>Project</p> <p>REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME</p>						
<p>Drawing Title</p> <p>ENVIRONMENTAL STATEMENT BAT SURVEY RESULTS (BRIDGES AND CULVERTS) SHEET 3 OF 4</p>						
<p>Drawing Status</p> <p>S4 – SUITABLE FOR STAGE APPROVAL</p>						
Scale @ A3		1:25000	DO NOT SCALE			
Jacobs No.		B36601D1	Rev			
Client No.		HE551497	PO1			
<p>Drawing Number</p> <p>HE55 1497-JAC-LDC-SCHW-SK-GI-0636</p>						

APPENDIX 9.4 - FIGURE 4



- Legend**
- Provisional Order Limits - Design Fix 1
- Bat roost potential**
- Confirmed roost
 - Moderate
 - Low
 - Negligible
 - Not Surveyed



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



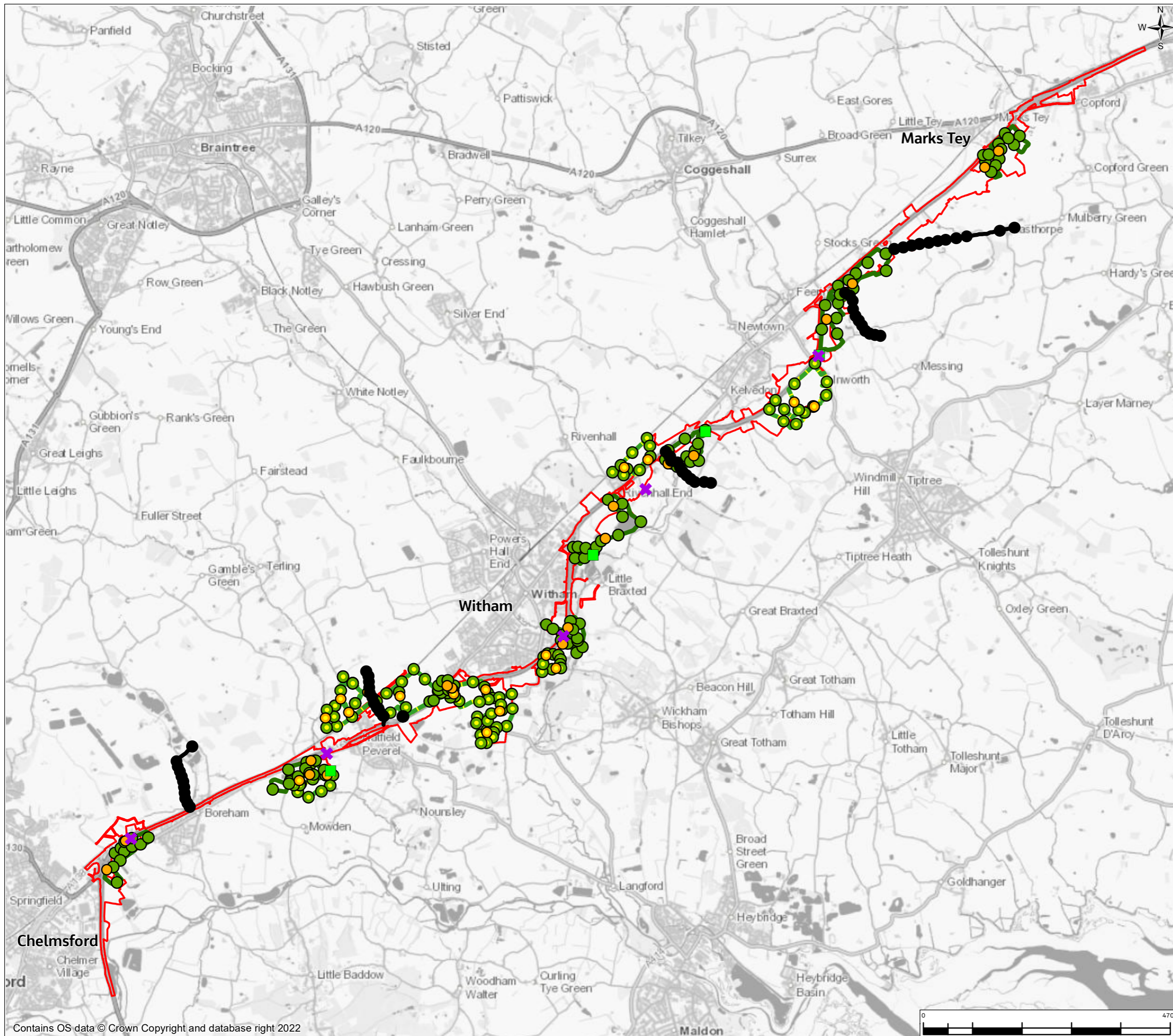
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 BAT SURVEY RESULTS (BRIDGES AND CULVERTS)
 SHEET 4 OF 4

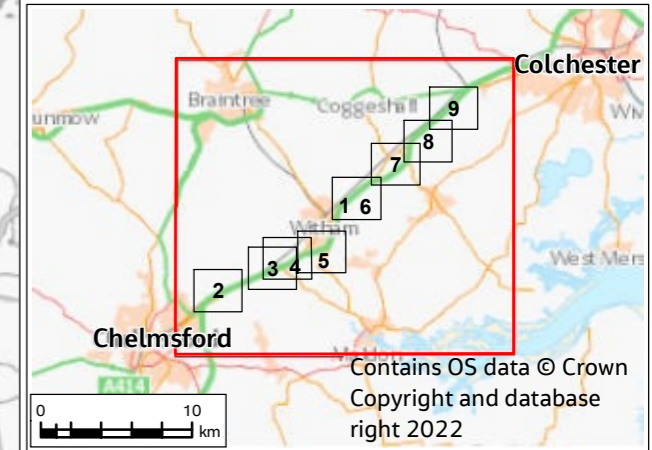
Drawing Status	S4 - SUITABLE FOR STAGE APPROVAL		
Scale @ A3	1:25000	DO NOT SCALE	
Jacobs No.	B36601D1	Rev	P01
Client No.	HE551497		
Drawing Number	HE55 1497-JAC-LDC-SCHW-SK-GI-0636		

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APPENDIX 9.4 - FIGURE 5

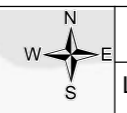


- Legend**
- Provisional Order Limits - Design Fix 1
 - Altringham points
 - SM2 locations
 - Crossing points
 - Anabat locations
 - Borrow pit anabat locations
 - Listening points
 - Borrow pit listening points
 - Transects
 - Borrow pit transects
 - Altringham transects

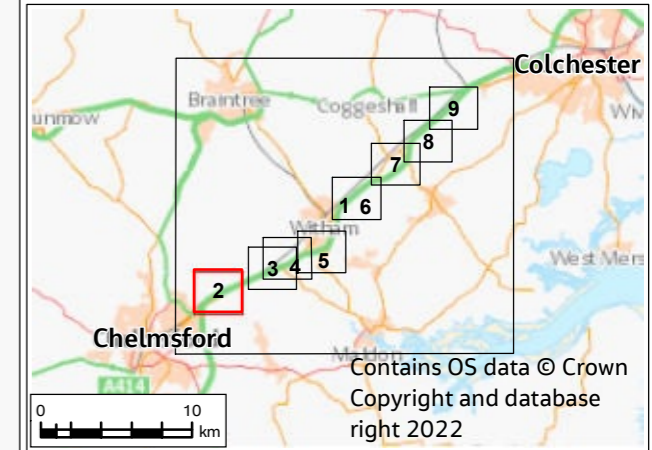
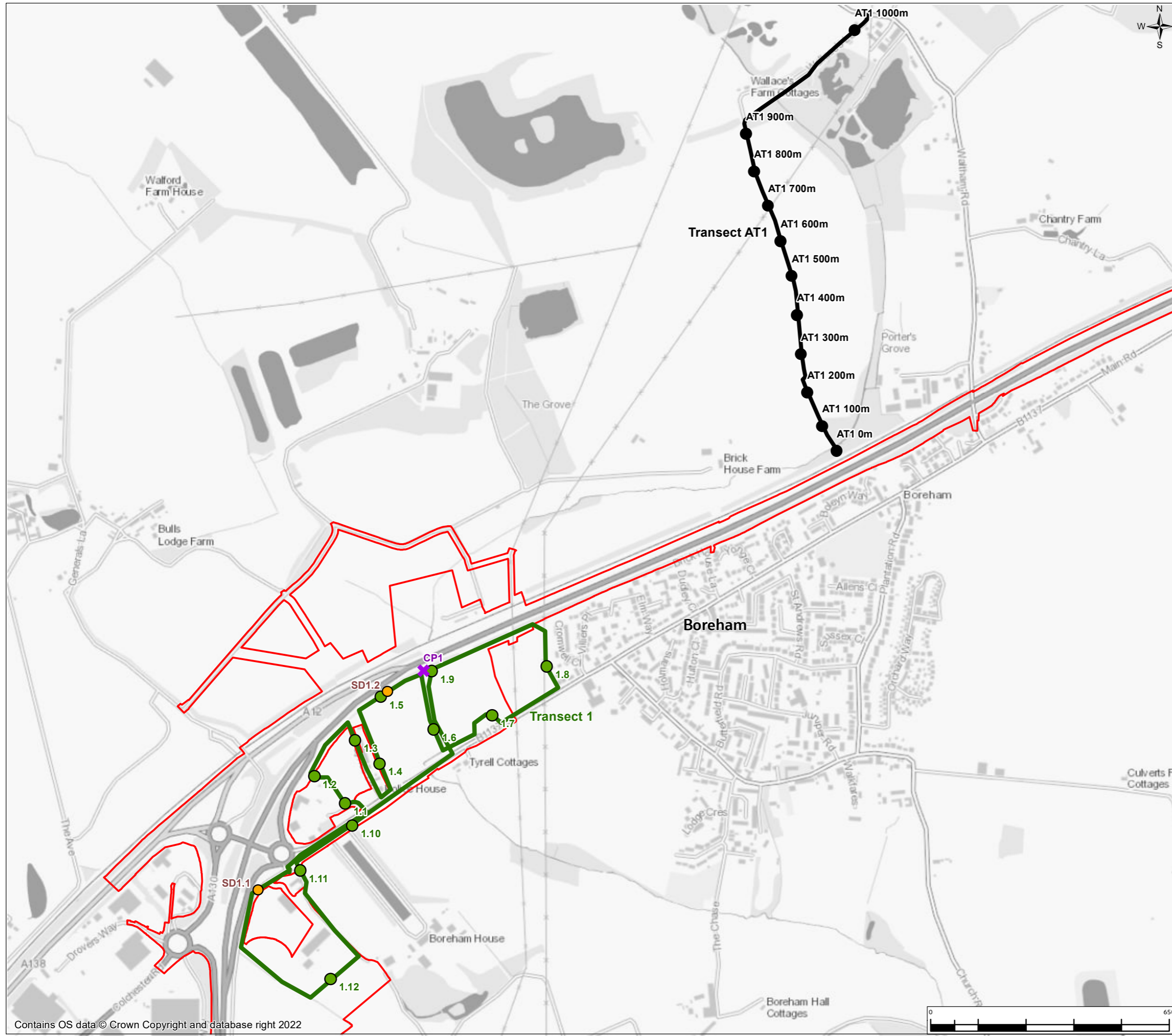


PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
<p align="center">Project</p> <p align="center">REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME</p>						
<p align="center">Drawing Title</p> <p align="center">ENVIRONMENTAL STATEMENT LOCATIONS OF CROSSING POINT, TRANSECT AND STATIC DETECTOR SURVEYS SHEET 1 OF 9</p>						
<p align="center">Drawing Status</p> <p align="center">S4 – SUITABLE FOR STAGE APPROVAL</p>						
Scale @ A3		1:70000	DO NOT SCALE			
Jacobs No.		B36601D1	Rev P01			
Client No.		HE551497				
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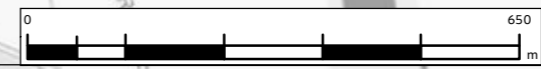
APPENDIX 9.4 - FIGURE 5



- Legend**
- Provisional Order Limits - Design Fix 1
 - Altringham points
 - SM2 locations
 - ✕ Crossing points
 - Anabat locations
 - Borrow pit anabat locations
 - Listening points
 - Borrow pit listening points
 - Transects
 - Borrow pit transects
 - Altringham transects



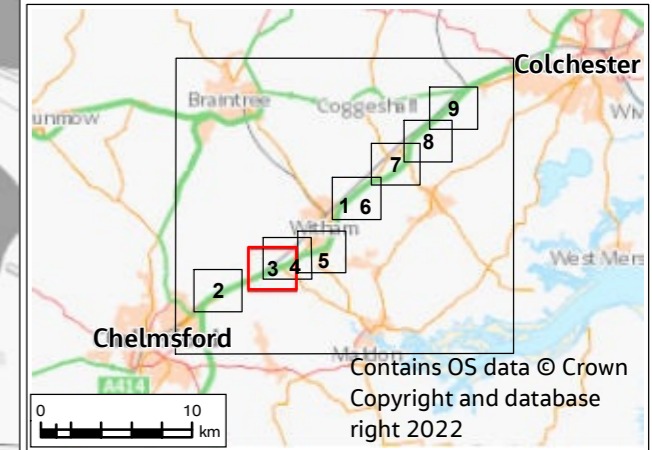
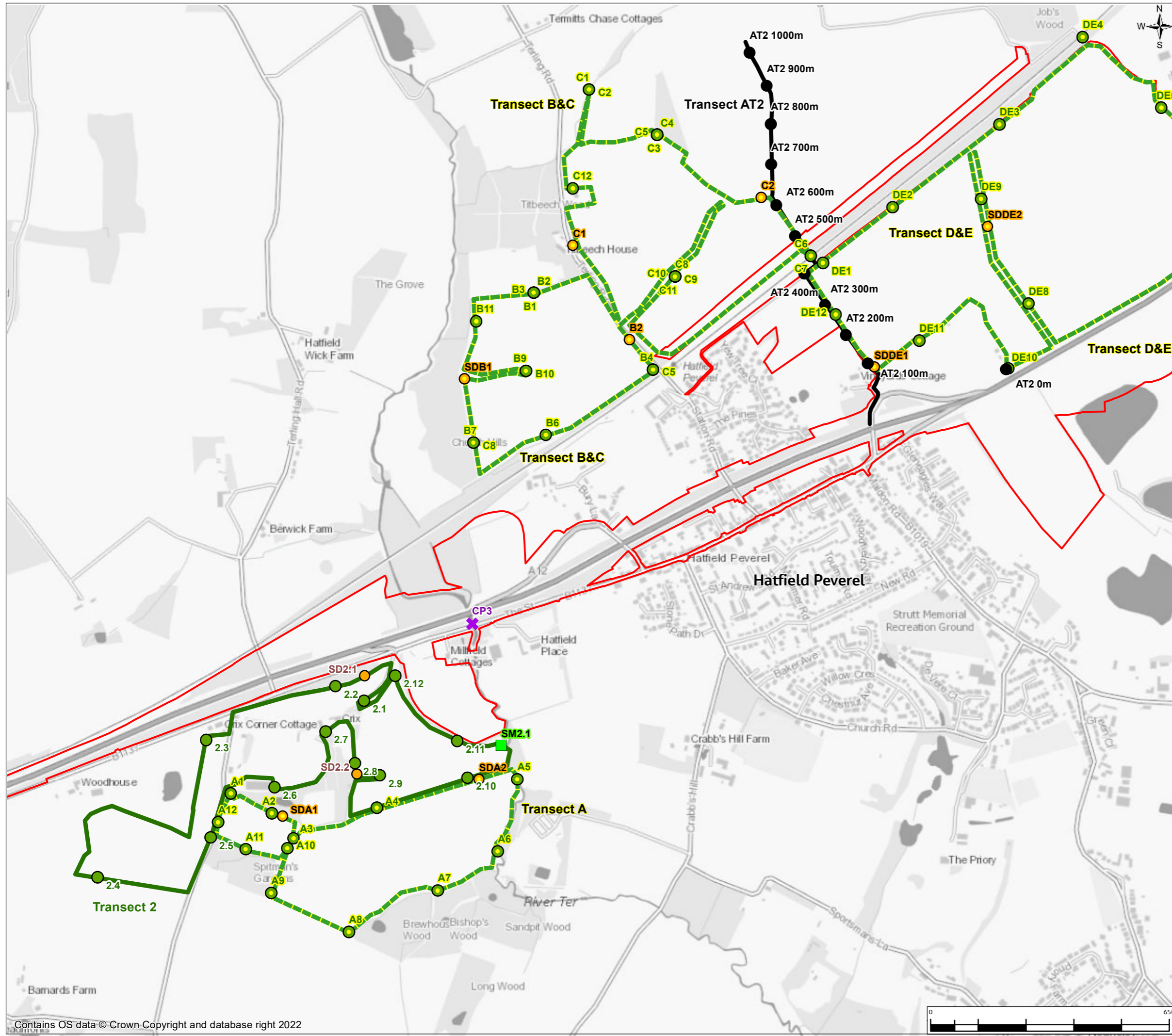
PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
<p>Project</p> <p>REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME</p>						
<p>Drawing Title</p> <p>ENVIRONMENTAL STATEMENT LOCATIONS OF CROSSING POINT, TRANSECT AND STATIC DETECTOR SURVEYS SHEET 2 OF 9</p>						
<p>Drawing Status</p> <p>S4 – SUITABLE FOR STAGE APPROVAL</p>						
Scale @ A3	1:10000					DO NOT SCALE
Jacobs No.	B36601D1					Rev
Client No.	HE551497					PO1
<p>Drawing Number</p> <p>HE551497-JAC-LDC-SCHW-SK-GI-0638</p>						



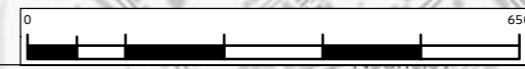
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APPENDIX 9.4 - FIGURE 5

- Legend
- Provisional Order Limits - Design Fix 1
 - Altringham points
 - SM2 locations
 - ✕ Crossing points
 - Anabat locations
 - Borrow pit anabat locations
 - Listening points
 - Borrow pit listening points
 - Transects
 - Borrow pit transects
 - Altringham transects



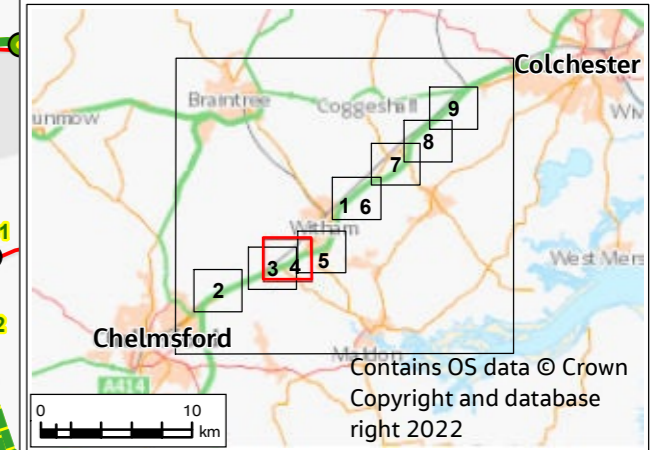
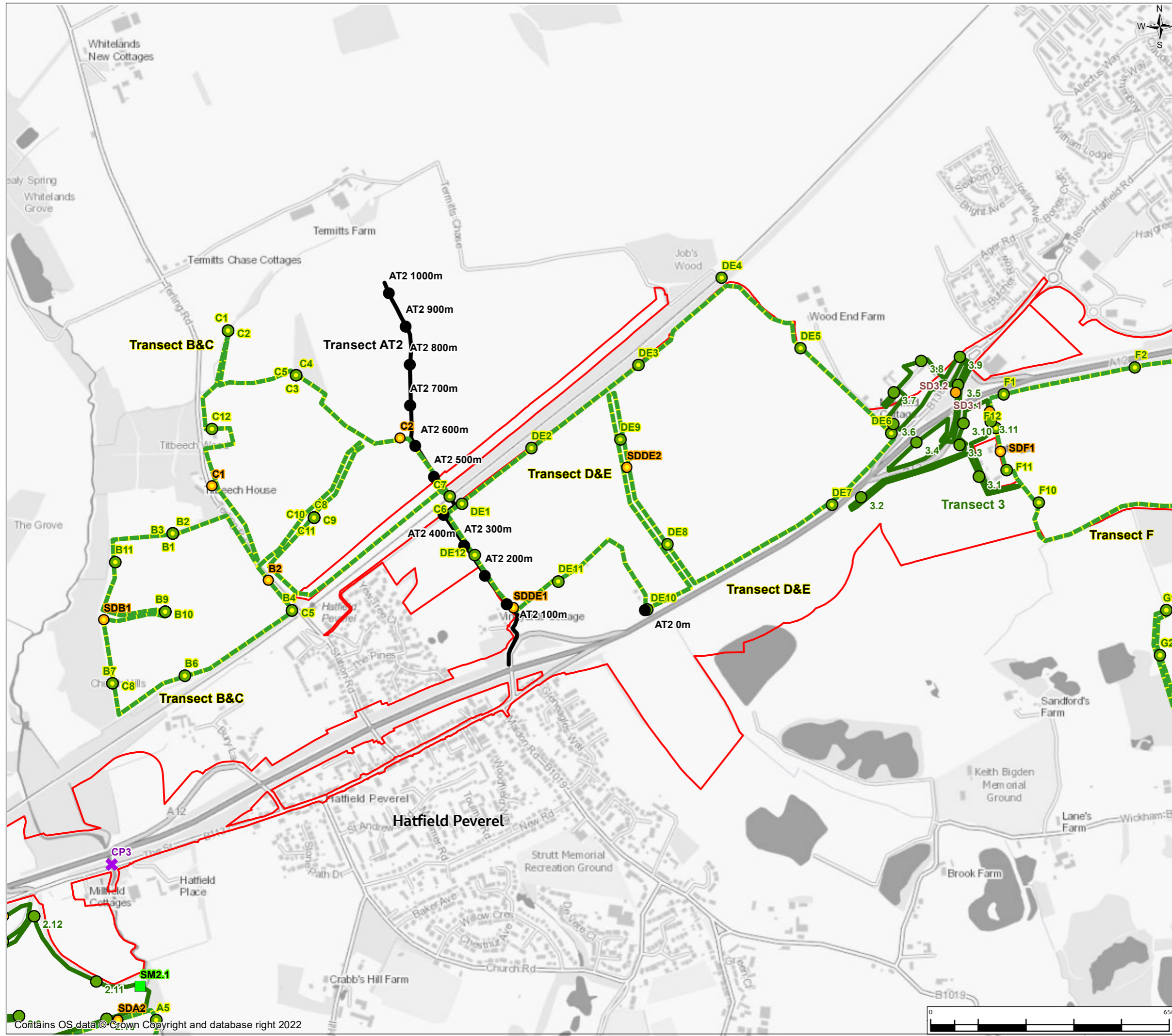
PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
Project: REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title: ENVIRONMENTAL STATEMENT LOCATIONS OF CROSSING POINT, TRANSECT AND STATIC DETECTOR SURVEYS SHEET 3 OF 9						
Drawing Status: S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3	1:10000		DO NOT SCALE			
Jacobs No.	B36601D1		Rev P01			
Client No.	HE551497					
Drawing Number: HE551497-JAC-LDC-SCHW-SK-GI-0639						



APPENDIX 9.4 - FIGURE 5

Legend

- Provisional Order Limits - Design Fix 1
- Altringham points
- SM2 locations
- ✕ Crossing points
- Anabat locations
- Borrow pit anabat locations
- Listening points
- Borrow pit listening points
- Transects
- Borrow pit transects
- Altringham transects



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



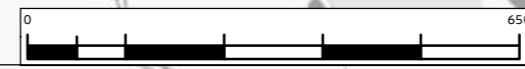
Client: **national highways**

Project: **REGIONAL DELIVERY PARTNERSHIP
A12 CHELMSFORD TO A120 WIDENING SCHEME**

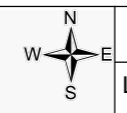
Drawing Title: **ENVIRONMENTAL STATEMENT
LOCATIONS OF CROSSING POINT, TRANSECT
AND STATIC DETECTOR SURVEYS
SHEET 4 OF 9**

Drawing Status	S4 - SUITABLE FOR STAGE APPROVAL		
Scale @ A3	1:10000	DO NOT SCALE	
Jacobs No.	B36601D1	Rev	P01
Client No.	HE551497		
Drawing Number	HE551497-JAC-LDC-SCHW-SK-GI-0640		

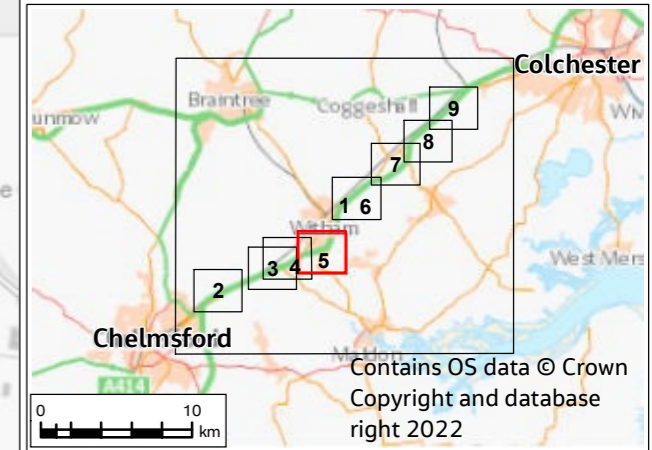
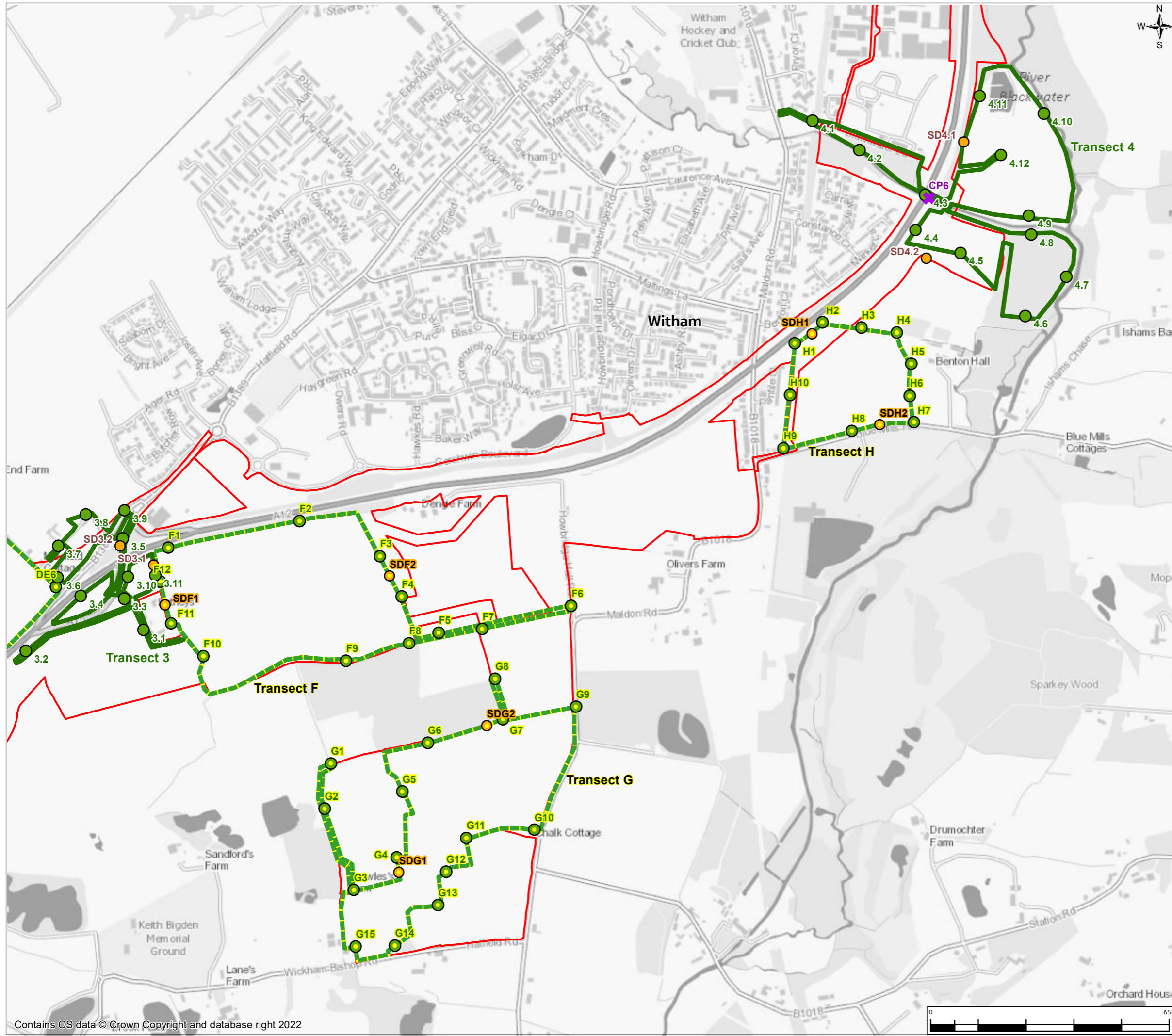
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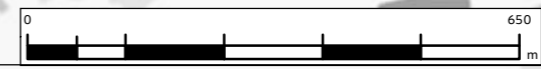
APPENDIX 9.4 - FIGURE 5



- Legend**
- Provisional Order Limits - Design Fix 1
 - Altringham points
 - SM2 locations
 - ✖ Crossing points
 - Anabat locations
 - Borrow pit anabat locations
 - Listening points
 - Borrow pit listening points
 - Transects
 - Borrow pit transects
 - Altringham transects

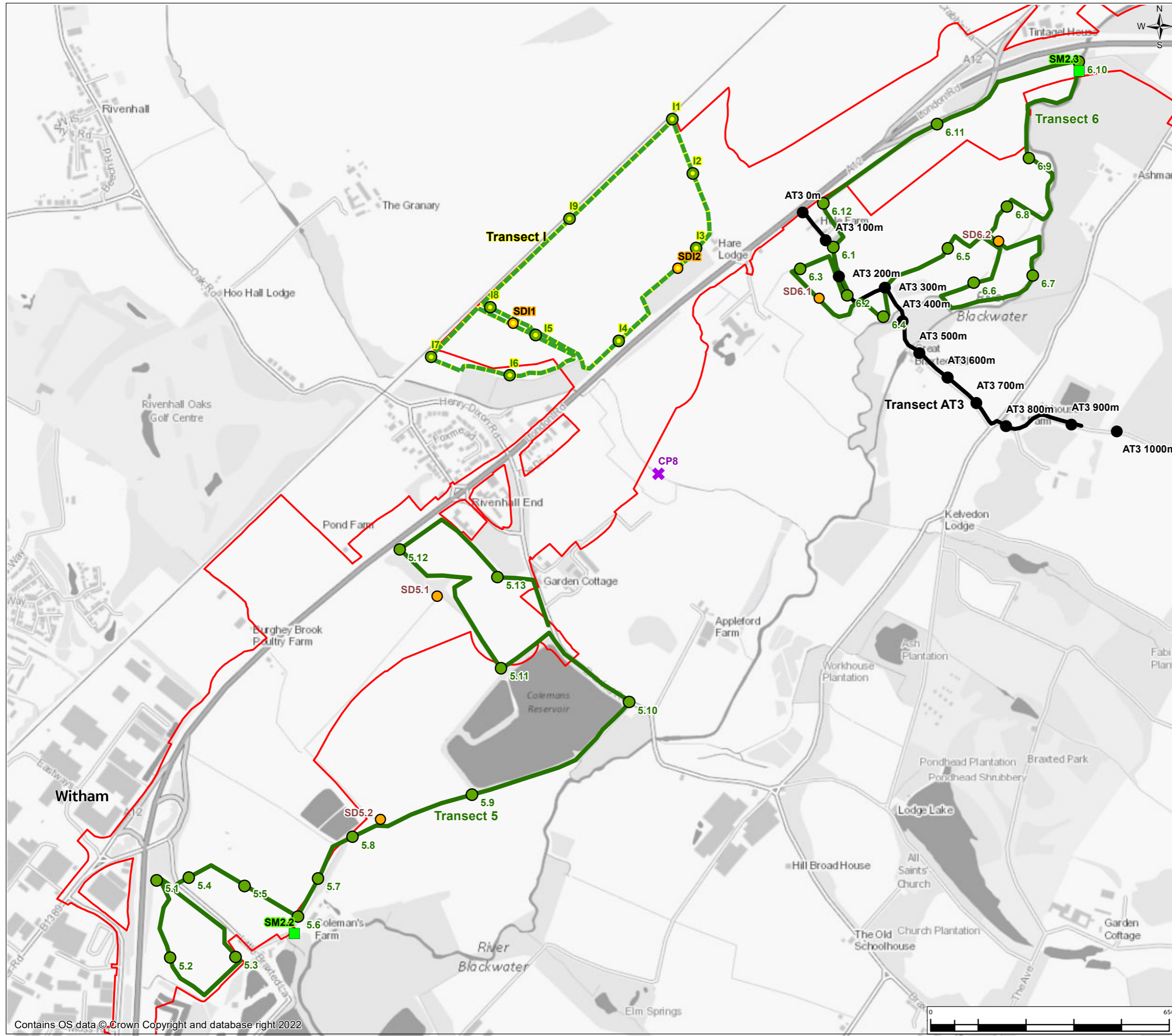


PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT LOCATIONS OF CROSSING POINT, TRANSECT AND STATIC DETECTOR SURVEYS SHEET 5 OF 9						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3	1:10000					DO NOT SCALE
Jacobs No.	B36601D1					Rev
Client No.	HE551497					PO1
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0641						

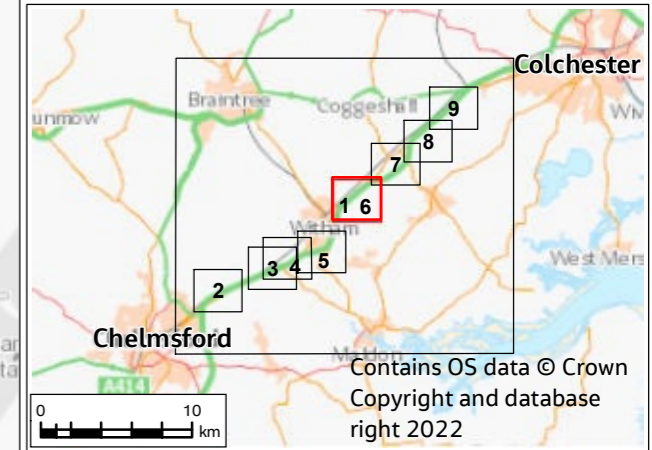


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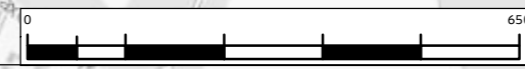
APPENDIX 9.4 - FIGURE 5



- Legend**
- Provisional Order Limits - Design Fix 1
 - Altringham points
 - SM2 locations
 - Crossing points
 - Anabat locations
 - Borrow pit anabat locations
 - Listening points
 - Borrow pit listening points
 - Transects
 - Borrow pit transects
 - Altringham transects



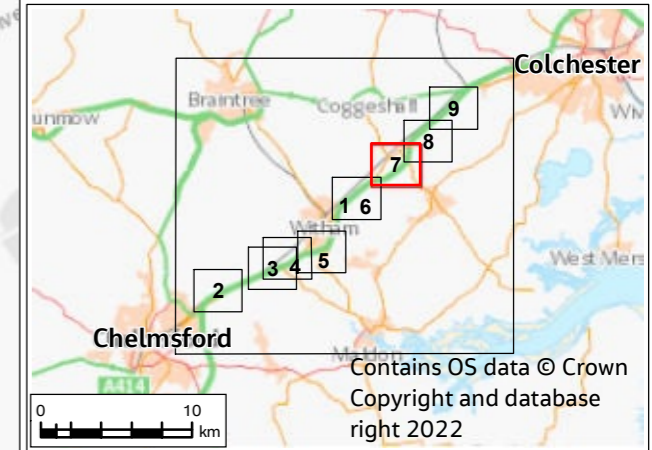
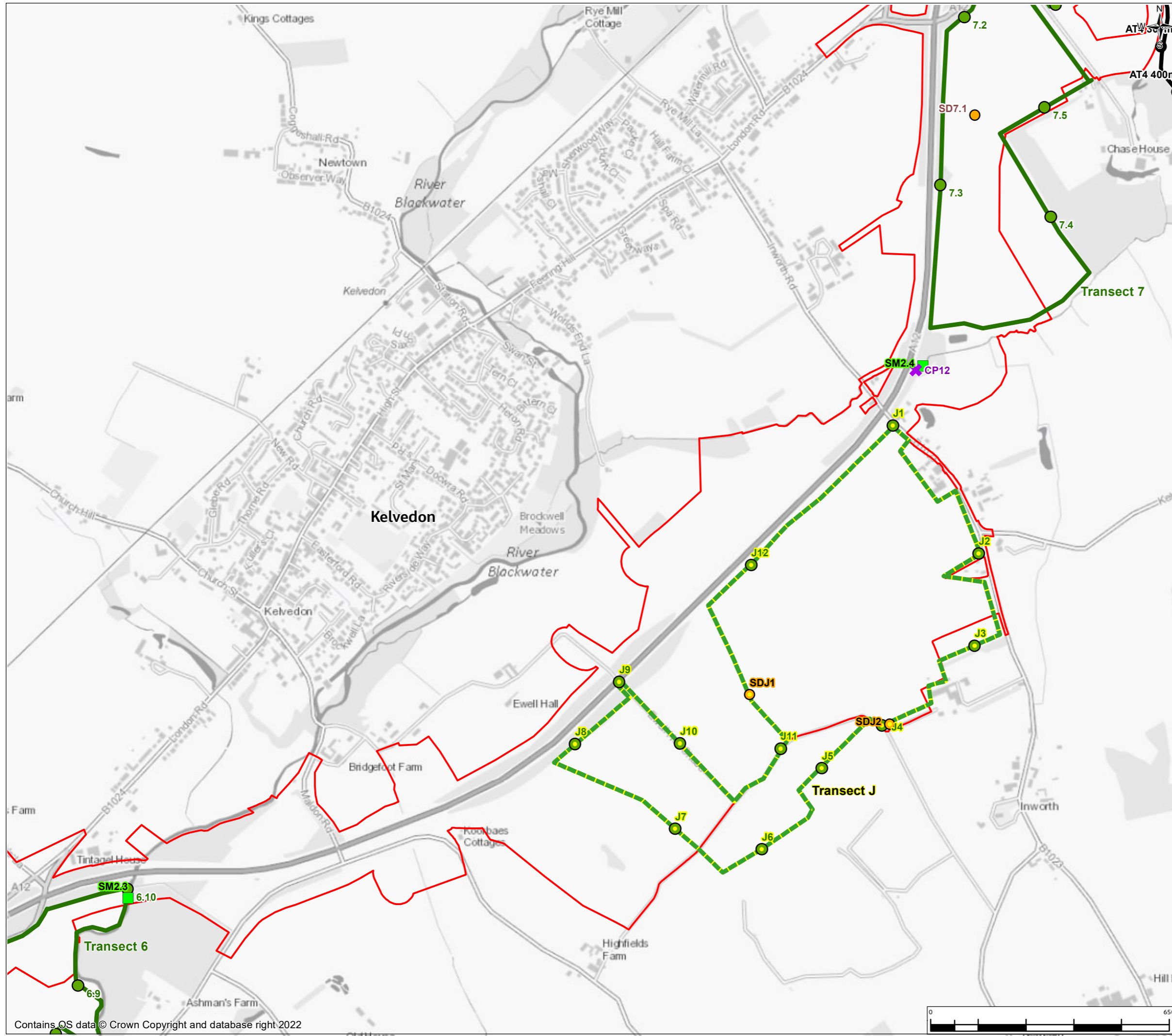
PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT LOCATIONS OF CROSSING POINT, TRANSECT AND STATIC DETECTOR SURVEYS SHEET 6 OF 9						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3	1:10000		DO NOT SCALE			
Jacobs No.	B36601D1		Rev P01			
Client No.	HE551497					
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0642						



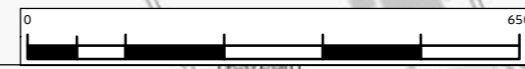
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APPENDIX 9.4 - FIGURE 5

- Legend**
- Provisional Order Limits - Design Fix 1
 - Altringham points
 - SM2 locations
 - ✕ Crossing points
 - Anabat locations
 - Borrow pit anabat locations
 - Listening points
 - Borrow pit listening points
 - Transects
 - Borrow pit transects
 - Altringham transects



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
Project: REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title: ENVIRONMENTAL STATEMENT LOCATIONS OF CROSSING POINT, TRANSECT AND STATIC DETECTOR SURVEYS SHEET 7 OF 9						
Drawing Status: S4 - SUITABLE FOR STAGE APPROVAL						
Scale @ A3	1:10000		DO NOT SCALE			
Jacobs No.	B36601D1		Rev		PO1	
Client No.	HE551497					
Drawing Number: HE551497-JAC-LDC-SCHW-SK-GI-0643						

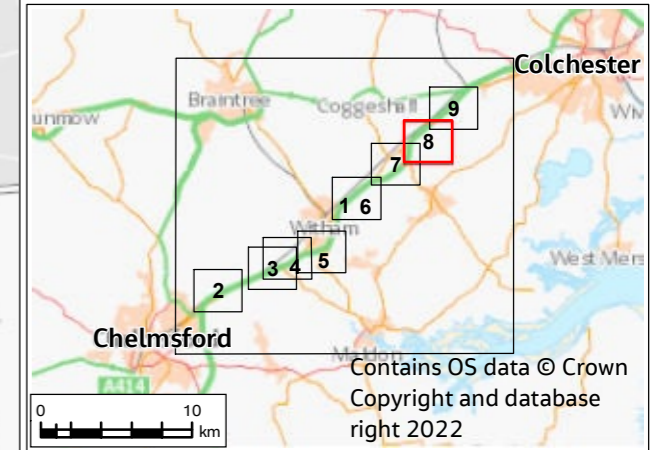
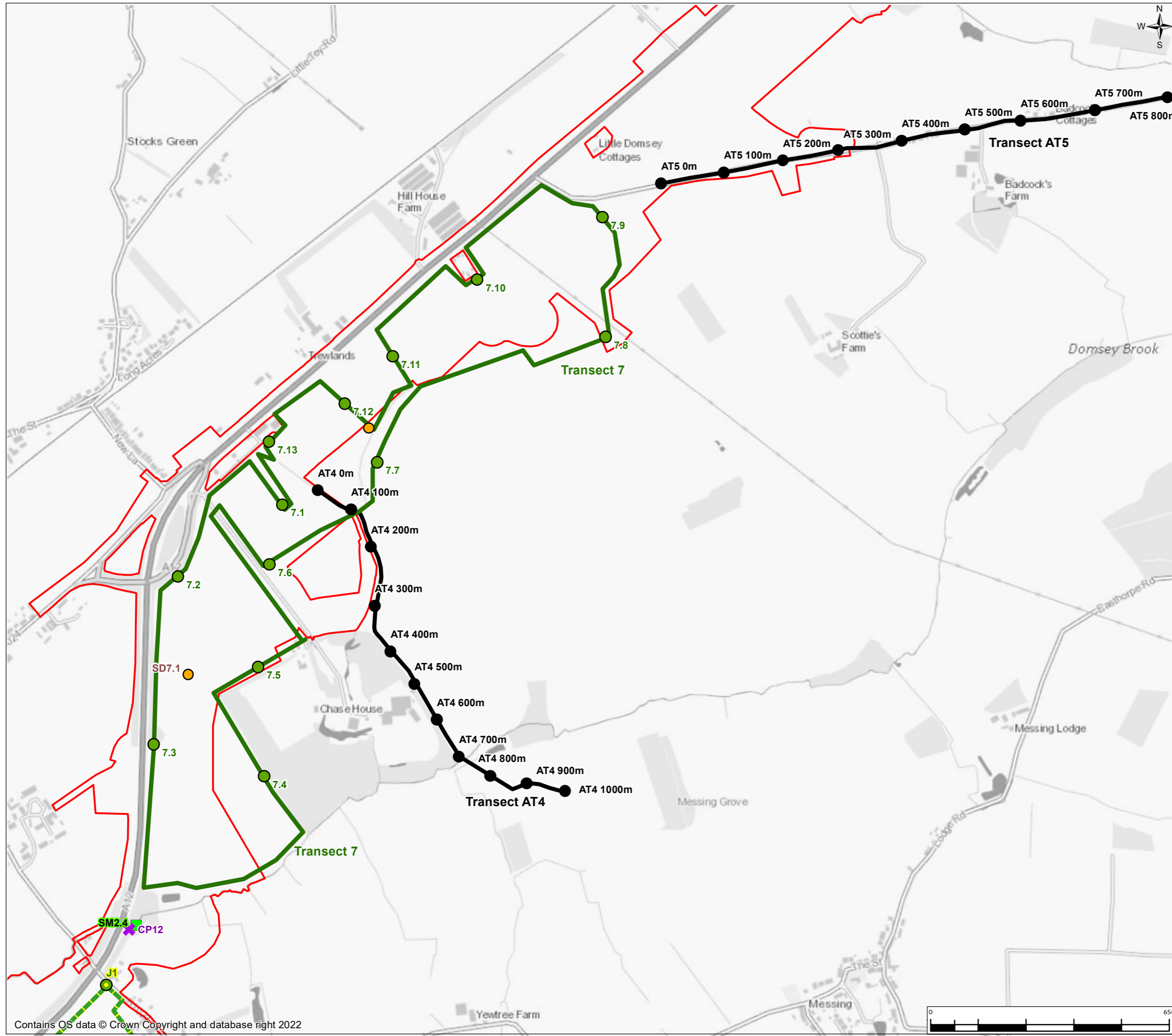


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APPENDIX 9.4 - FIGURE 5

Legend

- Provisional Order Limits - Design Fix 1
- Altringham points
- SM2 locations
- Crossing points
- Anabat locations
- Borrow pit anabat locations
- Listening points
- Borrow pit listening points
- Transects
- Borrow pit transects
- Altringham transects



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

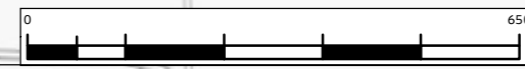
Drawing Title
 ENVIRONMENTAL STATEMENT
 LOCATIONS OF CROSSING POINT, TRANSECT
 AND STATIC DETECTOR SURVEYS
 SHEET 8 OF 9

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:10000	DO NOT SCALE
Jacobs No.	B36601D1	Rev
Client No.	HE551497	PO1

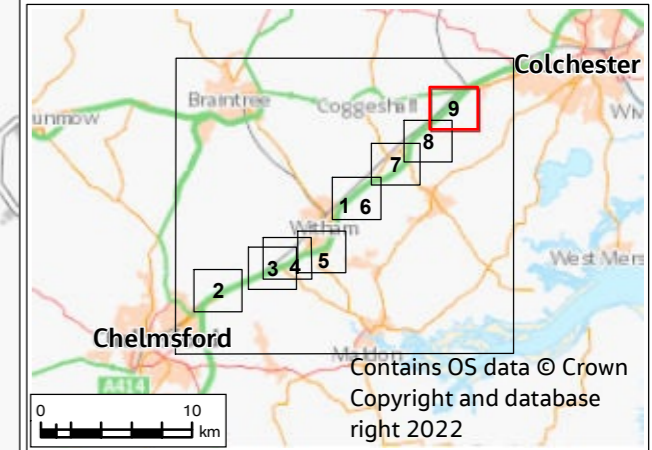
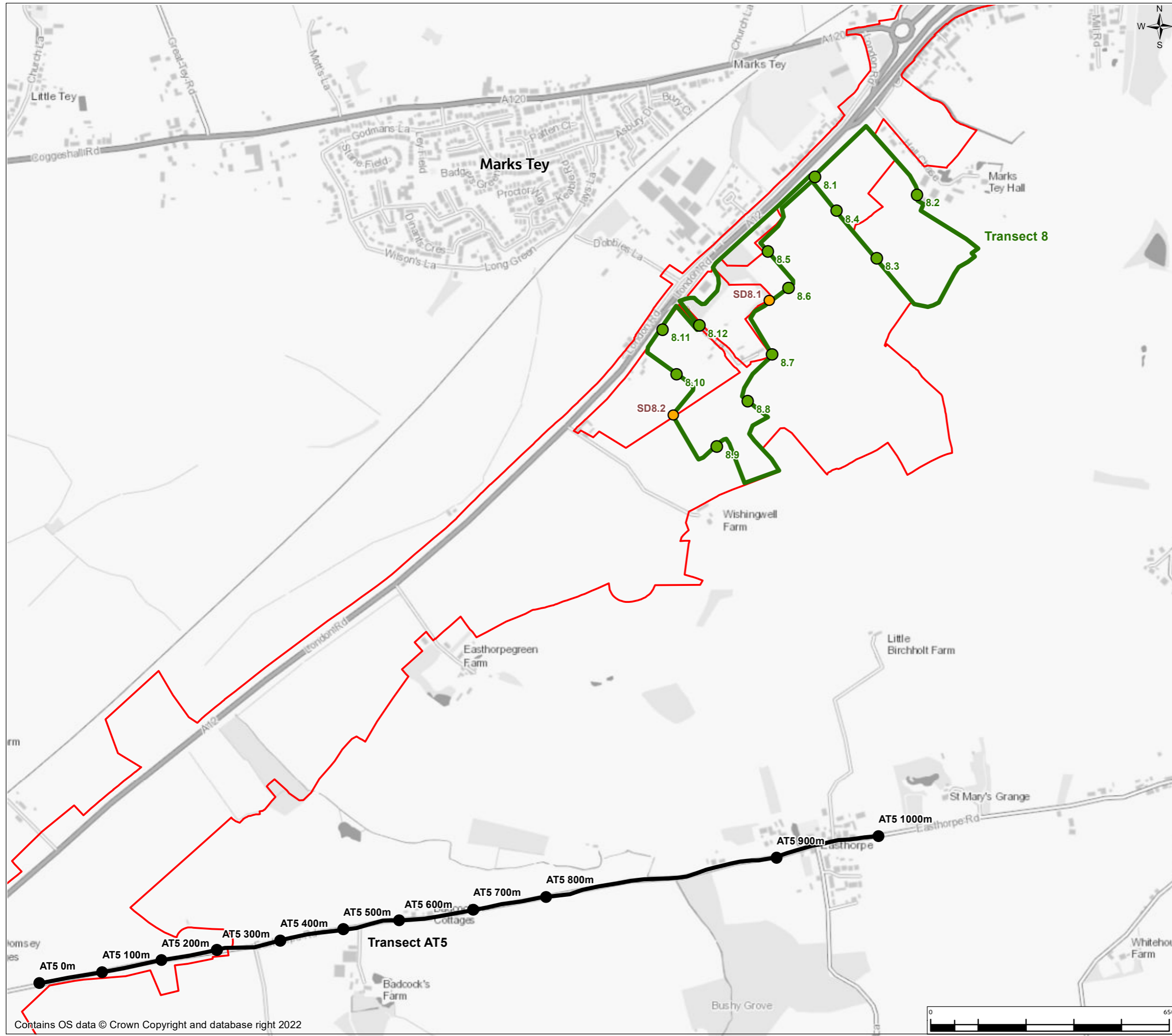
Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0644


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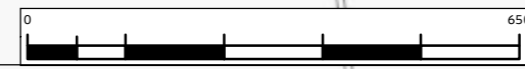


APPENDIX 9.4 - FIGURE 5

- Legend**
- Provisional Order Limits - Design Fix 1
 - Altringham points
 - SM2 locations
 - ✖ Crossing points
 - Anabat locations
 - Borrow pit anabat locations
 - Listening points
 - Borrow pit listening points
 - Transects
 - Borrow pit transects
 - Altringham transects



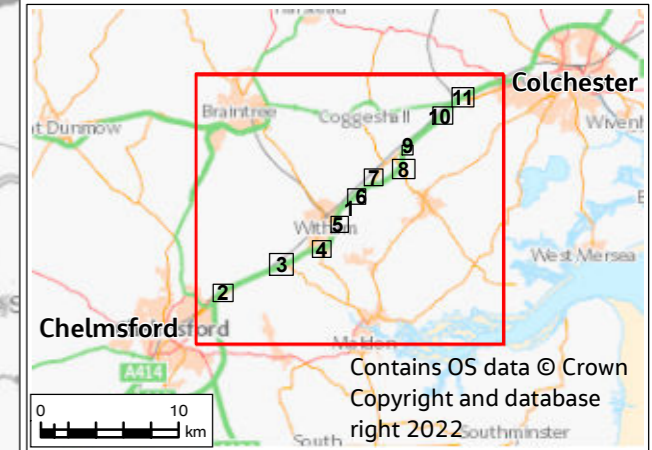
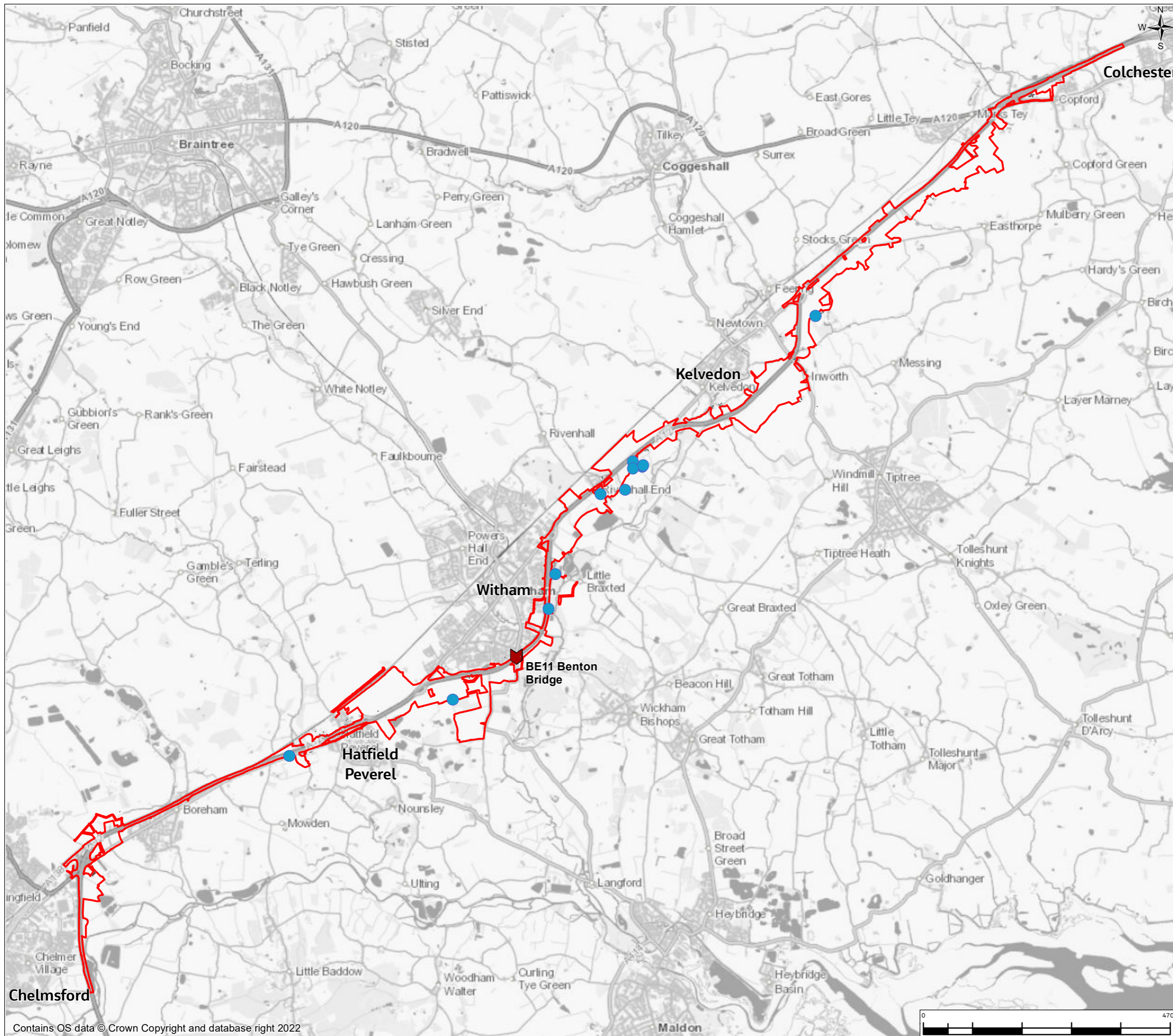
P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
						
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT LOCATIONS OF CROSSING POINT, TRANSECT AND STATIC DETECTOR SURVEYS SHEET 9 OF 9						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:10000	DO NOT SCALE			
Jacobs No.		B36601D1	Rev		P01	
Client No.		HE551497				
Drawing Number: HE551497-JAC-LDC-SCHW-SK-GI-0645						




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APPENDIX 9.4 - FIGURE 6

- Legend**
- Provisional Order Limits - Design Fix 1
 - Confirmed roost (trees)
 - Confirmed roost (bridges and culverts)
 - Confirmed roost (buildings)



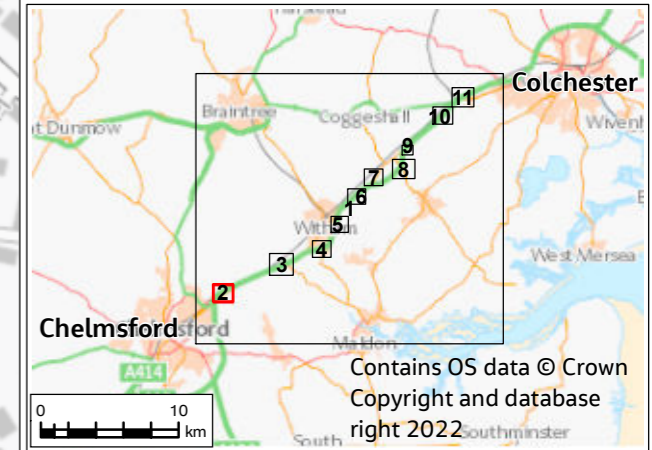
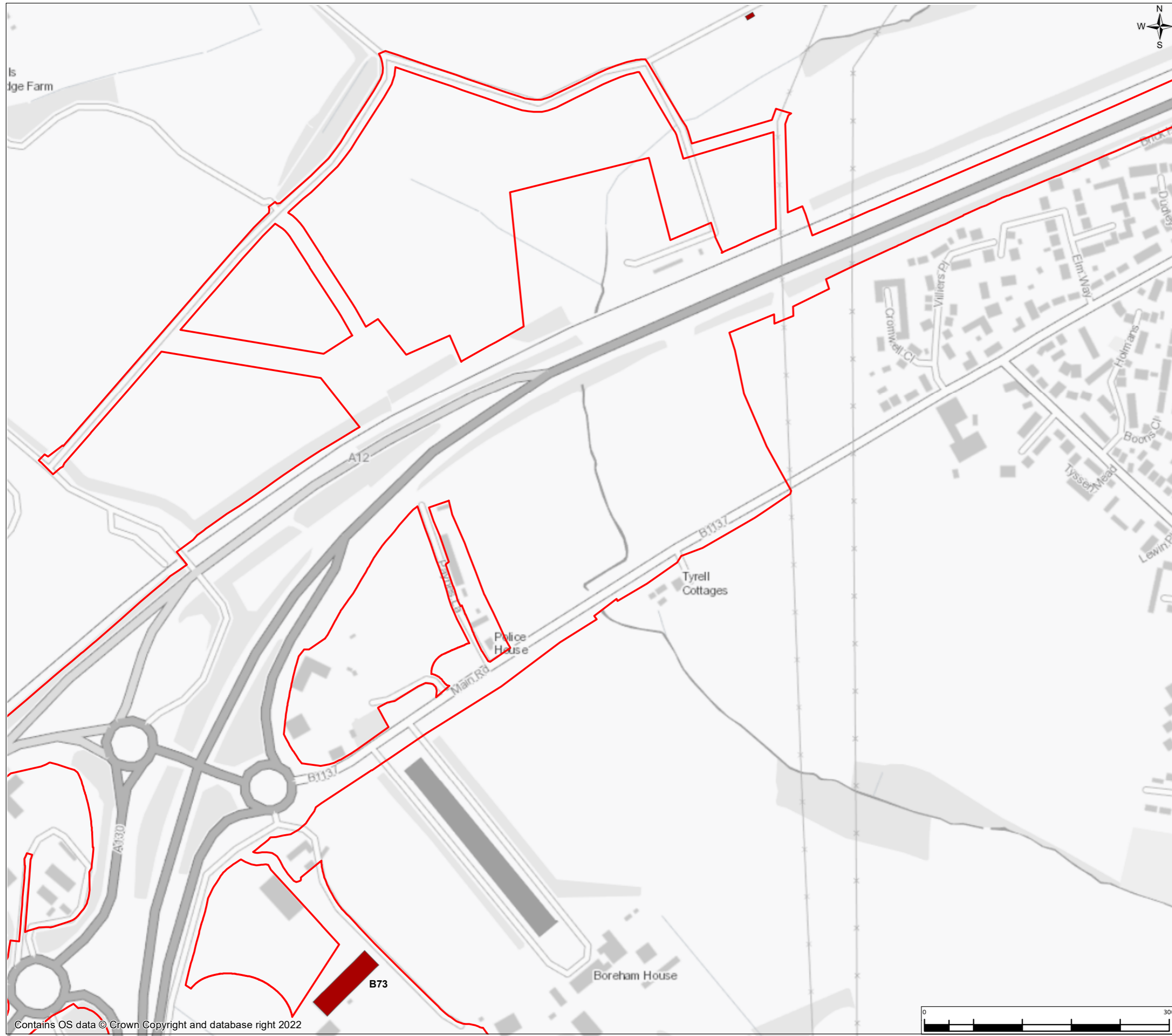
PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
						
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT CONFIRMED BAT ROOSTS (STRUCTURES, BUILDINGS AND TREES) SHEET 1 OF 11						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
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Jacobs No.		B36601D1		Rev P01		
Client No.		HE551497				
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0646						

APPENDIX 9.4 - FIGURE 6



Legend

- Provisional Order Limits - Design Fix 1
- Confirmed roost (trees)
- Confirmed roost (bridges and culverts)
- Confirmed roost (buildings)



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

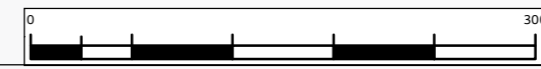
Drawing Title
 ENVIRONMENTAL STATEMENT
 CONFIRMED BAT ROOSTS
 (STRUCTURES, BUILDINGS AND TREES)
 SHEET 2 OF 11

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:4500	DO NOT SCALE
Jacobs No.	B36601D1	Rev
Client No.	HE551497	P01

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0647

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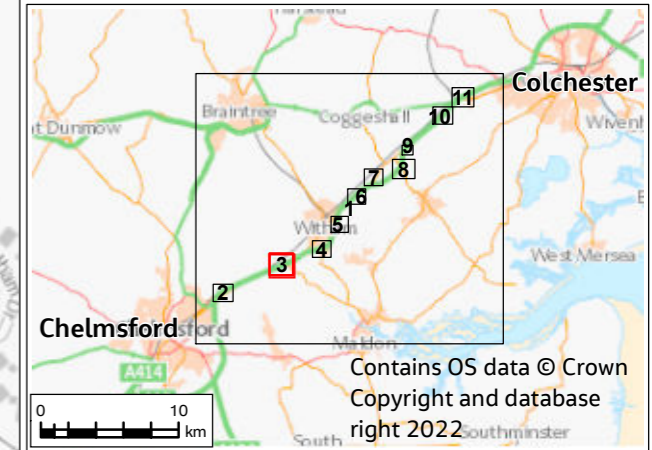
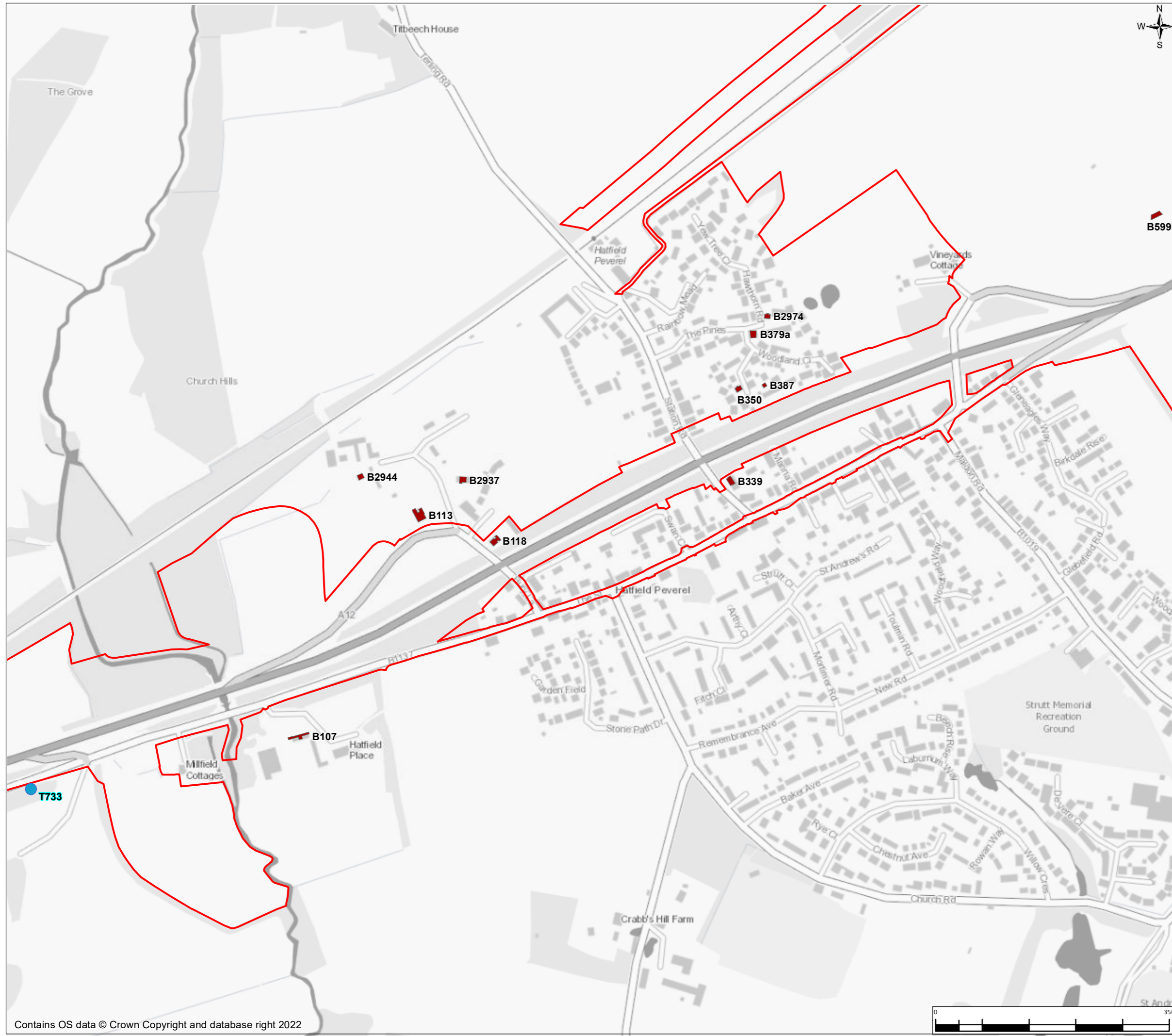


APPENDIX 9.4 - FIGURE 6

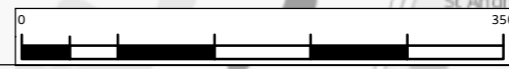


Legend

- Provisional Order Limits - Design Fix 1
- Confirmed roost (trees)
- ◆ Confirmed roost (bridges and culverts)
- Confirmed roost (buildings)



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT CONFIRMED BAT ROOSTS (STRUCTURES, BUILDINGS AND TREES) SHEET 3 OF 11						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
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Client No.	HE551497					
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0648						

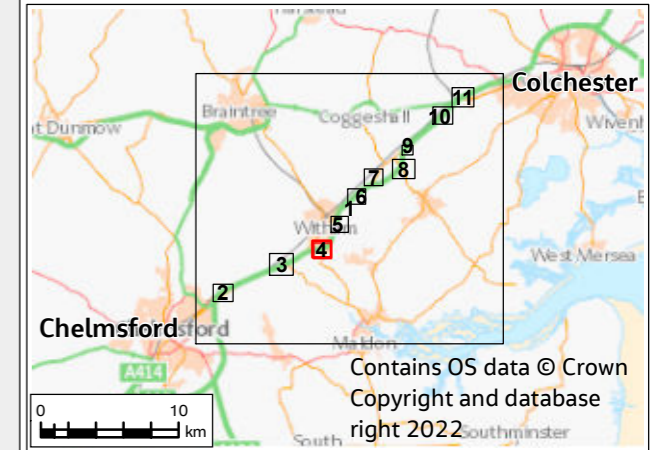
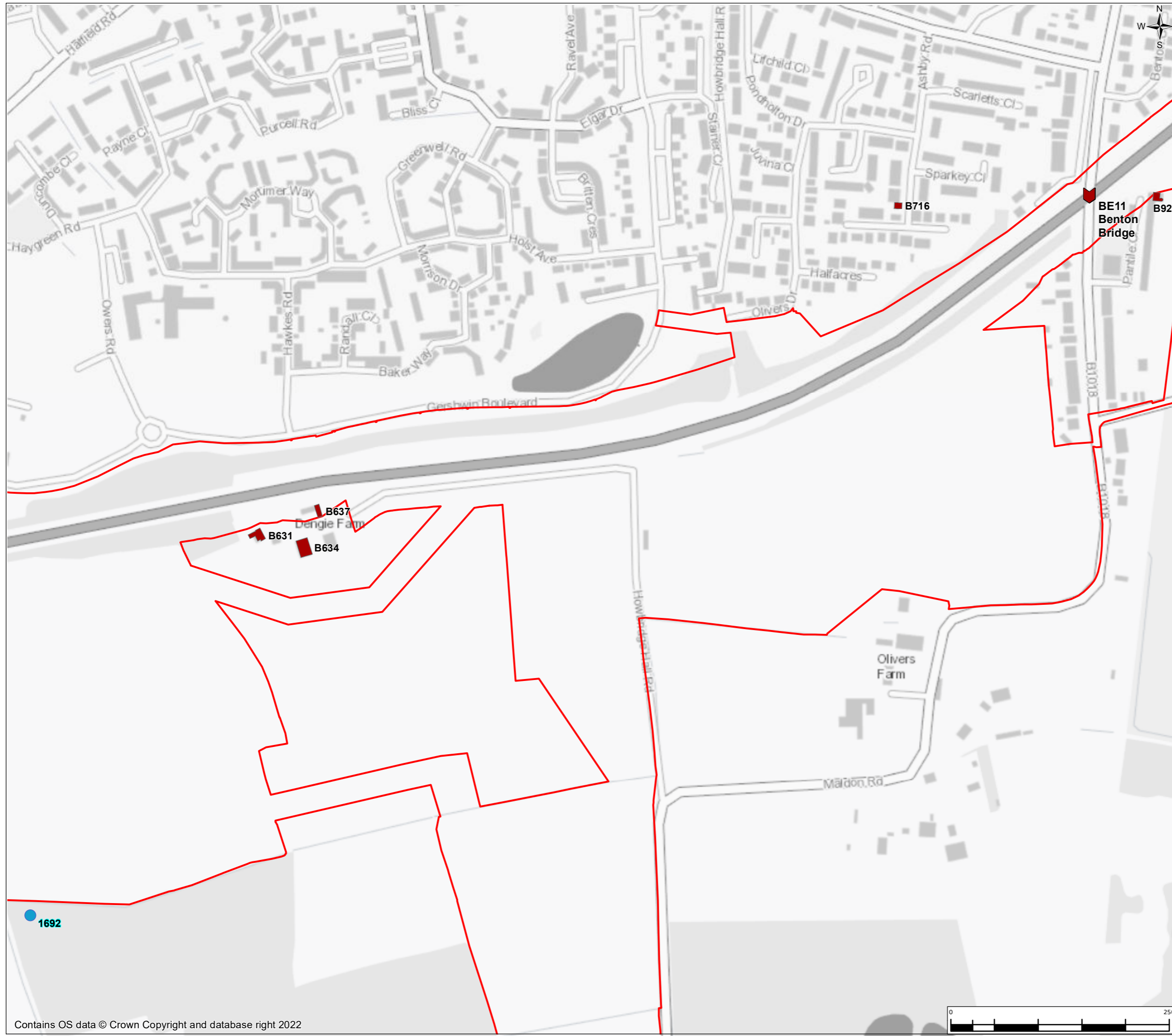


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APPENDIX 9.4 - FIGURE 6

Legend

- Provisional Order Limits - Design Fix 1
- Confirmed roost (trees)
- ▾ Confirmed roost (bridges and culverts)
- Confirmed roost (buildings)



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
**REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME**

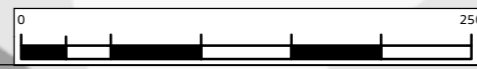
Drawing Title
**ENVIRONMENTAL STATEMENT
 CONFIRMED BAT ROOSTS
 (STRUCTURES, BUILDINGS AND TREES)
 SHEET 4 OF 11**

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:4200	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE551497-JAC-LDC-SCHW-SK-GI-0649

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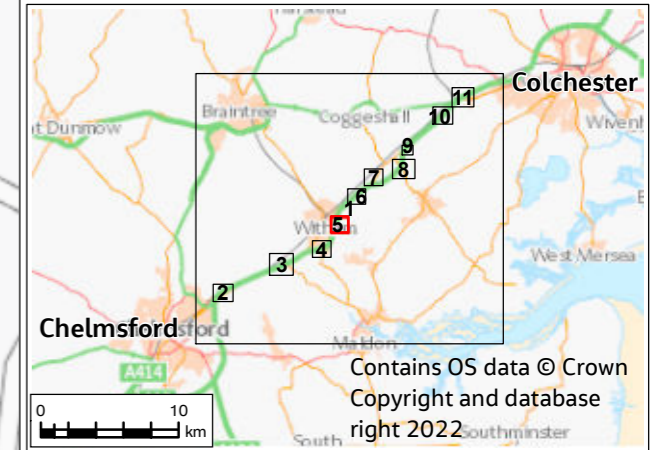
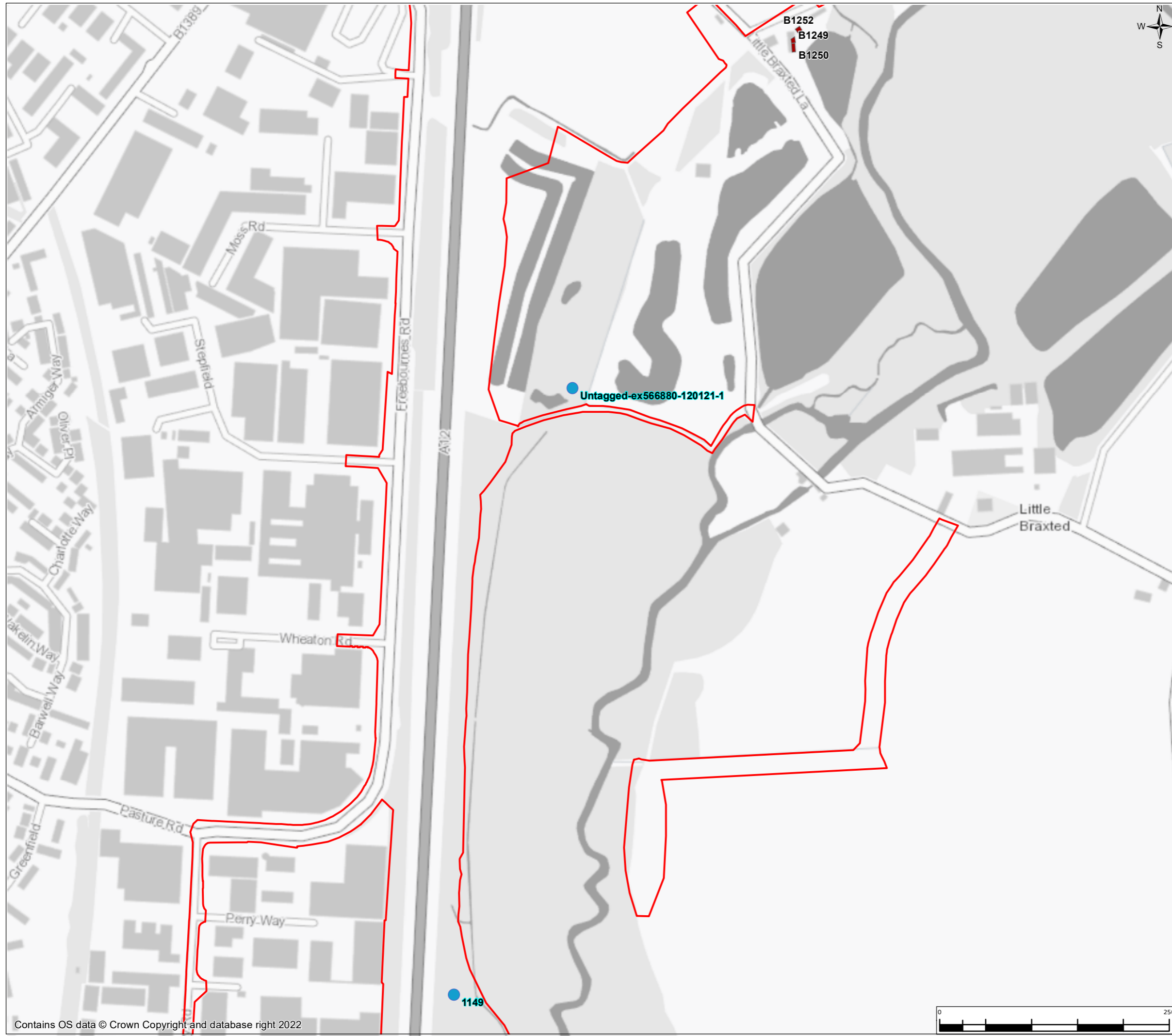


APPENDIX 9.4 - FIGURE 6



Legend

- Provisional Order Limits - Design Fix 1
- Confirmed roost (trees)
- Confirmed roost (bridges and culverts)
- Confirmed roost (buildings)



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			



Project
REGIONAL DELIVERY PARTNERSHIP
A12 CHELMSFORD TO A120 WIDENING SCHEME

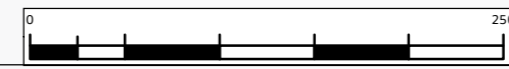
Drawing Title
ENVIRONMENTAL STATEMENT
CONFIRMED BAT ROOSTS
(STRUCTURES, BUILDINGS AND TREES)
SHEET 5 OF 11

Drawing Status
S4 – SUITABLE FOR STAGE APPROVAL

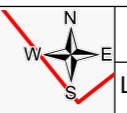
Scale @ A3	1:4000	DO NOT SCALE
Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

Drawing Number
HE551497-JAC-LDC-SCHW-SK-GI-0650

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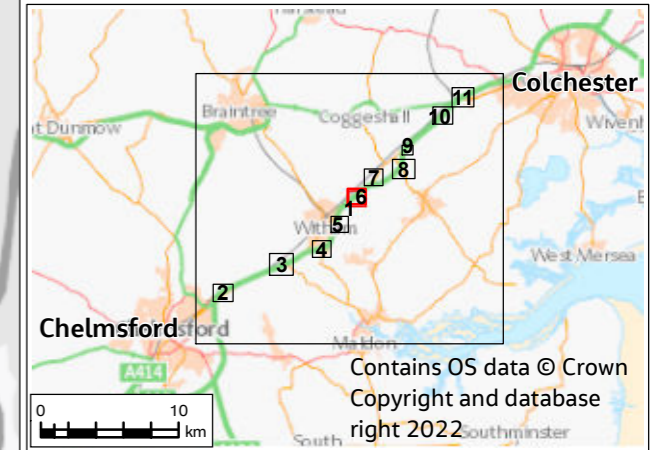
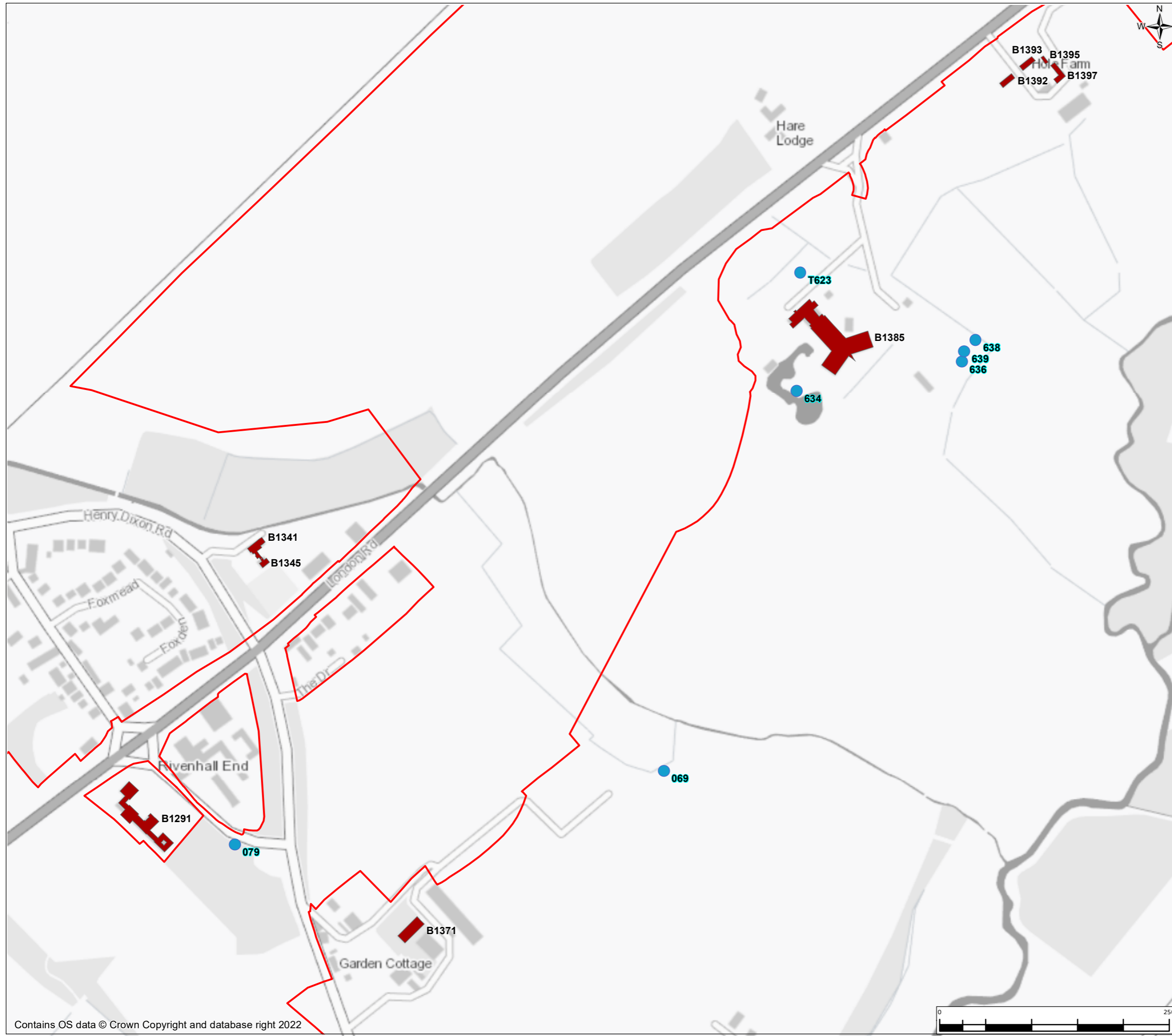


APPENDIX 9.4 - FIGURE 6



Legend

- Provisional Order Limits - Design Fix 1
- Confirmed roost (trees)
- Confirmed roost (bridges and culverts)
- Confirmed roost (buildings)



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



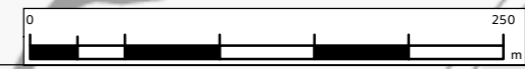
Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 CONFIRMED BAT ROOSTS
 (STRUCTURES, BUILDINGS AND TREES)
 SHEET 6 OF 11

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:4000	DO NOT SCALE
Jacobs No.	B36601D1	Rev
Client No.	HE551497	PO1

Drawing Number
 HE55 1497-JAC-LDC-SCHW-SK-GI-0651

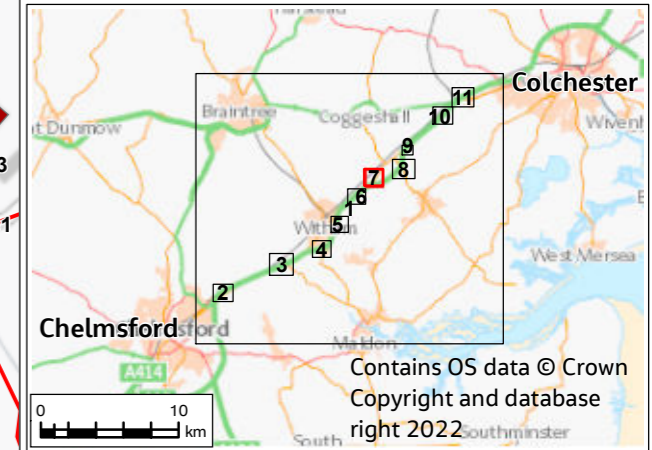



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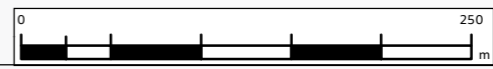
APPENDIX 9.4 - FIGURE 6

Legend

- Provisional Order Limits - Design Fix 1
- Confirmed roost (trees)
- ◆ Confirmed roost (bridges and culverts)
- Confirmed roost (buildings)



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APFP Regulation: Regulation 5(2)(l)			
						
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT CONFIRMED BAT ROOSTS (STRUCTURES, BUILDINGS AND TREES) SHEET 7 OF 11						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:4200		DO NOT SCALE		
Jacobs No.		B36601D1		Rev P01		
Client No.		HE551497				
Drawing Number HE551497-JAC-LDC-SCHW-SK-GI-0652						



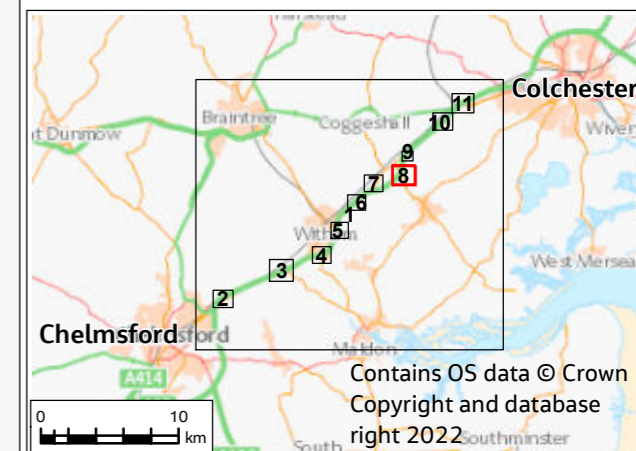
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APPENDIX 9.4 - FIGURE 6



Legend

- Provisional Order Limits - Design Fix 1
- Confirmed roost (trees)
- ♣ Confirmed roost (bridges and culverts)
- Confirmed roost (buildings)



P01	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

Drawing Title
 ENVIRONMENTAL STATEMENT
 CONFIRMED BAT ROOSTS
 (STRUCTURES, BUILDINGS AND TREES)
 SHEET 8 OF 11

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

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Jacobs No.	B36601D1	Rev P01
Client No.	HE551497	

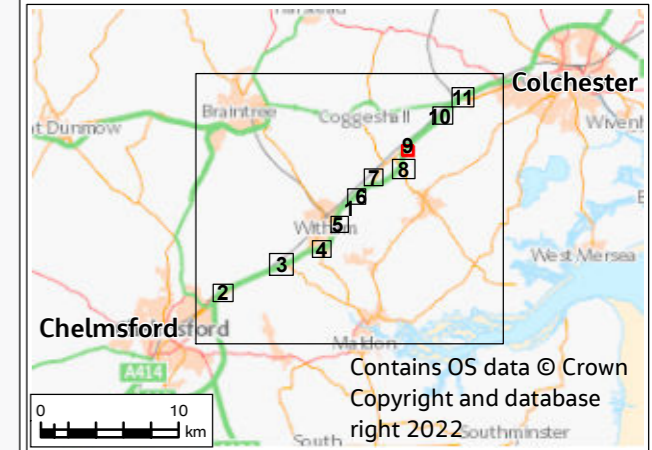
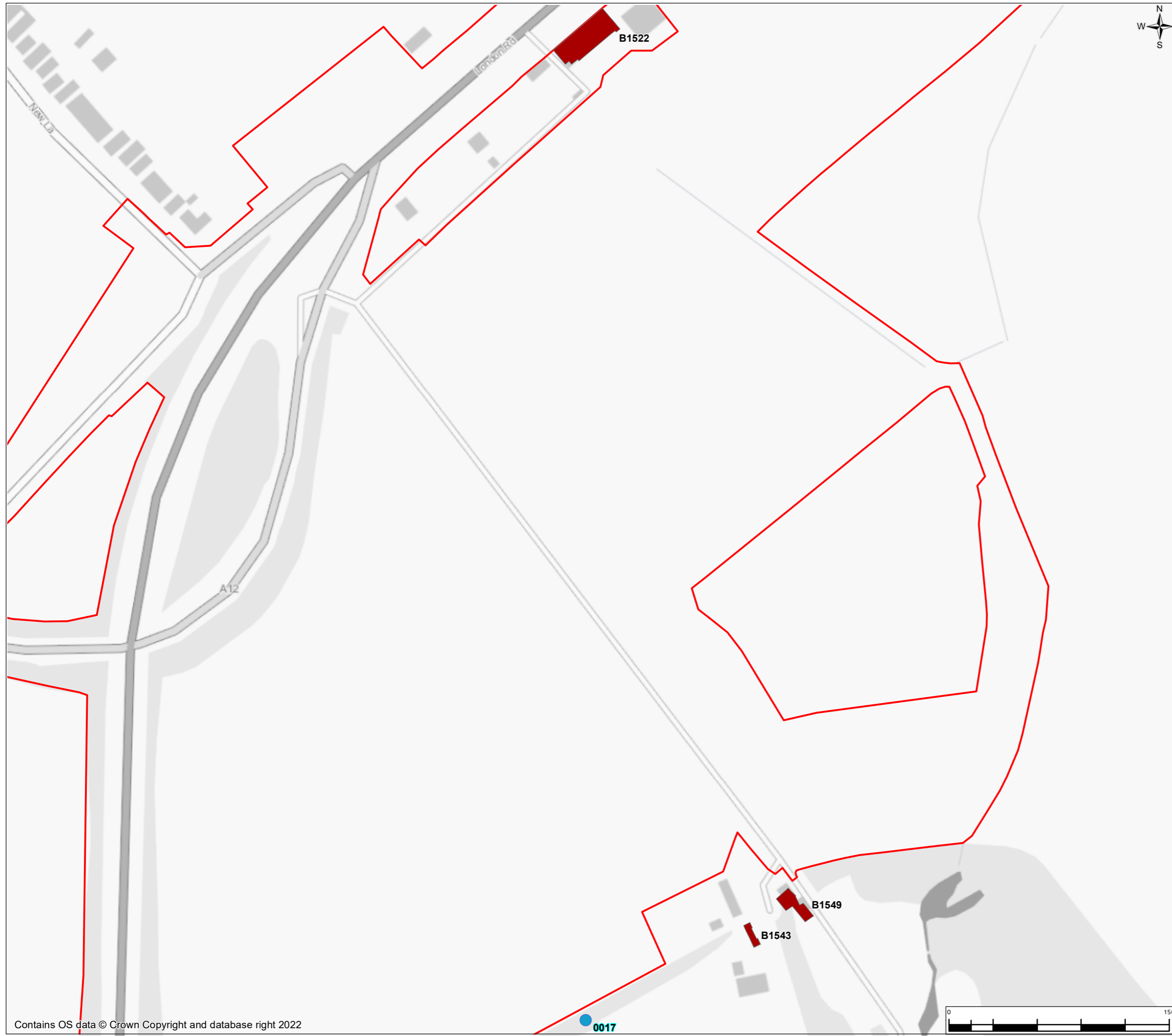
Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0653

APPENDIX 9.4 - FIGURE 6



Legend

- Provisional Order Limits - Design Fix 1
- Confirmed roost (trees)
- Confirmed roost (bridges and culverts)
- Confirmed roost (buildings)



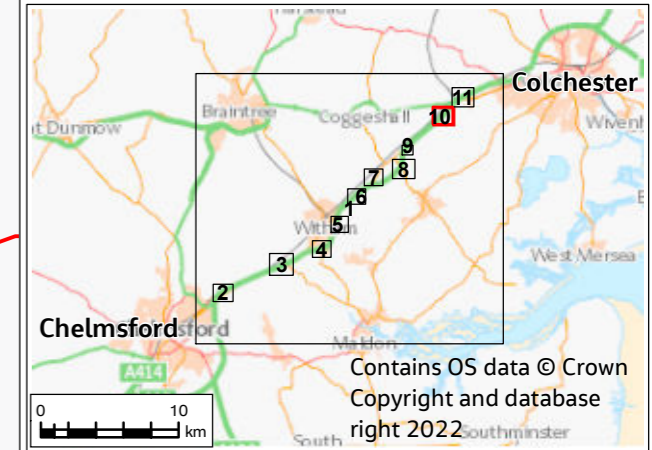
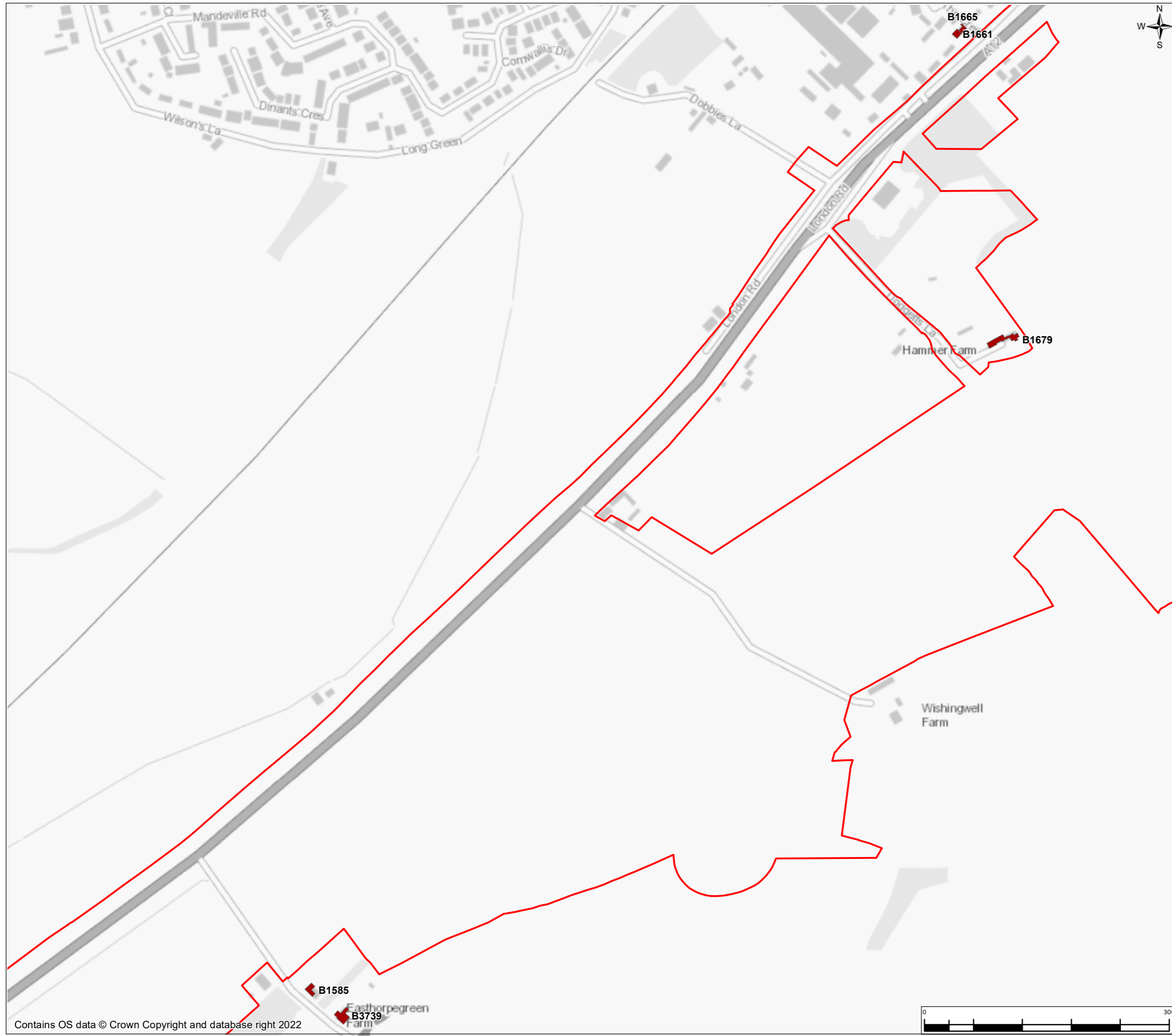
PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT CONFIRMED BAT ROOSTS (STRUCTURES, BUILDINGS AND TREES) SHEET 9 OF 11						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
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Jacobs No.		B36601D1	Rev		P01	
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Drawing Number		HE551497-JAC-LDC-SCHW-SK-GI-0654				

APPENDIX 9.4 - FIGURE 6

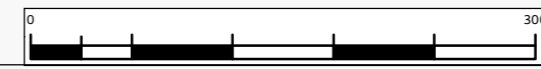


Legend

- Provisional Order Limits - Design Fix 1
- Confirmed roost (trees)
- ◆ Confirmed roost (bridges and culverts)
- Confirmed roost (buildings)



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Development Consent Order Drawing Number: TR010060/APP/6.3			APPP Regulation: Regulation 5(2)(l)			
Project REGIONAL DELIVERY PARTNERSHIP A12 CHELMSFORD TO A120 WIDENING SCHEME						
Drawing Title ENVIRONMENTAL STATEMENT CONFIRMED BAT ROOSTS (STRUCTURES, BUILDINGS AND TREES) SHEET 10 OF 11						
Drawing Status S4 – SUITABLE FOR STAGE APPROVAL						
Scale @ A3		1:4500		DO NOT SCALE		
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Client No.		HE551497				
Drawing Number		HE551497-JAC-LDC-SCHW-SK-GI-0655				

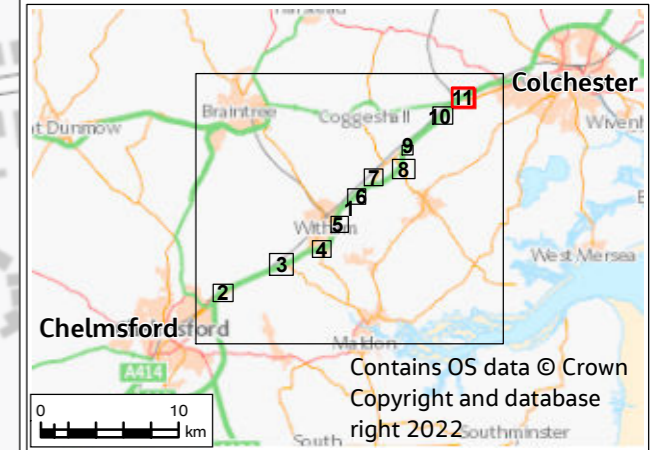
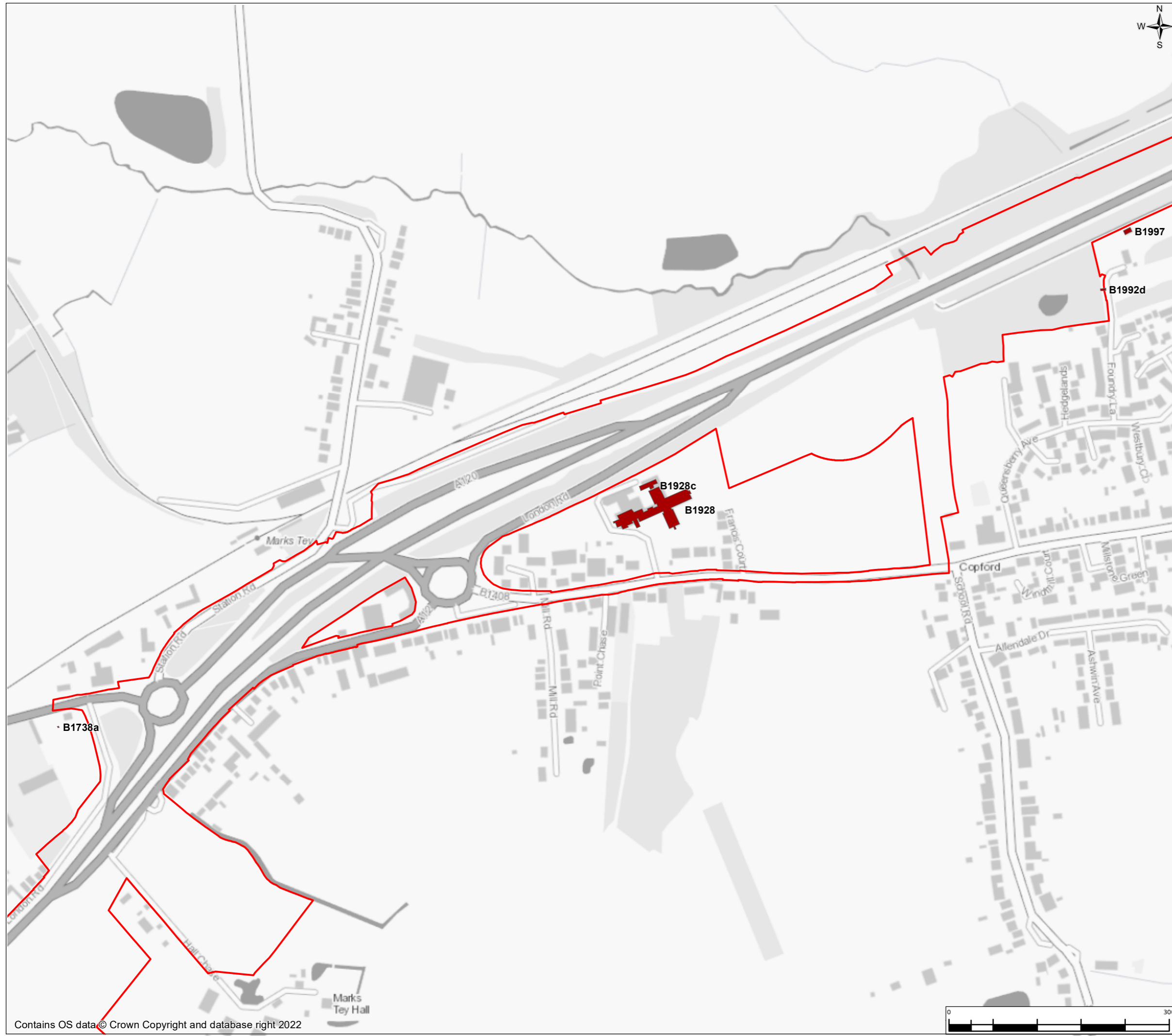


APPENDIX 9.4 - FIGURE 6



Legend

- Provisional Order Limits - Design Fix 1
- Confirmed roost (trees)
- Confirmed roost (bridges and culverts)
- Confirmed roost (buildings)



PO1	31/05/22	For DCO application	ML	LW	NP	SG
Rev.	Rev. Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Development Consent Order Drawing Number: TR010060/APP/6.3
 APFP Regulation: Regulation 5(2)(l)



Project
 REGIONAL DELIVERY PARTNERSHIP
 A12 CHELMSFORD TO A120 WIDENING SCHEME

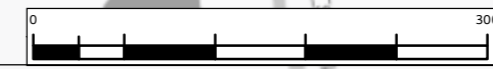
Drawing Title
 ENVIRONMENTAL STATEMENT
 CONFIRMED BAT ROOSTS
 (STRUCTURES, BUILDINGS AND TREES)
 SHEET 11 OF 11

Drawing Status
 S4 – SUITABLE FOR STAGE APPROVAL

Scale @ A3	1:5000	DO NOT SCALE
Jacobs No.	B36601D1	
Client No.	HE551497	Rev P01

Drawing Number
 HE551497-JAC-LDC-SCHW-SK-GI-0656

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Annex B Summary of ground-based tree assessments

Table B.1 Summary of ground-based tree assessments 2019-2021

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
733	Pedunculate oak	07/01/2019	Roost	Dusk/dawn	Yes	No	No	No	No	No	3
69	Beech	16/01/2020	High	Dusk/dawn	No	No	Yes	No	No	No	2
1432	Unknown	25/11/2020	High	Dusk/dawn	No	No	No	Yes	No	No	2
1433	Unknown	25/11/2020	High	Dusk/dawn	No	No	No	Yes	No	No	2
99	Willow	14/01/2020	High	Dusk/dawn	Yes	No	No	No	No	No	3
973	Ash	19/02/2020	High	Dusk/dawn	No	No	No	Yes	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
untagged_2 4022021_O BKT	Walnut (<i>Juglans</i> sp.)	24/02/2021	High	Dusk/dawn	No	No	No	Yes	No	No	2
1444	Hawthorn (<i>Crataegus monogyna</i>)	25/11/2020	High	Dusk/dawn	No	No	No	Yes	No	No	2
1447	Oak	25/11/2020	High	Dusk/dawn	No	No	No	Yes	No	No	2
1105	Willow	27/05/2020	High	Dusk/dawn	No	No	No	Yes	No	No	2
17	Beech	10/03/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
1149	Aspen	19/05/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1098	Sycamore (<i>Acer</i>)	21/01/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
	<i>pseudoplatanus</i>)										
1094	Sycamore	21/01/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
1406	Oak	25/11/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1427	Field maple (<i>Acer campestre</i>)	25/11/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1436	Unknown	26/11/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1439	Unknown	26/11/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1440	Unknown	26/11/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
628	Beech	02/12/2019	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
630	Ash	02/12/2019	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
1196	Oak	21/01/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
975	Ash	19/02/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
926	Ash	20/02/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
926a	Ash	20/02/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1162	Poplar (<i>Populus</i>)	18/03/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1163	Poplar	18/03/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1462	Oak	13/01/2021	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1318	Oak	10/12/20	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
622	Horse chestnut (<i>Aesculus hippocastanum</i>)	02/12/2019	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
1452	Willow	12/01/2021	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1099	Ash	21/01/2020	Moderate	Dusk/dawn	No	Yes	No	No	No	No	1

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1479	Unknown	13/01/2021	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1249	Willow	17/09/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
737	Elm (<i>Ulmus</i> sp.)	08/01/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
80	Unknown	15/01/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
84	White willow	15/01/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
85	White willow	15/01/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
89	White willow	15/01/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
2626	Unknown	11/03/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
2627	White willow	11/03/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
2628	White willow	11/03/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
2629	White willow	11/03/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
2630	White willow	28/07/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
78	Crack willow (<i>Salix fragilis</i>)	15/01/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
723	Pedunculate oak	07/01/2019	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
734	Pedunculate oak	07/01/2019	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
1474	Oak	13/01/2021	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
1476	Beech	13/01/2021	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
1147	Aspen	19/05/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1166	Sycamore	17/03/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1167	Sycamore	17/03/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1172	Sycamore	17/03/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
747	Willow	05/02/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
749	Willow	05/02/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1223	Field maple	03/06/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
541	Horse Chestnut	03/12/2019	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
556	Unknown (dead)	04/12/2019	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
618	Horse Chestnut	04/12/2019	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1203 & 1116	Oak	12/03/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
0002b	Crack willow	02/06/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1108	Elm	27/05/2020	Moderate	Dusk/dawn	No	No	No	Yes	No	No	2
1224	Elm	03/06/2020	Moderate	Dusk/dawn	Yes	No	No	No	No	No	2
623	Holm oak (<i>Quercus ilex</i>)	02/12/2019	Roost	Climb	No	Yes	No	No	No	No	2
634	Oak	03/12/2019	Roost	Climb	Yes	No	No	No	No	No	3
1692	Oak	18/02/2021	Roost	Climb	Yes	No	No	No	No	No	3
1321	Horse chestnut	10/12/20	High	Climb	No	No	No	No	Yes	No	1

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1326	Horse chestnut	10/12/20	High	Climb	No	No	No	No	Yes	No	1
1430	Ash	25/11/2020	High	Climb	No	No	No	Yes	No	No	2
40	Ash	06/02/2020	High	Climb	No	No	Yes	No	No	No	2
66	Pedunculate oak	16/01/2020	High	Climb	No	No	No	Yes	No	No	2
101	Horse chestnut	04/12/2019	High	Climb	No	No	No	Yes	No	No	2
727	Horse chestnut	07/01/2019	High	Climb	Yes	No	No	No	No	No	3
731	Horse chestnut	07/01/2019	High	Climb	Yes	No	No	No	No	No	3

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1155	Willow	18/03/2020	High	Climb	No	No	No	No	No	Yes	1
1310	Willow	09/12/20	High	Climb	No	No	Yes	No	No	No	2
1423	Oak	25/11/2020	High	Climb	No	No	No	Yes	No	No	2
1437	Willow	26/11/2020	High	Climb	No	No	No	Yes	No	No	2
1492	Beech	13/01/2021	High	Climb	Yes	No	No	No	No	No	3
1663	Unknown	18/02/2021	High	Climb	Yes	No	No	No	No	No	3
1664	Beech	18/02/2021	High	Climb	Yes	No	No	No	No	No	3

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1666	Oak	18/02/2021	High	Climb	Yes	No	No	No	No	No	3
1667	Oak	18/02/2021	High	Climb	Yes	No	No	No	No	No	3
1673	Oak	18/02/2021	High	Climb	Yes	No	No	No	No	No	3
1680	Dead willow	17/02/2021	High	Climb	No	Yes	No	No	No	No	2
Untagged_120520 DS AL 001	Poplar	12/05/2020	High	Climb	Yes	No	No	No	No	No	3
Untagged_ex722587_2	Oak	29/09/2020	High	Climb	No	No	No	Yes	No	No	2
1186	Ash	24/01/2020	High	Climb	Yes	No	No	No	No	No	3

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1317	Oak	10/12/20	Hlgh	Climb	Yes	No	No	No	No	No	3
1449	Unknown	25/11/2020	High	Climb	No	No	No	Yes	No	No	2
102	Horse Chestnut	04/12/2019	High	Climb	No	No	No	No	Yes	No	1
21	Lime (<i>Tilia</i> sp.)	10/03/2020	High	Climb	Yes	No	No	No	No	No	3
Untagged_ex722587_3	Oak	29/09/2020	High	Climb	No	No	No	Yes	No	No	2
1054	Oak	17/03/2020	High	Climb	Yes	No	No	No	No	No	3
631	Ash	02/12/2019	High	Climb	Yes	No	No	No	No	No	3

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
511	Willow	02/12/2019	High	Climb	Yes	No	No	No	No	No	3
23	Lime	10/03/2020	High	Climb	Yes	No	No	No	No	No	3
934	Beech	20/02/2020	High	Climb	Yes	No	No	No	No	No	3
557	Pedunculate oak	04/12/2019	High	Climb	No	No	No	Yes	No	No	2
933	Beech	20/02/2020	High	Climb	Yes	No	No	No	No	No	3
560	Horse chestnut	04/12/2019	High	Climb	No	No	No	No	Yes	No	1
79	White willow	15/01/2020	Moderate	Climb	Yes	No	No	No	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
Untagged-ex566880-120121-1	Alder	12/01/2021	Moderate	Climb	No	No	No	Yes	No	No	2
1686	Oak	16/02/2021	Moderate	Climb	No	No	No	Yes	No	No	2
1002	Ash	25/08/2020	Moderate	Climb	No	No	No	Yes	No	No	2
1294	Ash	24/11/2020	Moderate	Climb	No	No	No	Yes	No	No	2
1443	Unknown	25/11/2020	Moderate	Climb	No	No	No	Yes	No	No	2
1478	Beech	13/01/2021	Moderate	Climb	Yes	No	No	No	No	No	2
755	Ash	06/02/2020	Moderate	Climb	Yes	No	No	No	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1205	Sweet chestnut	11/03/2020	Moderate	Climb	Yes	No	No	No	No	No	2
968	Apple (<i>Malus</i> sp.)	12/12/2019	Moderate	Climb	No	No	No	No	Yes	No	0
2	Crack willow	11/03/2020	Moderate	Climb	No	No	No	Yes	No	No	2
4	Poplar	11/03/2020	Moderate	Climb	No	No	No	Yes	No	No	2
5	Poplar	11/03/2020	Moderate	Climb	No	No	No	Yes	No	No	2
73	White willow	16/01/2020	Moderate	Climb	Yes	No	No	No	No	No	2
544	Pedunculate oak	03/12/2019	Moderate	Climb	No	No	No	No	No	Yes	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
548	Pedunculate oak	04/12/2019	Moderate	Climb	No	No	No	Yes	No	No	2
842	Sycamore	10/12/2019	Moderate	Climb	No	No	No	No	No	Yes	0
928	Ash	20/02/2020	Moderate	Climb	Yes	No	No	No	No	No	2
1059	Elder (<i>Sambucus nigra</i>)	17/03/2020	Moderate	Climb	Yes	No	No	No	No	No	2
2630	White willow	11/03/2020	Moderate	Climb	Yes	No	No	No	No	No	2
14	Sycamore	10/03/2020	Moderate	Climb	Yes	No	No	No	No	No	2
19	Rowan (<i>Sorbus aucuparia</i>)	10/03/2020	Moderate	Climb	Yes	No	No	No	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
20	Beech	10/03/2020	Moderate	Climb	Yes	No	No	No	No	No	2
22	Lime	10/03/2020	Moderate	Climb	Yes	No	No	No	No	No	2
75	Oak	16/01/2020	Moderate	Climb	Yes	No	No	No	No	No	2
77	White willow	16/01/2020	Moderate	Climb	No	No	Yes	No	No	No	1
513	Oak	03/12/2019	Moderate	Climb	No	No	No	Yes	No	No	2
626	Lime	02/12/2019	Moderate	Climb	Yes	No	No	No	No	No	2
726	Beech	07/01/2019	Moderate	Climb	Yes	No	No	No	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
931	Beech	20/02/2020	Moderate	Climb	Yes	No	No	No	No	No	2
936	Field maple	20/02/2020	Moderate	Climb	Yes	No	No	No	No	No	2
962	Poplar	05/12/2019	Moderate	Climb	Yes	No	No	No	No	No	2
963	Willow	05/12/2019	Moderate	Climb	Yes	No	No	No	No	No	2
965	Chestnut	12/12/2019	Moderate	Climb	No	No	No	Yes	No	No	2
985	Ash	30/01/2020	Moderate	Climb	Yes	No	No	No	No	No	2
1013	Oak	25/08/2020	Moderate	Climb	No	No	No	Yes	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1048	Unknown	17/03/2020	Moderate	Climb	No	No	Yes	No	No	No	1
1118	Sycamore	27/05/2020	Moderate	Climb	No	No	No	Yes	No	No	2
1288	Oak	00/01/1900	Moderate	Climb	No	No	No	Yes	No	No	2
1295	Ash	25/11/2020	Moderate	Climb	No	No	No	Yes	No	No	2
1299	Ash	25/11/2020	Moderate	Climb	No	No	No	Yes	No	No	2
1405	Oak	25/11/2020	Moderate	Climb	No	No	No	Yes	No	No	2
1411	Field maple	25/11/2020	Moderate	Climb	No	No	No	Yes	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1438	Unknown	26/11/2020	Moderate	Climb	No	No	No	Yes	No	No	2
1445	Unknown	25/11/2020	Moderate	Climb	No	No	No	Yes	No	No	2
1453	Horse chestnut	13/01/2021	Moderate	Climb	Yes	No	No	No	No	No	2
1461	Ash	13/01/2021	Moderate	Climb	No	No	No	No	Yes	No	0
1484	Oak	13/01/2021	Moderate	Climb	Yes	No	No	No	No	No	2
1497	Oak	13/01/2021	Moderate	Climb	Yes	No	No	No	No	No	2
1656	Oak	18/02/2021	Moderate	Climb	Yes	No	No	No	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1657	Oak	18/02/2021	Moderate	Climb	Yes	No	No	No	No	No	2
1658	Oak	18/02/2021	Moderate	Climb	Yes	No	No	No	No	No	2
1660	Oak	18/02/2021	Moderate	Climb	Yes	No	No	No	No	No	2
1669	Oak	18/02/2021	Moderate	Climb	Yes	No	No	No	No	No	2
1675	Maple	18/02/2021	Moderate	Climb	Yes	No	No	No	No	No	2
1676	Poplar	17/02/2021	Moderate	Climb	Yes	No	No	No	No	No	2
1677	Willow	17/02/2021	Moderate	Climb	No	Yes	No	No	No	No	1

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1679	Willow	17/02/2021	Moderate	Climb	No	Yes	No	No	No	No	1
Untagged 290720 EW AL	Oak	30/07/2020	Moderate	Climb	No	No	No	No	No	Yes	0
untagged_06022020_OBJN_3	Ash	06/02/2020	Moderate	Climb	Yes	No	No	No	No	No	2
Untagged_120520 DSAL 002	Poplar	12/05/2020	Moderate	Climb	Yes	No	No	No	No	No	2
Untagged_120520 DSAL 004	Poplar	12/05/2020	Moderate	Climb	Yes	No	No	No	No	No	2
Untagged_120520_DSAL 005	Poplar	12/05/2020	Moderate	Climb	Yes	No	No	No	No	No	2
Untagged_120520_DSAL_003	Poplar	12/05/2020	Moderate	Climb	Yes	No	No	No	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1091	Poplar	21/01/2020	Moderate	Climb	Yes	No	No	No	No	No	2
1096	Sycamore	21/01/2020	Moderate	Climb	Yes	No	No	No	No	No	2
1097	Sycamore	21/01/2020	Moderate	Climb	Yes	No	No	No	No	No	2
1659	Oak	18/02/2021	Moderate	Climb	Yes	No	No	No	No	No	2
1238	Field maple	16/09/2020	Moderate	Climb	No	No	No	Yes	No	No	2
1246	Oak	17/09/2020	Moderate	Climb	No	No	No	Yes	No	No	2
621	Field maple	02/12/2019	Moderate	Climb	Yes	No	No	No	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
627	Horse chestnut	02/12/2019	Moderate	Climb	Yes	No	No	No	No	No	2
629	Ash	02/12/2019	Moderate	Climb	Yes	No	No	No	No	No	2
510	Willow	02/12/2019	Moderate	Climb	Yes	No	No	No	No	No	2
12	Black walnut (<i>Juglans nigra</i>)	10/03/2020	Moderate	Climb	Yes	No	No	No	No	No	2
13	Black walnut	10/03/2020	Moderate	Climb	Yes	No	No	No	No	No	2
932	Beech	20/02/2020	Moderate	Climb	Yes	No	No	No	No	No	2
937	Sycamore	20/02/2020	Moderate	Climb	Yes	No	No	No	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1179	Ash	17/03/2020	Moderate	Climb	No	No	No	Yes	No	No	2
1190	Willow	22/01/2020	Moderate	Climb	Yes	No	No	No	No	No	2
81	Fruit tree	15/01/2020	Moderate	Climb	Yes	No	No	No	No	No	2
722	Beech	07/01/2019	Moderate	Climb	Yes	No	No	No	No	No	2
724	Sycamore	07/01/2019	Moderate	Climb	Yes	No	No	No	No	No	2
725	Lime	07/01/2019	Moderate	Climb	Yes	No	No	No	No	No	2
729	Pedunculate oak	07/01/2019	Moderate	Climb	Yes	No	No	No	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
6	Poplar	11/03/2020	Moderate	Climb	No	No	No	Yes	No	No	2
1170	Sycamore	17/03/2020	Moderate	Climb	No	No	No	Yes	No	No	2
1171	Sycamore	17/03/2020	Moderate	Climb	No	No	No	Yes	No	No	2
547	Horse chestnut	03/12/2019	Moderate	Climb	No	No	No	Yes	No	No	2
559	Pedunculate oak	04/12/2019	Moderate	Climb	No	No	No	Yes	No	No	2
616	Horse Chestnut	04/12/2019	Moderate	Climb	No	No	No	Yes	No	No	2
554	Pedunculate oak	04/12/2019	Moderate	Climb	No	No	No	Yes	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
65	Sycamore	16/01/2020	Moderate	Climb	No	No	No	Yes	No	No	2
958	Willow	05/12/2019	Moderate	Climb	Yes	No	No	No	No	No	2
961	Poplar	05/12/2019	Moderate	Climb	Yes	No	No	No	No	No	2
untagged_EX382223_2	Unknown	22/07/2020	Moderate	Climb	No	No	No	Yes	No	No	2
632	Lime	03/12/2019	Moderate	Climb	Yes	No	No	No	No	No	2
633	Oak	03/12/2019	Moderate	Climb	No	No	Yes	No	No	No	1
1056	Alder	17/03/2020	Moderate	Climb	No	No	Yes	No	No	No	1

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1100	Ash	21/01/2020	Moderate	Climb	No	Yes	No	No	No	No	1
1011	Beech	19/03/2020	Moderate	Climb	Yes	No	No	No	No	No	2
1710	Oak	03/02/2021	Moderate	Climb	Yes	No	No	No	No	No	2
1006	Oak	25/08/2020	Low	Climb	No	No	No	Yes	No	No	0
625	Lime	02/12/2019	High	Ground endoscope	Yes	No	No	No	No	No	3
1047	Unknown	17/03/2020	High	Ground endoscope	No	No	Yes	No	No	No	2
1146	Aspen	19/05/2020	High	Ground endoscope	No	No	No	Yes	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1425	Unknown	25/11/2020	High	Ground endoscope	No	No	No	Yes	No	No	2
1429	Oak	25/11/2020	High	Ground endoscope	No	No	No	Yes	No	No	2
1413	Field maple	25/11/2020	High	Ground endoscope	No	No	No	Yes	No	No	2
1418	Elm	25/11/2020	High	Ground endoscope	No	No	No	Yes	No	No	2
1668	Oak	18/02/2021	High	Ground endoscope	Yes	No	No	No	No	No	3
Untagged1_17022021_obsp	Willow	17/02/2021	High	Ground endoscope	Yes	No	No	No	No	No	3
UNTAGGED_021219_1	Goat Willow (<i>Salix caprea</i>)	02/12/2019	High	Ground endoscope	Yes	No	No	No	No	No	3

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1185	Ash	24/01/2020	High	Ground endoscope	Yes	No	No	No	No	No	3
1431	Oak	25/11/2020	High	Ground endoscope	No	No	No	Yes	No	No	2
70	White willow	16/01/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
558	Sycamore	04/12/2019	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
752	Willow	05/02/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
922	Oak	19/02/2020	Moderate	Ground endoscope	No	No	No	No	Yes	No	1
1069	Field maple	28/01/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1112	Elder	27/05/2020	Moderate	Ground endoscope	No	No	No	No	No	Yes	1
1154	Willow	18/03/2020	Moderate	Ground endoscope	No	No	No	No	No	Yes	0
9	Sycamore	11/03/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
29	Crack willow	20/02/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
71	White willow	16/01/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
76	Oak	16/01/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
82	<i>Prunus</i> sp.	15/01/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
86	Blackthorn (<i>Prunus spinosa</i>)	15/01/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
635	Weeping willow (<i>Salix babylonica</i>)	03/12/2019	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
738	<i>Prunus</i> sp.	08/01/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
748	Willow	05/02/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
754	Pedunculate oak	06/02/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
758	Unknown	06/02/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
925	Crack willow	20/02/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
929	Crack Willow	20/02/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
930	Beech	20/02/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
935	Beech	20/02/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
959	Willow	05/12/2019	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1046	Unknown	17/03/2020	Moderate	Ground endoscope	No	No	Yes	No	No	No	1
1049	Unknown	17/03/2020	Moderate	Ground endoscope	No	No	Yes	No	No	No	1
1050	Oak	17/03/2020	Moderate	Ground endoscope	No	No	Yes	No	No	No	1

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1052	Sycamore	17/03/2020	Moderate	Ground endoscope	No	No	Yes	No	No	No	1
1057	Hawthorn	17/03/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1063	Elder	17/03/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1103	Ash	27/05/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
1107	Willow	27/05/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
1151	Aspen	19/05/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
1164	Poplar	18/03/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1165	Horse chestnut	18/03/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
1206	Crack willow	11/03/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1208	Oak	27/05/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
1212	Sycamore	02/06/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
1228	Cherry (<i>Prunus</i> sp.)	03/06/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1231	Willow	04/06/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1414	Field maple	25/11/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1421	Ash	25/11/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
1574	Ash	21/02/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1678	Willow	17/02/2021	Moderate	Ground endoscope	No	Yes	No	No	No	No	1
1687	Oak	16/02/2021	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
1708	Unknown	02/02/2021	Moderate	Ground endoscope	No	Yes	No	No	No	No	1
1709	Unknown	02/02/2021	Moderate	Ground endoscope	No	Yes	No	No	No	No	1
1719	Unknown	04/02/2021	Moderate	Ground endoscope	Yes	No	No	No	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
Untagged_130520 DSAL 001	Sycamore	13/05/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
581	Ash	02/12/2019	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1195	Elder	22/01/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1424	Field maple	25/11/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
1428	Unknown	25/11/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
1674	Willow	17/02/2021	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1695	Hawthorn	16/02/2021	Moderate	Ground endoscope	No	No	No	Yes	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
Untagged2_17022021_obsp	Willow	17/02/2021	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1207	Willow	11/03/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
1459	Willow	12/01/2021	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
1691	Unknown	18/02/2021	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1682	Field maple	17/02/2021	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
1720	Unknown	04/02/2021	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
640	Dead	03/12/2019	Moderate	Ground endoscope	No	Yes	No	No	No	No	1

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
585	Ash	03/12/2019	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1058	Unknown	17/03/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1061	Plum tree (<i>Prunus domestica</i>)	17/03/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
74	Elm	16/01/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
untagged_EX830846_1	Crack willow	02/12/2019	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1694	Hawthorn	16/02/2021	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
1205	Willow	16/09/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1175	Elm	17/03/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
1178	Field maple	17/03/2020	Moderate	Ground endoscope	No	No	No	Yes	No	No	2
587	Apple	03/12/2019	Moderate	Ground endoscope	No	Yes	No	No	No	No	1
586	Ash	03/12/2019	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
582	Ash	02/12/2019	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
583	Ash	02/12/2019	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1073	Thorn sp.	24/01/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
72	Ash	16/01/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
83	Blackthorn	15/01/2020	Moderate	Ground endoscope	Yes	No	No	No	No	No	2
1213	Cherry	02/06/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1214	Cherry	02/06/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1209	Cherry	02/06/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1210	Cherry	02/06/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1211	Cherry	02/06/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1092	Beech	21/01/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1093	Sycamore	21/01/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1095	Sycamore	21/01/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
7	Unknown	11/03/2020	Low	Pre-construction checks	No	No	No	No	Yes	No	0
3	Willow	11/03/2020	Low	Pre-construction checks	No	No	No	No	Yes	No	0
1305	Willow	08/12/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
untagged_2 80121_EW TR_006	Poplar	28/01/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
957	Willow	05/12/2019	Low	Pre-construction checks	Yes	No	No	No	No	No	0
Tuntagged_01022021_OBBH	Dead	01/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
753	Field maple	05/02/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1409	Field maple	25/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1410	Field maple	25/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1412	Field maple	25/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1415	Field maple	25/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1416	Elm	25/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1417	Elm	25/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1419	Elm	25/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1420	Elm	25/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1422	Field maple	25/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1426	Unknown	25/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1435	Unknown	26/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1434	Unknown	26/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
untagged_EX382223_3	Unknown	22/07/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1008	Hawthorn	16/09/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
624	Red cedar	02/12/2019	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1053	Oak	17/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1055	Unknown	17/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1194	Oak	22/01/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1066	Ash	17/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
untagged_06022020_OBJN_4	Field Maple	06/02/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
untagged_06022020_OBJN_5	Unknown	06/02/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
739	Field maple	30/01/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
740	Oak	30/01/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
Untagged300120a	Alder	30/01/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1456	Unknown	12/01/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1465	Unknown	12/01/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1466	Unknown	12/01/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1125	Ash	08/12/20	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1287	Ash	08/12/20	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1302	Ash	08/12/20	Low	Pre-construction checks	No	No	No	Yes	No	No	0
982	Elm	18/02/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1713	Unknown	04/02/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1714	Unknown	04/02/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1715	Unknown	04/02/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1716	Unknown	04/02/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1717	Unknown	04/02/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1718	Unknown	04/02/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
584	Ash	02/12/2019	Low	Pre-construction checks	Yes	No	No	No	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
924	Crack willow	20/02/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
927	Crack willow	20/02/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1197	Willow	21/01/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
100	Pedunculate oak	14/01/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1060	Wild cherry (<i>Prunus avium</i>)	17/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1062	Wild cherry	17/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1064	Elder	17/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1065	Elder	17/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1201	Horse chestnut	12/03/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1152	Field maple	18/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1153	Willow	18/03/2020	Low	Pre-construction checks	No	No	No	No	No	Yes	0
1161	Alder	18/03/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1173	Ash	17/03/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1174	Elm	17/03/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1176	Ash	17/03/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1180	Ash	17/03/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1182	Ash	17/03/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1183	Willow	17/03/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1184	Willow	17/03/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
Untagged_1803_568154	Ash	18/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1044	Field maple	17/03/2020	Low	Pre-construction checks	No	No	Yes	No	No	No	0
1045	Field maple	17/03/2020	Low	Pre-construction checks	No	No	Yes	No	No	No	0
1051	Oak	17/03/2020	Low	Pre-construction checks	No	No	Yes	No	No	No	0
1303	Wild cherry	08/12/20	Low	Pre-construction checks	Yes	No	No	No	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1304	Hornbeam (<i>Carpinus betulus</i>)	08/12/20	Low	Pre-construction checks	No	No	Yes	No	No	No	0
28	Sycamore	20/02/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1701	Unknown	02/02/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
984	Field maple	29/01/2020	Low	Pre-construction checks	No	Yes	No	No	No	No	0
1455	Ash	12/01/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1463	Oak	12/01/2021	Low	Pre-construction checks	No	No	Yes	No	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1472	Field maple	12/01/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
27	Crack willow	20/02/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1573	Elm	21/02/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1575	Ash	21/02/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1576	Oak	21/02/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1577	Oak	20/02/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1316	Oak	10/12/20	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1451	Hawthorn	13/01/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
960	Willow	05/12/2019	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1442	Oak	25/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
923	Oak	19/02/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1446	Unknown	26/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1448	Oak	25/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
512	Sycamore	02/12/2019	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1401	Field maple	24/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1402	Grey willow (<i>Salix cinerea</i>)	24/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1403	Hazel (<i>Corylus avellana</i>)	24/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1404	Willow	24/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1457	Willow	12/01/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1467	Ash	12/01/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1468	Willow	12/01/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1473	Chestnut	12/01/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1286	Unknown	25/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1229	Ash	03/06/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1227	Hawthorn	03/06/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1215	Hazel	02/06/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1101	Elder	27/05/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1102	Unknown	27/05/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1106	Field maple	27/05/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1119	Hazel	27/05/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1120	Elder	27/05/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1104	Ash	27/05/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1111	Sycamore	27/05/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1114	Conifer	27/05/2020	Low	Pre-construction checks	No	No	No	No	No	Yes	0
1115	Ash	27/05/2020	Low	Pre-construction checks	No	No	No	No	No	Yes	0
1117	Sycamore	27/05/2020	Low	Pre-construction checks	No	No	No	No	Yes	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1121	Hazel	27/05/2020	Low	Pre-construction checks	No	No	No	No	No	Yes	0
1123	Sycamore	27/05/2020	Low	Pre-construction checks	No	No	No	No	No	Yes	0
1124	Ash	27/05/2020	Low	Pre-construction checks	No	No	No	No	Yes	No	0
1113	Sycamore	27/05/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1289	Beech	25/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1290	Beech	24/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1291	Ash	24/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1292	Oak	24/11/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1293	Ash	24/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1300	Oak	24/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1480	Unknown	13/01/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1494	Unknown	13/01/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
Untagged_EX750778_130121	Unknown	13/01/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1250	Apple tree	17/09/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
15	<i>Prunus</i> sp.	10/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
24	Beech	10/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
25	Beech	10/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
16	Unknown	10/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
18	Oak	10/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
26	Beech	10/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
938	Beech	20/02/2020	Low	Pre-construction checks	No	No	Yes	No	No	No	0
1177	Hawthorn	17/03/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1693	Hawthorn	16/02/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1696	Blackthorn	16/02/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
735	Pedunculate Oak	08/01/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
736	Field maple	08/01/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1681	Willow	17/02/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1683	Dead tree	17/02/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1408	Field maple	25/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1074	Sycamore	22/01/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1187	Oak	22/01/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1191	Willow	22/01/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1192	Willow	22/01/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1314	Willow	09/12/2020	Low	Pre-construction checks	No	No	Yes	No	No	No	0
82a untagged	<i>Prunus</i> sp.	11/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
87	Hazel	15/01/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
88	Elder	15/01/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1703	Unknown	02/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1704	Unknown	02/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1705	Unknown	02/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1706	Unknown	02/02/2021	Low	Pre-construction checks	No	Yes	No	No	No	No	0
1707	Unknown	02/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
Untagged_02022021_OBBH_1	Unknown	02/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
Untagged_03022021_OBBH_1a	Unknown	02/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
Untagged_03022021_OBBH_2	Unknown	02/02/2021	Low	Pre-construction checks	No	Yes	No	No	No	No	0
Untagged_03022021_OBBH_3	Unknown	02/02/2021	Low	Pre-construction checks	No	Yes	No	No	No	No	0
Untagged_03022021_OBBH_4	Unknown	02/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
728	Pedunculate oak	07/01/2019	Low	Pre-construction checks	Yes	No	No	No	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
730	Common lime (<i>Tilia x europaea</i>)	07/01/2019	Low	Pre-construction checks	Yes	No	No	No	No	No	0
732	Sycamore	07/01/2019	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1477	Beech	13/01/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1486	Oak	13/01/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1500	Oak	13/01/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
751	Willow	05/02/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1221	Cherry	03/06/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1219	Hawthorn	03/06/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1220	Cherry	03/06/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1144	Aspen	19/05/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1145	Aspen	19/05/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1148	Aspen	19/05/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
756	Field Maple	06/02/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
757	Willow	06/02/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
untagged_06022020_OBJN_1	Beech	06/02/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
untagged_06022020_OBJN_2	Field Maple	06/02/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
untagged_06022020_OBJN_6	Field Maple	06/02/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1168	Wych Elm (<i>Ulmus glabra</i>)	17/03/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1169	Elm	17/03/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
750	Willow	05/02/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1226	Unknown	03/06/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1225	Cherry	04/06/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1234	Cherry	04/06/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1236	Cherry	04/06/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1237	Cherry	04/06/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
966	Chestnut	12/12/2019	Low	Pre-construction checks	No	No	No	No	Yes	No	0
1488	Unknown	13/01/2021	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1070	English elm	28/01/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1071	English elm	28/01/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1072	English elm	28/01/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1711	Unknown	03/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1712	Unknown	03/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
Tuntagged_03022021_EX849575_OBBH	Unknown	03/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1230	Cherry	04/06/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1232	Cherry	04/06/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1270	Unknown	27/10/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1454	Field maple	12/01/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1470	Sycamore	12/01/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
514	Pedunculate oak	22/01/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
515	Pedunculate oak	03/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0
516	Pedunculate oak	03/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0
517	Pedunculate oak	03/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
518	Pedunculate oak	03/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0
519	Pedunculate oak	03/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0
520	Pedunculate oak	03/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0
542	Pedunculate oak	03/12/2019	Low	Pre-construction checks	No	No	No	No	Yes	No	0
543	Pedunculate oak	03/12/2019	Low	Pre-construction checks	No	No	No	No	Yes	No	0
545	Pedunculate oak	03/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
546	Elm	03/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0
549	Elm	04/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0
550	Pedunculate oak	04/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0
551	Elm	04/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0
552	Elm	04/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0
553	Pedunculate oak	04/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
555	Horse Chestnut	04/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0
615	Pedunculate oak	04/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0
617	Horse Chestnut	04/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0
619	Pedunculate oak	04/12/2019	Low	Pre-construction checks	No	No	No	Yes	No	No	0
620	Horse chestnut	04/12/2019	Low	Pre-construction checks	No	No	No	No	Yes	No	0
1204	Apple	11/03/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1	Willow	11/03/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1202	Willow	11/03/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1216	Cherry	02/06/2020	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1218	Field maple	02/06/2020	Low	Pre-construction checks	No	No	Yes	No	No	No	0
1217	Unknown	02/06/2020	Low	Pre-construction checks	No	Yes	No	No	No	No	0
1109	Oak	27/05/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1661	Oak	18/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1662	Oak	18/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1665	Oak	18/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1670	Unknown	18/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1671	Unknown	18/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1672	Unknown	18/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1684	Oak	18/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1685	Oak	18/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1688	Unknown	18/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1689	Oak	18/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
1690	Oak	18/02/2021	Low	Pre-construction checks	Yes	No	No	No	No	No	0
101C	Oak	25/08/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
1015	Willow	16/09/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1301	Oak	16/09/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1275	Poplar	27/10/2020	Low	Pre-construction checks	No	Yes	No	No	No	No	0
1441	Wild cherry	25/11/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1101	Willow	27/05/2020	Low	Pre-construction checks	No	No	No	Yes	No	No	0
1161a	White willow	18/03/2020	Negligible	None	No	No	No	Yes	No	No	0
Untagged_1703_BSO_H_1	Willow	17/03/2020	Negligible	None	No	No	No	Yes	No	No	0

Tree ID	Species	Ground Based Assessment Date	Ground Based Assessment Grade	Further Survey	DF1 Offline 50m Buffer (Area 1)	DF1 Offline 100m Buffer (Area 3)	DF1 Offline 100m Buffer (Area 4)	DF1 Online 25m Buffer (Area 5)	DF1 Online 50m Buffer (Area 6)	DF1 Online 100m Buffer (Area 7)	Number of surveys required
untagged_EX781673_1	Willow	26/08/2020	Negligible	None	No	No	No	No	Yes	No	0
Untagged_170320_BS OH_2	Sycamore	17/03/2020	Negligible	None	No	No	No	Yes	No	No	0
Untagged_170320_BS OH_3	Unknown	17/03/2020	Negligible	None	No	No	No	Yes	No	No	0
1233	Field maple	04/06/2020	Negligible	None	No	No	No	Yes	No	No	0
Untagged_260820_O HRM_2	Poplar	26/08/2020	Negligible	None	No	No	No	Yes	No	No	0

Annex C Tree climbing and endoscope surveys

Table C.1 Summary of climbing and endoscope surveys 2019-2021

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
623	Climb	Roost	No change	Roost	Climb	17/06/2020	19/08/2020	-	N/A
634	Climb	Roost	No change	Roost	Climb	17/06/2020	19/08/2020	02/06/2021	N/A
1692	Climb	Roost	No change	Roost	Climb	16/03/2021	21/05/2021	02/06/2021	N/A
79	Climb	Moderate	Upgraded	Roost	Climb	27/07/2020	02/06/2021	29/06/2021	N/A
Untagged-ex566880-120121-1	Climb	Moderate	Upgraded	Roost	Climb	08/06/2021	25/06/2021	29/06/2021	N/A
1321	Climb	High	No change	High	Climb	11/05/2021	26/05/2021	-	N/A
1326	Climb	High	No change	High	Climb	11/05/2021	26/05/2021	-	N/A
1430	Climb	High	No change	High	Climb	10/05/2021	27/05/2021	09/06/2021	N/A
40	Climb	High	No change	High	Climb	N/A	N/A	-	ACCESS ISSUES
66	Climb	High	No change	High	Climb	29/07/2020	19/08/2020	-	N/A
101	Climb	High	No change	High	Climb	04/06/20	29/07/20	-	N/A
727	Climb	High	No change	High	Climb	29/07/2020	12/05/2021	14/06/2021	N/A
731	Climb	High	No change	High	Climb	12/05/2021	24/05/2021	09/06/2021	N/A
1155	Climb	High	No change	High	Climb	27/05/2020	-	-	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
1310	Climb	High	No change	High	Climb	10/05/2021	25/05/2021	-	N/A
1423	Climb	High	No change	High	Climb	10/05/2021	27/05/2021	-	N/A
1437	Climb	High	No change	High	Climb	10/05/2021	27/05/2021	-	N/A
1492	Climb	High	No change	High	Climb	12/05/2021	25/05/2021	09/06/2021	N/A
1663	Climb	High	No change	High	Climb	16/03/2021	21/05/2021	N/A	ACCESS ISSUES
1664	Climb	High	No change	High	Climb	16/03/2021	21/05/2021	N/A	ACCESS ISSUES
1666	Climb	High	No change	High	Climb	16/03/2021	21/05/2021	N/A	ACCESS ISSUES
1667	Climb	High	No change	High	Climb	16/03/2021	21/05/2021	23/06/2021	UNSAFE TO SURVEY
1673	Climb	High	No change	High	Climb	10/03/2021	20/05/2021	N/A	ACCESS ISSUES
1680	Climb	High	No change	High	Climb	N/A	N/A	-	ACCESS ISSUES
Untagged_120520 DS AL 001	Climb	High	No change	High	Climb	12/05/2020	16/06/2020	01/09/2020	ACCESS ISSUES
Untagged_ex722587_2	Climb	High	No change	High	Climb	29/09/2020	17/03/2021	-	N/A
1186	Climb	High	No change	High	Climb	26/05/2021	21/06/2021	N/A	ACCESS ISSUES

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
1317	Climb	High	No change	High	Climb	26/05/2021	24/06/2021	08/07/2021	N/A
1449	Climb	High	No change	High	Climb	N/A	N/A	-	ACCESS ISSUES
1686	Climb	Moderate	Upgraded	High	Climb	01/06/2021	25/06/2021	-	N/A
1002	Climb	Moderate	Upgraded	High	Climb	29/09/2020	17/03/2021	-	N/A
1294	Climb	Moderate	Upgraded	High	Climb	17/03/2021	02/06/2021	-	N/A
1443	Climb	Moderate	Upgraded	High	Climb	11/05/2021	25/05/2021	-	N/A
1478	Climb	Moderate	Upgraded	High	Climb	12/05/2021	25/05/2021	14/06/2021	ACCESS ISSUES
755	Climb	Moderate	Upgraded	High	Climb	04/06/2020	24/06/2021	N/A	ACCESS ISSUES
1205	Climb	Moderate	Upgraded	High	Climb	23/06/2021	N/A	N/A	ACCESS ISSUES
102	Climb	High	Downgraded	Moderate	Climb	04/06/20	-	-	N/A
21	Climb	High	Downgraded	Moderate	Climb	13/05/2020	01/06/2021	N/A	UNSAFE TO SURVEY
Untagged_ex722587_3	Climb	High	Downgraded	Moderate	Climb	11/05/2021	26/05/2021	-	N/A
968	Climb	Moderate	No change	Moderate	Climb	04/06/2020	17/09/2020	-	N/A
2	Climb	Moderate	No change	Moderate	Climb	18/08/2020	15/09/2020	02/06/2020	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
4	Climb	Moderate	No change	Moderate	Climb	22/05/2020	01/07/2020	19/03/2021	N/A
5	Climb	Moderate	No change	Moderate	Climb	21/05/2020	01/07/2020	19/03/2021	N/A
73	Climb	Moderate	No change	Moderate	Climb	18/06/2020	19/08/2020	11/03/2020	N/A
544	Climb	Moderate	No change	Moderate	Climb	04/06/2020	-	-	N/A
548	Climb	Moderate	No change	Moderate	Climb	04/06/20	19/05/2021	07/06/2021	N/A
842	Climb	Moderate	No change	Moderate	Climb	04/06/2020	-	-	N/A
928	Climb	Moderate	No change	Moderate	Climb	02/07/2020	18/08/2020	12/03/2020	N/A
1059	Climb	Moderate	No change	Moderate	Climb	28/05/2020	19/08/2020	02/09/2020	N/A
2630	Climb	Moderate	No change	Moderate	Climb	28/07/2020	15/09/2020	11/03/2020	N/A
14	Climb	Moderate	No change	Moderate	Climb	20/05/2020	02/09/2020	-	N/A
19	Climb	Moderate	No change	Moderate	Climb	13/05/2020	01/06/2021	-	N/A
20	Climb	Moderate	No change	Moderate	Climb	13/05/2020	01/06/2021	-	N/A
22	Climb	Moderate	No change	Moderate	Climb	13/05/2020	01/06/2021	-	N/A
75	Climb	Moderate	No change	Moderate	Climb	11/03/2020	08/06/2021	-	N/A
77	Climb	Moderate	No change	Moderate	Climb	11/03/2020	-	-	N/A
513	Climb	Moderate	No change	Moderate	Climb	19/05/2021	30/06/2021	-	N/A
626	Climb	Moderate	No change	Moderate	Climb	17/06/2020	19/08/2020	-	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
726	Climb	Moderate	No change	Moderate	Climb	29/07/2020	12/05/2021	24/05/2021	N/A
931	Climb	Moderate	No change	Moderate	Climb	14/05/2020	10/03/2020	-	N/A
936	Climb	Moderate	No change	Moderate	Climb	14/05/2020	10/03/2020	-	N/A
962	Climb	Moderate	No change	Moderate	Climb	12/05/2020	16/06/2020	-	N/A
963	Climb	Moderate	No change	Moderate	Climb	12/05/2020	16/06/2020	-	N/A
965	Climb	Moderate	No change	Moderate	Climb	N/A	N/A	-	ACCESS ISSUES
985	Climb	Moderate	No change	Moderate	Climb	18/06/2020	02/09/2020	-	N/A
1013	Climb	Moderate	No change	Moderate	Climb	29/09/2020	17/03/2021	-	N/A
1048	Climb	Moderate	No change	Moderate	Climb	18/03/2021	-	-	UNSAFE TO SURVEY
1118	Climb	Moderate	No change	Moderate	Climb	30/06/2020	09/06/2021	-	N/A
1288	Climb	Moderate	No change	Moderate	Climb	17/03/2021	02/06/2021	-	N/A
1295	Climb	Moderate	No change	Moderate	Climb	19/05/2021	02/06/2021	-	N/A
1299	Climb	Moderate	No change	Moderate	Climb	19/05/2021	02/06/2021	-	N/A
1405	Climb	Moderate	No change	Moderate	Climb	19/05/2021	02/06/2021	-	N/A
1411	Climb	Moderate	No change	Moderate	Climb	27/05/2021	09/06/2021	-	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
1438	Climb	Moderate	No change	Moderate	Climb	27/05/2021	09/06/2021	-	TREE FELLED/ COLLAPSED
1445	Climb	Moderate	No change	Moderate	Climb	15/06/2021	30/06/2021	-	N/A
1453	Climb	Moderate	No change	Moderate	Climb	N/A	N/A	-	ACCESS ISSUES
1461	Climb	Moderate	No change	Moderate	Climb	-	-	-	N/A
1484	Climb	Moderate	No change	Moderate	Climb	N/A	N/A	-	ACCESS ISSUES
1497	Climb	Moderate	No change	Moderate	Climb	12/05/2021	24/05/2021	14/06/2021	N/A
1656	Climb	Moderate	No change	Moderate	Climb	10/03/2021	20/05/2021	-	N/A
1657	Climb	Moderate	No change	Moderate	Climb	10/03/2021	20/05/2021	-	N/A
1658	Climb	Moderate	No change	Moderate	Climb	16/03/2021	20/05/2021	-	N/A
1660	Climb	Moderate	No change	Moderate	Climb	16/03/2021	20/05/2021	-	N/A
1669	Climb	Moderate	No change	Moderate	Climb	16/03/2021	20/05/2021	-	N/A
1675	Climb	Moderate	No change	Moderate	Climb	10/03/2021	20/05/2021	07/06/2021	N/A
1676	Climb	Moderate	No change	Moderate	Climb	N/A	N/A	-	ACCESS ISSUES
1677	Climb	Moderate	No change	Moderate	Climb	N/A	-	-	ACCESS ISSUES

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
1679	Climb	Moderate	No change	Moderate	Climb	N/A	-	-	ACCESS ISSUES
Untagged 290720 EW AL	Climb	Moderate	No change	Moderate	Climb	-	-	-	N/A
untagged_06022020_OBJN_3	Climb	Moderate	No change	Moderate	Climb	04/06/2020	N/A	-	ACCESS ISSUES
Untagged_120520 DSAL 002	Climb	Moderate	No change	Moderate	Climb	12/05/2020	16/06/2020	-	N/A
Untagged_120520 DSAL 004	Climb	Moderate	No change	Moderate	Climb	12/05/2020	16/06/2020	-	N/A
Untagged_120520_DSAL 005	Climb	Moderate	No change	Moderate	Climb	12/05/2020	01/09/2020	-	N/A
Untagged_120520_DSAL_003	Climb	Moderate	No change	Moderate	Climb	12/05/2020	16/06/2020	-	N/A
1006	Climb	Low	Upgraded	Moderate	Climb	29/09/2020	17/03/2021	-	N/A
1054	Climb	High	Downgraded	Low	Pre-construction checks	01/06/2020	N/A	N/A	N/A
631	Climb	High	Downgraded	Low	Pre-construction checks	15/01/2020	17/06/2020	19/08/2020	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
511	Climb	High	Downgraded	Low	Pre-construction checks	16/01/2020	N/A	N/A	N/A
23	Climb	High	Downgraded	Low	Pre-construction checks	13/05/2020	N/A	N/A	N/A
934	Climb	High	Downgraded	Low	Pre-construction checks	10/03/2020	N/A	N/A	N/A
557	Climb	High	Downgraded	Low	Pre-construction checks	12/02/2020	N/A	-	N/A
1091	Climb	Moderate	Downgraded	Low	Pre-construction checks	03/02/2020	N/A	-	N/A
1096	Climb	Moderate	Downgraded	Low	Pre-construction checks	03/02/2020	N/A	-	N/A
1097	Climb	Moderate	Downgraded	Low	Pre-construction checks	03/02/2020	N/A	-	N/A
1659	Climb	Moderate	Downgraded	Low	Pre-construction checks	10/03/2021	20/05/2021	-	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
1238	Climb	Moderate	Downgraded	Low	Pre-construction checks	01/10/2020	N/A	-	N/A
1246	Climb	Moderate	Downgraded	Low	Pre-construction checks	01/10/2020	N/A	-	N/A
621	Climb	Moderate	Downgraded	Low	Pre-construction checks	14/01/2020	N/A	-	N/A
627	Climb	Moderate	Downgraded	Low	Pre-construction checks	15/01/2020	N/A	-	N/A
629	Climb	Moderate	Downgraded	Low	Pre-construction checks	14/01/2020	N/A	-	N/A
510	Climb	Moderate	Downgraded	Low	Pre-construction checks	16/01/2020	N/A	-	N/A
12	Climb	Moderate	Downgraded	Low	Pre-construction checks	20/05/2020	N/A	-	N/A
13	Climb	Moderate	Downgraded	Low	Pre-construction checks	20/05/2020	02/09/2020	-	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
932	Climb	Moderate	Downgraded	Low	Pre-construction checks	10/03/2020	N/A	-	N/A
937	Climb	Moderate	Downgraded	Low	Pre-construction checks	10/03/2020	14/05/2020	-	N/A
1179	Climb	Moderate	Downgraded	Low	Pre-construction checks	27/01/2021	N/A	-	N/A
1190	Climb	Moderate	Downgraded	Low	Pre-construction checks	25/02/2020	N/A	-	N/A
81	Climb	Moderate	Downgraded	Low	Pre-construction checks	11/03/2020	N/A	-	N/A
722	Climb	Moderate	Downgraded	Low	Pre-construction checks	22/01/2020	N/A	-	N/A
724	Climb	Moderate	Downgraded	Low	Pre-construction checks	04/02/2020	N/A	-	N/A
725	Climb	Moderate	Downgraded	Low	Pre-construction checks	22/01/2020	N/A	-	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
729	Climb	Moderate	Downgraded	Low	Pre-construction checks	04/02/2020	N/A	-	N/A
6	Climb	Moderate	Downgraded	Low	Pre-construction checks	21/05/2020	N/A	-	N/A
1170	Climb	Moderate	Downgraded	Low	Pre-construction checks	21/05/2020	N/A	-	N/A
1171	Climb	Moderate	Downgraded	Low	Pre-construction checks	21/05/2020	N/A	-	N/A
547	Climb	Moderate	Downgraded	Low	Pre-construction checks	12/02/2020	N/A	-	N/A
559	Climb	Moderate	Downgraded	Low	Pre-construction checks	12/02/2020	N/A	-	N/A
616	Climb	Moderate	Downgraded	Low	Pre-construction checks	12/02/2020	N/A	-	N/A
554	Climb	Moderate	Downgraded	Low	Pre-construction checks	12/02/2020	N/A	-	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
933	Climb	High	Downgraded	Negligible	None	10/03/2020	N/A	N/A	N/A
560	Climb	High	Downgraded	Negligible	None	12/02/2020	-	-	N/A
65	Climb	Moderate	Downgraded	Negligible	None	19/03/2020	29/07/2020	-	N/A
958	Climb	Moderate	Downgraded	Negligible	None	13/05/2020	N/A	-	N/A
961	Climb	Moderate	Downgraded	Negligible	None	12/05/2020	N/A	-	N/A
untagged_EX382223_2	Climb	Moderate	Downgraded	Negligible	None	22/07/2020	10/06/2021	-	UNSAFE TO SURVEY
632	Climb	Moderate	Downgraded	Negligible	None	15/01/2020	N/A	-	N/A
633	Climb	Moderate	Downgraded	Negligible	None	15/01/2020	-	-	N/A
1056	Climb	Moderate	Downgraded	Negligible	None	01/06/2020	-	-	N/A
1100	Climb	Moderate	Downgraded	Negligible	None	25/02/2020	-	-	N/A
1011	Climb	Moderate	Downgraded	Negligible	None	25/02/2021	N/A	-	N/A
1710	Climb	Moderate	Downgraded	Negligible	None	24/02/2021	N/A	-	N/A
625	Ground endoscope	High	No change	High	Ground endoscope	17/06/2020	19/08/2020	16/09/2020	N/A
1047	Ground endoscope	High	No change	High	Ground endoscope	18/03/2021	08/06/2021	-	N/A
1146	Ground endoscope	High	No change	High	Ground endoscope	01/07/2020	19/08/2020	-	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
1425	Ground endoscope	High	No change	High	Ground endoscope	15/06/2021	28/06/2021	-	N/A
1429	Ground endoscope	High	No change	High	Ground endoscope	15/06/2021	28/06/2021	-	N/A
70	Ground endoscope	Moderate	Upgraded	High	Ground endoscope	18/06/2020	08/06/2021	N/A	ACCESS ISSUES
558	Ground endoscope	Moderate	Upgraded	High	Ground endoscope	04/06/20	07/06/2021	-	N/A
752	Ground endoscope	Moderate	Upgraded	High	Ground endoscope	21/06/2021	07/07/2021	-	N/A
1413	Ground endoscope	High	Downgraded	Moderate	Ground endoscope	02/06/2021	08/06/2021	-	N/A
1418	Ground endoscope	High	Downgraded	Moderate	Ground endoscope	02/06/2021	22/06/2021	-	N/A
922	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	12/05/2020	-	-	N/A
1069	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	23/06/2021	N/A	-	ACCESS ISSUES
1112	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	30/06/2020	-	-	N/A
1154	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	27/05/2020	-	-	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
9	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	19/08/2020	29/06/2021	-	N/A
29	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	02/07/2020	01/09/2020	-	N/A
71	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	18/06/2020	29/06/2021	-	N/A
76	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	11/03/2020	08/06/2021	-	N/A
82	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	28/07/2020	15/09/2020	-	N/A
86	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	28/07/2020	15/09/2020	-	N/A
635	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	17/06/2020	02/06/2021	-	N/A
738	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	16/06/2020	02/09/2020	-	N/A
748	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	20/07/2020	19/08/2020	-	N/A
754	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	29/05/2020	02/09/2020	-	N/A
758	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	19/05/2020	24/06/2021	-	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
925	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	02/07/2020	21/06/2021	-	N/A
929	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	02/07/2020	18/08/2020	-	N/A
930	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	14/05/2020	02/09/2020	-	N/A
935	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	14/05/2020	15/06/2021	-	N/A
959	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	12/05/2020	16/06/2020	-	N/A
1046	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	18/03/2021	-	-	N/A
1049	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	18/03/2021	-	-	N/A
1050	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	18/03/2021	-	-	N/A
1052	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	01/06/2020	-	-	N/A
1057	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	28/05/2020	19/08/2020	-	N/A
1063	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	28/05/2020	19/08/2020	-	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
1103	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	30/06/2020	18/08/2020	-	N/A
1107	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	30/06/2020	28/06/2021	-	N/A
1151	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	01/07/2020	19/08/2020	-	N/A
1164	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	27/05/2020	09/06/2021	-	N/A
1165	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	27/05/2020	09/06/2021	-	N/A
1206	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	18/08/2020	15/09/2020	-	N/A
1208	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	20/07/2020	15/09/2020	-	N/A
1212	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	18/08/2020	15/09/2020	-	N/A
1228	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	15/09/2020	22/06/2021	-	N/A
1231	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	04/06/2020	19/08/2020	-	N/A
1414	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	15/06/2021	28/06/2021	-	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
1421	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	02/06/2021	22/06/2021	-	N/A
1574	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	20/07/2020	20/08/2020	-	N/A
1678	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	N/A	-	-	ACCESS ISSUES
1687	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	01/06/2021	25/06/2021	-	N/A
1708	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	30/06/2021	-	-	N/A
1709	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	30/06/2021	-	-	N/A
1719	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	24/06/2021	N/A	-	TREE FELLED/ COLLAPSED
Untagged_130520 DSAL 001	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	13/05/2020	N/A	-	TREE FELLED/ COLLAPSED
581	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	16/06/2021	N/A	-	ACCESS ISSUES
1195	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	21/06/2021	N/A	-	ACCESS ISSUES

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
1424	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	28/06/2021	N/A	-	ACCESS ISSUES
1428	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	28/06/2021	N/A	-	ACCESS ISSUES
1674	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	22/06/2021	08/07/2021	-	N/A
1695	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	25/06/2021	07/07/2021	-	N/A
Untagged2_17022021_obsp	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	22/06/2021	08/07/2021	-	N/A
1207	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	N/A	N/A	-	ACCESS ISSUES
1459	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	N/A	N/A	-	ACCESS ISSUES
1691	Ground endoscope	Moderate	No change	Moderate	Ground endoscope	18/03/2021	21/05/2021	07/06/2021	N/A
1668	Ground endoscope	High	Downgraded	Low	Pre-construction checks	16/03/2021	21/05/2021	23/06/2021	N/A
Untagged1_17022021_obsp	Ground endoscope	High	Downgraded	Low	Pre-construction checks	22/06/2021	N/A	N/A	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
UNTAGGED_021219_1	Ground endoscope	High	Downgraded	Low	Pre-construction checks	11/03/2020	N/A	N/A	N/A
1682	Ground endoscope	Moderate	Downgraded	Low	Pre-construction checks	01/06/2021	24/06/2021	-	N/A
1720	Ground endoscope	Moderate	Downgraded	Low	Pre-construction checks	24/06/2021	N/A	-	N/A
640	Ground endoscope	Moderate	Downgraded	Low	Pre-construction checks	16/01/2020	-	-	N/A
585	Ground endoscope	Moderate	Downgraded	Low	Pre-construction checks	27/02/2020	N/A	-	N/A
1058	Ground endoscope	Moderate	Downgraded	Low	Pre-construction checks	28/05/2020	N/A	-	N/A
1061	Ground endoscope	Moderate	Downgraded	Low	Pre-construction checks	28/05/2020	N/A	-	N/A
74	Ground endoscope	Moderate	Downgraded	Low	Pre-construction checks	11/03/2020	N/A	-	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
untagged_EX830846_1	Ground endoscope	Moderate	Downgraded	Low	Pre-construction checks	03/03/2020	N/A	-	N/A
1694	Ground endoscope	Moderate	Downgraded	Low	Pre-construction checks	25/06/2021	N/A	-	N/A
1205	Ground endoscope	Moderate	Downgraded	Low	Pre-construction checks	30/09/2020	N/A	-	N/A
1185	Ground endoscope	High	Downgraded	Negligible	None	27/02/2020	N/A	N/A	N/A
1431	Ground endoscope	High	Downgraded	Negligible	None	28/06/2021	N/A	-	TREE FELLED/ COLLAPSED
1175	Ground endoscope	Moderate	Downgraded	Negligible	None	10/06/2021	N/A	-	TREE FELLED/ COLLAPSED
1178	Ground endoscope	Moderate	Downgraded	Negligible	None	10/06/2021	N/A	-	TREE FELLED/ COLLAPSED
587	Ground endoscope	Moderate	Downgraded	Negligible	None	16/06/2021	-	-	TREE FELLED/ COLLAPSED

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade After Further Survey	Further Survey Update	Survey 1	Survey 2	Survey 3	Survey Limitations
586	Ground endoscope	Moderate	Downgraded	Negligible	None	27/02/2020	N/A	-	N/A
582	Ground endoscope	Moderate	Downgraded	Negligible	None	27/02/2020	N/A	-	TREE FELLED/ COLLAPSED
583	Ground endoscope	Moderate	Downgraded	Negligible	None	27/02/2020	N/A	-	TREE FELLED/ COLLAPSED
1073	Ground endoscope	Moderate	Downgraded	Negligible	None	03/02/2020	N/A	-	N/A
72	Ground endoscope	Moderate	Downgraded	Negligible	None	11/03/2020	N/A	-	N/A
83	Ground endoscope	Moderate	Downgraded	Negligible	None	11/03/2020	28/07/2020	-	N/A

Annex D Tree emergence / re-entry surveys

Table D.1 Summary of tree emergence / re-entry surveys 2021

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade Following Further Survey	Further Survey Amendments	Survey 1	Survey 2	Survey 3	Survey Limitations
733	Dusk/dawn	Roost	No change	Roost	Dusk/dawn	05/05/2021	25/05/2021	15/06/2021	N/A
69	Dusk/dawn	High	Upgraded	Roost	Dusk/dawn	05/05/2021	08/07/2021	28/07/2021	N/A
17	Dusk/dawn	Moderate	Upgraded	Roost	Dusk/dawn	12/05/2021	03/06/2021	22/06/2021	N/A
1149	Dusk/dawn	Moderate	Upgraded	Roost	Dusk/dawn	26/05/2021	15/06/2021	07/07/2021	N/A
1432	Dusk/dawn	High	No change	High	Dusk/dawn	04/05/2021	23/06/2021	-	N/A
1433	Dusk/dawn	High	No change	High	Dusk/dawn	04/05/2021	23/06/2021	-	N/A
99	Dusk/dawn	High	No change	High	Dusk/dawn	05/05/2021	14/06/2021	06/07/2021	N/A
973	Dusk/dawn	High	No change	High	Dusk/dawn	N/A	N/A	-	ACCESS ISSUES
untagged_24022021_ OBKT	Dusk/dawn	High	No change	High	Dusk/dawn	08/06/2021	06/07/2021	-	N/A
1444	Dusk/dawn	High	No change	High	Dusk/dawn	27/05/2021	29/06/2021	-	N/A
1447	Dusk/dawn	High	No change	High	Dusk/dawn	06/07/2021	26/07/2021	-	N/A
1105	Dusk/dawn	High	No change	High	Dusk/dawn	12/05/2021	08/07/2021	-	N/A
1098	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	06/05/2021	15/06/2021	-	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade Following Further Survey	Further Survey Amendments	Survey 1	Survey 2	Survey 3	Survey Limitations
1094	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	06/05/2021	15/06/2021	-	N/A
1406	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	08/06/2021	28/06/2021	-	N/A
1427	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	18/05/2021	09/06/2021	-	N/A
1436	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	14/06/2021	08/07/2021	-	N/A
1439	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	08/06/2021	29/06/2021	-	N/A
1440	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	08/06/2021	29/06/2021	-	N/A
628	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	N/A	N/A	-	TREE FELLED/ COLLAPSED
630	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	10/05/2021	04/08/2021	-	N/A
1196	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	11/05/2021	21/07/2021	-	N/A
975	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	N/A	N/A	-	ACCESS ISSUES
926	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	11/05/2021	06/07/2021	-	N/A
926a	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	11/05/2021	06/07/2021	-	N/A
1162	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	N/A	N/A	-	TREE FELLED/ COLLAPSED
1163	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	10/05/2021	02/06/2021	-	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade Following Further Survey	Further Survey Amendments	Survey 1	Survey 2	Survey 3	Survey Limitations
1462	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	11/05/2021	09/06/2021	-	N/A
1318	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	10/06/2021	07/07/2021	-	N/A
622	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	10/05/2021	24/06/2021	-	N/A
1452	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	N/A	N/A	-	ACCESS ISSUES
1099	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	N/A	-	-	UNSAFE TO SURVEY
1479	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	12/05/2021	22/06/2021	-	N/A
1249	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	08/06/2021	N/A	-	UNSAFE TO SURVEY
737	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	12/05/2021	23/06/2021	-	N/A
80	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	17/05/2021	08/06/2021	-	N/A
84	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	18/05/2021	09/06/2021	-	N/A
85	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	18/05/2021	09/06/2021	-	N/A
89	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	N/A	N/A	-	UNSAFE TO SURVEY
2626	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	19/05/2021	10/06/2021	-	N/A
2627	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	19/05/2021	10/06/2021	-	N/A

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade Following Further Survey	Further Survey Amendments	Survey 1	Survey 2	Survey 3	Survey Limitations
2628	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	20/05/2021	07/06/2021	-	N/A
2629	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	20/05/2021	07/06/2021	-	N/A
2630	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	20/05/2021	09/06/2021	-	N/A
78	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	10/06/2021	30/06/2021	-	N/A
723	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	11/05/2021	23/06/2021	-	N/A
734	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	05/05/2021	25/05/2021	-	N/A
1474	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	12/05/2021	10/06/2021	-	N/A
1476	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	13/05/2021	08/06/2021	-	N/A
1147	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	25/05/2021	15/06/2021	-	N/A
1166	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	16/06/2021	07/07/2021	-	N/A
1167	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	N/A	N/A	-	TREE FELLED/ COLLAPSED
1172	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	17/06/2021	08/07/2021	-	N/A
747	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	N/A	N/A	-	UNSAFE TO SURVEY
749	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	N/A	N/A	-	UNSAFE TO SURVEY

Tree ID	Further Survey	Ground Based Assessment Grade	Change	Tree Grade Following Further Survey	Further Survey Amendments	Survey 1	Survey 2	Survey 3	Survey Limitations
1223	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	09/06/2021	06/07/2021	-	N/A
541	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	01/06/2021	22/07/2021	-	N/A
556	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	03/06/2021	07/07/2021	-	N/A
618	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	02/06/2021	08/07/2021	-	N/A
1203 & 1116	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	01/07/2021	27/07/2021	-	N/A
0002b	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	05/05/2021	16/06/2021	-	N/A
1108	Dusk/dawn	Moderate	No change	Moderate	Dusk/dawn	13/05/2021	10/06/2021	-	N/A
1224	Dusk/dawn	Moderate	Downgraded	Low	Pre-construction checks	08/06/2021	N/A	-	N/A

Annex E Ground-based bat roost assessments of buildings

Table E.1 Summary of ground-based bat roost assessments of buildings 2020-2021

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B107	14/01/2020	Roost	Emergence/Re-Entry Surveys	Y	2	N	N/A
B113	12/02/2020	Roost	Emergence/Re-Entry Surveys	Y	2	N	N/A
B118	11/08/2020	Roost	Emergence/Re-Entry Surveys	Y	3	N	N/A
B1291	29/01/2020	Roost	Emergence/Re-Entry Surveys	Y	3	Y	2
B1371	15/01/2020	Roost	Emergence/Re-Entry Surveys	Y	3	Y	3
B1385	12/02/2020	Roost	Emergence/Re-Entry Surveys	Y	2	N	N/A
B1392	11/02/2020	Roost	Emergence/Re-Entry Surveys	Y	3	N	N/A
B1393	11/02/2020	Roost	Emergence/Re-Entry Surveys	Y	3	N	N/A
B1395	11/02/2020	Roost	Emergence/Re-Entry Surveys	Y	3	Y	3

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1397	11/02/2020	Roost	Emergence/Re-Entry Surveys	Y	2	N	N/A
B1447	12/08/2020	Roost	Emergence/Re-Entry Surveys	Y	3	Y	3
B1455	12/08/2020	Roost	Emergence/Re-Entry Surveys	Y	3	N	N/A
B1463	12/08/2020	Roost	Emergence/Re-Entry Surveys	Y	3	Y	3
B1522	18/02/2020	Roost	Emergence/Re-Entry Surveys	Y	3	Y	3
B1543	12/08/2020	Roost	Emergence/Re-Entry Surveys	Y	3	Y	3
B1549	13/08/2020	Roost	Emergence/Re-Entry Surveys	Y	3	Y	3
B1585	11/02/2020	Roost	Emergence/Re-Entry Surveys	Y	3	N	N/A
B1679	12/02/2020	Roost	Emergence/Re-Entry Surveys	Y	3	Y	3
B1738a	14/05/2020	Roost	Emergence/Re-Entry Surveys	Y	2	Y	3

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1928	11/08/2020	Roost	Emergence/Re-Entry Surveys	Y	3	N	N/A
B1928c	11/08/2020	Roost	Emergence/Re-Entry Surveys	Y	3	N	N/A
B1992d	05/02/2020	Roost	Emergence/Re-Entry Surveys	Y	3	Y	3
B1997	05/02/2020	Roost	Emergence/Re-Entry Surveys	Y	3	Y	0
B2042	22/01/2021	Roost	Emergence/Re-Entry Surveys	Y	3	Y	2
B2046	28/04/2021	Roost	Emergence/Re-Entry Surveys	Y	3	N	N/A
B2937	24/02/2021	Roost	Emergence/Re-Entry Surveys	Y	2	N	N/A
B339	21/01/2021	Roost	Emergence/Re-Entry Surveys	Y	3	N	N/A
B3621	19/01/2021	Roost	Emergence/Re-Entry Surveys	Y	3	N	N/A
B3631	24/02/2021	Roost	Emergence/Re-Entry Surveys	Y	1	N	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3638	24/02/2021	Roost	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3643	24/02/2021	Roost	Emergence/Re-Entry Surveys	Y	3	N	N/A
B3648	27/01/2021	Roost	Emergence/Re-Entry Surveys	Y	2	Y	2
B3679	28/01/2021	Roost	Emergence/Re-Entry Surveys	Y	3	N	N/A
B3709	01/06/2021	Roost	Emergence/Re-Entry Surveys	Y	2	N	N/A
B3739	27/01/2021	Roost	Emergence/Re-Entry Surveys	Y	3	N	N/A
B599b	28/01/2020	Roost	Emergence/Re-Entry Surveys	Y	3	Y	2
B631	28/01/2020	Roost	Emergence/Re-Entry Surveys	Y	3	N	N/A
B634	28/01/2020	Roost	Emergence/Re-Entry Surveys	Y	3	Y	3
B637	28/01/2020	Roost	Emergence/Re-Entry Surveys	Y	3	Y	3

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B73	10/03/2020	Roost	Emergence/Re-Entry Surveys	Y	1	Y	2
B923	13/01/2021	Roost	Emergence/Re-Entry Surveys	Y	3	N	N/A
B3646	19/01/2021	Roost	Hibernation Only	N/A	N/A	Y	2
B3657	27/01/2021	Roost	Hibernation Only	N/A	N/A	Y	3
B1249	11/03/2020	Roost	Scoped Out	N/A	N/A	N/A	N/A
B1250	11/03/2020	Roost	Scoped Out	N/A	N/A	N/A	N/A
B1252	11/03/2020	Roost	Scoped Out	N/A	N/A	N/A	N/A
B1341	12/02/2020	Roost	Scoped Out	N/A	N/A	N/A	N/A
B1345	12/02/2020	Roost	Scoped Out	N/A	N/A	N/A	N/A
B1531	04/02/2020	Roost	Scoped Out	N/A	N/A	N/A	N/A
B2944	15/12/2020	Roost	Scoped Out	N/A	N/A	N/A	N/A
B1247	29/04/2021	High	Emergence/Re-Entry Surveys	Y	3	N	N/A
B1272	11/02/2020	High	Emergence/Re-Entry Surveys	Y	3	Y	3
B1470	04/02/2020	High	Emergence/Re-Entry Surveys	Y	2	Y	0

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1994	05/02/2020	High	Emergence/Re-Entry Surveys	Y	2	Y	3
B1996	05/02/2020	High	Emergence/Re-Entry Surveys	Y	2	N	N/A
B2033b	16/12/2020	High	Emergence/Re-Entry Surveys	Y	3	Y	3
B3532	28/04/2021	High	Emergence/Re-Entry Surveys	Y	3	N	N/A
B3534	28/04/2021	High	Emergence/Re-Entry Surveys	Y	3	N	N/A
B3538	28/04/2021	High	Emergence/Re-Entry Surveys	Y	3	N	N/A
B599c	16/12/2020	High	Emergence/Re-Entry Surveys	Y	3	Y	2
B599d	16/12/2020	High	Emergence/Re-Entry Surveys	Y	3	Y	2
B3634	19/01/2021	High	Hibernation Only	N/A	N/A	Y	3
B110	14/01/2020	High	Scoped Out	N/A	N/A	N/A	N/A
B1245	11/03/2020	High	Scoped Out	N/A	N/A	N/A	N/A
B2048	28/01/2021	High	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3117	11/01/2021	High	Scoped Out	N/A	N/A	N/A	N/A
B3644	19/01/2021	High	Scoped Out	N/A	N/A	N/A	N/A
B3738	27/01/2021	High	Scoped Out	N/A	N/A	N/A	N/A
B3759b	02/02/2021	High	Scoped Out	N/A	N/A	N/A	N/A
B3761	02/02/2021	High	Scoped Out	N/A	N/A	N/A	N/A
B3764	02/02/2021	High	Scoped Out	N/A	N/A	N/A	N/A
B3767	02/02/2021	High	Scoped Out	N/A	N/A	N/A	N/A
B516	11/02/2020	High	Scoped Out	N/A	N/A	N/A	N/A
B609	28/01/2020	High	Scoped Out	N/A	N/A	N/A	N/A
B1246	18/02/2020	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B1255	18/02/2020	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B126	11/08/2020	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B1375	12/02/2020	Moderate	Emergence/Re-Entry Surveys	Y	2	Y	0
B1379	12/02/2020	Moderate	Emergence/Re-Entry Surveys	Y	1	N	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1463a	12/08/2020	Moderate	Emergence/Re-Entry Surveys	Y	2	Y	3
B1482	04/02/2020	Moderate	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1489	04/02/2020	Moderate	Emergence/Re-Entry Surveys	Y	2	Y	0
B1505	12/08/2020	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B1564	02/06/2021	Moderate	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1584	12/08/2020	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B1627	11/02/2020	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B1678	13/05/2020	Moderate	Emergence/Re-Entry Surveys	Y	2	Y	0
B1691	13/05/2020	Moderate	Emergence/Re-Entry Surveys	Y	2	Y	3
B1738	14/05/2020	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1928b	11/08/2020	Moderate	Emergence/Re-Entry Surveys	Y	3	N	N/A
B2190	03/06/2021	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B303a	01/06/2021	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B3627	28/04/2021	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B3628	28/04/2021	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B3635	24/02/2021	Moderate	Emergence/Re-Entry Surveys	Y	0	N	N/A
B3668	29/01/2021	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B3668a	29/01/2021	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B3672	26/01/2021	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B3674	26/01/2021	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3684	28/01/2021	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B3715	28/01/2021	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B3839	23/02/2021	Moderate	Emergence/Re-Entry Surveys	Y	0	N	N/A
B3840	23/02/2021	Moderate	Emergence/Re-Entry Surveys	Y	0	N	N/A
B3887	23/02/2021	Moderate	Emergence/Re-Entry Surveys	Y	0	N	N/A
B538	02/06/2021	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B62	10/03/2020	Moderate	Emergence/Re-Entry Surveys	Y	2	Y	3
B63	14/01/2020	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B635	28/01/2020	Moderate	Emergence/Re-Entry Surveys	Y	2	N	N/A
B87	12/08/2020	Moderate	Emergence/Re-Entry Surveys	Y	2	Y	3
B2195	21/01/2021	Moderate	Hibernation Only	N/A	N/A	Y	2

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3105	12/01/2021	Moderate	Hibernation Only	N/A	N/A	Y	3
B3625	22/01/2021	Moderate	Hibernation Only	N/A	N/A	Y	2
B3626	22/01/2021	Moderate	Hibernation Only	N/A	N/A	Y	3
B3659	19/01/2021	Moderate	Hibernation Only	N/A	N/A	Y	2
B102	14/05/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B104	14/05/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B106	14/01/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B106c	14/01/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B11	11/08/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1348	20/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1350	12/05/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1358	12/05/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1372	15/01/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1374b	10/12/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1382	12/02/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1410	05/02/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1420	13/02/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1517	04/02/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1550	26/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1603	28/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1609	11/02/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1610	11/02/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1613	11/02/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1614	11/02/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1616	11/02/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1623	11/02/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1722	12/08/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1736	12/08/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1744	18/02/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1755	14/05/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1797	29/10/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1824	05/02/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1918	19/08/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1948	13/02/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1992e	05/02/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1998a	05/02/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B2041	22/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B2177	15/12/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B2202	16/12/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B2939	15/12/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3011	20/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3011b	20/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3041	16/12/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3108	14/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3109	13/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3111	13/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3607	20/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3639	19/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3641	19/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3642	19/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3651	18/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3657a	27/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3682b	28/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3686	28/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3697	26/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3703	28/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3704	28/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3705	28/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3706	28/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3707	28/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3710	28/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3713	28/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3726	29/01/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3756	02/02/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3758	02/02/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3759	02/02/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3762b	02/02/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3766	02/02/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3978	23/02/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3981	24/02/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3984	24/04/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3985	29/04/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3987	29/04/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B3989	29/04/2021	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B600	28/01/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B602	28/01/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B605	28/01/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B639	28/01/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B7	15/01/2020	Moderate	Scoped Out	N/A	N/A	N/A	N/A
B1172	02/06/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1246a	18/02/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1255a	18/02/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1255b	18/02/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1255c	18/02/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1256b	10/03/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1256c	10/03/2020	Low	Emergence/Re-Entry Surveys	Y	1	Y	0
B126a	11/08/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1357	28/04/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1376	10/12/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1451	12/08/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1452	12/08/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1475	04/02/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1476	04/02/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1488b	04/02/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1490	10/03/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1506	28/04/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1507	12/08/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1509	12/08/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1509a	12/08/2020	Low	Emergence/Re-Entry Surveys	Y	0	N	N/A
B1511	13/05/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1511a	13/05/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1557	28/04/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1572	13/02/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1588	11/08/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1598	28/04/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1601	28/01/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1680	13/05/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1686	13/05/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1744b	18/02/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1747	13/05/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1750	13/05/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1751	13/05/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1752	14/05/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1845	11/01/2021	Low	Emergence/Re-Entry Surveys	Y	0	N	N/A
B1916	02/06/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B1997a	05/02/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B2043	28/04/2021	Low	Emergence/Re-Entry Surveys	Y	0	N	N/A
B2191	28/04/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B2191a	28/04/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B2191b	28/04/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B2192	24/02/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B2196	15/12/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B310	01/06/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3425	13/01/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3452	28/04/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3459	01/06/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3460	01/06/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3461	01/06/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3470	02/06/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3472	02/06/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3629	24/02/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3630	28/04/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3632	28/04/2021	Low	Emergence/Re-Entry Surveys	Y	0	N	N/A
B3633	24/02/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3669	29/01/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3694	26/01/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3698	26/01/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3699	26/01/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3728	24/02/2021	Low	Emergence/Re-Entry Surveys	Y	0	N	N/A
B3731	30/04/2021	Low	Emergence/Re-Entry Surveys	Y	0	N	N/A
B3734	27/04/2021	Low	Emergence/Re-Entry Surveys	Y	0	N	N/A
B3768	03/02/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3773	29/01/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3879	04/06/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3880	02/06/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3907	23/02/2021	Low	Emergence/Re-Entry Surveys	Y	0	N	N/A
B3919	27/04/2021	Low	Emergence/Re-Entry Surveys	Y	0	N	N/A
B3922	27/04/2021	Low	Emergence/Re-Entry Surveys	Y	0	N	N/A
B3937	27/04/2021	Low	Emergence/Re-Entry Surveys	Y	0	N	N/A
B535	11/02/2020	Low	Emergence/Re-Entry Surveys	Y	1	Y	0
B598	28/01/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B61	10/03/2020	Low	Emergence/Re-Entry Surveys	Y	1	Y	2

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B613	28/01/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B622	12/08/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B68	10/03/2020	Low	Emergence/Re-Entry Surveys	Y	1	Y	2
B70	10/03/2020	Low	Emergence/Re-Entry Surveys	Y	1	Y	2
B799	12/01/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B802	12/01/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B802c	12/01/2021	Low	Emergence/Re-Entry Surveys	Y	1	Y	2
B805	10/03/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B807	12/01/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B808b	10/03/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B817	12/01/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B838	12/01/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B86	12/08/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B873	12/08/2020	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B909	13/01/2021	Low	Emergence/Re-Entry Surveys	Y	1	N	N/A
B3545	08/12/2020	Low	Hibernation Only	N/A	N/A	Y	2
B3751b	02/02/2021	Low	Hibernation Only	N/A	N/A	Y	2
B103	14/05/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B104a	14/05/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B106b	14/01/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1183	13/05/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1205	12/05/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1209	12/05/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1244b	11/03/2020	Low	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1244c	11/03/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1248	11/03/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1254	11/03/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1256d	10/03/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1257	10/03/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1345b	12/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1345c	12/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1349	20/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B1350a	12/05/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1364	11/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1365	30/01/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1394	11/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1396	11/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1398	11/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B13b	15/01/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1405	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1405a	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1405b	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1410b	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1414	10/03/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1415	13/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1417	13/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1418	13/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1418a	13/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1419	13/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1421	12/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1431	14/05/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1431a	14/05/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1437	27/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B1446	12/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1457	12/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1471	04/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1484	10/03/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1504	04/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1516	18/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1520	14/05/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1520a	14/05/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1520b	14/05/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1522a	18/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1532	18/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1555	27/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B1556	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1556b	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1558	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1569	13/08/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1586	11/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1587	11/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1587b	11/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1587c	11/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1591	11/08/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1591a	11/08/2020	Low	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1591b	11/08/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1591c	11/08/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1591d	11/08/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1600	13/05/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1604	12/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1606	28/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B1611	12/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1617	11/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1621	06/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1679a	12/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1679b	12/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1685	13/05/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1724	12/08/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1754	03/02/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B1780	18/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1782	18/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1782b	18/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1792	29/10/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1809	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1822	29/10/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1838	14/05/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1839	04/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1842	12/08/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1867	12/03/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1869	12/03/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1902	18/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1904	18/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1907	18/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1908	18/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1909	18/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1911	18/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1912	18/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1913	18/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1922	13/08/2020	Low	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1928a	11/08/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1946a	13/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1948a	13/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1949	13/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1950	13/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1992b	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1992c	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1992f	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1992g	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1993	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1993a	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1993b	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1994d	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1997c	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1997d	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1997e	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1998	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1998b	05/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B1999	12/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B2000	12/02/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B2033	13/08/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B2033a	13/08/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B2042b	22/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B2044	22/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B2045	22/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B2049	28/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B2180	15/12/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B2187	15/12/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B2194	21/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B2194a	21/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B2197	16/12/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B2201	21/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B27	11/08/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B2901	16/12/2020	Low	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B2942	15/12/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B2953	15/12/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B2955	15/12/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B2957	15/12/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B3011a	20/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3019	16/12/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B3032	16/12/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B3036	16/12/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B3054	16/12/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B3068b	16/12/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B3092b	16/12/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B3092c	16/12/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B3107	12/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3108a	14/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3110	12/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3114	13/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3429	13/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3432	13/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3434	13/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3444	13/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3445	13/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3446	13/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3449	13/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3450	13/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3542	08/12/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B3640	19/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3646a	19/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3649	27/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3653	27/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3656	27/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3658	27/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3666	27/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3670	29/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3679f	28/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3680	28/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3682	28/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3683	28/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3685	28/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3685b	28/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3688	26/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3692	28/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3692b	28/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3714	28/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3735	27/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3736	27/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3737	27/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3739a	27/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3739b	27/01/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3749	02/02/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3749b	02/02/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3754	02/02/2021	Low	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3755	02/02/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3757	02/02/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3759c	02/02/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3759d	02/02/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3762	02/02/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3763	02/02/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3765	02/02/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3766b	02/02/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3791	28/04/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3793	28/04/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3814	28/04/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3898	28/04/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3979	24/02/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3986	30/04/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B3988	30/04/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B42	15/01/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B45	15/01/2020	Low	Scoped Out	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B536	12/08/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B536a	12/08/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B600b	28/01/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B603	28/01/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B608	28/01/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B633	28/01/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B655	11/03/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B82	16/01/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B89	12/08/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B9	15/01/2020	Low	Scoped Out	N/A	N/A	N/A	N/A
B912a	29/04/2021	Low	Scoped Out	N/A	N/A	N/A	N/A
B1000	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1001	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1002	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1003	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1004	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1005	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1006	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1007	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1008	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1009	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1010	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1011	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1012	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1013	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1014	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1015	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1016	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1017	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1018	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1019	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1020	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1021	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1022	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1023	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1024	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1025	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1026	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1027	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1028	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1029	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1030	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1031	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1032	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1033	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1034	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1035	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1036	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1037	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1038	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1039	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1040	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1041	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1042	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1043	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1044	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1045	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1046	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1047	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1048	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1049	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1050	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1051	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1052	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1053	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1054	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1055	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1056	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1057	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1058	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1059	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1060	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1061	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1062	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1063	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1064	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1065	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1067	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1068	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1069	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1070	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1071	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1072	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1073	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1074	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1075	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1076	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1077	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1078	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1079	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1080	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1081	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1082	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1083	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1084	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1085	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1086	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1087	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1088	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1089	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1090	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1091	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1092	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1093	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1094	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1095	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1096	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1097	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1098	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1099	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B1100	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1101	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1102	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1103	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1104	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1105	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1106	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1107	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1108	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1110	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1112	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B1113	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1117	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1127	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B1128	20/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1129	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1130	02/06/2021	Negligible	None	N/A	N/A	N/A	N/A
B1137	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1138	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1146	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1148	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1173	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1175	20/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1177	14/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B1186	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1187	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1190	20/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1191	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B1193	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1196	20/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1197	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1199	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1201	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1207	12/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1210	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1213	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1216	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1219	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1220	12/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B1222	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1246b	18/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1251	29/04/2021	Negligible	None	N/A	N/A	N/A	N/A
B1256	10/03/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1256e	10/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B1256f	10/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B1285	29/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B13	15/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1300	29/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1342	12/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1346	15/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1347	06/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1347a	06/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1349a	20/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B1349b	20/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B1349c	20/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B1350b	12/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1350c	12/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1353	12/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1354	12/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1355	11/02/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1356	12/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1359	11/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1362	30/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1363	11/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1366	30/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1374c	10/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B1387	12/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1388	12/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B14	15/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1400	29/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1401	29/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1404	29/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1408	29/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1409	29/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1410a	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1410c	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1411	29/01/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1412	20/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B1413	04/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1436	12/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1447a	12/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B1447b	12/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B1448	12/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B1448a	12/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B1448b	12/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B1448c	12/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B1465	06/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1481	04/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1488	04/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1493	10/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B1493b	10/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B1493c	10/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B1493d	10/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B15	21/05/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1501	26/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B1502	06/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1503	26/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B1512	13/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1552	06/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1553	06/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1554	06/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1555a	27/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B1555b	27/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B1556a	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1565	29/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B1566	13/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B1570	13/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B1571	13/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B1572a	13/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1581	14/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1582	14/05/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1587a	11/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1587d	11/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B159	12/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B1596	14/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1596a	14/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1599	28/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B1600a	13/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1602	28/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B1605	12/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1607	11/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1608	11/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1608a	11/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1611a	12/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1611b	12/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1618	13/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1620	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1638	06/02/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1682	13/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1714	26/04/2021	Negligible	None	N/A	N/A	N/A	N/A
B1739	14/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1740	19/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1741	18/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1744a	18/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1748	13/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1749	14/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1753	13/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1770	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1774	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1781	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1781b	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1782a	18/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1782c	18/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1791	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1799	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1802	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1806	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1811	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1819	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1825	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1827	29/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B1830	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1835	29/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B1837	14/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1847	12/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B1848	12/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B1850	12/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B1914	18/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1914a	18/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1917	19/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B1919	11/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B1921	13/08/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B1926	12/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B1933	14/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1934	14/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1941	14/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1941a	14/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B1950a	13/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1960	18/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1962	23/02/2021	Negligible	None	N/A	N/A	N/A	N/A
B1992	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1993e	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1994a	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1994b	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1994c	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B1998c	05/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B2	15/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B2004	15/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B2035	11/01/2021	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B2036	11/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B2037	11/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B2037a	11/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B2038	11/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B2039	13/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B2039a	13/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B2040	13/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B2042a	22/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B2042c	22/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B2172	15/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B2173	15/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B2174	15/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B2176	15/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B2177b	15/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B2189	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B2193	24/02/2021	Negligible	None	N/A	N/A	N/A	N/A
B2197b	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B2199	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B2203	15/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B2901b	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3032b	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3032c	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B303b	01/06/2021	Negligible	None	N/A	N/A	N/A	N/A
B3063	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3063b	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3068	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3092	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3104	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3106	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3109a	13/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3114a	13/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3115	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3119	11/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3147	11/01/2021	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3149	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3152	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3153	11/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3156	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3157	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3158	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3159	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3161	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3162	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3164	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3165	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3168	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3169	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3170	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3171	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3172	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3173	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3175	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3176	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3184	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B32	15/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B3206	11/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3241	29/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3246	29/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3251	29/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B33	15/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B339a	21/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3448	13/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3451	13/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3455	28/04/2021	Negligible	None	N/A	N/A	N/A	N/A
B3456	14/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3457	14/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3470a	02/06/2021	Negligible	None	N/A	N/A	N/A	N/A
B3473	02/06/2021	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3475	02/06/2021	Negligible	None	N/A	N/A	N/A	N/A
B3477	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3479	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3481	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3483	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3487	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B35	21/05/2020	Negligible	None	N/A	N/A	N/A	N/A
B3506	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3508	13/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3508a	13/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3509	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3510	13/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3511	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3513	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3519	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3520	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3521	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3524	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3527	16/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3543	08/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3544	08/12/2020	Negligible	None	N/A	N/A	N/A	N/A
B3606	20/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3621a	19/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3623	22/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3636	28/04/2021	Negligible	None	N/A	N/A	N/A	N/A
B3637a	19/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3637b	19/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3646b	19/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3647	27/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3648a	27/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3650	27/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3653a	27/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3664	27/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3679b	28/01/2021	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3679c	28/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3679d	28/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3679e	28/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3679g	28/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3681	28/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3684b	28/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3684c	28/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3684d	28/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3689	28/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3693	26/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3695	26/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3696	26/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3700	26/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3708	28/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3712	28/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3723	02/06/2021	Negligible	None	N/A	N/A	N/A	N/A
B3732	30/04/2021	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3733	30/04/2021	Negligible	None	N/A	N/A	N/A	N/A
B3741	26/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B3742	03/06/2021	Negligible	None	N/A	N/A	N/A	N/A
B3743	03/06/2021	Negligible	None	N/A	N/A	N/A	N/A
B3745	03/06/2021	Negligible	None	N/A	N/A	N/A	N/A
B3746	03/06/2021	Negligible	None	N/A	N/A	N/A	N/A
B3747	03/06/2021	Negligible	None	N/A	N/A	N/A	N/A
B3750	02/02/2021	Negligible	None	N/A	N/A	N/A	N/A
B3751	02/02/2021	Negligible	None	N/A	N/A	N/A	N/A
B3752	02/02/2021	Negligible	None	N/A	N/A	N/A	N/A
B3755b	02/02/2021	Negligible	None	N/A	N/A	N/A	N/A
B3760	02/02/2021	Negligible	None	N/A	N/A	N/A	N/A
B3769	29/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3770	28/04/2021	Negligible	None	N/A	N/A	N/A	N/A
B3771	28/04/2021	Negligible	None	N/A	N/A	N/A	N/A
B3776	28/04/2021	Negligible	None	N/A	N/A	N/A	N/A
B3777	28/04/2021	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B3786	28/04/2021	Negligible	None	N/A	N/A	N/A	N/A
B38	14/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B3806	28/04/2021	Negligible	None	N/A	N/A	N/A	N/A
B3879a	04/06/2021	Negligible	None	N/A	N/A	N/A	N/A
B3879b	04/06/2021	Negligible	None	N/A	N/A	N/A	N/A
B3883	02/06/2021	Negligible	None	N/A	N/A	N/A	N/A
B3892	23/02/2021	Negligible	None	N/A	N/A	N/A	N/A
B3893	23/02/2021	Negligible	None	N/A	N/A	N/A	N/A
B3895	23/02/2021	Negligible	None	N/A	N/A	N/A	N/A
B3899	28/04/2021	Negligible	None	N/A	N/A	N/A	N/A
B39	14/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B3920	27/04/2021	Negligible	None	N/A	N/A	N/A	N/A
B3925	27/04/2021	Negligible	None	N/A	N/A	N/A	N/A
B3927	27/04/2021	Negligible	None	N/A	N/A	N/A	N/A
B3986	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B3988	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B40	14/01/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B41	15/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B44	14/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B46	15/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B47	14/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B48	15/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B50	14/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B51	14/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B514b	11/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B52	14/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B549	29/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B55	14/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B56	14/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B57	14/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B58	14/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B59	14/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B599	28/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B6	15/01/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B60	10/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B617b	13/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B617c	13/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B619a	13/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B619b	13/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B624	12/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B629	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B632	28/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B640	11/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B644	11/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B646	11/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B647	11/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B648	11/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B649	11/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B650	11/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B651	11/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B652	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B653	06/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B654	06/02/2020	Negligible	None	N/A	N/A	N/A	N/A
B68b	10/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B69	14/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B73b	10/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B76	10/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B77	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B79	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B792	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B80	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B802a	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B802b	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B802d	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B805b	10/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B807a	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B808	10/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B814	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B830	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B832	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B834	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B837	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B837a	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B837b	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B837c	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B839	10/03/2020	Negligible	None	N/A	N/A	N/A	N/A
B84	12/08/2020	Negligible	None	N/A	N/A	N/A	N/A
B850	12/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B884	13/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B884a	13/01/2021	Negligible	None	N/A	N/A	N/A	N/A
B947	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B948	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B949	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B950	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B951	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B952	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B953	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B954	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B955	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B956	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B957	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B958	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B959	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B960	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B961	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B962	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B963	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B964	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B965	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B966	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B967	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B968	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B969	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B970	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B971	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B972	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B973	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B974	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B975	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B976	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B977	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B978	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B979	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B980	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B981	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B982	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B983	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B984	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B985	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A

Building ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Emergence/Re-Entry Surveys Y/N	Number Of Emergence/Re-Entry Surveys Required	Hibernation Survey Y/N	Number Of Hibernation Visits Required
B987	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B989	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B990	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B991	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B992	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B993	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B994	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B995	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B996	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B997	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B998	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B999	16/01/2020	Negligible	None	N/A	N/A	N/A	N/A
B1865	24/02/2021	Negligible	None	N/A	N/A	N/A	N/A
B1871	24/02/2021	Negligible	None	N/A	N/A	N/A	N/A
B3372	28/10/2020	Negligible	None	N/A	N/A	N/A	N/A
B3458	01/06/2021	Negligible	None	N/A	N/A	N/A	N/A
B3744	03/06/2021	Negligible	None	N/A	N/A	N/A	N/A
B3888	28/04/2021	Negligible	None	N/A	N/A	N/A	N/A

Annex F Building emergence / re-entry surveys

Table F.1 Summary of building emergence / re-entry surveys 2020-2021

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B107	Roost	01/07/2020	Dawn	N/A	N/A	-	-	Y	2 x Soprano pipistrelle	Day roost	N	ACCESS ISSUES
B113	Roost	09/07/2020	Dawn	03/08/2020	Dusk	-	-	Y	1 x Common pipistrelle	Day roost	N	
B118	Roost	24/08/2020	Dusk	08/07/2021	Dusk	N/A	N/A	Y	1 x Common pipistrelle, 1 x Soprano pipistrelle	Day roost	N	ACCESS ISSUES
B1249	Roost	08/07/2020	Dawn	29/07/2020	Dusk	25/08/2020	Dusk	Y	1 x Noctule	Day roost	N	SCOPED OUT
B1250	Roost	08/07/2020	Dawn	03/08/2020	Dusk	25/08/2020	Dusk	Y	1 x Soprano pipistrelle	Day roost	N	SCOPED OUT
B1252	Roost	08/07/2020	Dusk and Dawn	29/07/2020	Dusk	-	-	Y	1 x Soprano pipistrelle	Day roost	N	SCOPED OUT
B1291	Roost	24/06/2020	Dusk	26/08/2020	Dawn	N/A	N/A	Y	1 x Common pipistrelle, 1 x BLE (hibernating)	Day roost + hibernation roost	N	ACCESS ISSUES
B1385	Roost	30/06/2020	Dusk	27/08/2020	Dawn	-	-	Y	2 x Common pipistrelle (2017)	Day roost	N	

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B1392	Roost	14/07/2020	Dusk	27/07/2020	Dusk	25/08/2020	Dawn	Y	1 x Soprano pipistrelle	Day roost	N	
B1393	Roost	09/07/2020	Dusk	N/A	N/A	N/A	N/A	Y	5 x Soprano pipistrelle (2017)	Day roost	N	ACCESS ISSUES
B1395	Roost	16/07/2020	Dusk	N/A	N/A	N/A	N/A	Y	1 x Soprano pipistrelle	Day roost	N	ACCESS ISSUES
B1397	Roost	20/07/2020	Dusk	N/A	N/A	-	-	Y	1 x Soprano pipistrelle	Day roost	N	ACCESS ISSUES
B1447	Roost	01/09/2020	Dusk	22/07/2021	Dusk	N/A	N/A	Y	1 x Soprano pipistrelle	Transitional roost	N	ACCESS ISSUES
B1455	Roost	15/09/2020	Dawn	N/A	N/A	N/A	N/A	Y	3 x Soprano pipistrelle (2017)	Day roost	N	ACCESS ISSUES
B1463	Roost	14/09/2020	Dusk	07/07/2021	Dawn	05/08/2021	Dusk	Y	1 x Common pipistrelle	Day roost	Y	
B1522	Roost	20/07/2020	Dusk	04/08/2020	Dawn	-	-	Y	3 x Common pipistrelle, 1 x Soprano pipistrelle	Day roost	N	
B1543	Roost	25/08/2020	Dusk	23/09/2020	Dawn	28/07/2021	Dusk	Y	1 x <i>Myotis</i> .species. (2020) and 1 x Noctule (2017). Also, minor Common pipistrelle and Soprano pipistrelle	Day roost + hibernation roost	N	

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
									hibernation roost based on static data			
B1549	Roost	03/09/2020	Dusk	N/A	N/A	N/A	N/A	Y	2 x Soprano pipistrelle	Transitional roost	N	ACCESS ISSUES
B1585	Roost	25/06/2020	Dusk	07/07/2021	Dawn	17/08/2021	Dusk	Y	2 x Soprano pipistrelle	Day roost	N	
B1679	Roost	03/08/2017	N/A	N/A	N/A	N/A	N/A	Y	2017 roost - 3 x Common pipistrelle emergence/re-entry. Access refused for all 2020/2021 surveys.	Day roost	N	ACCESS ISSUES
B1928	Roost	17/08/2020	Dusk	17/09/2020	Dusk	08/07/2021	Dawn	Y	2 x Common pipistrelle, 1 x Soprano pipistrelle	Day roost	N	
B1928c	Roost	20/08/2020	Dusk	03/09/2020	Dawn	03/08/2021	Dusk	Y	1 x Common pipistrelle	Day roost	N	
B1997	Roost	02/07/2020	Dawn	23/07/2020	Dusk	21/09/2020	Dusk	Y	1 x Soprano pipistrelle	Day roost	N	
B2042	Roost	13/05/2021	Dusk	27/05/2021	Dusk	01/09/2021	Dawn	Y	5 x Soprano pipistrelle, 2 x Common pipistrelle	Soprano pipistrelle and Common pipistrelle day roost	N	

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B2046	Roost	01/07/2021	Dawn	31/08/2021	Dusk	-	-	Y	51 x Soprano pipistrelle, 2 x Common pipistrelle	Soprano pipistrelle maternity roost, Common pipistrelle day roost	N	
B2937	Roost	04/08/2021	Dusk	21/09/2021	Dusk	-	-	Y	1 x Soprano pipistrelle	Transitional roost	N	
B339	Roost	05/07/2021	Dawn	05/08/2021	Dusk	N/A	N/A	Y	1 x Common pipistrelle	Day roost	N	ACCESS ISSUES
B3621	Roost	25/05/2021	Dusk	04/08/2021	Dusk	23/08/2021	Dusk	Y	9 x Soprano pipistrelle 2 x Common pipistrelle	Maternity roost	N	
B3631	Roost	07/07/2021	Dusk	-	-	-	-	Y	1 x Common pipistrelle	Day roost	N	
B3638	Roost	17/06/2021	Dusk	-	-	-	-	Y	1 x Common pipistrelle	Day Roost	N	
B3648	Roost	03/08/2021	Dusk	01/09/2021	Dusk	-	-	Y	Unknown - anecdotal evidence from landowner. Also, unidentified bat during emergence.	Day roost + hibernation roost	N	

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B3679	Roost	03/06/2021	Dusk	22/09/2021	Dawn	N/A	N/A	Y	1 x Common pipistrelle	Transitional roost	N	ACCESS ISSUES
B3709	Roost	24/06/2021	Dusk	11/08/2021	Dawn	-	-	Y	3 x Common pipistrelle	Day roost	N	
B3739	Roost	06/07/2021	Dawn	18/08/2021	Dawn	09/09/2021	Dusk	Y	15 x Soprano pipistrelle, 4 x BLE	Maternity roost (Soprano pipistrelle) Day roost (BLE)	N	
B631	Roost	24/06/2020	Dawn	N/A	N/A	N/A	N/A	Y	1 x Soprano pipistrelle	Day roost	N	ACCESS ISSUES
B634	Roost	23/06/2020	Dusk	18/08/2020	Dawn	N/A	N/A	Y	1 x Common pipistrelle	Day roost	N	ACCESS ISSUES
B637	Roost	24/06/2020	Dawn	22/07/2020	Dawn	04/08/2020	Dusk	Y	1 x Soprano pipistrelle	Day roost	N	
B73	Roost	24/05/2021	Dusk	-	-	-	-	Y	5 x Common pipistrelle	Maternity roost (precautionary)	N	
B923	Roost	02/09/2021	Dusk	22/09/2021	Dusk	N/A	N/A	Y	2 x Common pipistrelle	Day roost	N	ACCESS ISSUES
B1371	Roost	02/07/2020	Dusk	N/A	N/A	-	-	N	No species recorded during dusk survey. Droppings (4-5 collected, unknown species) during hibernation surveys.	Undetermined	N	ACCESS ISSUES

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B1738a	Roost	06/08/2020	Dawn	27/08/2020	Dusk	N/A	N/A	N	No species recorded during dusk/dawn survey. Large volume of Myotis calls detected during statics.	Day roost + hibernation roost	N	ACCESS ISSUES
B1992d	Roost	23/07/2020	Dawn	23/09/2020	Dusk	25/08/2021	Dusk	N	No species recorded during dusk/dawn survey. 05/02/2021: One bat dropping found inside container - Common pipistrelle. or M.sp.	Day roost	N	
B3643	High	N/A	N/A	N/A	N/A	N/A	N/A	N	No evidence found that this is a roost. No Access in 2020/2021 for DD. Also not on 2017 roost tracker.	N	N	ACCESS ISSUES
B599b	High	06/08/2020	Dawn	20/08/2020	Dusk	09/09/2021	Dawn	N	N/A	N/A	N	
B110	High	01/07/2020	Dawn	N/A	N/A	-	-	N	N/A	N/A	N	SCOPED OUT
B1247	High	06/07/2021	Dawn	N/A	N/A	N/A	N/A	N	N/A	N/A	N	ACCESS ISSUES
B1470	High	25/06/2020	Dusk	27/08/2020	Dusk	-	-	N	N/A	N/A	N	

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B1994	High	01/07/2020	Dusk	22/09/2020	Dawn	-	-	N	N/A	N/A	N	
B1996	High	02/07/2020	Dawn	23/07/2020	Dusk	N/A	N/A	N	N/A	N/A	N	ACCESS ISSUES
B2033b	High	16/08/2021	Dusk	01/09/2021	Dusk	07/10/2021	Dawn	N	N/A	N/A	N	
B2048	High	10/06/2021	Dusk	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B3532	High	21/06/2021	Dusk	29/07/2021	Dusk	02/09/2021	Dawn	N	N/A	N/A	N	
B3534	High	21/06/2021	Dusk	29/07/2021	Dusk	02/09/2021	Dawn	N	N/A	N/A	N	
B3538	High	29/07/2021	Dusk	02/09/2021	Dawn	08/09/2021	Dawn	N	N/A	N/A	N	
B599c	High	24/06/2021	Dusk	27/07/2021	Dusk	19/08/2021	Dawn	N	N/A	N/A	N	
B599d	High	24/06/2021	Dusk	27/07/2021	Dusk	19/08/2021	Dawn	N	N/A	N/A	N	
B609	High	21/07/2020	Dusk	05/08/2020	Dawn	18/08/2020	Dusk	N	N/A	N/A	N	SCOPED OUT
B619	High	05/08/2020	Dusk	19/08/2020	Dusk	-	-	N	N/A	N/A	N	
B1246	Moderate	06/05/2021	Dusk	20/07/2021	Dusk	-	-	N	N/A	N/A	N	
B1255	Moderate	N/A	N/A	N/A	N/A	-	-	N	N/A	N	Y	ACCESS ISSUES
B126	Moderate	24/08/2020	Dusk	25/09/2020	Dawn	-	-	N	N/A	N/A	N	

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B1358	Moderate	16/07/2020	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1372	Moderate	02/07/2020	Dusk	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1375	Moderate	08/07/2020	Dusk	-	-	-	-	N	N/A	N/A	N	
B1379	Moderate	30/06/2020	Dusk	-	-	-	-	N	N/A	N/A	N	
B1420	Moderate	25/06/2020	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1463a	Moderate	16/09/2020	Dawn	06/07/2021	Dusk	-	-	N	N/A	N/A	N	
B1482	Moderate	25/06/2020	Dusk	-	-	-	-	N	N/A	N/A	N	
B1489	Moderate	06/05/2021	Dusk	22/06/2021	Dawn	-	-	N	N/A	N/A	N	
B1505	Moderate	26/08/2020	Dusk	17/09/2020	Dawn	-	-	N	N/A	N/A	N	
B1564	Moderate	N/A	N/A	-	-	-	-	N	N/A	N	N	ACCESS ISSUES
B1584	Moderate	15/09/2020	Dusk	05/08/2021	Dawn	-	-	N	N/A	N/A	N	
B1627	Moderate	11/05/2021	Dawn	09/06/2021	Dusk	-	-	N	N/A	N/A	N	
B1678	Moderate	N/A	N/A	N/A	N/A	-	-	N	N/A	N	N	ACCESS ISSUES

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B1691	Moderate	N/A	N/A	N/A	N/A	-	-	N	N/A	N	N	ACCESS ISSUES
B1722	Moderate	22/09/2020	Dusk	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1736	Moderate	16/09/2020	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1738	Moderate	15/07/2020	Dusk	20/08/2020	Dawn	-	-	N	N/A	N/A	N	
B1744	Moderate	23/07/2020	Dawn	20/05/2021	Dusk	-	-	N	N/A	N/A	N	SCOPED OUT
B1797	Moderate	10/05/2021	Dusk	08/06/2021	Dawn	-	-	N	N/A	N/A	N	SCOPED OUT
B1928b	Moderate	20/08/2020	Dawn	24/09/2020	Dawn	-	-	N	N/A	N/A	N	
B1992e	Moderate	18/05/2021	Dusk	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B2190	Moderate	10/08/2021	Dawn	06/10/2021	Dusk	-	-	N	N/A	N/A	N	
B303a	Moderate	05/08/2021	Dawn	06/10/2021	Dusk	-	-	N	N/A	N/A	N	
B3627	Moderate	21/07/2021	Dawn	-	-	-	-	N	N/A	N/A	N	
B3628	Moderate	22/07/2021	Dawn	-	-	-	-	N	N/A	N/A	N	
B3668	Moderate	03/06/2021	Dusk	08/07/2021	Dawn	-	-	N	N/A	N/A	N	

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B3668a	Moderate	24/08/2021	Dawn	07/09/2021	Dusk	-	-	N	N/A	N/A	N	
B3672	Moderate	N/A	N/A	N/A	N/A	-	-	N	N/A	N	N	ACCESS ISSUES
B3674	Moderate	N/A	N/A	N/A	N/A	-	-	N	N/A	N	N	ACCESS ISSUES
B3684	Moderate	10/08/2021	Dusk	N/A	N/A	-	-	N	N/A	N/A	N	ACCESS ISSUES
B3715	Moderate	N/A	N/A	N/A	N/A	-	-	N	N/A	N	N	ACCESS ISSUES
B538	Moderate	08/09/2021	Dawn	-	-	-	-	N	N/A	N/A	N	
B600	Moderate	01/07/2020	Dusk	29/07/2020	Dawn	-	-	N	N/A	N/A	N	SCOPED OUT
B62	Moderate	22/07/2020	Dawn	06/08/2020	Dusk	-	-	N	N/A	N/A	N	
B63	Moderate	27/07/2020	Dusk	19/08/2020	Dawn	-	-	N	N/A	N/A	N	
B635	Moderate	24/06/2020	Dawn	24/09/2020	Dusk	-	-	N	N/A	N/A	N	
B639	Moderate	23/06/2020	Dusk	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B87	Moderate	07/06/2021	Dusk	N/A	N/A	-	-	N	N/A	N/A	N	ACCESS ISSUES
B1172	Low	10/08/2021	Dusk	-	-	-	-	N	N/A	N/A	N	

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B1183	Low	N/A	N/A	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1205	Low	24/06/2020	Dusk	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1209	Low	24/06/2020	Dusk	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1246a	Low	20/07/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B1248	Low	07/07/2020	Dusk	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1254	Low	07/07/2020	Dusk	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1255a	Low	16/09/2021	Dusk	-	-	-	-	N	N/A	N/A	Y	
B1255b	Low	16/09/2021	Dusk	-	-	-	-	N	N/A	N/A	Y	
B1255c	Low	16/09/2021	Dusk	-	-	-	-	N	N/A	N/A	Y	
B1256b	Low	25/05/2021	Dawn	-	-	-	-	N	N/A	N/A	N	
B1256c	Low	25/05/2021	Dawn	-	-	-	-	N	N/A	N/A	N	
B126a	Low	02/09/2020	Dusk	-	-	-	-	N	N/A	N/A	N	
B1357	Low	N/A	N/A	-	-	-	-	N	N/A	N	N	ACCESS ISSUES

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B1364	Low	16/07/2020	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1376	Low	05/05/2021	Dawn	-	-	-	-	N	N/A	N/A	Y	
B13b	Low	06/08/2020	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1415	Low	25/06/2020	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1417	Low	25/06/2020	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1418	Low	25/06/2020	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1418a	Low	25/06/2020	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1419	Low	25/06/2020	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1421	Low	22/07/2020	Dusk	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1451	Low	01/09/2020	Dusk	-	-	-	-	N	N/A	N/A	N	
B1452	Low	01/09/2020	Dusk	15/09/2020	Dusk	-	-	N	N/A	N/A	N	
B1475	Low	04/08/2021	Dawn	-	-	-	-	N	N/A	N/A	N	

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B1476	Low	N/A	N/A	-	-	-	-	N	N/A	N	N	ACCESS ISSUES
B1488b	Low	N/A	N/A	-	-	-	-	N	N/A	N/A	N	ACCESS ISSUES
B1490	Low	22/07/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B1506	Low	15/07/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B1507	Low	02/09/2020	Dawn	-	-	-	-	N	N/A	N/A	N	
B1509	Low	02/09/2020	Dusk	-	-	-	-	N	N/A	N/A	N	
B1511	Low	15/07/2020	Dusk	-	-	-	-	N	N/A	N/A	N	
B1511a	Low	30/07/2020	Dusk	-	-	-	-	N	N/A	N/A	N	
B1557	Low	N/A	N/A	-	-	-	-	N	N/A	N	N	ACCESS ISSUES
B1572	Low	16/07/2020	Dusk	-	-	-	-	N	N/A	N/A	N	
B1586	Low	02/06/2020	Dusk	25/06/2020	Dusk	-	-	N	N/A	N/A	N	SCOPED OUT
B1588	Low	06/07/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B1598	Low	05/08/2021	Dawn	-	-	-	-	N	N/A	N/A	N	
B1600	Low	05/08/2021	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B1601	Low	21/09/2021	Dawn	-	-	-	-	N	N/A	N/A	N	
B1680	Low	N/A	N/A	-	-	-	-	N	N/A	N	N	ACCESS ISSUES
B1686	Low	N/A	N/A	-	-	-	-	N	N/A	N	N	ACCESS ISSUES
B1744b	Low	17/08/2021	Dawn	-	-	-	-	N	N/A	N/A	N	
B1747	Low	15/07/2020	Dawn	-	-	-	-	N	N/A	N/A	N	
B1750	Low	15/07/2020	Dawn	-	-	-	-	N	N/A	N/A	N	
B1751	Low	22/07/2020	Dusk	-	-	-	-	N	N/A	N/A	N	
B1752	Low	N/A	N/A	-	-	-	-	N	N/A	N/A	N	ACCESS ISSUES
B1754	Low	18/05/2021	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1907	Low	07/06/2021	Dusk	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1916	Low	05/10/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B1992b	Low	19/05/2021	Dusk	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1992c	Low	19/05/2021	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B1992f	Low	19/05/2021	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B1997a	Low	23/07/2020	Dawn	-	-	-	-	N	N/A	N/A	N	
B1997c	Low	02/07/2020	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B2191	Low	23/06/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B2191a	Low	09/08/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B2191b	Low	09/08/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B2192	Low	21/07/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B2196	Low	30/06/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B27	Low	25/08/2020	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B3092b	Low	11/08/2021	Dusk	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B3092c	Low	11/08/2021	Dusk	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B310	Low	N/A	N/A	-	-	-	-	N	N/A	N/A	N	ACCESS ISSUES
B3425	Low	N/A	N/A	-	-	-	-	N	N/A	N/A	N	ACCESS ISSUES

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B3452	Low	N/A	N/A	-	-	-	-	N	N/A	N	N	ACCESS ISSUES
B3459	Low	18/08/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B3460	Low	18/08/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B3461	Low	18/08/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B3470	Low	N/A	N/A	-	-	-	-	N	N/A	N	N	ACCESS ISSUES
B3472	Low	N/A	N/A	-	-	-	-	N	N/A	N	N	ACCESS ISSUES
B3629	Low	04/08/2021	Dawn	-	-	-	-	N	N/A	N/A	N	
B3630	Low	N/A	N/A	-	-	-	-	N	N/A	N	N	ACCESS ISSUES
B3633	Low	17/06/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B3669	Low	N/A	N/A	-	-	-	-	N	N/A	N	N	ACCESS ISSUES
B3694	Low	N/A	N/A	-	-	-	-	N	N/A	N	N	ACCESS ISSUES
B3698	Low	06/10/2021	Dawn	-	-	-	-	N	N/A	N/A	N	
B3699	Low	17/08/2021	Dusk	-	-	-	-	N	N/A	N/A	N	

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B3739a	Low	18/08/2021	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B3739b	Low	18/08/2021	Dawn	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B3768	Low	10/06/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B3773	Low	06/07/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B3879	Low	N/A	N/A	-	-	-	-	N	N/A	N	N	ACCESS ISSUES
B3880	Low	N/A	N/A	-	-	-	-	N	N/A	N	N	ACCESS ISSUES
B535	Low	17/05/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B598	Low	28/07/2020	Dusk	-	-	-	-	N	N/A	N/A	Y	
B608	Low	21/07/2020	Dusk	-	-	-	-	N	N/A	N/A	N	SCOPED OUT
B61	Low	28/07/2020	Dusk	-	-	-	-	N	N/A	N/A	N	
B613	Low	30/07/2020	Dawn	-	-	-	-	N	N/A	N/A	N	
B622	Low	16/09/2020	Dusk	-	-	-	-	N	N/A	N/A	N	
B633	Low	23/06/2020	Dusk	24/06/2020	Dawn	-	-	N	N/A	N/A	N	SCOPED OUT

Building ID	Roost suitability rating	Survey 1 date	Dusk/dawn	Survey 2 date	Dusk/dawn	Survey 3 date	Dusk/dawn	Roost (Y/N)	Roost Species and Max Counts	Roost type	Scheduled for demolition (Y/N)	Survey Limitations
B68	Low	28/07/2020	Dusk	-	-	-	-	N	N/A	N/A	N	
B70	Low	22/07/2020	Dusk	-	-	-	-	N	N/A	N/A	N	
B799	Low	25/05/2021	Dawn	-	-	-	-	N	N/A	N/A	N	
B802	Low	12/08/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B802c	Low	20/05/2021	Dawn	-	-	-	-	N	N/A	N/A	N	
B805	Low	05/05/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B807	Low	26/08/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B808b	Low	05/05/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B817	Low	N/A	N/A	-	-	-	-	N	N/A	N	N	ACCESS ISSUES
B838	Low	01/07/2021	Dusk	-	-	-	-	N	N/A	N/A	Y	
B86	Low	27/08/2020	Dusk	-	-	-	-	N	N/A	N/A	N	
B873	Low	04/05/2021	Dusk	-	-	-	-	N	N/A	N/A	N	
B909	Low	N/A	N/A	-	-	-	-	N	N/A	N	N	ACCESS ISSUES

Annex G Building back-tracking and forward-tracking surveys

Table G.1 Summary of building back-tracking surveys 2020-2021

Back-tracking route ID	Suitability rating	Survey 1 date	Survey 2 date	Survey 3 date	Roost Y/N	Roost category	Due for demolition Y/N
Market Lane	Negligible	N/A	N/A	N/A	N/A	N/A	N
Bakers Way	Negligible	N/A	N/A	N/A	N/A	N/A	N
New Lane	Low	18-19/05/2021	N/A	N/A	N	N/A	N
Allan Way	Low	02-03/08/2021	N/A	N/A	N	N/A	N
The Rookeries	Low	19-20/07/2021	N/A	N/A	N	N/A	N
Freebourne Industrial Estate	Low	16-17/08/2021	N/A	N/A	N	N/A	N
London Road	Low - Moderate	12-13/05/2021	08-09/06/2021	N/A	N	N/A	N
Hodges Holt/Maldon Drive	Moderate	04-05/05/2021	01-02/06/2021	N/A	N	N/A	N
Benton Close	Moderate	10-11/05/2021	07-08/06/2021	N/A	N	N/A	N
The Crescent	Moderate	19-20/05/2021	15-16/06/2021	N/A	Y	Maternity	N
Old London Road	Moderate	02-03/06/2021	06-07/09/2021	N/A	N	N/A	N
Hedgelands	Moderate	N/A – due to refinement of the POL Hedgelands is now more than 100m from the proposed scheme					N
Station Road	Moderate	24-25/05/2021	21-22/06/2021	N/A	N	N/A	N

Back-tracking route ID	Suitability rating	Survey 1 date	Survey 2 date	Survey 3 date	Roost Y/N	Roost category	Due for demolition Y/N	
The Pines	Moderate	28-29/06/2021	12-13/07/2021	N/A	Y	Day	N	
Woodland Close	Moderate	11-12/05/2021	09-10/06/2021	N/A	2 x Day	2 x Maternity	N	
Gleneagles Way	Moderate	17-18/05/2021	13-14/07/2021	N/A	N	N/A	N	
Oliver's Drive	Moderate	25-26/05/2021	22-23/06/2021	N/A	Y	Maternity	N	
Foxmead Close	Moderate	N/A – due to refinement of the POL Foxmead Close is now more than 100m from the proposed scheme						N
Pantile Close/Maldon Road	Moderate	09-10/08/2021	07-08/09/2021	N/A	N	N/A	N	

Annex H Building hibernation surveys

Table H.1 Summary of building hibernation surveys 2020-2021

Building ID	Roost Suitability Rating	Number Of Hibernation Visits Required	Hibernation Survey Access	Visit 1	Visit 2	Visit 3	Survey Type	Hibernation Survey Notes	Hibernation Roost (Y/N)	Scoped Out? Y/N
B1543	Roost	3	Granted	WC071220	WC250121	WC220221	Statics	10-15 droppings present. Common pipistrelle (Pipistrellus pipistrellus) and soprano pipistrelle (Pipistrellus pygmaeus) calls detected on statics. Building should be classed as a minor hibernation roost based on calls and ideal location type.	Y	N
B1738a	Roost	3	Granted	WC071220	WC250121	WC220221	Endoscope and Statics	Myotis calls detected. Activity all night approx 17:00 - 09:00 most days.	Y	N
B1291	Roost	2	Access Refused	N/A	N/A	-	N/A	Although access was refused for B1291, this building has been classified as a hibernation roost as	Y	N

Building ID	Roost Suitability Rating	Number Of Hibernation Visits Required	Hibernation Survey Access	Visit 1	Visit 2	Visit 3	Survey Type	Hibernation Survey Notes	Hibernation Roost (Y/N)	Scoped Out? Y/N
								one hibernating BLE was found during GBA inspections (27/01/2020)		
B3648	Roost	2	Access Refused	N/A	N/A	-	N/A	Despite access being refused, B3648 has been classified as a hibernation roost based on anecdotal evidence from landowner. Species unknown	Y	N
B1447	Roost	3	Granted	WC071220	WC250121	N/A	Endoscope	No internal hibernation bat signs/evidence.	N	N
B1463	Roost	3	Granted	WC071220	WC250121	WC220221	Endoscope	No internal hibernation bat signs/evidence.	N	N
B1992d	Roost	3	Granted	WC071220	WC220221	N/A	Endoscope	No internal hibernation bat signs/evidence.	N	N
B2042	Roost	2	Granted	WC010221	WC220221	-	Endoscope and Statics	Droppings found on garage door and on top of chest of	N	N

Building ID	Roost Suitability Rating	Number Of Hibernation Visits Required	Hibernation Survey Access	Visit 1	Visit 2	Visit 3	Survey Type	Hibernation Survey Notes	Hibernation Roost (Y/N)	Scoped Out? Y/N
								drawers. No bat recordings on statics.		
B3657	Roost	3	Granted	WC220221	N/A	N/A	Endoscope	Droppings and feeding remains (butterfly wings). Unsuccessful data to class as a hibernation roost.	N	N
B3646	High	2	Granted	WC010221	WC220221	-	Statics	Feeding remains (butterfly wings). No static information	N	N
B599b	High	2	Granted	WC250121	WC220221	-	Endoscope and Statics	Single Myotis call recorded. No evidence that droppings found were from bats. Not a hibernation roost	N	N
B637	Roost	3	Granted	WC071220	WC250121	WC220221	Endoscope and Statics	Common pipistrelle (Pipistrellus pipistrellus) and soprano pipistrelle (Pipistrellus pygmaeus) calls detected on statics. Open fronted barn so likely foraging bats	N	N

Building ID	Roost Suitability Rating	Number Of Hibernation Visits Required	Hibernation Survey Access	Visit 1	Visit 2	Visit 3	Survey Type	Hibernation Survey Notes	Hibernation Roost (Y/N)	Scoped Out? Y/N
B2033b	High	3	Granted	WC141220	WC250121	WC220221	Statics	No bat recordings, only interference.	N	N
B599c	High	2	Granted	WC250121	WC220221	-	Endoscope	No internal hibernation bat signs/evidence.	N	N
B599d	High	2	Granted	WC250121	WC220221	-	Endoscope	Suspected dropping noted in one crevice. Could not be retrieved to confirm if bat	N	N
B1463a	Moderate	3	Granted	WC071220	WC250121	WC220221	Endoscope	No internal hibernation bat signs/evidence.	N	N
B1691	Moderate	3	Granted	WC071220	WC110121	N/A	Endoscope and Statics	No static information.	N	N
B2195	Moderate	2	Granted	WC010221	WC220221	-	Statics	High volume of calls detected for various bat species (NOC, LNOC, MYO). Calls were deemed as electrical interference when further analysed.	N	N

Building ID	Roost Suitability Rating	Number Of Hibernation Visits Required	Hibernation Survey Access	Visit 1	Visit 2	Visit 3	Survey Type	Hibernation Survey Notes	Hibernation Roost (Y/N)	Scoped Out? Y/N
B3625	Moderate	2	Granted	WC010221	N/A	-	Endoscope	Low potential. No internal hibernation bat signs/evidence.	N	N
B3626	Moderate	3	Granted	WC010221	N/A	N/A	Endoscope	No internal hibernation bat signs/evidence	N	N
B3659	Moderate	2	Granted	WC220221	N/A	-	Endoscope	Negligible for hibernation	N	N
B802c	Low	2	Granted	WC250121	WC220221	-	Endoscope	No internal hibernation bat signs/evidence	N	N
B1395	Roost	3	Access Refused For Internal Access (Statics Only)	WC071220	N/A	N/A	Endoscope	No internal hibernation bat signs/evidence	N	N
B1994	High	3	Access Refused For Internal Access (Statics Only)	WC071220	WC220221	N/A	Statics	Numerous recordings of bats detected (LNOC, NOC, CP, SP, BLE). Static was set-up externally, so calls were likely passing bats.	N	N

Building ID	Roost Suitability Rating	Number Of Hibernation Visits Required	Hibernation Survey Access	Visit 1	Visit 2	Visit 3	Survey Type	Hibernation Survey Notes	Hibernation Roost (Y/N)	Scoped Out? Y/N
B1371	Roost	3	Access Refused After December	WC071220	N/A	N/A	Endoscope and Statics	Feeding remains (peacock butterfly wings) scattered and droppings present. No static information.	N	N
B1522	Roost	3	Access Refused	N/A	N/A	N/A	N/A	N/A	N/A	N
B1549	Roost	3	Access Refused	N/A	N/A	N/A	N/A	N/A	N/A	N
B1679	Roost	3	Access Refused	N/A	N/A	N/A	N/A	N/A	N/A	N
B634	Roost	3	Access Refused	N/A	N/A	N/A	N/A	N/A	N/A	N
B73	Roost	2	Access Refused	N/A	N/A	-	N/A	N/A	N/A	N
B1272	High	3	Access Refused	N/A	N/A	N/A	N/A	N/A	N/A	N
B3105	Moderate	3	Access Refused	N/A	N/A	N/A	N/A	N/A	N/A	N
B62	Moderate	3	Access Refused	N/A	N/A	N/A	N/A	N/A	N/A	N

Building ID	Roost Suitability Rating	Number Of Hibernation Visits Required	Hibernation Survey Access	Visit 1	Visit 2	Visit 3	Survey Type	Hibernation Survey Notes	Hibernation Roost (Y/N)	Scoped Out? Y/N
B87	Moderate	3	Access Refused	N/A	N/A	N/A	N/A	N/A	N/A	N
B3545	Low	2	Access Refused	N/A	N/A	-	N/A	N/A	N/A	N
B3751b	Low	2	Access Refused	N/A	N/A	-	N/A	N/A	N/A	N
B61	Low	2	Access Refused	N/A	N/A	-	N/A	N/A	N/A	N
B68	Low	2	Access Refused	N/A	N/A	-	N/A	N/A	N/A	N
B70	Low	2	Access Refused	N/A	N/A	-	N/A	N/A	N/A	N
B1249	Roost	3	Granted	WC071220	WC250121	WC220221	Endoscope and Statics	No static information and difficult to endoscope. One Noctule re-entry during emergence/re-entry survey. Not a hibernation roost	N	Y
B609	High	3	Granted	WC071220	WC010221	WC220221	Endoscope and Statics	No bat recordings on statics. No internal hibernation bat signs/evidence.	N	Y

Building ID	Roost Suitability Rating	Number Of Hibernation Visits Required	Hibernation Survey Access	Visit 1	Visit 2	Visit 3	Survey Type	Hibernation Survey Notes	Hibernation Roost (Y/N)	Scoped Out? Y/N
B1382	Moderate	3	Granted	WC071220	WC250121	WC220221	Endoscope	No access to eastern section of building. No internal hibernation bat signs/evidence	N	Y
B1992e	Moderate	2	Granted	WC220221	N/A	-	Endoscope	No internal hibernation bat signs/evidence.	N	Y
B3682b	Moderate	2	Granted	WC220221	N/A	-	Endoscope	Negligible for hibernation	N	Y
B3758	Moderate	3	Granted	WC220221	N/A	N/A	Endoscope	No internal hibernation bat signs/evidence	N	Y
B1992f	Low	2	Granted	WC220221	N/A	-	Endoscope	No internal hibernation bat signs/evidence	N	Y
B2187	Low	2	Granted	WC250121	N/A	-	Endoscope	No internal hibernation bat signs/evidence	N	Y
B600b	Low	2	Granted	WC010221	N/A	-	Endoscope	Negligible for hibernation	N	Y
B603	Low	2	Granted	WC010221	N/A	-	Endoscope	Negligible for hibernation	N	Y

Building ID	Roost Suitability Rating	Number Of Hibernation Visits Required	Hibernation Survey Access	Visit 1	Visit 2	Visit 3	Survey Type	Hibernation Survey Notes	Hibernation Roost (Y/N)	Scoped Out? Y/N
B1998a	Moderate	3	Access Refused For Internal Access (Statics Only)	WC071220	WC220221	N/A	Statics	No static information.	N	Y
B2944	Roost	2	Access Refused After January	WC071220	N/A	-	Endoscope and Statics	Droppings present although not particularly fresh. No static information.	N	Y

Annex I Ground based bat roost assessments of bridges and culverts

Table I.1 Summary of initial ground assessment results on structures

Structure ID	Structure name	Structure Type	Description	Grid Reference	Overall roost category
BE01 South	Boreham Bridge	Bridge	A large concrete bridge carrying the A130 dual carriageway over the A12. Gaps present in the expansion joints, wingwall and abutments.	TL741094	Low
BE01 North					Low
BE02 South	Generals Lane	Bridge	A large concrete bridge carrying the A12 over a slip road. Good vegetation links either side of the structure owing to woodland and hedgerows. Access constraints due to a railway to the north.	TL741096	Moderate
BE02 North					Not Surveyed
CE01 South	Boreham Culvert South	Culvert	Concrete culvert that is 1.5m high and 4m wide. Negligible potential for roosting bats. Access not possible to northern side of culvert due to land access.	TL746098	Negligible
BE03 North	Porters Park Bridge	Bridge	A large concrete bridge spanning the A12. The northern side is inaccessible due to the presence of a railway. A defect was found on the southern side of the bridge leading to a cavity.	TL761106	Not Surveyed
BE03 South					Low
BE04	Crix Bridge	Bridge	Concrete road bridge spanning the A12 with no features suitable	TL777113	Negligible

Structure ID	Structure name	Structure Type	Description	Grid Reference	Overall roost category
			for bats on either side of the bridge.		
BE05 East	River Ter Bridge	Bridge	Concrete road bridge carrying the A12 over river Ter. Red brick single arch bridge carrying London road section over same stream to the south. There is a vegetation corridor along the river Ter on both sides.	TL783115	Moderate
BE05 West					Moderate
BE06	Bury Lane	Bridge	Steel beam road bridge spanning the A12 with no suitable bat features present.	TL787117	Negligible
BE07	Station Road Bridge	Bridge	Steel beam road bridge spanning the A12 with no suitable bat features present.	TL790118	Negligible
BE08	Wellington Bridge	Bridge	Slip road over A12 of steel beam construction. No suitable bat features present.	TL794120	Negligible
BE09 North	Woodend Bridge	Bridge	Steel beam road bridge spanning the A12 with no suitable bat features present. Small areas of vegetation on either side of the bridge.	TL806127	Negligible
BE09 South					Negligible
BE10 East	Olivers Bridge	Bridge	Steel beam road bridge carrying A12 over Maldon Road. Large joint in centre of bridge open creating potential bat feature.	TL823132	Low
BE10 West					Low

Structure ID	Structure name	Structure Type	Description	Grid Reference	Overall roost category
			Vegetation corridors along the A12 present.		
BE11 North	Benton Bridge	Bridge	Underpass under the A12 for a gravel footpath. Underpass is dark and has gaps in the bearing shelf creating suitable bat features. Continuous strip of vegetation also present to the north and south of the underpass.	TL824133	Low
BE11 South					Moderate
BE12 North	Brain Bridge / Whetmead Nature Reserve	Bridge	Concrete road bridge carrying A12 over the river Brain and the access path to Whetmead nature reserve. Limited roosting potential in bridge. Underpass is dark with large areas of vegetation in the surrounding area.	TL828136	Low
BE12 South					Low
BE13	Whetmead Reserve Dry Culvert / Barrows Creep	Culvert	Iron and steel culvert with limited bat roosting potential. Culvert has good crossing point potential.	TL829140	Negligible
BE14 North	Colemans Bridge	Bridge	Concrete road bridge carrying exit slip road over the A12. Gaps in bearing shelf have bat potential. Vegetation corridor to the south of the bridge leads to large area of foraging habitat.	TL830155	Low
BE14 South					Low
BE15 East	Memorial	Bridge	Concrete road bridge carrying A12 over smaller road. Gaps in bearing shelf create bat potential.	TL840165	Low
BE15 West					Low

Structure ID	Structure name	Structure Type	Description	Grid Reference	Overall roost category
BE16 South	Rivenhall Bridge	Bridge	Concrete road bridge carrying A12 over stream. There is limited bat potential due to a lack of observable features. Bridge is well lit at night.	TL842167	Negligible
BE16 North					Negligible
Essex Fire and Rescue North	Essex Fire and rescue Service culvert	Culvert	Red brick culvert under A12. Most of the brickwork is well sealed however fallen bricks at top of arch may create bat features. Culvert may be susceptible to flooding.	TL845170	Negligible
Essex Fire and Rescue South					Low
BE17 East	Cranes Bridge	Bridge	Large concrete road bridge carrying A12 over slip road. Gaps in pillars and bearing shelf create potential bat features. Vegetation to the east of the bridge connects to larger vegetated area.	TL853176	Low
BE17 West					Moderate
BE18 East	Ashmans Bridge	Bridge	Large concrete road bridge carrying the A12 over a river. There is roosting potential in the deck and pillars on the west side of the bridge. Good connectivity to surrounding river and forest creating suitable foraging and commuting habitat for bats.	TL855177	Moderate
BE18 West					Moderate
BE19	Highfields Bridge	Bridge	Concrete road bridge carrying smaller road over the A12. No observable bat features present.	TL861177	Negligible

Structure ID	Structure name	Structure Type	Description	Grid Reference	Overall roost category
BE20 South	Ewell Bridge	Bridge	Steel bridge carrying small dirt track over A12. No observable bat features.	TL869182	Negligible
BE20 North					Negligible
BE21	Inworth Subway	Culvert	Culvert formed of corrugated steel pipe. Limited use and connectivity to surrounding habitat. No observable bat features.	TL874187	Negligible
BE22 Culvert	Domsey Brook	Culvert	Culvert formed of concrete slabs running over brook. Limited bat roosting features. Commuting and foraging potential over the water.	TL876189	Negligible
BE22 West	Park Bridge	Bridge	Large concrete road bridge carrying A12 over smaller road. Corridors of vegetation create good connectivity to surrounding habitat.	TL876189	Moderate
BE22 East					Moderate
BE23 East	Threshelsford Bridge	Bridge	Steel bridge used as footpath and farmer track (not a public road). Joints in bridge have bat roosting potential. There is also good connectivity to surrounding habitat.	TL877195	Low
BE23 West					Low
BE24 East	Nursery	Bridge	Large curved concrete road bridge carrying A12 slip road towards Kelvedon. Limited bat	TL877200	Negligible

Structure ID	Structure name	Structure Type	Description	Grid Reference	Overall roost category
			roosting potential due to bridge being well sealed.		
BE24 West					Negligible
BE25	Marks Tey Footbridge	Bridge	Steel footbridge connecting two smaller roads running parallel to the A12. No observable bat features. Bridge is well lit at night.	TL916237	Negligible
BE26	Marks Tey Bridge	Bridge	Large curved road bridge carrying the A120 over the A12. Bridge in good condition causing a lack of bat roosting features. Areas of bridge inaccessible with an endoscope.	TL918238	Low

Annex J Bridges and culverts emergence / re-entry surveys

Table J.1 Weather meta data for all structure emergence/re-entry surveys

Structure ID	Visit Number	Date	Start time	End time	Sunrise/ Sunset time	Dusk/ Dawn	Moon Phase	Temp. (°C) at Start	Rain* at start	Cloud Cover* at start	Wind* at start	Temp (°C) at End	Rain at end	Cloud Cover at end	Wind at end
BE02_South	1	28/07/2020	20:37	22:22	20:52	Dusk	1/2	17	1	3	1	15	1	2	1
BE02_South	2	03/09/2020	04:40	06:27	06:12	Dawn	Full	16	1	8	2	17	1	6	1
BE05_East	1	29/07/2020	03:56	05:30	05:15	Dawn	1/2	10	1	0	1	8	1	0	0
BE05_East	2	25/08/2020	19:42	21:27	19:57	Dusk	Not seen	15	1	8	6	15	1	8	8
BE05_West	1	29/07/2020	20:36	22:21	20:51	Dusk	3/4	21	1	2	1	17	1	1	1
BE05_West	2	26/08/2020	04:29	06:14	05:59	Dawn	Not seen	15	1	8	8	14	1	7	8
BE10_East	1	30/07/2020	20:34	22:19	20:49	Dusk	3/4	22	1	1	2	18	1	1	1
BE11_North	1	18/08/2020	19:58	21:43	20:13	Dusk	1/4	22	1	0	1	19	1	1	1
BE11_North	2	01/09/2020	19:28	21:13	05:48	Dusk	Full	15	1	5	1	15	1	5	1
BE11_North	3	14/06/2021	21:03	23:18	21:18	Dusk	1/4	21	1	8	1	17	1	8	1
BE11_South	1	18/08/2020	19:58	21:44	20:13	Dusk	1/4	22	1	2	0	20	1	5	0
BE11_South	2	14/06/2021	21:03	23:18	21:18	Dusk	1/4	21	1	8	1	17	1	8	1
BE12_South	1	27/08/2020	19:38	21:23	19:53	Dusk	Not seen	16	3	8	4	16	1	8	1
BE17_East	1	19/08/2020	04:18	06:03	04:33	Dawn	1/4	16	1	2	0	15	1	5	1
BE17_East	2	01/09/2020	19:28	21:12	19:43	Dusk	Full	16	1	2	1	14	1	2	0
BE17_West	1	19/08/2020	04:18	06:03	05:48	Dawn	0/4	15	1	2	1	16	1	3	1

Structure ID	Visit Number	Date	Start time	End time	Sunrise/ Sunset time	Dusk/ Dawn	Moon Phase	Temp. (°C) at Start	Rain* at start	Cloud Cover* at start	Wind* at start	Temp (°C) at End	Rain at end	Cloud Cover at end	Wind at end
BE17_West	2	01/09/2020	19:28	21:12	19:42	Dusk	Not seen	16	1	2	1	15	1	2	1
BE18_East	1	26/08/2020	19:40	21:25	19:55	Dusk	Not seen	19	1	3	1	18	1	4	1
BE18_East	2	02/09/2020	04:41	06:26	06:11	Dawn	Full	8	1	0	1	7	1	0	1
BE18_West	1	27/08/2020	04:30	06:15	06:00	Dawn	Not seen	14	1	8	0	10	1	8	0
BE18_West	2	02/09/2020	04:41	06:26	06:11	Dawn	Full	8	1	3	1	10	1	3	1
BE22_East	1	19/08/2020	19:56	21:42	20:11	Dusk	1/4	19	2	8	1	18	1	8	1
BE22_East	2	03/09/2020	04:42	06:27	06:12	Dawn	Full	16	1	6	2	17	1	6	2
BE24_West	1	18/08/2020	03:16	06:01	05:46	Dawn	Not seen	15	1	6	2	15	1	7	2
Near_BE16_South_F&R	1	02/09/2020	19:25	21:10	19:40	Dusk	Full	15	1	6	1	14	1	6	1

Weather Conditions*

Rain 1 - No / Very light rain (0-0.25mm/hr)
 2 - Light rain (0.26-1mm/hr)
 3 - Moderate rain (1.01-4mm/hr)
 4 - Heavy rain (>4mm/hr)

Cloud Cover Scale of 0-8 (0=Completely clear – 8 = Completely clouded)

Wind Beaufort Scale

Structure ID	Visit Number	Date	Start time	End time	Sunrise/ Sunset time	Dusk/ Dawn	Moon Phase	Temp. (°C) at Start	Rain* at start	Cloud Cover* at start	Wind* at start	Temp (°C) at End	Rain at end	Cloud Cover at end	Wind at end																																																																																				
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Table J.2 Species data from all structure emergence / re-entry surveys

Structure ID (and roost category)	Visit number	Date	Dusk/dawn	Time of recording	Species	Number of bats	Activity type
BE01_South (low)	N/A						
BE01_North (low)	N/A						
BE02_South (moderate)	1	28/07/2020	Dusk	21:41:00	Noctule	1	C - Commuting
				21:53:00	Soprano pipistrelle	1	C - Commuting
				22:03:00	Common pipistrelle	1	C - Commuting
				21:22:00	Soprano pipistrelle	1	F - Foraging
				21:39:00	Noctule	1	F - Foraging
				21:50:00	Soprano pipistrelle	1	Unknown
				21:10:00	Common pipistrelle	1	F - Foraging
				22:14:00	Leisler's bat	1	F - Foraging
	2	03/09/2020	Dawn	05:13:00	Common pipistrelle	1	C - Commuting
				04:58:00	Noctule	1	C - Commuting
				05:13:00	Common pipistrelle	1	C - Commuting
				05:46:00	Soprano pipistrelle	1	C - Commuting
BE03_South	N/A						

Structure ID (and roost category)	Visit number	Date	Dusk/dawn	Time of recording	Species	Number of bats	Activity type
(low)							
BE05_East (moderate)	1	29/07/2020	Dawn	03:57:00	Whiskered bat / Brandt's bat	1	C - Commuting
				04:00:00	Whiskered bat / Brandt's bat	1	C - Commuting
				04:07:00	Soprano pipistrelle	1	C - Commuting
				04:08:00	Whiskered bat / Brandt's bat	1	C - Commuting
				04:11:00	Whiskered bat / Brandt's bat	1	C - Commuting
				04:15:00	Common pipistrelle	1	F - Foraging
				04:23:00	Soprano pipistrelle	1	C - Commuting
				04:26:00	Soprano pipistrelle	1	C - Commuting
				04:27:00	Noctule	1	C - Commuting
				04:44:00	Soprano pipistrelle	1	C - Commuting
				03:57:00	Daubenton's bat	1	F - Foraging
				04:02:00	Soprano pipistrelle	1	F - Foraging
				04:11:00	Daubenton's bat	1	F - Foraging
				04:05:00	Common pipistrelle	1	F - Foraging
				2	25/08/2020	Dusk	20:19:38
20:25:29	Soprano pipistrelle	1	C - Commuting				
20:30:36	Noctule	1	C - Commuting				

Structure ID (and roost category)	Visit number	Date	Dusk/dawn	Time of recording	Species	Number of bats	Activity type
				20:43:33	<i>Myotis species</i>	1	C - Commuting
				21:14:14	Common pipistrelle	1	S - Socialising
				20:15:00	Common pipistrelle	2	C - Commuting
				20:15:00	Soprano pipistrelle	1	C - Commuting
				20:35:00	<i>Myotis species</i>	1	C - Commuting
				20:45:00	<i>Myotis species</i>	1	F - Foraging
				21:00:00	Daubenton's bat	1	S - Socialising
				21:14:00	Common pipistrelle	N/A	S - Socialising
BE05_West (moderate)	1	29/07/2020	Dusk	21:14:00	Common pipistrelle	1	C - Commuting
				21:20:00	Soprano pipistrelle	1	C - Commuting
				21:20:30	Common pipistrelle	1	F - Foraging
				21:26:00	Soprano pipistrelle	1	C - Commuting
				21:44:00	Whiskered bat / Brandt's bat	1	C - Commuting
				21:00:00	Common pipistrelle	1	Unknown
				21:14:00	Soprano pipistrelle	1	F - Foraging
				21:19:00	<i>Myotis species</i>	1	F - Foraging
				21:20:00	Daubenton's bat	2	F - Foraging
				21:27:00	Soprano pipistrelle	1	F - Foraging

Structure ID (and roost category)	Visit number	Date	Dusk/dawn	Time of recording	Species	Number of bats	Activity type
				22:12:00	Common pipistrelle	1	F - Foraging
				21:16:00	Common pipistrelle	1	Unknown
	2	26/08/2020	Dawn	04:49:40	Soprano pipistrelle	1	C - Commuting
				04:55:51	<i>Myotis species</i>	1	C - Commuting
				04:56:04	Common pipistrelle	1	S - Socialising
				05:26:15	Common pipistrelle	1	F - Foraging
				04:34:00	<i>Myotis species</i>	1	C - Commuting
				04:49:00	Soprano pipistrelle	1	C - Commuting
				04:55:00	Common pipistrelle	1	S - Socialising
				05:30:00	Common pipistrelle	1	F - Foraging
BE10_East (low)	1	30/07/2020	Dusk	21:11:00	Soprano pipistrelle	1	F - Foraging
				22:10:00	Common pipistrelle	1	C - Commuting
				21:20:00	Soprano pipistrelle	1	S - Socialising
				21:23:00	Serotine	1	Unknown
				22:15:00	Noctule	1	Unknown
				22:09:00	Common pipistrelle	1	Unknown
BE10_West (low)	1	30/07/2020	Dusk	N/A	N/A	N/A	N/A

Structure ID (and roost category)	Visit number	Date	Dusk/dawn	Time of recording	Species	Number of bats	Activity type
BE11_North (low)	1	18/08/2020	Dusk	20:20:00	Soprano pipistrelle	1	E - Emergence
				20:20:00	Soprano pipistrelle	1	F - Foraging
				20:31:00	Common pipistrelle and soprano pipistrelle	2	S - Socialising
				20:31:44	Common pipistrelle	1	C - Commuting
				20:33:00	Common pipistrelle	3	S - Socialising
				21:02:00	<i>Myotis</i> sp.	1	C - Commuting
				21:42:00	Soprano pipistrelle	1	Other (state in notes)
	2	01/09/2020	Dusk	19:51:34	Unknown	1	E - Emergence
				19:57:00	Soprano pipistrelle	2	F - Foraging
				20:03:00	Common pipistrelle	1	F - Foraging
				20:04:00	Soprano pipistrelle	1	S - Socialising
				20:04:00	Common pipistrelle	2	S - Socialising
				20:13:00	Common pipistrelle	1	E - Emergence
				20:14:00	Soprano pipistrelle	1	E - Emergence
20:31:00	Brown long-eared bat	1	C - Commuting				
21:00:28	Barbastelle	1	Unknown				
21:00:37	Barbastelle	1	Unknown				

Structure ID (and roost category)	Visit number	Date	Dusk/dawn	Time of recording	Species	Number of bats	Activity type
	3	14/06/2021	Dusk	21:01:58	Barbastelle	1	Unknown
				21:02:05	Barbastelle	1	Unknown
				21:03:00 - 23:18:00	Common pipistrelle	6	E - Emergence
					Soprano pipistrelle	2	E - Emergence
BE11_South (moderate)	1	18/08/2020	Dusk	20:24:00	Soprano pipistrelle	2	F - Foraging
				20:32:00	Common pipistrelle	2	F - Foraging
				20:37:00	Soprano pipistrelle	2	S - Socialising
				20:37:00	Common pipistrelle	2	S - Socialising
	2	01/09/2020	Dusk	19:56:00	Soprano pipistrelle	2	S - Socialising
				20:00:00	Noctule	1	F - Foraging
				20:03:00	Common pipistrelle	1	F - Foraging
				20:35:00	Soprano pipistrelle	1	F - Foraging
				20:47:00	Soprano pipistrelle	1	C - Commuting
	3	14/06/2021	Dusk	21:34:00	Common pipistrelle	1	Emergence
				21:38 – 23:18	Common pipistrelle	6	S – Socialising F - Foraging
				21:39 – 23:18	Soprano pipistrelle	2	S – Socialising F - Foraging

Structure ID (and roost category)	Visit number	Date	Dusk/dawn	Time of recording	Species	Number of bats	Activity type
BE12_North (low)	1	27/08/2020	Dusk	N/A	N/A	N/A	N/A
BE12_South (low)	1	27/08/2020	Dusk	20:10:00	Soprano pipistrelle	2	F - Foraging
				20:14:00	Common pipistrelle	2	C - Commuting
				20:20:00	Soprano pipistrelle	1	S - Socialising
				20:31:00	Common pipistrelle	1	S - Socialising
				20:36:00	<i>Myotis</i> species	2	C - Commuting
				21:12:00	Daubenton's bat	2	F - Foraging
				21:23:00	Soprano pipistrelle	1	C - Commuting
BE14_North (low)	N/A						
BE14_South (low)	N/A						
BE15_East (low)	N/A						
BE15_West (low)	N/A						
BE17_East (low)	1	19/08/2020	Dawn	04:43:00	Noctule	1	C - Commuting
				04:47:00	Soprano pipistrelle	1	F - Foraging
	2	01/09/2020	Dusk	20:43:00	Soprano pipistrelle	1	C - Commuting
BE17_West (moderate)	1	19/08/2020	Dawn	04:19:00	Noctule	1	C - Commuting
	2	01/09/2020	Dusk	20:36:00	Noctule	1	C - Commuting

Structure ID (and roost category)	Visit number	Date	Dusk/dawn	Time of recording	Species	Number of bats	Activity type
BE18_East (moderate)	1	26/08/2020	Dusk	20:05:00	Soprano pipistrelle	1	C - Commuting
				20:08:00	Soprano pipistrelle	1	F - Foraging
				20:08:00	Soprano pipistrelle	1	S - Socialising
				20:22:00	Daubenton's bat	1	C - Commuting
				20:24:00	Daubenton's bat	2	C - Commuting
				20:25:00	Daubenton's bat	1	S - Socialising
				20:26:00	Common pipistrelle	3	C - Commuting
				20:50:00	Soprano pipistrelle	3	S - Socialising
				21:25:00	Soprano pipistrelle	1	S - Socialising
	2	02/09/2020	Dawn	05:05:00	Whiskered bat/Brandt's bat	1	F - Foraging
				05:11:00	Whiskered bat/Brandt's bat	1	C - Commuting
05:27:00				Daubenton's bat	1	C - Commuting	
05:44:00				Noctule	1	C - Commuting	
BE18_West (moderate)	1	27/08/2020	Dawn	04:31:17	Soprano pipistrelle	1	S - Socialising
			Dawn	04:31:44	<i>Myotis</i> species	1	C - Commuting
			Dawn	04:32:48	Soprano pipistrelle	1	C - Commuting
			Dawn	04:50:03	Common pipistrelle	1	C - Commuting
			Dawn	05:15:50	<i>Myotis</i> species	1	S - Socialising

Structure ID (and roost category)	Visit number	Date	Dusk/dawn	Time of recording	Species	Number of bats	Activity type
			Dawn	05:26:35	Soprano pipistrelle	1	F - Foraging
			Dawn	04:31:00	Soprano pipistrelle	1	S - Socialising
			Dawn	04:33:00	Daubenton's bat	1	C - Commuting
			Dawn	04:34:00	Soprano pipistrelle	2	S - Socialising
			Dawn	04:35:00	<i>Myotis</i> species	1	C - Commuting
			Dawn	04:43:00	Barbastelle	1	C - Commuting
			Dawn	04:48:00	Barbastelle	1	C - Commuting
			Dawn	04:56:00	<i>Myotis</i> species	1	C - Commuting
			Dawn	05:01:00	<i>Myotis</i> species and soprano pipistrelle	2	S - Socialising
			Dawn	05:16:00	Common pipistrelle	1	C - Commuting
			Dawn	05:35:00	Unknown	3	C - Commuting
	2	02/09/2020	Dawn	05:05:00	whiskered bat/Brandt's bat	1	N/A
			Dawn	05:07:00	Whiskered batBrandt's bat	1	N/A
			Dawn	05:14:00	Whiskered bat/Brandt's bat	1	N/A
			Dawn	05:07:00	<i>Myotis</i> species	1	C - Commuting
BE22_East (moderate)	1	19/08/2020	Dusk	20:25:00	Soprano pipistrelle	1	F - Foraging
				20:37:00	Common pipistrelle	1	C - Commuting

Structure ID (and roost category)	Visit number	Date	Dusk/dawn	Time of recording	Species	Number of bats	Activity type
				21:03:00	Common pipistrelle	1	F - Foraging
	2	03/09/2020	Dawn	04:49:00	Common pipistrelle	1	C - Commuting
				05:16:00	Common pipistrelle	1	C - Commuting
BE22_West (moderate)	1	19/08/2020	Dusk	20:25:00	Soprano pipistrelle	1	C - Commuting
				20:39:00	Common pipistrelle and soprano pipistrelle	2	C - Commuting
				20:37:00	Common pipistrelle	1	C - Commuting
				21:16:00	Common pipistrelle	1	C - Commuting
				21:28:17	Common pipistrelle	1	S - Socialising
	2	03/09/2020	Dawn	04:49:00	Common pipistrelle	1	S - Socialising
BE24_East	1	18/08/2020	Dawn	N/A	N/A	N/A	N/A
BE24_West	1	18/08/2020	Dawn	N/A	N/A	N/A	N/A
Essex Fire and Rescue_South (low)	1	02/09/2020	Dusk	20:04:00	Pipistrelle species	11	F - Foraging
				20:09:00	Common pipistrelle	1	F - Foraging
				19:57:00	Soprano pipistrelle	1	F - Foraging
				21:38:00	Common pipistrelle	2	F - Foraging
				20:44:00	Noctule	1	C - Commuting

Annex K Crossing point surveys

Table K.1 Crossing Point survey information

Crossing point	Survey date	Sunset time	Survey time	Survey end time	Temperature (°C)	Wind (Beaufort)	Cloud cover (1-8)	Rain (1-5 light to torrential)
CP-A	15/06/2020	21:18	21:03	22:48	18	0	1	0
CP-A	13/07/2020	21:10	20:55	22:40	19	0	8	2
CP-A	10/08/2020	20:29	20:14	22:00	26	1	1	0
CP-A	07/09/2020	19:31	19:16	21:01	14	2	8	0
CP-A	05/10/2020	18:26	18:11	19:56	15	2	8	2
CP-B	18/06/2020	21:20	21:05	22:50	17	0	0	0
CP-B	13/07/2020	21:11	20:54	22:40	21	0	1	0
CP-B	10/08/2020	20:28	20:14	21:59	25	1	1	0
CP-B	21/09/2020	18:57	18:42	20:27	21	1	2	0
CP-B	19/10/2020	17:54	17:39	19:24	17	1	7	0
CP-C	15/06/2020	21:18	21:03	22:48	18	0	2	0
CP-C	13/07/2020	22:53	20:56	22:41	19	0	7	1
CP-C	17/08/2020	20:15	20:00	21:48	20	0	3	1
CP-C	07/09/2020	19:29	19:14	20:59	19	1	8	1
CP-C	05/10/2020	18:31	18:16	20:01	16	0	8	1
CP-D	15/06/2020	21:17	21:02	22:47	16	1	2	0

Crossing point	Survey date	Sunset time	Survey time	Survey end time	Temperature (°C)	Wind (Beaufort)	Cloud cover (1-8)	Rain (1-5 light to torrential)
CP-D	14/07/2020	21:10	20:55	22:40	17	0	7	0
CP-D	18/08/2020	20:18	19:58	21:43	21	2	3	0
CP-D	15/09/2020	19:11	18:56	21:11	27-21	1	2	1
CP-D	13/10/2020	18:08	17:53	21:38	10	2	8	2
CP-E	16/06/2020	21:19	21:05	22:49	18	1	1	0
CP-E	14/07/2020	21:10	20:55	22:40	21	0	2	0
CP-E	19/08/2020	20:11	19:56	21:41	19	3	8	1
CP-E	15/09/2020	19:10	18:55	20:40	26	0	1	1
CP-E	13/10/2020	18:05	17:50	20:05	8	2	8	2

Annex L Linear transect surveys

Table L.1 Linear transect locations and survey information

Linear transect reference	Survey date	Sunset time	Survey time	Direction walked	Temperature	Wind (Beaufort)	Rain	Description
Linear Transect 1	03/06/20	21:39	21:39 – 23:40	Away	15	3	0	Transect running north of the existing A12 north of Boreham, through arable fields and woodland to Wallace's Lane.
	07/07/20	21:15	21:45 - 00:09	Towards	16	3	0	
Linear Transect 2	03/06/20	21:09	21:09 – 00:01	Towards	15	3	0	Transect running north of the existing A12 from Hatfield Peverel. It crosses the Great Eastern Main Line Railway and follows a public right of way through arable fields and along hedgerow lined field margins.
	07/07/20	21:16	21:45 – 00:04	Towards	16	3	0	
Linear Transect 3	02/06/20	21:07	21:37 – 23:47	Away	17	3	0	Transect running south of the existing A12. It runs through woodland, over the River Blackwater along tree lined field boundary's and partway along Mill Lane and Braxted Road.
	07/07/20	21:14	21:44 – 23:54	Towards	16	3	0	
Linear Transect 4	09/06/20	21:15	21:45 – 23:45	Away	12	3	0	Transect running south from a field south of the A12 to the east of Feering. The route runs along the margins of arable fields adjacent to hedgerows, through grassland, and over Domsey Brook.
	09/07/20	21:43	21:43 – 23:50	Away	17	5	0	
	16/06/20	21:18	21:48 – 00:14	Away	18.4	3	0	

Linear transect reference	Survey date	Sunset time	Survey time	Direction walked	Temperature	Wind (Beaufort)	Rain	Description
Linear Transect 5	29/07/20	20:51	21:21 – 23:41	Towards	18	3	0	Transect running east to the south of the existing A12 following Easthorpe Road. Habitats to either side of the road comprise arable and grassland fields and Easthorpe village.

Annex M Manual / automatic activity surveys – transect

Table M.1 Traditional transects survey details

Transect number	Date	Start point	Dusk/dawn	Sunset/sunrise time	Start time	End time	Start temperature (Celsius)	Start rain	Start wind	End temperature	End rain	End wind
1	19/05/2020	1	Dusk	2020/05/19 20:56	20:56	23:15	21	None 0-0.25mm	1	18	None 0-0.25mm	1
1	04/06/2020	7	Dusk	2020/06/04 21:11	21:11	23:14	11	None 0-0.25mm	2	9	None 0-0.25mm	1
1	07/07/2020	11	Dusk	2020/07/07 21:17	21:17	23:41	15	Light 0.26-1mm	1	14	Moderate 1.01-4mm	3
1	04/08/2020	5	Dusk	2020/08/04 20:40	20:40	22:44	20	None 0-0.25mm	3	18	None 0-0.25mm	2
1	05/08/2020	5	Dawn	2020/08/05 05:27	03:27	05:29	16	None 0-0.25mm	3	14	None 0-0.25mm	2
1	08/09/2020	9	Dusk	2020/09/08 19:28	19:29	20:31	23	None 0-0.25mm	0	20	None 0-0.25mm	3
1	06/10/2020	3	Dusk	2020/10/06 18:23	18:23	19:03	14	None 0-0.25mm	3	14	None 0-0.25mm	3
2	20/05/2020	1	Dusk	2020/05/20 20:51	20:51	23:09	21	None 0-0.25mm	1	17	None 0-0.25mm	1
2	04/06/2020	7	Dusk	2020/06/04 21:09	21:09	22:39	10	None 0-0.25mm	2	10	None 0-0.25mm	2

Transect number	Date	Start point	Dusk/dawn	Sunset/sunrise time	Start time	End time	Start temperature (Celsius)	Start rain	Start wind	End temperature	End rain	End wind
2	08/07/2020	11	Dusk	2020/07/08 21:15	21:15	23:32	15	Light 0.26-1mm	1	14	Moderate 1.01-4mm	3
2	05/08/2020	5	Dusk	2020/08/05 20:39	20:3	22:43	21	None 0-0.25mm	1	19	None 0-0.25mm	1
2	06/08/2020	5	Dawn	2020/08/06 03:27	03:27	05:27	18	None 0-0.25mm	1	18	None 0-0.25mm	1
2	09/09/2020	9	Dusk	2020/09/09 19:26	19:26	21:32	19	None 0-0.25mm	1	16	None 0-0.25mm	1
2	07/10/2020	3	Dusk	2020/10/07 18:20	18:20	20:20	13	None 0-0.25mm	1	13	None 0-0.25mm	1
3	01/06/2020	7	Dusk	2020/06/01 21:06	21:06	23:06	18	None 0-0.25mm	1	16	None 0-0.25mm	1
3	09/07/2020	11	Dusk	2020/07/09 21:15	21:15	22:14	15	Light 0.26-1mm	1	14	Moderate 1.01-4mm	3
3	27/07/2020	11	Dusk	2020/07/27 20:53	20:53	22:55	19	None 0-0.25mm	3	18	None 0-0.25mm	3
3	18/08/2020	5	Dusk	2020/08/18 20:13	20:13	22:14	20	None 0-0.25mm	2	18	None 0-0.25mm	1
3	19/08/2020	5	Dawn	2020/08/19 05:48	03:48	05:48	15	None 0-0.25mm	1	14	None 0-0.25mm	1
3	10/09/2020	9	Dusk	2020/09/10 19:22	19:22	21:22	16	None 0-0.25mm	1	15	None 0-0.25mm	1

Transect number	Date	Start point	Dusk/dawn	Sunset/sunrise time	Start time	End time	Start temperature (Celsius)	Start rain	Start wind	End temperature	End rain	End wind
3	08/10/2020	3	Dusk	2020/10/08 18:18	18:18	20:18	12	None 0-0.25mm	1	11	None 0-0.25mm	1
4	01/06/2020	7	Dusk	2020/06/01 21:07	21:07	23:16	18	None 0-0.25mm	1	14	None 0-0.25mm	1
4	17/06/2020	7	Dusk	2020/06/17 21:19	21:19	23:54	18	None 0-0.25mm	0	16	Heavy >4mm	1
4	06/07/2020	11	Dusk	2020/07/06 21:17	21:17	00:00	0	None 0-0.25mm	0	0	None 0-0.25mm	0
4	03/08/2020	5	Dusk	2020/08/03 20:42	20:42	22:50	26.5	None 0-0.25mm	1	19.11	None 0-0.25mm	1
4	04/08/2020	5	Dawn	2020/08/04 05:26	03:20	05:26	12.7	None 0-0.25mm	1	11.2	None 0-0.25mm	1
4	08/09/2020	9	Dusk	2020/09/08 19:30	19:30	21:52	20	None 0-0.25mm	0	18	None 0-0.25mm	0
4	06/10/2020	3	Dusk	2020/10/06 18:23	18:23	18:40	13	Heavy >4mm	4	13	Heavy >4mm	4
5	09/07/2020	11	Dusk	2020/07/09 21:14	21:14	00:10	15	Moderate 1.01-4mm	1	12	Light 0.26-1mm	1
5	05/08/2020	5	Dusk	2020/08/05 20:39	20:39	23:02	22.5	None 0-0.25mm	1	21.1	None 0-0.25mm	1
5	05/08/2020	5	Dawn	2020/08/05 05:29	03:24	05:29	20.7	None 0-0.25mm	1	20.11	None 0-0.25mm	1

Transect number	Date	Start point	Dusk/dawn	Sunset/sunrise time	Start time	End time	Start temperature (Celsius)	Start rain	Start wind	End temperature	End rain	End wind
5	10/09/2020	9	Dusk	2020/09/10 19:22	2020/09/10 19:22	21:50	14	None 0-0.25mm	0	12	None 0-0.25mm	0
5	08/10/2020	3	Dusk	2020/10/08 18:18	18:18	20:18	13	None 0-0.25mm	3	11	None 0-0.25mm	2
6	18/06/2020	7	Dusk	2020/06/18 21:20	21:20	23:00	19	None 0-0.25mm	1	0	0	0
6	08/07/2020	11	Dusk	2020/07/08 21:15	21:15	23:15	14	Light 0.26-1mm	Light	11	Light 0.26-1mm	Light
6	04/08/2020	5	Dusk	2020/08/04 20:41	20:41:00	22:41	18	None 0-0.25mm	3	19.3	None 0-0.25mm	1
6	05/08/2020	5	Dawn	2020/08/05 05:27	03:25	05:27	15.8	None 0-0.25mm	1	15.2	None 0-0.25mm	1
6	09/09/2020	9	Dusk	2020/09/09 19:24	19:24	21:38	15	None 0-0.25mm	0	13	None 0-0.25mm	0
6	07/10/2020	2	Dusk	2020/10/07 18:20	18:20	20:20	12	None 0-0.25mm	3	11	None 0-0.25mm	2
7	18/06/2020	13	Dusk	2020/06/18 21:19	21:19	23:19	17	None 0-0.25mm	1	15	None 0-0.25mm	1
7	08/07/2020	11	Dusk	2020/07/08 21:15	21:15	23:46	16	Light 0.26-1mm	1	15	Light 0.26-1mm	1
7	03/08/2020	5	Dusk	2020/08/03 20:42	20:42	23:03	16	None 0-0.25mm	1	14	None 0-0.25mm	1

Transect number	Date	Start point	Dusk/dawn	Sunset/sunrise time	Start time	End time	Start temperature (Celsius)	Start rain	Start wind	End temperature	End rain	End wind
7	04/08/2020	5	Dawn	2020/08/04 03:32	03:32	05:38	9	None 0-0.25mm	1	8	None 0-0.25mm	1
7	23/09/2020	9	Dusk	2020/09/23 18:52	18:52	21:09	15	None 0-0.25mm	0	13	Light 0.26-1mm	1
7	21/10/2020	1	Dusk	2020/10/21 17:50	18:02	20:14	15	Light 0.26-1mm	1	13	None 0-0.25mm	1
8	03/06/2020	7	Dusk	2020/06/03 21:08	21:08	23:12	14	None 0-0.25mm	4	13	None 0-0.25mm	3
8	06/07/2020	11	Dusk	2020/07/06 21:16	21:16	23:28	17	None 0-0.25mm	1	13	None 0-0.25mm	1
8	17/08/2020	5	Dusk	2020/08/17 20:26	20:26	22:33	18	None 0-0.25mm	1	17	None 0-0.25mm	2
8	18/08/2020	5	Dawn	2020/08/18 03:46	03:46	05:38	15	None 0-0.25mm	1	0	0	0
8	22/09/2020	9	Dusk	2020/09/22 18:54	18:54	21:01	22	None 0-0.25mm	1	18	None 0-0.25mm	1
8	20/10/2020	3	Dusk	2020/10/20 17:52	17:52	19:52	16	None 0-0.25mm	1	14	None 0-0.25mm	1
A	04/06/2020	7	Dusk	2020/06/04 21:10	21:10	23:10	11	None 0-0.25mm	1	10	None 0-0.25mm	0
A	14/07/2020	11	Dusk	2020/07/14 21:10	21:10	23:10	17	None 0-0.25mm	0	15	None 0-0.25mm	0

Transect number	Date	Start point	Dusk/dawn	Sunset/sunrise time	Start time	End time	Start temperature (Celsius)	Start rain	Start wind	End temperature	End rain	End wind
A	12/08/2020	1	Dusk	2020/08/12 20:25	20:25	22:25	25	None 0-0.25mm	0	24	None 0-0.25mm	0
A	13/08/2020	12	Dawn	2020/08/13 05:40	03:40	05:43	20	None 0-0.25mm	0	20	None 0-0.25mm	0
A	21/09/2020	9	Dusk	2020/09/21 18:57	19:25	21:15	21	None 0-0.25mm	0	15	None 0-0.25mm	0
A	13/10/2020	3	Dusk	2020/10/13 18:07	18:07	20:07	10	Light 0.26-1mm	1	11	Moderate 1.01-4mm	0
B	21/05/2020	1	Dusk	2020/05/21 20:52	20:52	22:52	21	None 0-0.25mm	1	18	None 0-0.25mm	1
B	01/06/2020	7	Dusk	2020/06/01 21:06	21:06	23:08	15	None 0-0.25mm	2	12	None 0-0.25mm	2
B	15/07/2020	11	Dusk	2020/07/15 21:09	21:09	23:27	15	None 0-0.25mm	0	12	None 0-0.25mm	0
B	11/08/2020	6	Dawn	2020/08/11 05:39	03:14	05:41	19	None 0-0.25mm	1	19	None 0-0.25mm	1
B	16/09/2020	9	Dusk	2020/09/16 19:09	19:09	21:26	20	None 0-0.25mm	6	16	None 0-0.25mm	3
B	14/10/2020	1	Dusk	2020/10/14 18:05	18:05	20:12	13	None 0-0.25mm	1	10	None 0-0.25mm	2
D	21/05/2020	1	Dusk	2020/05/21 20:54	20:54	23:25	20	None 0-0.25mm	1	17	None 0-0.25mm	1

Transect number	Date	Start point	Dusk/dawn	Sunset/sunrise time	Start time	End time	Start temperature (Celsius)	Start rain	Start wind	End temperature	End rain	End wind
D	17/06/2020	7	Dusk	2020/06/17 21:19	21:19	23:25	18	None 0-0.25mm	1	16	Light 0.26-1mm	1
D	16/07/2020	11	Dusk	2020/07/16 21:07	21:07	23:10	16	None 0-0.25mm	0	12	None 0-0.25mm	0
D	12/08/2020	6	Dusk	2020/08/12 20:25	20:25	22:40	25	None 0-0.25mm	1	22	None 0-0.25mm	1
D	13/08/2020	6	Dawn	2020/08/13 05:39	03:14	05:39	19	None 0-0.25mm	2	19	None 0-0.25mm	1
D	17/09/2020	9	Dusk	2020/09/17 19:07	19:07	21:07	17	None 0-0.25mm	3	14	None 0-0.25mm	2
F	17/06/2020	7	Dusk	2020/06/17 21:20	21:20	23:24	19	None 0-0.25mm	0	19	Moderate 1.01-4mm	0
F	15/07/2020	11	Dusk	2020/05 21:09:00	21:09	23:15	16	None 0-0.25mm	1	16	None 0-0.25mm	2
F	11/08/2020	12	Dusk	2020/08/11 20:27	20:27	22:27	26	None 0-0.25mm	0	26	None 0-0.25mm	0
F	12/08/2020	11	Dawn	2020/08/12 05:38	03:38	05:38	19	None 0-0.25mm	0	19	None 0-0.25mm	0
F	22/09/2020	9	Dusk	2020/09/22 18:54	18:54	21:03	21.7	None 0-0.25mm	1	19.5	None 0-0.25mm	2
F	14/10/2020	3	Dusk	2020/10/14 18:05	18:05	20:05	10	None 0-0.25mm	0	9	None 0-0.25mm	0

Transect number	Date	Start point	Dusk/dawn	Sunset/sunrise time	Start time	End time	Start temperature (Celsius)	Start rain	Start wind	End temperature	End rain	End wind
G	16/06/2020	7	Dusk	2020/06/16 21:19	21:19	23:33	18	None 0-0.25mm	2	14	Moderate 1.01-4mm	3
G	15/07/2020	11	Dusk	2020/07/15 21:09	21:09	23:26	17	None 0-0.25mm	2	16	None 0-0.25mm	2
G	11/08/2020	9	Dusk	2020/08/11 20:28	20:25	22:28	30	None 0-0.25mm	0	22	None 0-0.25mm	0
G	12/08/2020	9	Dawn	2020/08/12 05:38	03:38	05:38	19.5	None 0-0.25mm	0	18	None 0-0.25mm	0
G	16/09/2020	9	Dusk	2020/09/16 19:08	19:08	21:26	20	None 0-0.25mm	1	15	None 0-0.25mm	3
G	14/10/2020	3	Dusk	2020/10/14 18:04	18:04	20:17	8	None 0-0.25mm	2	7	None 0-0.25mm	2
H	18/06/2020	7	Dusk	2020/06/18 21:19	21:19	23:21	17	None 0-0.25mm	1	14	None 0-0.25mm	1
H	15/07/2020	10	Dusk	2020/07/15 21:08	21:08	23:08	23	None 0-0.25mm	1	21	None 0-0.25mm	1
H	12/08/2020	4	Dusk	2020/08/12 20:26	20:26	22:26	24.8	None 0-0.25mm	0	25.5	None 0-0.25mm	0
H	13/08/2020	4	Dawn	2020/08/13 05:40	03:40	05:40	20.3	None 0-0.25mm	0	22	None 0-0.25mm	1
H	17/09/2020	5	Dusk	2020/09/17 19:07	19:07	21:07	16	None 0-0.25mm	1	15	None 0-0.25mm	1

Transect number	Date	Start point	Dusk/dawn	Sunset/sunrise time	Start time	End time	Start temperature (Celsius)	Start rain	Start wind	End temperature	End rain	End wind
H	15/10/2020	3	Dusk	2020/10/15 18:02	18:02	20:02	7	None 0-0.25mm	1	7	None 0-0.25mm	1
I	16/06/2020	7	Dusk	2020/06/16 21:19	21:19	23:19	18	None 0-0.25mm	1	16	None 0-0.25mm	1
I	16/07/2020	9	Dusk	2020/07/16 21:09	21:07	23:07	19	None 0-0.25mm	1	18	None 0-0.25mm	0
I	10/08/2020	7	Dusk	2020/08/10 20:29	20:29	22:29	25.9	None 0-0.25mm	0	23.5	None 0-0.25mm	0
I	11/08/2020	7	Dawn	2020/08/11 05:37	03:37	05:37	21.3	None 0-0.25mm	0	20.5	None 0-0.25mm	0
I	23/09/2020	9	Dusk	2020/09/23 18:51	18:51	20:53	19	Light 0.26-1mm	1	14	Moderate 1.01-4mm	2
I	15/10/2020	3	Dusk	2020/10/15 18:02	18:02	20:02	9	None 0-0.25mm	1	7	None 0-0.25mm	2
J	16/06/2020	7	Dusk	2020/06/16 21:19	21:19	23:36	18	None 0-0.25mm	2	16	None 0-0.25mm	0
J	28/07/2020	11	Dusk	2020/07/28 20:52	20:52	23:24	18	None 0-0.25mm	2	12	None 0-0.25mm	0
J	19/08/2020	5	Dusk	2020/08/19 20:11	20:11	22:14	19	Light 0.26-1mm	2	19	Light 0.26-1mm	1
J	20/08/2020	5	Dawn	2020/08/20 05:50	03:50	05:54	20	None 0-0.25mm	3	18	None 0-0.25mm	3

Transect number	Date	Start point	Dusk/dawn	Sunset/sunrise time	Start time	End time	Start temperature (Celsius)	Start rain	Start wind	End temperature	End rain	End wind
J	24/09/2020	9	Dusk	2020/09/24 18:51	18:51	21:11	11	Light 0.26-1mm	1	10	Light 0.26-1mm	1

Annex N Manual / automatic activity surveys – static

Table N.1 Table showing months where statics had either a limited recording ability or surveys weren't fulfilled

Static detector	Grid reference	Percentage of surveys completed successfully	Issues
SD1.1	TL 74166 09297	33%	Static failed in May and June; data file error in July, only 3 days recorded in October
SD1.2	TL 74518 09817	83%	Data file error in August
SD2.1	TL 78067 11361	83%	Only two days recorded in August
SD2.2	TL 78034 11112	100%	None
SD3.1	TL 80737 12733	83%	Static failed in October
SD3.2	TL 80646 12790	67%	Static failed in October; data file error in June
SD4.1	TL 82944 13910	50%	Data file error in May, August and September
SD4.2	TL 82873 13551	100%	None
SD5.1	TL 83810 16198	33%	Static failed in June and September; Data file error in July and reduced survey days in October (2)
SD5.2	TL 83647 15587	67%	Static failed in September,
SD6.1	TL 84832 17012	100%	None
SD6.2	TL 85314 17138	100%	None
SD7.1	TL 87869 19746	50%	Reduced days in May and July; data error in October and static failure in June.

Static detector	Grid reference	Percentage of surveys completed successfully	Issues
SD7.2	TL 88345 20431	50%	Static failure in May and September; data error in July
SD8.1	TL 91139 22966	67%	Access restrictions and static failure in October
SD8.2	TL 90876 22646	83%	Access restrictions
SDA.1	TL 77836 10974	100%	None
SDA.2	TL 78376 11081	67%	Reduced survey days in May and a data error in August
SDB.1	TL 78321 12174	100%	None
SDB.2	TL 78776 12265	83%	Data error in September
SDC.1	TL 78622 12516	83%	Static failure in June
SDC.2	TL 79131 12662	83%	Static failure in June
SDDE.1	TL 79443 12184	67%	Static failure in May and data error in October
SDDE.2	TL 79739 12588	83%	Static failure in May
SDF.1	TL 80761 12638	100%	None
SDF.2	TL 81382 12697	83%	Data error in June
SDG.1	TL 81397 11913	83%	Access restrictions in May
SDG.2	TL 81640 12303	67%	Reduced survey days due to access restrictions in May and data error in July
SDH.1	TL 82521 13359	83%	Access restrictions in May

Static detector	Grid reference	Percentage of surveys completed successfully	Issues
SDH.2	TL 82702 13108	83%	Access restrictions in May
SDI.1	TL 84017 16931	33%	Static failure in May, June, July and reduced survey days in September
SDI.2	TL 84501 17367	83%	Static failure in June
SDJ.1	TL 87238 18195	67%	Static failure in July and data error for June data
SDJ.2	TL 87633 18082	67%	Data error for June and September data
SM2.1	TL 78425 11170	67%	Access restrictions in September and static failure in October
SM2.2	TL 83424 15274	67%	Static failure in July
SM2.3	TL 85555 17639	50%	Static failure in May, July and September
SM2.4	TL 87719 19092	50%	Static failure in October and access restrictions in May and September

Annex O Gas Diversion and Inworth Road ground-based assessments

Table O.1 Summary of 2021 Gas Diversion and Inworth Road ground-based tree and building assessments

ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Number of Further Surveys Required	Hibernation Survey Y/N
B10001	27/10/21	High	Dusk/Dawn	3	N
B10004	29/10/21	Moderate	Dusk/Dawn	2	N
B10003	29/10/21	Low	Dusk/Dawn	1	N
B10002	29/10/21	Negligible	N/A	N/A	N
Tuntagged-2021/11/10-6	28/10/21	High	Dusk/Dawn	3	N
Tuntagged-2021/11/10-5	10/11/21	Moderate	Dusk/Dawn	2	N
Tuntagged-2021/11/10-4	10/11/21	Moderate	Dusk/Dawn	2	N
Tuntagged_20211028_1	10/11/21	Moderate	Dusk/Dawn	2	N
Tuntagged_20211028_2	28/10/21	Moderate	Dusk/Dawn	2	N
Tuntagged_20211028_3	28/10/21	Moderate	Dusk/Dawn	2	N
Tuntagged_20211028_4	28/10/21	Moderate	Dusk/Dawn	2	N
Tuntagged_18112021_3	18/11/21	Moderate	Dusk/Dawn	2	N
Tuntagged-2021/11/10-3	27/10/21	High	Climb	3	N
Tuntagged-2021/11/10-2	28/10/21	High	Climb	3	N
T1648	27/10/21	High	Climb	3	N

ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Number of Further Surveys Required	Hibernation Survey Y/N
T1636	27/10/21	High	Climb	3	N
T1645	27/10/21	High	Climb	3	N
T1644	10/11/21	Moderate	Climb	2	N
T1643	10/11/21	Moderate	Climb	2	N
T1642	29/10/21	Moderate	Climb	2	N
T1641	28/10/21	Moderate	Climb	2	N
T1640	28/10/21	Moderate	Climb	2	N
T1655	28/10/21	Moderate	Climb	2	N
T1652	28/10/21	Moderate	Climb	2	N
T1651	28/10/21	Moderate	Climb	2	N
T1649	27/10/21	Moderate	Climb	2	N
T1639	28/10/21	Moderate	Climb	2	N
Tuntagged_061221_OBBH_1	06/12/21	Moderate	Climb	2	N
Tuntagged-2021/11/10-8	10/11/21	High	Ground endoscope	3	N
Tuntagged-2021/11/10-7	10/11/21	Moderate	Ground endoscope	2	N
Tuntagged-2021/11/10-1	10/11/21	Moderate	Ground endoscope	2	N
Tuntagged-2021/11/09-4	09/11/21	Moderate	Ground endoscope	2	N
Tuntagged-2021/11/09-3	09/11/21	Moderate	Ground endoscope	2	N

ID	Ground Based Assessment Date	Roost Suitability Rating	Further Survey	Number of Further Surveys Required	Hibernation Survey Y/N
Tuntagged-2021/11/09-2	09/11/21	Moderate	Ground endoscope	2	N
T1637	29/10/21	Moderate	Ground endoscope	2	N
T1646	28/10/21	Moderate	Ground endoscope	2	N
T1638	28/10/21	Moderate	Ground endoscope	2	N
Tuntagged-2021/11/09-1	09/11/21	Low	Pre-works checks	N/A	N
Tuntagged_2011027_1	27/10/21	Low	Pre-works checks	N/A	N
Tuntagged_20211027_2	27/10/21	Low	Pre-works checks	N/A	N
T1647	28/10/21	Low	Pre-works checks	N/A	N
T1650	27/10/21	Low	Pre-works checks	N/A	N
Tuntagged_071221_OBBH_1	07/12/21	Low	Pre-works checks	N/A	N
Tuntagged_18112021_1	18/11/21	Low	Pre-works checks	N/A	N
Tuntagged_18112021_2	18/11/21	Low	Pre-works checks	N/A	N