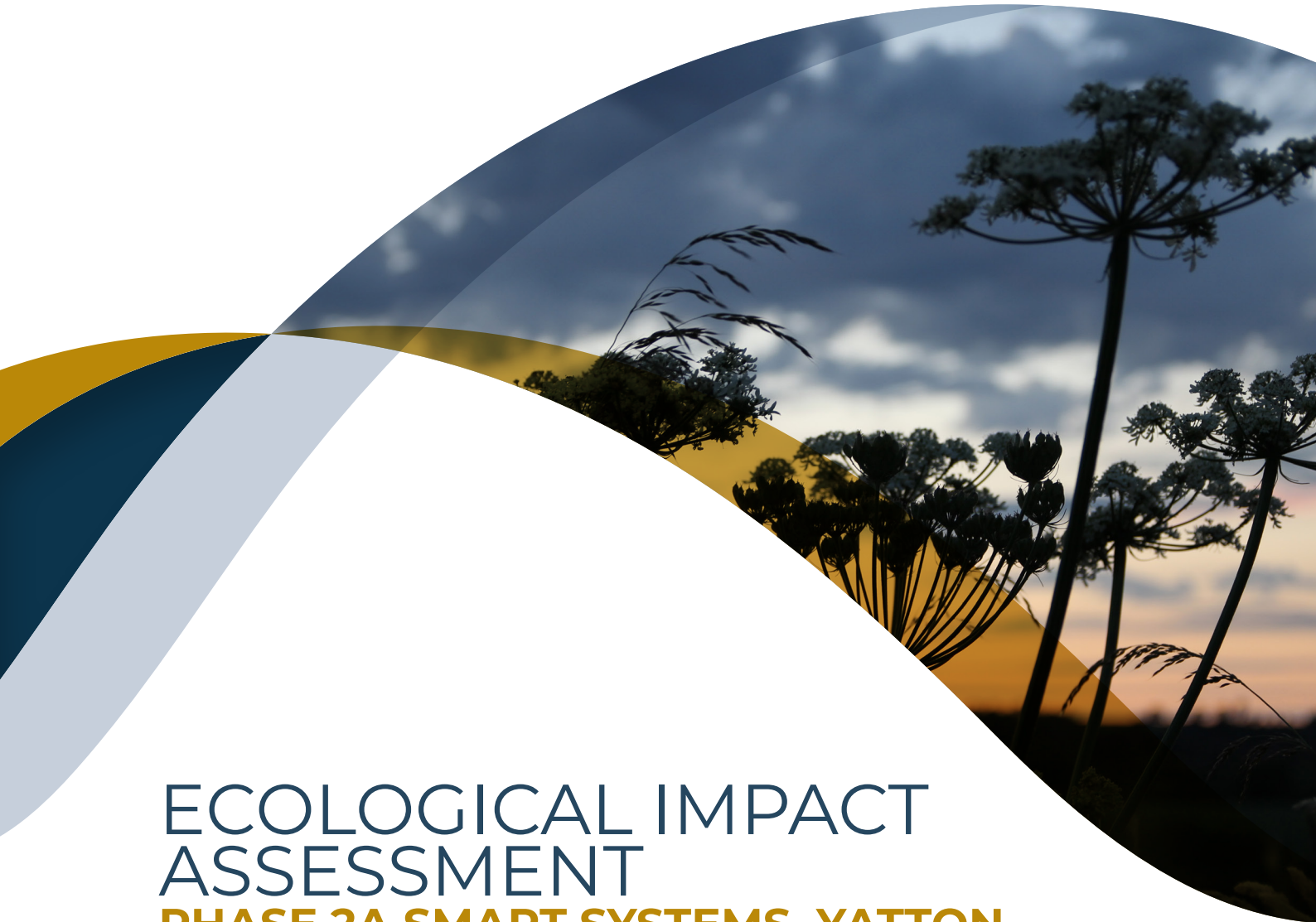


BURTON REID
ASSOCIATES



ECOLOGICAL IMPACT
ASSESSMENT
PHASE 2A SMART SYSTEMS, YATTON
SMART SYSTEMS

| MARCH 2021 | BR0532/EcIA/PHASE2A/B |



COMPANY PHILOSOPHY

Burton Reid Associates are a multi-disciplinary consultancy specialising in providing high quality ecological and landscape design and advice related to the provision of embedded green and blue infrastructure and biodiversity net gains. We have a simple philosophy, designing with nature in mind supports the long-term health and wellbeing of us all. We work with clients who share this philosophy.

We can help you to achieve biodiversity net gains and deliver high-quality green infrastructure at a local and strategic level. We provide expert ecological services, undertaking surveys for protected species and habitats and supporting you to create on and off-site mitigation with our dedicated habitat management team. Our services include landscape architecture and production of high quality graphics that clearly communicate information and data.

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"As we rekindle our imagination, we discover our power to act. And that is the point at which we become unstoppable."

George Monbiot, journalist and author

BURTON REID
ASSOCIATES



DECLARATIONS OF COMPLIANCE

The report which we have prepared and provided is in accordance with the Chartered Institute for Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

This report has been produced in accordance with British Standard 42020:2013 "Biodiversity, Code of practice for planning and development" and the Chartered Institute of Ecology and Environmental Management's Guidelines for Ecological Report Writing (CIEEM, 2017).

DATA VALIDITY

Please note that unless otherwise stated, the contents of this report will remain valid for a maximum period of 12 months from date of issue. Beyond this updated survey work may be required to establish any changes in baseline conditions.

DISCLAIMER

Burton Reid Associates has exercised all reasonable skill and due care in preparing this report. Burton Reid Associates has not, unless specifically stated, independently verified information provided by others. No other warranty, express or implied, is made in relation to the content of this report and Burton Reid Associates assumes no liability for any loss resulting from errors, omissions or misrepresentation made by others.

Any recommendation, opinion or finding stated in this report is based on circumstances and facts as they existed at the time that Burton Reid Associates performed the work (including based on the information provided by the client). Professional judgement and opinion has been utilised where required. All opinion is provided in good faith.

NON-TECHNICAL SUMMARY

An Ecological Appraisal was carried out in February 2021 by Burton Reid Associates in order to assess the potential wildlife value of the site and the presence or likely presence of protected or priority species. The proposals at the site include the extension (known as Phase 2A) of an existing factory that manufactures aluminium doors.

A field survey and desk study were undertaken in order to assess the ecological implications of the above proposals, involving an assessment of the likelihood for protected species to be present at the site or within any adjacent habitats which could be impacted by the proposals. A UK Habitat Classification map of the site was compiled as part of the work.

The table below provides a summary of recommendations made within this report, broken down into the development stage at which the work should be undertaken.

| STAGE | RECOMMENDATIONS |
|--|--|
| <i>PRE-PLANNING</i> (RIBA Stages 0 to 2) | <ul style="list-style-type: none"> N/A |
| <i>POST-PLANNING PRE-CONSTRUCTION</i> (RIBA Stages 3 & 4) | <ul style="list-style-type: none"> Erection of Heras fencing with an attached mesh material to provide a protected corridor along the hedgerow to the south during construction. |
| <i>CONSTRUCTION PHASE</i> (RIBA Stages 4 & 5) | <ul style="list-style-type: none"> Standard Pollution Prevention Guidelines to be followed during the construction phase to prevent impacts to the rhine to the south of the site and the designated wildlife sites in the wider landscape. No storage of materials to be permitted within adjacent grassland habitat. Night-time construction work during the active bat season (April to November) or the breeding bird season (March to August) will be avoided where possible. Where unavoidable, lighting should be directional and, on a timer, to limit light spill onto the hedgerow and rhine offsite. Installation of 5 bird boxes on trees within the hedgerow to the south of the Application Site |

| STAGE | RECOMMENDATIONS |
|---|---|
| <i>POST DEVELOPMENT</i> <i>(RIBA Stages 6 & 7)</i> | <ul style="list-style-type: none">Operational lighting should be avoided on the southern elevation of the new unit. If unavoidable a sensitive lighting strategy should be produced and implemented which ensures that any introduced light levels will not affect the linear features to above 0.5 lux or above existing baseline levels.Wastewater discharge should be carefully considered so that water quality impacts on the Biddle Street SSSI or the Congresbury Yeo, adjacent Land and Rhynes LWS are avoided once the Site is operational. |

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1 INTRODUCTION

1.1 BACKGROUND AND OBJECTIVES

This document has been prepared by Burton Reid Associates on behalf of Smart Systems who intend to submit a planning application to North Somerset Council for the construction of an extension to an existing industrial manufacturing building with an area of approximately 3,300m².

The need to carry out an ecological assessment was identified in order to highlight any potential ecological constraints and ecological opportunities on the Site (hereafter referred to as the 'Application Site') associated with proposals being developed for a planning application.

The Application Site is centred on National Grid Reference ST 41650 66113 and comprises an area of hardstanding adjacent to the existing manufacturing building. A hedgerow and rhyne (wet ditch) outside of the Application Site boundary to the south are referred to in the report where considered relevant.

The Application Site boundary is defined in Appendix III.

A description of the survey methods used is provided together with descriptions of habitats present on and around the Application Site. Potential impacts of the development on habitats / species together with avoidance, mitigation and biodiversity enhancement measures are also included.

1.2 LEGISLATION AND PLANNING POLICY

This report has been written with reference to the following wildlife legislation, links to the full text of which can be found in Appendix I:

- Conservation of Habitats and Species Regulations 2017 (as amended);
- Wildlife and Countryside Act 1981 (as amended);
- Countryside Rights of Way Act 2000;
- Natural Environment and Rural Communities Act 2006.

A summary of relevant specific species legal protections derived from the above legislation is also given in Appendix I, for ease of reference.

Furthermore, the following planning policies, guidance and local plans have been taken into account and referred to where appropriate:

- Yatton Neighbourhood Development Plan for the Period 2017-2026;

- North Somerset Council Core Strategy (2017);
- ODPM Circular 06/2005: Biodiversity and Geological Conservation;
- UK Post-2010 Biodiversity Framework;
- National Planning Policy Framework (NPPF);
- CIEEM Biodiversity Net Gain – Good Practice Principles for Development (CIEEM 2016);
- CIEEM Biodiversity Net Gain – Good Practice Principles for Development, A Practical Guide (CIEEM 2019).

2 METHODS

2.1 SCOPE OF EcIA ASSESSMENT

The Ecological Impact Assessment (EcIA) has been undertaken following the Chartered Institute of Ecology and Environmental Management's Guidelines for Ecological Impact Assessment (CIEEM, 2018). These guidelines represent current best practice when assessing the impacts of development on biodiversity.

In summary, the guidelines provide a framework for describing the potentially significant effects of a proposed development on ecology and for setting out mitigation and enhancement measures to avoid/minimise impacts and create positive outcomes for biodiversity.

In the first instance, ecological features of importance are identified using a geographical frame of reference. For the purposes of this report the following geographical frame of reference has been used.

- International,
- National (England)
- Regional (South West England)
- County / local authority area (North Somerset)
- Local (e.g. Yatton)
- Site (the Site boundary and immediate surrounds)
- Negligible (of very low/limited ecological value).

The next step in EcIA involves predicting the likely impacts of a development (both positive and negative) on ecological features of importance and taking into account avoidance and mitigation measures. In EcIA any significant impacts which remain after taking into consideration mitigation/compensation measures are used to determine the overall ecological implications of the scheme in terms of legislation, planning policy and development control.

2.2 DESK STUDY

A desk study was carried out in December 2020 whereby records of protected and priority species in the locality were identified using the resources below. Please note due to the nature of the proposals (i.e. the Site comprised solely of hardstanding) a maximum area of 1km from the Application Site was considered appropriate for the desk study):

- NBN Atlas – records for commercial use only (CC-BY, CCo and OGL licenced data) (www.nbnatlas.org).
- Phase 4, Smart Systems, Yatton Ecological Appraisal by Wild Service in October 2016
- Phase 5, Smart Systems, Yatton Ecological Appraisal by Wild Service in October 2016

- Bat Assessment for Smart Systems Ltd, The Landmark Practice, 2013
- Ecological Assessment for Smart Systems Ltd, The Landmark Practice, 2012

Protected species are those which are afforded legal protection. Priority habitats and species are those which have some level of nature conservation importance due to factors such as rarity, vulnerability or declining population/status and are considered as priorities for nature conservation. They may be of importance at a national scale, or at a more local level and include 'Habitats/Species of Principal Importance' as listed under the under Section 41 of the NERC Act (2006).

The presence of nearby statutory and non-statutory designated sites and priority habitats was established using the following resources:

- MAGIC map tool (www.magic.gov.uk);
- North Somerset policies map tool ([Policies Map \(n-somerset.gov.uk\)](http://Policies Map (n-somerset.gov.uk)));
- North Somerset and Mendip Bats SAC Guidance on Development.

A full Bristol Regional Environmental Records Centre (BRERC) data search was not considered necessary in this instance due to the Application Site comprising only hardstanding (CIEEM, 2017a).

Statutory sites are those which are protected under current UK/European legislation and include Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar Sites and Local Nature Reserves (LNR).

Non-statutory sites include Local Wildlife Sites (LWS). They are designated on account of the flora and fauna they support and represent some of the best wildlife sites in the County.

The location of the Application Site in relation to the North Somerset and Mendip Bats Special Area of Conservation (SAC). Consultation Zone was also established. The North Somerset and Mendip SAC is a site of European importance for wildlife and is important for two bat species. The Greater Horseshoe bat *Rhinolophus ferrumequinum* and the Lesser Horseshoe bat *Rhinolophus hipposideros*. The landscapes around the SAC are important in providing foraging habitat needed to maintain the favourable conservation status of the horseshoe bats. Developments falling within a bat consultation zone must therefore demonstrate that proposals will not adversely impact on the designated bat populations.

The results of the desk study are provided in Section 3.1 below.

2.3 FIELD SURVEY

2.3.1 Survey Visit

Field surveys of the Application Site were carried out in November 2020 and February 2021 by Burton Reid Associates in order to assess the potential wildlife value of the Application Site and to assess the presence or likely presence of protected or priority species / habitats. All habitat types on the Application Site were mapped with target notes describing particular features of interest. Photographs were also taken for reference.

The Application Site was assessed using the UK Habitat Classification System (UKHAB). This system for habitat classification allows for clear interpretation of data as it takes into account important habitat types such as Priority and Annex I habitats¹. The system also allows for translation between existing classifications including the Phase I Habitat methodology (JNCC 2010) and the National Vegetation Classification (Rodwell et al. 1991-2000). It comprises a principle hierarchy (primary habitats) which include ecosystems, broad habitats, priority habitats and Annex I Habitats together with a suite of more detailed secondary codes which can be used to record further information on habitat features, land use, landscape context and management practices.

An assessment was also made of the potential for the habitats on the Application Site to support protected or priority species. Species groups considered during this assessment of habitat suitability are provided below. Please note that this list is not exhaustive, and only covers species which are commonly found on development sites and receive some form of legal protection.

- Mammals - including bats (all species), Hazel Dormouse *Muscardinus avellanarius*, Badger *Meles meles*, Water Vole *Arvicola amphibius* and Otter *Lutra lutra*;
- Amphibians – including Great Crested Newt *Triturus cristatus*;
- Reptiles – including Slow-worm *Anguis fragilis*, Common Lizard *Zootoca vivipara*, Barred Grass Snake *Natrix helvetica*, and Adder *Vipera berus*.
- Birds (all species). Particular emphasis given to bird species listed under Schedule 1 of the Wildlife and Countryside Act (1981) as amended, species listed on Section 41 of the NERC Act (2006) and Red and Amber listed Birds of Conservation Concern (Eaton et al., 2015).

A Habitat Suitability Index (HSI) assessment was carried out in November 2020 on one pond located 210m to the east of the Application Site (within the ownership of the Applicant) to assess its suitability for Great Crested Newts. The pond was assessed against the following ten suitability indices in accordance with the methods set out in Oldham *et al.* (2000):

1. Geographic location
2. Pond area

¹ A natural habitat listed under Annex I of the European Habitats Directive for which Special Areas of Conservation can be selected.

3. Pond permanence
4. Water quality
5. Shading by bankside trees and trees
6. Presence of waterfowl
7. Presence of fish
8. Pond density in the area
9. Terrestrial habitat quality
10. Macrophyte cover in pond

An HSI value was then calculated through which the level of suitability of a waterbody for Great Crested Newts can be determined along with a predicted percentage of the likelihood of Great Crested Newts being present within a waterbody. These values are provided in Table 1 below:

Table 1: Pond Suitability Classification for Great Crested Newts (ARG UK, 2010)

| Habitat Suitability Index (HSI) Score | Pond Suitability | Proportion of Ponds Occupied by Great Crested Newts (%) |
|---------------------------------------|------------------|---|
| < 0.5 | Poor | 0.03 |
| 0.5 - 0.59 | Below Average | 0.2 |
| 0.6 - 0.69 | Average | 0.55 |
| 0.7 - 0.79 | Good | 0.79 |
| > 0.8 | Excellent | 0.93 |

2.3.2 Weather Conditions and Surveyors

The date the HSI survey was undertaken along with the prevailing weather conditions are provided in 2 below.

Table 2: Survey date and weather conditions

| DATE | WEATHER CONDITIONS |
|------------|---|
| 25/11/2020 | Temp: 12.6°C Wind ¹ : 2-3 Cloud ² : 5/8 Rain: None |

¹: Wind as per Beaufort scale

²: Cloud cover given in Oktas (/8)

The HSI survey was undertaken by Ella Dangerfield (Qualifying member of CIEEM) and Jenni Reid CEnv MCIEEM in November 2020.

2.3.3 Constraints

Some flowering plants may not have been evident at the time the survey was undertaken due to the time of year. Based on the types of habitats present at the Application Site (hardstanding and bare ground) this constraint is considered unlikely to be significant to the results of the survey.

A pond located 250m from the Application Site and several rhynes were not accessible during the survey and as such no HSI assessment could be undertaken on these waterbodies. Prior ecological reports and survey data were however used to inform the current assessment and these confirmed that Great Crested Newt were not present within the locality. As the habitat within the development Site is comprised of hardstanding and is unsuitable for Great Crested Newts, the absence of HSI survey data of these waterbodies is not considered to be a significant constraint to development proposals.

3 RESULTS

3.1 DESK STUDY

Available records obtained from NBN Atlas² did not provide any results coinciding directly with the Application Site itself, however it should be noted that records are often only accompanied by low resolution grid references and the locations associated to the records available are therefore only approximate. Records indicated the presence of Common Pipistrelle bats *Pipistrellus pipistrellus* (credit: Bat Conservation Trust) in the wider area.

Birds recorded in the area included green listed³ species Greenfinch *Chloris chloris*, Great Tit *Parus major* (credit: BTO) and amber listed Swift *Apus apus* (credit: RSPB). Many notable species related to water systems were returned during the search. These included dragonfly species, such as Banded Demoiselle *Calopteryx splendens* and the nationally scarce Hairy Dragonfly *Brachytron pratense* (credit: British Dragonfly Society Recording Scheme). Records indicated a number of notable water beetle species in the area, such as *Ranthis grapii*, *Helochares lividus*, *Hydaticus transversalis* and *Peltodytes caesus* (credit: Balfour/Brown Club). Records of Common Frogs *Rana temporaria* were also returned (credit: Biological Records Centre). It should also be noted that an absence of records for a species in the area does not necessarily infer that the species is absent.

Three statutorily designated sites were identified within 1km of the Application Site. This included Biddle Street Yatton SSSI (470m south-east of the Site), designated for its aquatic plant assemblages and invertebrate species and Cheddar Valley Railway Walk LNR which lies 560m approx. to the east of the Site.

The Application Site also falls within Consultation Zone C of the North Somerset and Mendips Bats SAC⁴, which lies 3.1km to the east.

In the wider landscape to the north, south and west, the Site is surrounded by Coastal Floodplain and Grazing Marsh, a Priority Habitat.

The Application Site lies within several SSSI Impact Risk Zones, with the development proposals meeting the criteria for Natural England consultation (large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m²).

² The NBN Atlas is the country's largest holder of biodiversity information with data being provided under a Creative Commons (CC) and Open Government Licence (OGL). Data provided by the NBN under a CC-BY-NC licence cannot be used for commercial purposes. Therefore, only NBN records which are available for commercial use under the CC0, CC-BY and OGL licences have been mentioned within this report and in-line with the NBN Atlas Terms of Use, the original data providers have been credited. Please note that data provider, original recorder and NBN Trust bear no responsibility for further analysis or interpretation of material or data.

³ as per Birds of Conservation Concern 4 (Eaton et al., 2015).

⁴ As shown on the North Somerset Planning Constraints Portal [Planning map | North Somerset Council \(n-somerset.gov.uk\)](https://www.n-somerset.gov.uk/planning-map/)

Non-statutory sites in the area include Congresbury Yeo, Adjacent Land and Rhynes LWS which borders the southern boundary of the Site and Horsecastle Pond LWS 580m to the east.

Table 3: Statutory designated sites within 1km and consultation zones

| RECORD | LOCATION | DESCRIPTION |
|--|---------------------------|--|
| North Somerset and Mendips Bats SAC, Consultation Zone C | Within Zone C | The "Bat Consultation Zone" is where horseshoe bats may be found and is divided into bands A, B and C, reflecting the likely importance of the habitat for the bats and proximity to maternity and other roosts. |
| Biddle Street SSSI | 470m to the south of Site | Network of rhynes and waterways designated for its aquatic plant assemblages and invertebrate species. |
| Cheddar Valley Railway Walk LNR | 560m to the east of Site | Following a disused railway line, this site supports birds, bats, reptiles, and amphibians. |

3.2 FIELD SURVEY

Field surveys were carried out in November 2020 and February 2021 and comprised a UK Habitat Classification survey and protected species scoping survey. The results of this survey are described in the sections below. Full species lists are provided in Appendix II. The map in Appendix III shows the habitats recorded both within the proposed construction footprint and wider survey area with associated target notes for features of interest and photographs included in Appendix IV.

In summary, the Application Site comprised an area of hardstanding immediately adjacent to a large manufacturing building and was surrounded by industrial units to the north, south, east and west. A species-poor hedgerow and poor-quality rhyme were found 10m to the south of the Application Site. In the wider context, the village of Yatton is found to the east, with farmland surrounding the industrial site to the north, south and west.

Where considered relevant, surrounding habitats have been included within section 3.2.1 below to provide a more complete assessment of the Application Site and potential impacts to the surrounds.



3.2.1 Habitats

Habitats recorded are described in the sections below, along with the most abundant species found in each. Full species lists are provided in Appendix II.

u1b: Developed land; sealed surface


This was a concrete service yard in constant use. This habitat comprised the entirety of the Application Site. Previ-

ous surveys undertaken at the Application Site in 2016 confirmed that this habitat type was also present at that time (Wild Service, 2016). (N.B. Part of the hardstanding had been removed at the time of the survey; refer to Photograph 2 below).

| UKHAB Primary | UKHAB Secondary | Phase I translation |
|--|--|---------------------|
| u1b – Developed land; sealed surface | n/a | Built up areas |
|  | <p><i>P1- Hardstanding (concrete service yard) adjacent large manufacturing building</i></p> | |
|  | <p><i>P2 – u1c Area of hardstanding recently removed – bare soil exposed, unvegetated at the time of the survey.</i></p> | |


h2a: Hedgerow (Priority Habitat) - immediately adjacent to the Application Site

10m to the south of the Application Site was a hedgerow that was flanked by a rhyne. The hedgerow was tall and narrow and appeared to be recently flailed. It was dominated by Blackthorn *Prunus spinosa* and Hawthorn *Crataegus monogyna* and was continuous along this boundary. The hedgerow qualifies as being a priority habitat as it is comprised of 80% cover of at least one woody native species.

| UKHAB Primary | UKHAB Secondary | Phase I translation |
|---|---|--------------------------------|
| h2a – Hedgerow (Priority habitat) | 76 – recent management | Hedges – intact – species-poor |
|  | <i>P3 – Hedgerow to south of the Application Site</i> | |


r1: Standing open water and canals - immediately adjacent to the Application Site

10m to the south of the Application Site was a shallow (<5cm) rhyne. This was flanked for most part by hedgerows on either side and contained floating (Duckweed *Lemna* sp.) in some locations, indicating a state of eutrophication.

| UKHAB Primary | UKHAB Secondary | Phase I translation |
|--|---|---------------------|
| r1 Standing open water and canals (eutrophic) | n/a | Wet ditch |
|  | <i>P4 –View of shallow rhyne with overhanging hedgerows</i> | |

g4: modified grassland- immediately adjacent to the Application Site

There was a narrow strip (<1m) of amenity grassland running parallel to the hedgerow to the south of the Application Site which appeared to be regularly mowed.

| UKHAB Primary | UKHAB Secondary | Phase I translation |
|--|---|---------------------|
| g4: modified grassland | 64 - mown | Amenity grassland |
|  | <p><i>P5 -Narrow strip of amenity grassland</i></p> | |

3.2.2 Species

An assessment of the potential for the following *protected* / priority species to occur within habitats on/in close proximity to the Application Site is provided below.

Plants

No records of plants of priority status or conservation concern within 1km of the Application Site were returned during the desk study, nor were any recorded during the survey visit.

No invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were recorded at the Application Site during the survey. Therefore, this species group is not considered further within this report.

Bats

No potential for roosting bats was identified on the Application Site during the survey.

The Application Site falls within the North Somerset and Mendips Bats SAC, Consultation Zone C. According to SAC guidance, potential development sites within this zone must be give due consideration to impacts on commuting and foraging bats.

The current Application Site offers limited suitability for foraging bats, being comprised entirely of hardstanding however the hedgerow located offsite to the south boundary of the Application Site and adjacent rhyme both offer some suitability for commuting and foraging bats. These features are however rather isolated surrounded on either side by

the industrial estate and are disconnected from adjacent semi-natural habitat. Security lighting was also seen along the length of the building's southern elevation which would act as a deterrent to light-sensitive species of bats (e.g. horseshoe and Myotis bats). Therefore, these features only offer sub-optimal foraging or commuting opportunities for bats.

Previous bat activity surveys completed by The Landmark Practice (2013) in relation to a prior development on the wider land parcel under the ownership of the Applicant found that only low numbers of Greater Horseshoe bats were utilising the Site (current Application Site formed only a small part of the area surveyed in 2013 – please refer to the full report which can be provided on request).

Water vole and otter

The banks of the rhyne offsite to the south were not suitable for water vole burrows as they were too shallow, dominated by woody species and contained very little herbaceous vegetation. The rhyne itself was very shallow and appeared heavily eutrophied in several locations with no herbaceous vegetation mid channel. As such, it was not considered suitable habitat for water voles (Dean et al, 2016).

According to the ecological report produced by Wild Services (2016) water vole have been recorded within a rhyne located approximately 340m from the Application Site associated with the Congresbury Yeo, adjacent land and rhyne LWS.

It is possible that otters might occasionally use the rhyne for movement/dispersal. However, due to a lack of dense cover and its close proximity to busy industrial units either side of it, the rhyne was considered to have negligible potential for otter holts or refuges (Chanin, 2003).

Impacts on otters are considered unlikely and this species is not considered further within this report.

Amphibians

The Application Site is considered to be negligible for Great Crested Newts (GCN) and other amphibians being comprised of hardstanding and exposed bare substrate.

Potential terrestrial habitat for amphibians, including GCNs, is present within the hedgerow offsite to the south of the Application Site which could provide some cover for amphibian foraging and hibernation.

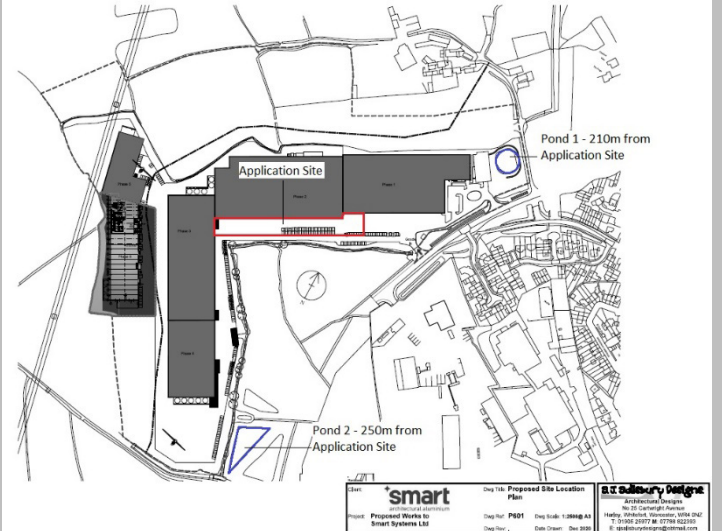
The rhyne located immediately beyond the Application Site provides sub-optimal aquatic habitat for amphibians being shallow, covered in Duckweed and heavily shaded by the adjacent overgrown hedgerow.

Two ponds are located within 250m of the Application Site including a pond 210m to the north-east situated beyond numerous industrial units and carparks, and a pond (with several interconnected waterbodies) located 250m to the south of the Application Site on land outside of the Applicants ownership. A Habitat Suitability Index survey was com-

pleted on the one accessible pond (Pond 1) to determine suitability for GCN. The results are provided in the Table 5 below.

Table 5: Great Crested Newt HSI Assessment Results of Pond 1

| HSI Category | Assessment Notes | Score |
|--|----------------------------|--|
| SI1 - Location | Zone A | 1 |
| SI2 - Pond area | 765m2 | 1 |
| SI3 - Pond drying | Never | 0.9 |
| SI4 - Water quality | Moderate | 0.67 |
| SI4 - Shade | 0% | 1 |
| SI6 - Fowl | Minor | 0.67 |
| SI7 - Fish | Possible | 0.67 |
| SI8 – Density of ponds in wider area | 3 ponds within 1km radius. | 0.6 |
| SI9 – Terrestrial habitat quality | Moderate | 0.67 |
| SI10 - Macrophytes | 80% (at time of survey) | 1 |
| HSI Score | | 0.80 (Excellent) |
| Pond 1 210m to the north east of the Application Site | |  |

| HSI Category | Assessment Notes | Score |
|--|--|-------|
| <p><i>Location of Pond 1 & Pond(s) 2 in relation to the Application Site</i></p> |  | |

Ecological reports produced by The Landmark Practice (2012) in relation to prior phases of development adjacent to the current Application Site, confirmed that no evidence of GCN was identified during presence/absence surveys carried out on Ponds 1 and 2 mentioned above. It is recognised that data from the report is out of date, however, it is still considered noteworthy. Also, due to increased levels of development in the surrounding area in recent years and the Application Site's unsuitability for amphibians (i.e. comprised entirely of hardstanding) habitats adjacent to the Site offer only very limited potential for GCNs.

According to the ecological report produced by Wild Services (2016), the nearest GCN records are from over 1km away in Tickenham Moors.

Reptiles

Reptiles are extremely unlikely to occur within the Application Site due to it comprising solely hardstanding. There is limited potential for any reptile species including Slow-worm and Common Lizard within the hedgerow located off-site to the south of the Application Site's boundary which is heavily shaded and has little to offer in terms of habitat for basking. The strip of grassland adjacent the hedgerow is kept very short making it unsuitable due to a lack of cover. In addition a 10m strip of hard standing is located between this habitat and the Application Site. As the presence of reptiles is considered unlikely, they are not considered further within this report.

Hazel Dormouse

The hedgerow to the south of the Application Site is considered to be sub-optimal for Hazel Dormouse, being largely dominated by Blackthorn and located within an industrial estate with poor connectivity to woodland and other hedgerows in the surrounding landscape. The nearest area of woodland occurs 560m to the east at Cheddar Valley Railway Walk LNR but connectivity between the Site and the LNR is poor with the industrial estate, roads and limited

woody vegetation in between. Overall, the risk of Hazel Dormouse being present is considered reasonably unlikely due to the lack of suitable habitat, and therefore this species is not considered further within the report.

Badgers

No evidence of badger was identified on the Application Site. It is possible that badgers forage along the hedgerow on occasion however due to high levels of disturbance associated with the industrial estate and given the abundance of more suitable foraging habitat in the wider farmed landscape it is considered unlikely that this feature would be of significance to badgers. Therefore, this species has not been considered further within this report.

Birds

Species recorded at the Application Site or adjacent to the Application Site during the survey visit are displayed in 6 below along with their conservation status. It is important to note that birds were not the target of this survey visit and that these incidental records should not be taken as a full species list for the Application Site.

Table 6: Bird species recorded during Site visit along with their conservation status

| COMMON NAME | SYSTEMATIC NAME | CONSERVATION STATUS* |
|---------------------|--------------------------------|----------------------|
| <i>Pied Wagtail</i> | <i>Motacilla alba</i> | BOCC Green |
| <i>Starling</i> | <i>Sturnus vulgaris</i> | S41, BOCC Red |
| <i>Robin</i> | <i>Erithacus rubecula</i> | BOCC Green |
| <i>Wren</i> | <i>Troglodytes troglodytes</i> | BOCC Green |

* Sch1: listed on Schedule 1 of The Wildlife and Countryside Act (1981)

S41: listed on Section 41 of the NERC Act (2006) as a species of principal importance

BoCC: Birds of Conservation Concern (Eaton et al., 2015) – green, amber or red listed

Devon Pr Sp: Devon Local BAP Priority Species

Robin and Wren were noted foraging within the hedgerow along the southern boundary of the Application Site and flocks of Starling were seen flying overhead. A Pied Wagtail was noted on adjacent hardstanding. The hedgerow to the south of the Application Site offers some potential for nesting birds.

Invertebrates

The Application Site being comprised of hardstanding/bare ground is considered to be negligible for invertebrates. Adjacent habitats did not contain the types of mosaics normally associated with notable invertebrate assemblages. Therefore, this species group is not considered further within this report.

3.2.3 Ecological Evaluation

Table 7 below provides an analysis of the value of ecological receptors described above. The valuation of the receptor takes into account factors such as legal protection, local and national conservation status, population trends, range and distribution, diversity, connectivity and rarity. Importance is defined using a geographical frame of reference as per CIEEM guidelines (2018).

Table 7: Ecological evaluation

| HABITAT | VALUE | REASON |
|---|---------------|---|
| Designated Sites and priority habitats | | |
| North Somerset and Mendip Bats SAC | International | European Designated Site. |
| Biddle Street Yatton SSSI (470m SE) | National | Designated under national legislation. |
| Cheddar Valley Railway Walk LNR (560m E) | National | Designated under national legislation but falls 560m away and impacts unlikely. Therefore, not considered further in this report. |
| Congresbury Yeo, Adjacent Land and Rhynes LWS (adjacent to the south) | County | Local wildlife sites are designated on account of designated on account of the flora and fauna they support and represent some of the best wildlife sites in the County. |
| Horsecastle Pond LWS (580m E) | County | Local wildlife sites are designated on account of designated on account of the flora and fauna they support and represent some of the best wildlife sites in the County. However, this site falls 580m away and impacts unlikely. Therefore, not considered further in this report. |
| Coastal Floodplain and Grazing Marsh Priority Habitat | Local | Widespread habitat in the surrounding landscape and across Somerset. |
| Habitats | | |
| u1b: Developed land; sealed surface (concrete service yard) | Negligible | No intrinsic wildlife value. |

| HABITAT | VALUE | REASON |
|---|------------|--|
| h2a: Hedgerow (Priority Habitat) Please note this falls outside of the Application Site boundary | Local | Provides habitat for nesting birds and shelter for small mammals, offers some connectivity to surrounding habitats and landscape but limited somewhat as located within an industrial estate. |
| r1 Standing open water and canals Please note this fall outside of the Application Site boundary | Local | Watercourses provide habitat connectivity and have the potential to support a range of species. |
| g4: modified grassland Please note this fall outside of the Application Site boundary | Negligible | Common and widespread habitat – heavily managed. |
| Protected/priority species | | |
| Plants | Negligible | No notable plants found to be present. |
| Bats (commuting and foraging habitat only) | Site | Offsite hedgerow offers some potential for foraging and commuting but is sub-optimal due to location in an industrial environment. |
| Water Vole and Otter | Negligible | Presence unlikely due to unsuitability of habitat. Not considered further in this report. |
| Amphibians | Site | Some potential within offsite habitat (hedgerow and rhyne). |
| Reptiles | Negligible | Presence unlikely due to unsuitability of habitat. Not considered further in this report. |
| Hazel Dormouse | Negligible | Presence unlikely due to unsuitability of habitat. Not considered further in this report. |
| Badgers | Negligible | Badgers could potentially use the hedgerow offsite for foraging but overall this feature provides limited opportunities compared to the wider farmed landscape. The species is therefore not considered further. |
| Birds | Site | Some potential for nesting birds within offsite hedgerow. Given its location in industrial area it is considered unlikely that this feature supports any remarkable bird assemblages. |

| HABITAT | VALUE | REASON |
|---------------|------------|---|
| Invertebrates | Negligible | Presence of notable invertebrate assemblages unlikely due to unsuitability of habitat. Not considered further in this report. |

4 IMPACT ASSESSMENT AND MITIGATION / AVOIDANCE MEASURES

Measures to mitigate or avoid impacts on habitats and protected species are provided in the following sections.

4.1 CEcMP

Construction Ecological Management Plan (CEcMP)

A CEcMP should be produced (to form part of or sit alongside the overarching contractor’s CEMP) to ensure that ecological mitigation measures as described within this report are delivered during the construction phase. These include measures required to avoid and minimise impacts on ecological features, measures which need to be adhered to for legal reasons and measures which should be implemented as environmental good practice.

The following should also be included within the CEcMP:

- Identification of ecological protection zones where works are to be restricted;
- Areas where protective fencing is to be installed and maintained;
- Ecological working methodologies to avoid/minimise impacts on sensitive ecological receptors;
- Timing of works to avoid/minimise impacts on sensitive ecological receptors;
- Where and when ecological supervision and/or toolbox talks to Site personnel are required;
- Responsible persons.

4.2 DESIGNATED SITES

| RECOMMENDATIONS | | |
|--|-----|----|
| <ul style="list-style-type: none"> • Strict Pollution Prevention measures to be implemented during the construction phase to avoid water quality impacts on the Biddle Street SSSI and the Congresbury Yeo, adjacent Land and Rhynes LWS. • Wastewater discharge should be carefully considered so that water quality impacts on the Biddle Street SSSI or the Congresbury Yeo, adjacent Land and Rhynes LWS are avoided once the Site is operational. | | |
| Requires additional work pre-planning | | NO |
| Requires action during construction | YES | |
| Requires action post-development | | NO |

The Application Site lies within several SSSI Impact Risk Zones, with the development proposals meeting the criteria for Natural England consultation (large infrastructure such as warehousing / industry where net additional gross

internal floorspace is > 1,000m²). It is therefore likely that North Somerset Council will look to consult Natural England on this matter.

Construction

Direct impacts to the Biddle Street SSSI and Congresbury Yeo, Adjacent Land and Rhynes LWS are considered unlikely as a result of the proposed works. However, ordnance survey mapping suggests that the rhyne adjacent to the Application Site could be connected to the network of waterbodies associated with these designated sites. Therefore, there are potential water quality impacts (e.g. run-off from the Application Site) on the important aquatic communities present within the SSSI and LWS. Strict precautionary measures should therefore be adopted during construction following standard Pollution Prevention guidelines

Operation

Similarly, inappropriate discharge of wastewater could impact upon the SSSI and LWS and therefore careful consideration should be given to wastewater discharge to avoid impacts on these designations once the Site is operational.

No impacts as a result of the proposals are anticipated to the Tickenham, Nailsea and Kenn Moors and Puxton Moor SSSI sites and also the Cheddar Valley Railway Walk and Cadbury Hill Local Nature Reserves given their distance from the Application Site.

Coastal Floodplain and Grazing Marsh Priority Habitat is located in the surrounding countryside around the Site, Biddle Street SSSI and Congesbury Yeo, Adjacent Land and Rhynes LWS encompass this habitat and have been discussed separately above. No other impacts on the Coastal Floodplain and Grazing Marsh habitat are anticipated as a result of the proposed development.

Please note that impacts and mitigation measures in relation to the North Somerset and Mendip bat SAC are discussed separately in section 4.4.1 below.

4.3 HABITATS

| RECOMMENDATIONS | | |
|---|-----|----|
| <ul style="list-style-type: none"> Hedgerows, the rhyne and adjacent grassland areas should be protected throughout the construction period via erection of Heras fencing with an attached mesh material to provide a protected corridor during construction. Strict Pollution Prevention Guidelines to be followed during the construction phase to prevent impacts to the rhyne adjacent to the Site. | | |
| Requires additional work pre-planning | | NO |
| Requires action during construction | YES | |
| Requires action post-development | | NO |

Construction

No direct impacts are anticipated to the hedgerow or rhyne to the south of the Application Site as a result of the proposals however these features should be protected from accidental damage through the use of appropriate protective fencing during the construction phase.

Strict Pollution Prevention measures should also be adopted during the construction phase to reduce the likelihood of construction impacts to the adjacent rhyne.

Please note that protected species could potentially use habitats considered to be of low intrinsic ecological value. Where this is the case recommendations have been provided in the relevant species sections below.

Operation

No impacts upon habitats are anticipated once the Site is operational.

4.4 SPECIES

4.4.1 Bats

| RECOMMENDATIONS | |
|--|------------|
| <ul style="list-style-type: none"> Erection of Heras fencing with an attached mesh material to provide a protected corridor along the hedgerow and rhyne to the south during construction. Night-time construction work during the active bat season (April to November) should be avoided. Where unavoidable, lighting should be directional and, on a timer, to limit light spill onto the hedgerow and rhyne offsite. Operational lighting should be avoided on the southern elevation of the new unit. If external lighting is proposed a lighting strategy for the Site will be produced that ensures no increase in light levels along the hedgerow and rhyne features which could potentially be used by bats (including those associated with the North Somerset and Mendip SAC). | |
| Requires additional work pre-planning | NO |
| Requires action during construction | YES |
| Requires action post-development | YES |

All bats and their roosts are protected under UK and European Legislation including the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended) Further information is provided in Appendix I. No impacts to roosting bats are anticipated.

North Somerset and Mendip bats SAC

The Application Site falls within Band C of the North Somerset and Mendip bat consultation zone. A Supplementary Planning Document (SPD) has been produced to provide guidance to developers should a site fall within this zone (North Somerset Council 2018).

Within the SPD the following is stated:

'Proposed developments with minor impacts

4.17 In circumstances of overall less potential impact, especially in Band C, mitigation may be put forward without the need for a full season's survey. (See Annex 3). This approach will only be suitable where it can be clearly demonstrated that the impacts of a proposed development are proven to be minor and can be fully mitigated without an impact upon the existing (& likely) SAC bat habitat. In order to adopt this approach, it will be necessary for a suitably qualified ecologist to visit the site and prepare a report with an assessment of existing (& likely) SAC bat habitat. The information from this report should provide the basis to determine appropriate mitigation measures associated with the proposed development. The proposed mitigation should clearly demonstrate that there will be no interruption of suitable SAC bat commut-

ing habitat. Replacement of foraging habitat may be required as appropriate.

The Bat Assessment report produced by The Landmark Practice (2013) for a wider survey area encompassing the current Application Site concluded that the site does not appear to be used regularly by horseshoe bats (Greater or Lesser), nor does it provide them with an important foraging resource. Further surveys to determine usage of the Site by horseshoe bats was not considered necessary in this instance. As the Application Site is comprised of hardstanding/bare exposed substrate it is considered unlikely that horseshoe bats would use the Site for any sustained period of time.

Construction

There is potential for horseshoe bats to use the hedgerow and rhyne offsite for commuting and foraging however no direct impacts (clearance/removal) on these features are anticipated as a result of the proposals. In addition, these features are surrounded on both sides by the active wider industrial estate comprised of large areas of hardstanding, buildings and very little semi-natural habitat. On this basis it is considered unlikely that it would form any commuting or foraging habitat of significance for horseshoe bats whose preferred feeding areas are grazed pasture (especially cattle grazed) as well as habitats such as meadows and ancient semi natural woodland (North Somerset Council 2018). In addition, security lighting is located along the length of the building's southern elevation which is likely to act as a deterrent to light-sensitive species of bats such as horseshoes.

As the use of the linear features by horseshoe bats cannot be ruled out entirely, on a precautionary basis it is recommended that night-time construction work during the active bat season (April to November) is avoided. Where unavoidable a sensitive lighting strategy should be devised under guidance from an ecologist to limit impacts.

Operation

Operational lighting should be avoided on the southern elevation of the new unit. Should external lighting be required once the Site is operational, a sensitive lighting strategy should be produced and implemented which ensures that any introduced light levels will not affect the linear features to above 0.5 lux or above existing baseline levels. Retaining a dark buffer zone between the Application Site and the adjacent hedgerow/rhyne will ensure that any commuting bats, if present, can continue to use the hedgerows and rhyne as a linear commuting feature and for foraging.

Erection of Heras fencing with an attached mesh material will act to provide a protected corridor along the hedgerow/rhyne to the south during construction.

On this basis, there are not anticipated to be any significant impacts on horseshoe bat populations associated with the SAC due to interruption of foraging or commuting habitat.

Please note the above measures will also ensure that impacts on any other bat species using the hedgerow/rhyne for foraging/commuting will be avoided.

4.4.2 Amphibians

| RECOMMENDATIONS | |
|---|-----|
| <ul style="list-style-type: none"> No storage of materials within adjacent grassland habitat. Retained hedgerows and grass habitats within close proximity to the area of works should be protected from accidental damage through use of appropriate protective fencing during the construction phase. | |
| Requires additional work pre-planning | NO |
| Requires action during construction | YES |
| Requires action post-development | NO |

Great Crested Newt and their habitats are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended) Further information is provided in Appendix I.

Construction

Habitats located to the south of the Application Site could potentially be used by amphibians. The hedgerow is also connected to the pond to the south that could not be surveyed due to access issues. Therefore, the following precautionary recommendations should be followed;

No storage of materials to be permitted within adjacent grassland habitats;

Retained hedgerows and grass habitats within close proximity to the area of works should be protected from accidental damage through use of appropriate protective fencing during the construction phase.

Operation

No impacts upon amphibians are anticipated once the Site is operational.

4.4.3 Breeding Birds

| RECOMMENDATIONS | |
|--|------------|
| <ul style="list-style-type: none"> Erection of Heras fencing with an attached mesh material will act to provide a protected corridor along the hedgerow to the south during construction. No storage of materials to be permitted within adjacent grassland habitat. Night-time construction work during the breeding bird season (March to August) will be avoided where possible. | |
| Requires additional work pre-planning | NO |
| Requires action during construction | YES |
| Requires action post-development | NO |

All birds, their nests and eggs are protected under the Wildlife and Countryside Act 1981 (as amended). Further information is provided in Appendix I.

Construction

The hedgerow located immediately offsite to the south could potentially be used by breeding birds therefore the following precautionary measures should be followed during construction:

- Erection of Heras fencing with an attached mesh material will act to provide a protected corridor along the hedgerow to the south during construction.
- No storage of materials to be permitted within adjacent grassland habitat.
- Night-time construction work during the breeding bird season (March to August) will be avoided where possible.

Operation

No impacts upon breeding birds are anticipated once the Site is operational.

5 BIODIVERSITY ENHANCEMENT MEASURES

The National Planning Policy Framework (NPPF 2019) states that the planning system should ‘contribute to and enhance the natural and local environment by ...minimising impacts on and providing net gains for biodiversity...’.



In addition, the North Somerset Core Strategy Policy CS4: Nature conservation states the following:

The biodiversity of North Somerset will be maintained and enhanced by:

2) seeking to ensure that new development is designed to maximise benefits to biodiversity, incorporating, safeguarding and enhancing natural habitats and features and adding to them where possible, particularly networks of habitats. A net loss of biodiversity interest should be avoided, and a net gain achieved where possible;

Therefore, the following enhancements are recommended for inclusion at the Site during the construction phase:

Table 7: Proposed ecological enhancements

| Enhancement | |
|---|---|
| <p>Installation of 5 bird boxes on trees within the hedgerow to the south of the Application Site</p> <p>3 x Vivara Pro Seville 28mm WoodStone Nest Box (https://www.nhbs.com/vivara-pro-seville-28mm-woodstone-nest-box)</p> <p>2 x Traditional Wooden Bird Nest Box (https://www.nhbs.com/traditional-wooden-bird-nest-box)</p> |   |

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7 APPENDICES

Appendix I: Legislation and Planning Policy

This report has been produced with reference to the following relevant wildlife and environmental legislation and planning policy.

| LEGISLATION/PLANNING POLICY | LINK |
|--|---|
| The Conservation of Habitats and Species Regulations 2017 (as amended) | https://www.legislation.gov.uk/uksi/2017/1012/contents/made |
| The Wildlife and Countryside Act (W&CA) 1981 (as amended) | http://www.legislation.gov.uk/ukpga/1981/69/contents |
| Countryside and Rights of Way (CRoW) Act 2000 | http://www.legislation.gov.uk/ukpga/2000/37/contents |
| Natural Environment and Rural Communities (NERC) Act 2006 | http://www.legislation.gov.uk/ukpga/2006/16/contents |
| OCPM Circular 06/2005: Biodiversity and Geological Conservation | https://www.gov.uk/government/publications/biodiversity-and-geological-conservation-circular-06-2005 |
| North Somerset Council Core Strategy | https://www.n-somerset.gov.uk/sites/default/files/2020-07/core%20strategy.pdf |
| Yatton Neighbourhood Plan for the Period 2017-2026 | https://www.n-somerset.gov.uk/sites/default/files/2020-04/Yatton%2oneighbourhood%20plan.pdf |
| UK Post 2010 Biodiversity Framework | http://jncc.defra.gov.uk/pdf/UK_Post2010_Bio-Fwork.pdf |
| National Planning Policy Framework | https://www.gov.uk/government/publications/national-planning-policy-framework--2 |

The most relevant legislation pertaining to each of the protected species described within this document is given in the table below.

| SPECIES | LEGISLATION | PROTECTION |
|---------------------------|---|---|
| <i>Bats (all species)</i> | Sch 5 of The Wildlife and Countryside Act 1981 (as amended) Conservation of Habitats and Species Regulations 2017 (as amended) | It is an offence to: <ul style="list-style-type: none"> • Intentionally or deliberately take, kill or injure a bat; • Damage, destroy or obstruct access to bat roosts; • Deliberately disturb bats. |
| <i>Hazel Dormouse</i> | Sch 5 of The Wildlife and Countryside Act 1981 (as amended) Conservation of Habitats and Species Regulations 2017 (as amended) | It is an offence to: <ul style="list-style-type: none"> • Intentionally or deliberately take, kill or injure; • Damage, destroy or obstruct access to any structure or place used for shelter or protection; • Disturb an animal occupying such a structure or place. |
| <i>Great Crested Newt</i> | Sch 5 of The Wildlife and Countryside Act 1981 (as amended) Conservation of Habitats and Species Regulations 2017 (as amended) | It is an offence to: <ul style="list-style-type: none"> • Intentionally or deliberately take, kill or injure; • Damage, destroy or obstruct access to any structure or place used for shelter or protection; • Disturb an animal occupying such a structure or place. |
| <i>Reptiles</i> | Sch 5 of The Wildlife and Countryside Act 1981 (as amended) | Part of sub-section 9(1) and all of sub-section 9(5) apply; <ul style="list-style-type: none"> • Prohibits the intentional killing and injuring of reptile species. |
| <i>Water vole</i> | Sch 5 of The Wildlife and Countryside Act 1981 (as amended) | It is an offence to: <ul style="list-style-type: none"> • Intentionally capture, kill or injure water voles; • damage, destroy or block access to their places of shelter or protection; • disturb them in a place of shelter or protection (on purpose or by not taking enough care). |

| | | |
|--------------------------------|--|---|
| Badgers | The Protection of Badgers Act 1992 | <p>It is an offence to:</p> <ul style="list-style-type: none"> • intentionally or recklessly damage, destroy or obstruct access to a sett; and • to disturb a Badger whilst it is occupying a sett. |
| Nesting birds (all species) | The Wildlife and Countryside Act 1981 (as amended) | <p>It is an offence to:</p> <ul style="list-style-type: none"> • Kill, injure, or take any wild bird; • Take, damage or destroy the nest of any wild bird while that nest is in use or being built; • Take or destroy an egg of any wild bird. |

* Excludes Sand Lizard and Smooth Snake for which a higher level of protection is granted. These species were not considered here, as no suitable habitat was available for them and the Site falls outside of their recorded range.

Appendix II: Phase 1 Habitat Species Lists

* DAFOR scale of relative abundance: Dominant, Abundant, Frequent, Occasional or Rare.

h2a: Hedgerow (Priority habitat) – immediately offsite

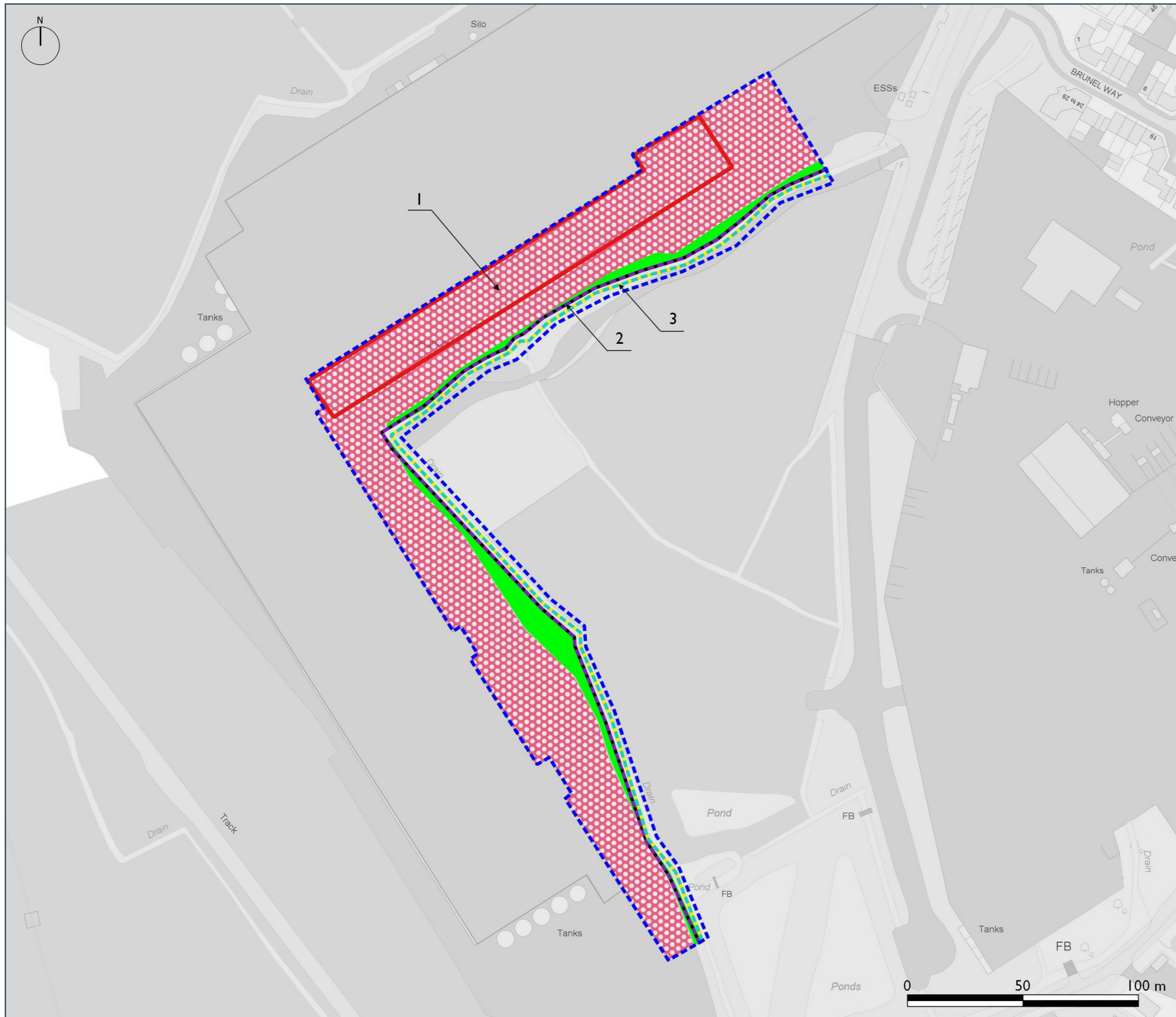
| COMMON NAME | LATIN NAME | ABUNDANCE (DAFOR) |
|---------------------|------------------------------|-------------------|
| Blackthorn | <i>Prunus spinosa</i> | A |
| Bramble | <i>Rubus fruticosus agg.</i> | A |
| Dog-rose | <i>Rosa canina</i> | A |
| Ivy | <i>Hedera helix</i> | A |
| Hawthorn | <i>Crataegus monogyna</i> | A |
| Hogweed | <i>Heracleum sphondylium</i> | A |
| Hedge bedstraw | <i>Galium mollugo</i> | F |
| Lords and ladies | <i>Arum maculatum</i> | O |
| Herb robert | <i>Geranium robertianum</i> | O |
| Common Nettle | <i>Urtica dioica</i> | O |
| Creeping Buttercup | <i>Ranunculus repens</i> | O |
| Perennial Rye-grass | <i>Lolium perenne</i> | O |
| Willow sp. | <i>Salix sp.</i> | R |
| Pedunculate oak | <i>Quercus Robur</i> | R |

r1: Standing open water and canals – immediately offsite

| COMMON NAME | LATIN NAME | ABUNDANCE (DAFOR) |
|--------------|-----------------------|-------------------|
| Duckweed sp. | <i>Lemnoideae sp.</i> | O |

g4: modified grassland – immediately offsite

| COMMON NAME | LATIN NAME | ABUNDANCE (DAFOR) |
|---------------------|--------------------------|-------------------|
| Perennial Rye-grass | <i>Lolium perenne</i> | D |
| Creeping Buttercup | <i>Ranunculus repens</i> | O |
| Daisy | <i>Bellis perennis</i> | O |



Key

- Survey boundary
- Application site
- g4 - modified grassland
- u1b - developed land sealed surface
- h2a - hedgerow (priority habitat)
- r1e - canal or ditch

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ECOLOGY & LANDSCAPE

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Yatton

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Extended Phase 1 Habitat Map

February 2021

BY FG | **DOC REF** BR0532/EcIA/PHASE2A/A | **REV. B**

Appendix IV: Target Notes for Phase 1 Habitat Map

(See Appendix III for location references)

| TARGET NOTE | DESCRIPTION | IMAGE |
|-------------|--|--|
| 1 | Hardstanding (concrete service yard) |  |
| 2 | <p>Species-poor hedgerow located 10m to the south of the Application Site.</p> <p>Low amphibian potential. Potential for bat commuting and foraging. Nesting bird potential.</p> |  |
| 3 | <p>Rhyne to the south of the Application Site.</p> <p>Negligible for water vole or otter. Potential for foraging and commuting bats.</p> |  |

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