

**Dunmill Energy Storage Project  
Montrose  
Ecological Impact Assessment (EclA)**



**Client:**

**RENEWABLE ENERGY SYSTEMS  
LIMITED**

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## PROJECT

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# 1 INTRODUCTION AND BACKGROUND

## 1.1 Terms of Reference

- i RammSanderson Ecology Ltd (RS) were commissioned by Renewable Energy Systems Limited (the Applicant) to undertake an Ecological Impact Assessment (EclA) to support the planning application for the proposed battery storage project (hereafter referred to as the Scheme), located just north of the Bridge of Dun and directly west of Dun, Montrose, Scotland. All land situated within the red line of the Scheme is hereafter referred to as the Application Site and is shown on Figure 1.
- ii The purpose of this EclA is to demonstrate how the Scheme accords with relevant national and local planning policy and legislation. Further details on relevant planning policy and legislation are provided in Appendix A.
- iii This EclA details the methodology followed to undertake the assessment, describes the ecological baseline relevant to the Scheme and evaluates the nature conservation importance of ecological features present within the Study Area (see Section 2). The EclA characterises the impacts (both positive and negative) of the Scheme on Important Ecological Features (IEF)<sup>1</sup>, and where necessary, sets out appropriate and proportionate avoidance, mitigation and compensation measures that will be delivered by the Applicant. The significance of any residual effects (both positive and negative) of the Scheme on the IEFs has been assessed, and opportunities for enhancement are identified with the overall aim of achieving biodiversity net gain through the Scheme.
- iv This EclA forms part of the supporting technical documentation for the planning application submitted for the Scheme and has been undertaken with reference to current good practice<sup>2</sup> and is consistent with the requirements of British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development.

## 1.2 The Scheme

- i The Scheme involves the development of a new battery storage facility. It will include hardstanding, battery containers, substations and other equipment, surrounded by security fencing up to 3m in height. A new access track will connect to the road which runs along the eastern boundary of the Site.

## 1.3 The Application Site

- i The Application Site is located just south of the A935 to the northwest of the Montrose Basin near Bridge of Dun and directly west of Dun. The centre of the Application Site is at Ordnance Survey national grid reference NO 66466 59259 and is approximately 3.69 ha in size.
- ii The Application Site is situated within an arable field, with a field margin of grassland in the north of the Application Site and to the south of the A935. The land is used for agricultural purposes. The wider landscape consists largely of arable fields that are in similar land use.

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<sup>1</sup> Important Ecological Features are habitats, species, ecosystems and their functions and processes that are of conservation importance and could potentially be affected by the Scheme. Various characteristics contribute to a feature's importance including its rarity, diversity, size, population trend, distinctiveness, naturalness, fragility, typicalness, recorded history, potential value and intrinsic appeal.

<sup>2</sup> CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland. Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.

## 2 METHODOLOGY

### 2.1 Scope of the EclA

- i The EclA has been undertaken as follows:
- Define the Study Area for the assessment, which considers the Zone of Influence<sup>3</sup> (ZoI) of the Scheme.
  - Undertake desk and field-based assessments for designated sites, habitats and species to determine the ecological baseline for the Scheme within the Study Area.
  - Determine the nature conservation importance of each ecological feature recorded during the desk and field-based assessments to determine which of those features are IEFs in the context of the EclA.
  - Assess the potential impacts on IEFs because of the Scheme.
  - Design suitable avoidance and mitigation measures to address potential impacts.
  - Determine the significance of any residual effects and design suitable compensation measures to address significant residual effects; and,
  - Identify opportunities for biodiversity enhancements including delivery of Biodiversity Net Gain.

### 2.2 Important Ecological Features

- ii The EclA has focused on the potential impacts to ecological features (habitats, species, ecosystems and their functions/ processes) that are considered important and potentially affected by the Scheme. The EclA has not carried out detailed assessments of features that are sufficiently widespread, unthreatened and resilient to impacts and which will remain viable and sustainable should the Scheme proceed as detailed in Section 1.
- iii For this EclA, the following are considered IEFs requiring detailed assessment:
- Statutory designated sites.
  - Non-statutory designated sites.
  - Habitats and species of principal importance (HoPI / SoPI) for the conservation of biodiversity in Scotland listed on the Scottish Biodiversity List.
  - Irreplaceable habitats including ancient woodland and veteran trees.
  - Individual habitat types or mosaics that may not qualify as HoPI but form an important part of ecosystems and their function.
  - Legally protected species<sup>4</sup>
  - Local Biodiversity Action Plan (LBAP) priority species and habitats.
  - Species of conservation concern, Red Data Book (RDB) species – UK<sup>5</sup>.
  - Birds of Conservation Concern – UK<sup>6</sup>.
- iv The EclA has also considered legally controlled plant species listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 in Britain (e.g., Japanese knotweed, Himalayan balsam, giant hogweed).

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<sup>3</sup> The Zone of Influence is the area over which ecological features may be affected by biophysical changes because of the Scheme and associated activities.

<sup>4</sup> Legally protected species are those listed on the Wildlife and Countryside Act 1981, The Conservation of Habitats and Species Regulations 2018, Protection of Badgers 1992.

<sup>5</sup> Species Status Assessment project published by Joint Nature Conservation Committee (JNCC) in 1999. <http://jncc.defra.gov.uk/default.aspx?page=3352>.

<sup>6</sup> (Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015). Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man.

## 2.3 Study Area

- v Desk and field-based studies have been undertaken to establish the biodiversity baseline that may be impacted by the Scheme. The scale of the Study Areas varies dependent upon the ecology of the feature being assessed and its vulnerability to change resulting from construction and operation of the Scheme. Ecological features outside of the Study Area are unlikely to be affected by the Scheme and are not considered in this EclA.
- vi Table 1 summarises the Study Area for the Scheme.

**Table 1. Background Records and Field Surveys Study Areas**

Ecological Feature	Background Records Study Area <sup>7</sup>	Field Survey Study Area <sup>8</sup>
Designated Sites	1 km	The Application Site and its immediate surrounds
Legally protected and notable habitats, flora and fauna	1 km	The Application Site and a 50m buffer where access was possible
Great crested newt	1km	500m

## 2.4 Desk Study

vii A desk study has been undertaken to obtain background records relevant to the Scheme and the EclA, including records of statutory and non-statutory designated sites. The data obtained provides contextual information for the scope of field surveys, to aid the evaluation of field survey results, and to provide supplementary information where complete field survey coverage has not been possible.

Data has been obtained from [www.magic.gov.uk](http://www.magic.gov.uk)<sup>9,10</sup> and [map.environment.gov.scot](http://map.environment.gov.scot).

*NB: Desk study data and data from [magic.gov](http://magic.gov) is third party controlled data, purchased or consulted for the purposes of this report only. RammSanderson Ecology Ltd cannot vouch for its accuracy and cannot be held liable for any error(s) in these data.*

## 2.5 Field Surveys

viii Field surveys have been designed to collect information on the habitats and species present that may be affected by the Scheme. The geographical areas across which field surveys have been undertaken are the areas over which ecological features are likely to be subject to impacts from the construction or operation of the Scheme if they are present and accounting for the Scheme design measures detailed in Section 1.

ix Table 2 summarises the field surveys that have been undertaken to inform the EclA.

x Detailed methodologies for collection of field survey data, and any specific limitations and deviations encountered during these surveys, are presented in Appendix 2.

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<sup>7</sup> Distance measured from the Application Site Boundary.

<sup>8</sup> Distance measured from the Application Site Boundary.

<sup>9</sup> Multi Agency Geographic Information for the Countryside Interactive GIS Map.

<sup>10</sup> MAGIC resource was reviewed on the 7<sup>th</sup> December 2023.

**Table 2. Field Surveys undertaken to inform EclA**

Ecological Feature	Survey Type	Date(s) of Survey(s)
Habitats	Phase 1 habitat survey	31 <sup>st</sup> October 2023
Badger	Presence likely absence survey	31 <sup>st</sup> October 2023
Bats	Ground level tree assessment (GLTA)	31 <sup>st</sup> October 2023
Otter	Scoping Survey	31 <sup>st</sup> October 2023
Wintering Birds	Presence/ likely absence survey	31 <sup>st</sup> October 2023
Other protected or notable species	Scoping Survey	31 <sup>st</sup> October 2023

## 2.6 Assessment criteria

xi This EclA broadly follows CIEEMs Guidelines for Ecological Impact Assessment in the United Kingdom with the following clarifications specific to the Scheme.

### 2.6.1 Nature conservation evaluation

xii Several criteria have become accepted as a means of assessing the nature conservation importance of a defined area of land which are set out in *A Nature Conservation Review*<sup>11</sup> and include diversity, rarity and naturalness.

xiii For this EclA, the nature conservation importance or potential value of an ecological feature is determined within the following geographic context:

- International (Europe): such as Special Areas of Conservation (SAC) or Special Protection Areas (SPA).
- National (Scotland): such as Sites of Special Scientific Interest (SSSI);
- Regional (\*): such as populations of species which enrich biodiversity on a regional scale and whose loss would significantly affect the species national distribution.
- County (Ross and Cromarty): such as Local Nature Reserves (LNR) or populations of species which qualify for Local Wildlife Site (LWS) designation.
- Local (AIness): undesignated ecological features such as old hedges, woodlands, ponds;
- Site: the feature has some ecological importance, but is not of a scale warranting consideration outside of the boundaries of the Site itself; and
- Negligible: the feature either has little or no importance for biodiversity, or is considered sufficiently widespread, unthreatened, and resilient to impacts and will remain viable and sustainable.

\*A geographical area for Regional importance has not been defined. A feature is of Regional importance when it is of greater geographical importance than within the area of Ross and Cromarty but does not reach the threshold to be of National (Scottish) importance.

xiv Ecological features of Local or higher nature conservation importance are considered IEFs requiring detailed assessment. In addition, for the EclA to demonstrate how the Scheme will comply with statutory requirements and policy

<sup>11</sup> Ratcliffe, D. (1977). *A Nature Conservation Review*.



objectives for biodiversity, some ecological features are considered IEFs even if they are not of Local or higher nature conservation importance. These are features that are protected by national legislation and include:

- Badgers, legally protected through the Protection of Badgers Act, 1992;
- All nesting birds, legally protected through the Wildlife and Countryside Act, 1981; and,
- Non-native invasive plant species, listed on Schedule 9 of the Wildlife and Countryside Act, 1981.

### **2.6.2 Temporal scope**

xv Potential impacts on IEFs have been assessed in the context of how the predicted baseline conditions might change between the surveys and the start of construction.

xvi Long-term trend information was used to make judgements about the significance of an impact or effect on the conservation objectives or condition of a designated site, or the conservation status of a habitat or species (for example a species with a long term, national population decline may be more susceptible to impacts attributable to the Scheme). Where this information was available it is referenced in Section 4.

xvii Once construction is complete, this EclA has assumed that the operational phase of the Scheme will last for the foreseeable future.

### **2.6.3 Approach to mitigation**

xviii Where impacts on IEFs are predicted, the approach to mitigation engages the following hierarchy:

- (1) Avoid features where possible.
- (2) Minimise impact by design, method of working or other measures, for example by enhancing existing features; and,
- (3) Compensate for significant residual impacts (e.g., by providing suitable habitats elsewhere).

xix The highest level of the hierarchy has been applied where possible. Only where this cannot reasonably be adopted have lower levels been considered. The rationale for the proposed level of mitigation has been detailed in Section 4, including sufficient detail to show that these measures are feasible and will be provided by the Applicant.

xx The Fourth National Planning Framework (NP4) states that all development will contribute to the enhancement of biodiversity, including where relevant restoring degraded habitats. Proposals for local development will include appropriate measures to conserve, restore and enhance biodiversity in accordance with national and local guidance.

xxi Throughout this EclA, the potential to secure biodiversity enhancement, and therefore overall net gain, has been considered.

## **2.7 Limitations to the Assessment**

xxii The ecological surveys undertaken to support this EclA have not produced a complete list of plants and animals and the absence of evidence of any particular species should not be taken as conclusive proof that the species is not present or that it will not be present in the future. However, the results of these surveys have been reviewed and are considered to be sufficient to undertake this EclA.

### 3 BASELINE CONDITIONS

- i The following sections provide a summary of the baseline conditions relevant to the Scheme and the assessment of potential impacts of the Scheme on biodiversity. The baseline is based on the results of the desk and field-based studies undertaken within the Study Area to inform this EclA.
- ii Regarding background data, 'recent' records are considered to be those no older than 10 years from the date of the desk study. Records outside of this period are historical and have only been reported where more recent records do not exist. Exceptions to this are detailed in the appropriate sections below.
- iii Ecological features which are present or considered likely to be present within the Study Area have been assigned a geographical scale of nature conservation importance in line with the criteria detailed in Section 2. Nature conservation importance is summarised in Table 6.

#### 3.1 Designated Sites

- i Two statutorily designated sites were recorded within the search radius, the details of which are summarised in the table below.

**Table 3: Statutorily Designated sites within Study Area**

Site Name	Designation	Location	Brief Description
Montrose Basin	RAMSAR, SPA, SSSI	0.3km SE	Selected for its status for its coastal habitats (Saltmarsh and extensive mudflats at low tide, brackish and freshwater habitats), and also the birdlife that this support, including a nationally important population of breeding eiders.
South River Esk	SAC	0.6km S	The river has multiple qualifying features for its status including its freshwater pearl mussel population and Atlantic salmon population, both in which rely on good water quality and appropriate water levels and hydrological functioning.

#### 3.2 Habitats<sup>12</sup>

- i Most habitats on site were generally of limited botanical interest and poor species diversity. The value of habitats such as the scattered broad-leaved trees, scrub and tall ruderal were largely noted in their potential to support a range of protected / Priority faunal species rather than for their botanical value. The scattered trees and hedgerow offered some value as ecological corridors for the dispersal of fauna and flora into the wider countryside. All hedgerows are listed as a Habitat of Principal Importance under the Scottish Biodiversity List.
- ii No protected or Priority plant species were observed and all plant species encountered were common, widespread and characteristic of the common habitat types they represent. The table below summarises the habitat types identified on site and the potential impacts as a result of the proposals and their ecological significance.
- iii Habitats are shown on Figure 2.

<sup>12</sup> Full Phase 1 survey results are displayed in Appendix 5.

**Table 4: Phase 1 habitat types and their ecological importance**

Habitat	UK HABS Code	Area (m <sup>2</sup> )	Proportion of Site Area
Winter Stubble	C5	33,060	89.1%
Modified Grassland	G4	2,654.45	7.49
Other Neutral Grassland	G3c	1205.1	3.4%
Native Hedgerow with Trees	H232	81m (length)	N/A

### 3.3 Great Crested Newt (GCN)

- i No ponds were located on site, however there were four ponds within 500m of the site boundary. The closest of these (P1) was 175m north-east. This pond was considered to be located beyond a major barrier to dispersal in the form of the A935, which was a busy road into Montrose. P2 (450m south) was located beyond the Bridge of Dun which was also considered a barrier to dispersal due to it being a road that lay between the optimal habitat for this species and the Site boundary. P3 and P4 (450m South also) were located just to the east of P2 and are thought to be subject to the same amount of barriers to dispersal that P2 is subject to.
- ii Given that all ponds are separated from the Application Site by major barriers to dispersal, and GCN are rare and sparsely distributed in Scotland, it is highly unlikely that GCN will be impacted by site works, as such best practices should be followed as the development takes place, and works should immediately cease and an ecologist should be contacted if any newts are found onsite at any point during the development.
- iii Waterbodies are shown on Figure 3.

### 3.4 Bats

#### 3.4.1 Trees

- i All trees on site were subject to an assessment of roosting features during the walkover survey. None of the trees had any potential to support roosting bats as they all lacked features such as holes, splits or flaking bark that bats typically use for roosts.

#### 3.4.2 Foraging Habitat

- ii The hedgerows present on the peripheries of the Application Site provided limited potential foraging and commuting habitat, as they are situated close to the busy A935 road. In assessing the Application Site against criteria in best practice guidelines (Collins J., eds, 2023) the Application Site was considered to offer low quality foraging and commuting habitat for bats.

### 3.5 Birds

- i The habitats within the Application Site are typical of the surrounding area and there is no reason to suggest that the Application Site would be of particular value to birds. The wintering bird survey undertaken at the end of October 2023 recorded mostly common and widespread species (see Figure 4). Skylark was recorded in very low numbers, and it is possible that this species uses the Application Site for nesting.
- ii Given the typicalness of the habitats present it is likely that only small numbers of commoner bird species nest within the Application Site.

- iii Habitats adjacent to Application Site are similar to those within the Application Site, consisting of arable farmland. It is unlikely any rarer or notable bird species such as those listed on Schedule 1 of the Wildlife and Countryside Act 1981 would be present in these areas.

### **3.6 Reptiles**

- i The terrestrial habitats on site are, for the most part, considered unsuitable for reptiles. Hedgerows and grassland provide some limited opportunities for reptiles, though as they are small in size and isolated from more favourable habitats likely to support larger populations, reptiles are considered likely absent from the Application Site.

### **3.7 Otter and Water Vole**

- i A watercourse flows adjacent to the eastern site boundary. The watercourse is clear and fast flowing and has vegetated banks. The watercourse is suitable to support water vole and for use by foraging otter. Given that there are high levels of disturbance from the A935 to the north of the Application Site which the watercourse crosses under, as well as farms, residential properties and the arable fields are in use for crops, it is unlikely that otters would rest or breed along this section of watercourse. There are far more suitable locations for otters to rest or breed to the north and south of the Application Site which are less disturbed as they are further away from roads or buildings.

### **3.8 Badgers**

- i No evidence of badger was recorded within or adjacent to the Application Site. There is very little opportunity for sett building within the Application Site, and whilst badger may commute through the Application Site on occasion, they are considered to be absent from the Application Site.

### **3.9 Red Squirrel and Pine Marten**

- i The Application Site, being mostly arable farmland, offered very little suitable habitat for either of these species. Red squirrel are likely absent from the Application Site. Pine marten may occasionally pass through the Application Site, but as there are no likely locations for breeding or resting within or adjacent to the Application Site, pine marten are considered likely absent.

### **3.10 Other Priority Fauna Species**

- i The habitats onsite were suitable for hedgehogs and brown hare. No observations of these species were made during the surveys that were undertaken.
- ii Due to a lack of suitable habitats, the Application Site is not considered likely to support any other legally protected or Priority species.

### **3.11 Summary of Nature Conservation Importance**

- iii Table 5 summaries the IEFs that have been recorded (or assumed to be present) in the Study Area and their nature conservation importance.

**Table 5. Summary of Nature Conservation Importance**

Ecological Feature	Geographical Scale of Nature Conservation Importance
Montrose Basin SPA, Ramsar and SSSI South River Esk SAC	International (Europe)
Habitats within the Application Site	Site
Bats	Site – limited opportunities for roosting and foraging for bat species
Birds within the Application Site	Site – likely to support common and widespread species, as well as skylark
Otter and water vole	Local- the watercourse to the east of the Application may support water vole and foraging otter
Other Priority Fauna	Site

## 4 IMPACT ASSESSMENT, AGREED MITIGATION MEASURES AND SIGNIFICANCE OF RESIDUAL EFFECTS

- iv This Section characterises the impacts of the Scheme on IEFs during the construction and operation phases, sets out agreed avoidance and mitigation measures, and assesses the significance of the residual effects (both positive and negative) of the Scheme on these features. Where significant residual effects will occur, appropriate compensation measures are identified to offset those effects. Enhancements agreed by the Applicant are set out in Section 5.
- v The Applicant has agreed that the mitigation measures identified below will be incorporated into the detailed design proposals for the Scheme and implemented as part of the overall development of the Application Site.

### 4.1 Statutorily and Non-Statutorily Designated Sites

#### 4.1.1 Construction Impacts and Mitigation

- i No direct impacts from land take or disturbance would occur to the two internationally designated sites in the Study Area as they are situated more than 300m from the footprint of any works.
- ii It is unlikely that any impacts through pollution, siltation or other construction related contamination would occur to these sites given the small scale of the development and the distance between the construction works and the designated sites. However, to further reduce this risk, standard methods to reduce pollution because of dust, contaminants or spills would be instigated during construction. These would be detailed within a Construction Environmental Management Plan (CEMP) for the Scheme.
- iii The Montrose Basin SPA and Ramsar is designated in part for supporting internationally important bird populations, in particular pink-footed geese, greylag geese and redshank. Studies (Scottish Natural Heritage Commissioned Report No. 937) have shown geese forage at distances up to 20km from their night time roosts. The habitats within the Application Site make up a tiny fraction of the available habitat within 20km of the Montrose Basin SPA and Ramsar site, and no greylag or pink footed geese were recorded within or close to the Application Site in October 2023. Redshank are in the main associated with coastal and wetland habitats, not arable farmland which makes up the majority of the habitats within the Application Site. As such, no species associated with the designated sites would be impacted by the loss of very small areas of poor quality arable farmland.

#### 4.1.2 Operation Impacts and Mitigation

- vi As the Scheme is a battery storage facility, no operational impacts on the designated sites would occur as a result of the Scheme.

#### 4.1.3 Residual Effects and Compensation Measures

- vii No residual effects would occur to bats and no compensation is required.

### 4.2 Habitats

#### 4.2.1 Construction Impacts and Mitigation

- viii The construction of the Scheme would result in the loss of poor-quality arable farmland. Other habitats within the Application Site would be retained.
- ix The landscaping plan for the Scheme includes native scrub planting, meadow grassland as well as enhancing the existing hedgerows around the perimeter of the Application Site. This habitat creation would improve the

quality and variety of habitats within the Application Site and would provide habitat for a range of biodiversity including mammals, birds and invertebrates.

#### 4.2.2 Operation Impacts and Mitigation

x As the Scheme is a battery storage facility, no operational impacts on habitats would occur.

#### 4.2.3 Residual Effects and Compensation Measures

xi Accounting for the habitat creation as part of the Scheme, a positive effect on habitats would occur significant at the Site scale.

### 4.3 Bats

#### 4.3.1 Construction Impacts and Mitigation

xii The habitats within the Application Site are of very low suitability for foraging and commuting bats as they consist mostly of arable land. During construction, any artificial lighting required would be controlled to ensure light spill did not occur to hedgerows and the watercourse adjacent to the Application Site boundary.

#### 4.3.2 Operation Impacts and Mitigation

xiii During operation, any artificial lighting required would be controlled to ensure light spill did not occur to hedgerows, the watercourse and newly created habitats within the Application Site boundary. The specific details with regards lighting are:

- Lighting provided for occasional operational and maintenance use only. Lights would be manually switched rather than automated. The light output would be up to 15,000 lumens.
- Lights to be directional/shielded to prevent glare and light spill onto nearby woodland.
- Operation and maintenance activities would normally be limited to the hours of daylight to minimise use of artificial lighting and consequential disturbance to local wildlife.
- The lighting column itself would be 4m high.

xiv As such, no operational impacts on bats would occur.

#### 4.3.3 Residual Effects and Compensation Measures

xv No residual effects would occur to bats and no compensation is required.

### 4.4 Birds

#### 4.4.1 Construction Impacts and Mitigation

xvi With the exception of skylark, which was recorded during the wintering bird survey of the Application Site, habitats within the Application Site are unlikely to support notable or protected bird species as they consist almost entirely of poor-quality arable land. There is still a risk that commoner bird species nest within the Application Site during construction. As the construction period would last approximately 12 months it is not possible to avoid working during the bird nesting season, which is typically March to August with some species and seasonal variations. Therefore, immediately prior to clearance of any habitat, a check for nests would be undertaken by an appropriately experienced ecologist. If any nests were found, they would be left in situ until the nest is no longer active or the chicks have fledged, with an appropriate buffer of vegetation to be left around the nest, the extent of which would be determined by the ecologist on site.

xvii Regarding skylark, the habitat lost would only support a single pair as skylarks typically have a territory size of up to 2 ha. As there are very large areas of similar, suitable habitat both immediately adjacent to the Application Site, as well as in the wider area, the loss of habitat and displacement of a single pair of skylark

is not significant as they would be likely to nest close by in unaffected habitat, including the newly created meadow grassland as part of the Scheme.

#### **4.4.2 Operation Impacts and Mitigation**

- xviii Habitat creation including native scrub and meadow grassland, as well as the enhancement of the existing hedgerows within the Application Site would provide nesting and foraging opportunities for a range of bird species in the long term.

#### **4.4.3 Residual Effects and Compensation Measures**

- xix Accounting for the habitat creation as part of the Scheme, a positive effect on birds would occur significant at the Site scale.

### **4.5 Water Vole and Otter**

#### **4.5.1 Construction Impacts and Mitigation**

- i To prevent any impacts to water vole, a minimum 5m stand off from the watercourse along the eastern site boundary will be maintained.
- ii Otter may utilise the watercourse for foraging, though as detailed above it is unlikely that they breed or rest along this watercourse due to the existing levels of disturbance. To further reduce the impacts to otter, as described above lighting would be directional/shielded to prevent glare and light spill onto the watercourse and construction would normally be limited to the hours of daylight to minimise use of artificial lighting and consequential disturbance to local wildlife.

#### **4.5.2 Operation Impacts and Mitigation**

- iii As detailed above, lighting would be sympathetic to wildlife and the main battery storage facility would be located over 100m from the watercourse. As such, no operational impacts to otter or water vole would occur.

#### **4.5.3 Residual Effects and Compensation Measures**

- xx No residual effects would occur to bats and no compensation is required.

### **4.6 Other Priority Fauna**

#### **4.6.1 Construction Impacts and Mitigation**

- i Precautionary measures would be followed to reduce the risk of impacting mammals such as brown hare and hedgehog, or any other mammals during the works.
- ii These precautions are:
- Mammal ladders (such as a plank) or earth ramps to be placed in any open excavations at the end of each day;
  - Cap off any open pipes at the end of each day;
  - Cover any open holes, or install mammal ladders or earth ramps in any open excavations at the end of each day to prevent animals from becoming trapped;
  - Keep all fuel and other harmful substances in a locked area;
  - Ensure any spillages are treated with spill kits;
  - Night work should be avoided where possible, and any flood lighting should face away from the Site boundaries; and
  - If any fresh sett digging is observed notify an ecologist immediately and leave a 20m buffer around the area until an assessment can be made.



#### **4.6.2 Operation Impacts and Mitigation**

- iii Given the wildlife friendly lighting scheme to be implemented, no operational impacts to mammals are expected to occur because of the Scheme.

#### **4.6.3 Residual Effects and Compensation Measures**

- xxi No residual effects would occur to other mammals and no compensation is required.

## 5 ENHANCEMENTS

- i As only poor-quality arable land would be lost as part of the Scheme, the creation of native scrub and meadow grassland as well as the enhancement of existing hedgerows would enhance the Application Site and deliver a net gain for biodiversity.
- ii A Biodiversity Impact Assessment utilising the DEFRA Biodiversity Metric accompanies this EclA and sets out the gain in biodiversity that the Scheme would deliver in terms of biodiversity units.

## 6 CONCLUSION

- i No significant effects would occur to the Montrose Basin SPA and Ramsar or the South River Esk SAC, or to bats, otter, water vole or birds.
- ii The creation of native scrub and meadow grassland within the Application Site as well as the enhancement of existing hedgerows would result in a positive effect on habitats, significant at the Site scale.
- iii Overall, the Scheme would deliver a net gain for biodiversity and would accord with local and national planning policy.

## 7 FIGURES

Figure 1: Site Location and Context Plan

Figure 2: Phase 1 Habitat Survey

Figure 3: Waterbody Plan

Figure 4: Wintering Bird Survey



<b>RammSanderson</b>		
Title: Site Context Plan		
Project: Dunmill Energy Storage Project		
Client: Renewable Energy Systems Limited		
Date: 19/12/2023	Fig:	Author: LG
A4 Scale: 1:2500	ID: RSE_7426_STC_1223_V2R1	
EPSG:27700 OSGB36 / British National Grid		



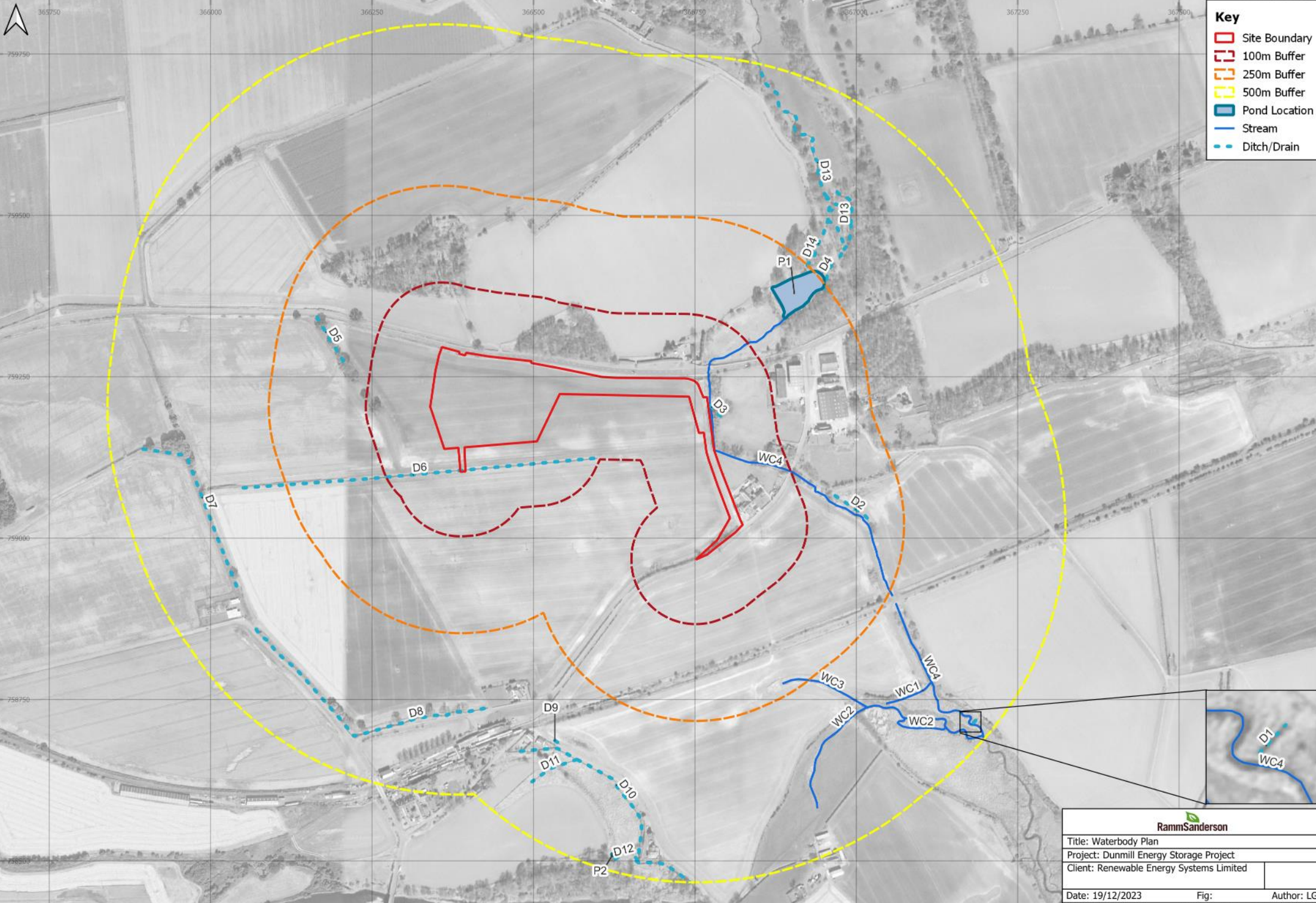
- Key**
- Boundary
  - C5: Winter stubble
  - g4: Modified grassland
  - g3c: Other neutral grassland
  - H2: Native hedgerow
  - R1G50: Ditches

81--Ruderal or ephemeral

200 - Trees

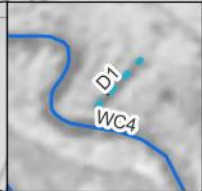
H1

<b>RammSanderson</b>		
Title: UKHabs Habitat Plan		
Project: Dunmill Energy Storage Project		
Client: Renewable Energy Systems Limited		
Plan Ref:		
Date: 19/12/2023	Fig:	Author: LG
A4 Scale: 1:2500	ID: RSE_7426_UKH_1223_V2R1	



**Key**

- Site Boundary
- 100m Buffer
- 250m Buffer
- 500m Buffer
- Pond Location
- Stream
- Ditch/Drain



**RammSanderson**

Title: Waterbody Plan  
 Project: Dunmill Energy Storage Project  
 Client: Renewable Energy Systems Limited


Date: 19/12/2023	Fig:	Author: LG
A4 Scale: 1:7000	ID: RSE_7426_WBY_1223_V2R1	

EPSG:27700 OSGB36 / British National Grid



- Key**
- Site Boundary
  - Survey Boundary
  - S Flying in
  - S → Flying away
  - S → Flying over
  - S ... S Two separate birds singing
  - ♂ Male
  - Call
  - == Alarm Call

C.	Carrion Crow
FF	Fieldfare
GT	Great Tit
LB	Lesser Black-backed Gull
PG	Pink-footed Goose
PH	Common Pheasant
RN	Common Raven
S.	Skylark
WR	Wren

	Survey Start Time: 8:30
	Survey End Time: 10:15
	Precipitation: 0%
	Cloud: 4%
	Temperature: 9° C
	Wind: 3 mph

**RammSanderson**

Title: Breeding Bird Survey Plan - Survey 1 - 31/10/2023  
 Project: Dunmill Energy Storage Project  
 Client: Renewable Energy Systems Limited

Date: 20/12/2023	Fig:	Author: RD/LG
A4 Scale: 1:4200	ID: RSE_7426_BBS1_1223_V2R2	

EPSG:27700 OSGB36 / British National Grid

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## 9 LEGISLATION AND PLANNING POLICY

### 9.1 General & Regionally Specific Policies

- i Articles of British legislation, policy guidance and both Local Biodiversity Action Plans (BAPs) and the NERC Act, 2006 are referred to throughout this report. Their context and application is explained in the relevant sections of this report. The relevant articles of legislation are:
- Fourth National Planning Framework (NPF4);
  - Local planning policies for Tayside, Perth and Kinross
  - The Conservation of Habitats & Species (Amendment) (EU Exit) Regulations 2019 (as amended);
  - The Wildlife and Countryside Act 1981 (as amended);
  - EC Council Directive on the Conservation of Wild Birds 79/409/EEC;
  - National Parks and Access to the Countryside Act 1949;
  - The Protection of Badgers Act 1992;
  - Nature Conservation (Scotland) Act 2004;
  - Local Biodiversity Action Plan for Tayside
- ii Specifically, The Tayside local biodiversity action plan states:
- iii “The Nature Conservation (Scotland) Act 2004 places a biodiversity duty on all public bodies to further the conservation of biodiversity and to have regard to the Scottish Biodiversity Strategy’s 2020 Challenge. This is helping to mainstream the biodiversity process in many organisations, including local authority services.”

In relation to these proposals relevant sections of the NPPF, 2019 are:

*“promote the conservation restoration and enhancement of priority habitats and ecological networks and the protection and recovery of priority species...identify and pursue opportunities for securing measurable net gains for biodiversity (174b)”*

*“minimising impacts on and providing net gains for biodiversity (170d)”*

*“if significant harm to biodiversity resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused (175)”*

### 9.2 Bats and Great Crested Newts

- i Great crested newt and species of British bats are fully protected within UK Law under *Wildlife and Countryside Act 1981* (as amended) through their inclusion in Schedule 5. Under the Act, they are protected from:
- Intentional or reckless killing, injury, taking;
  - Damage to or destruction of or, obstruction of access to any place of shelter, breeding or rest;
  - Disturbance of an animal occupying a structure or place;
  - Possession or control (live or dead animals);
  - Selling, bartering or exchange of these species, or parts of.
- ii This law is reinforced by the UK’s transposition of the EU Habitats Regulations under *The Conservation of Habitats & Species (Amendment) (EU Exit) Regulations 2019 (as amended)*. These Regulations also prohibit:
- the deliberate killing, injuring or taking of great crested newt or bats;
  - the deliberate disturbance of any great crested newt or bat species in such a way as to be significantly likely to affect:
  - their ability to survive, hibernate, migrate, breed, or rear or nurture their young; or

- the local distribution or abundance of that species.
  - damage or destruction of a breeding site or resting place;
  - the possession or transport of great crested newt or bats or any other part of.
- iii Under certain circumstances a licence may be granted by Natural England to permit activities that would otherwise constitute an offence. In relation to development, a scheme must have full planning permission before a licence application can be made.
- iv In addition, seven British bat species are listed as Species of Principal Importance (SPI) under the Natural Environment and Rural Communities (NERC) Act, 2006. These are barbastelle (*Barbastellus barbastellus*), Bechstein's (*Myotis bechsteinii*), noctule (*Nyctalus noctula*), soprano pipistrelle (*Pipistrellus pygmaeus*), brown long-eared (*Plecotus auritus*), greater horseshoe (*Rhinolophus ferrumequinum*) and lesser horseshoe (*Rhinolophus hipposideros*).
- v Under the National Planning Policy Framework 2019 the presence of any protected species is a material planning consideration. The Framework states that impacts arising from development proposals must be avoided where possible or adequately mitigated/compensated for and that opportunities for ecological enhancement should be sought.

### 9.3 Birds

- i The Wildlife and Countryside Act 1981 (as amended) is the Priority legislation affording protection to UK wild birds. Under this legislation all birds, their nests and eggs are protected by law and it is an offence, with certain exceptions, to recklessly or intentionally:
  - Kill, injure or take any wild bird;
  - Take, damage or destroy the nest of any wild bird while it is in use or being built;
  - Take or destroy the egg of any wild bird.
- ii For birds listed on Schedule 1 of the Act, it is an offence to disturb any bird while it is building a nest, is at or near a nest with young; or disturb the dependant young of such a bird.
- iii Species listed in Annex 1 of the EU Birds Directive 1994 (e.g. barn owl) are required to have special conservation measures taken to preserve their habitats and sites to be classified as Special Protection Areas (SPAs) where appropriate.

### 9.4 Reptiles

- i All reptile species are partially protected under Schedule 5 (Sections 9(1) and 9(5)) of the Wildlife and Countryside Act 1981 (as amended). This legislation protects these animals from:
  - Reckless or intentional killing and injury;
  - Selling, offering for sale, possessing or transporting for the purpose of the sale or publishing advertisements to buy or sell a protected species.
- i In addition to the above legislation, UK rare reptiles; sand lizards (*Lacerta agilis*) and smooth snakes (*Coronella austriaca*), are listed under The Conservation of Habitats & Species (Amendment) (EU Exit) Regulations 2019 (as amended). This makes it an offence to;
  - Capture, kill, injure and disturb;
  - Take or destroying eggs;
  - Damage or destroy breeding/resting places;
  - Obstruct access to resting places; and
  - Possess, advertise for sale, sell or transport for sale, live or dead (part or derivative).

- ii Where these animals are confirmed as present on land that is to be affected by development guidance recommends that:
- The animals should be protected from injury or killing during construction operations;
  - Mitigation should be provided to maintain the conservation status of the species locally;
  - Under the National Planning Policy Framework 2019 the presence of any protected species is a material planning consideration. The Framework states that impacts arising from development proposals must be avoided where possible or adequately mitigated/compensated for and that opportunities for ecological enhancement should be sought.

## 9.5 Water Vole

- i Water voles (*Arvicola amphibius*) are protected under Schedule 5 Section 9 of the Wildlife & Countryside Act 1981 (as amended). It is an offence to intentionally kill, injure or capture a water vole, to intentionally or recklessly damage, destroy or obstruct access to any structure or place which water voles use for shelter or protection or to disturb water voles while they are using such a place.

## 9.6 Otter

- i The European otter (*Lutra lutra*) is the only native UK otter species. It is fully protected under Schedule 5 of the Wildlife and Countryside Act 1981. This law is reinforced by the UK's transposition of the EU Habitats Regulations under The Conservation of Habitats & Species (Amendment) (EU Exit) Regulations 2019 (as amended). Together, these Regulations make it an offence to:
- capture, kill, disturb or injure otters (on purpose or by not taking enough care)
  - damage or destroy a breeding or resting place (deliberately or by not taking enough care)
  - obstruct access to their resting or sheltering places (deliberately or by not taking enough care)
  - possess, sell, control or transport live or dead otters, or parts of otters
- ii A convicted offence could get an unlimited fine and up to 6 months in prison.

## 9.7 Hedgehogs

- i Under the NERC Act 2006, the hedgehog (*Erinaceus europaeus*) and common toad (*Bufo bufo*) are categorised as a 'Species of Principal Importance' for biodiversity.. Listing as SPI reflects concerns that populations have suffered a rapid and sustained decline in the UK. As such, they are a material consideration during planning.

## APPENDIX 1: SURVEY CONDITIONS

Table 6: Survey Conditions

Survey type	Date completed	Temperatures (°C)	Times	Wind speed (Beaufort Scale)	Cloud cover (Oktas Scale)	Precipitation
PEA	31/10/2023	9	8:30am-10:15am	3	4	0
Wintering Bird Survey	31/10/2023	9	8:30am-10:15am	3	4	0

## APPENDIX 2: SPECIES SPECIFIC SURVEY METHODOLOGY

### Bats

- ii The overall value of the site and its connectivity to the wider countryside was assessed in relation to bats during the PEA survey. The likelihood of bats roosting at the site or moving through the site between local roost sites and foraging/mating/hibernation habitats was considered.
- iii The site, including the trees and boundary trees, were assessed by an ecologist and graded as to their suitability for supporting roosting bats using the Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Survey Guidelines* (Collins, J. Eds. 2016), an extract of which is provided interpreted in Table 7.

**Table 7: Criteria for bat roost potential assessment of buildings and trees**

Roost Potential	Description	Surveys Required (Buildings)	Surveys Required (Trees)
Confirmed roost	Evidence of roosting bats found during initial daytime inspection.	3 – including 1 dawn as a minimum	3 – including 1 dawn as a minimum
High *	Structures with one or more features suitable for bat roosting, with obvious suitability for larger numbers of bats.	3 – including 1 dawn as a minimum	3 – including 1 dawn as a minimum
Moderate	Structure with one or more potential roost sites that could be used due to size, shelter and protection but unlikely to support a roost of high conservation status.	2- including 1 dawn as a minimum	2- including 1 dawn as a minimum
Low	Structure with one or more potential roosting sites used by individual bats opportunistically. Insufficient space, shelter or protection to be used by large numbers of bats.	1 Survey	Precautionary Mitigation Approach, some instances may require further survey
Negligible	No or negligible features identified that are likely to be used by roosting bats	None	None

\* Unless it is a confirmed roost, additional surveys are required of buildings to assess presence / likely absence of a roost. The number of surveys are indicative to give confidence in a negative result, i.e. where no bats are found, confidence in a result can be taken.

## Wintering Bird Survey

- iv A wintering bird survey was carried out at the Site following a method based on the British Trust for Ornithology's (BTO) Common Bird Census (CBC) methodology<sup>13</sup>. A total of one visit was carried out between on 31<sup>st</sup> October 2023- this survey doubled-up as a scoping visit also in order to assess if the Site's habitats and connectivity warranted the need for further wintering bird surveys.
- v The visit commenced shortly after dawn and lasted for up to 1.75 hours. The survey was carried out in suitable weather conditions with winds up to or less than force 3 on the Beaufort scale and no precipitation.
- vi On each visit the entirety of the Site was surveyed, with the surveyor coming within 50 metres of all points within the Site boundary. The location and activity of each bird detected (visually and/or aurally) was recorded.
- vii The field maps from the wintering bird visit were analysed and combined to produce the final wintering bird survey field location map which was used to estimate the population densities of each species. The main impetus behind this was to attempt to ascertain if the Site had any value for large assemblages of any bird species that may use the Site regularly for the purposes of foraging or roosting.

## Hedgerow Assessment

- viii The hedgerows within the Site were initially surveyed to assess the probability that they would qualify as 'important' under the Hedgerow Regulations 1997 on the basis of the ecological criteria of the legislation. These were assessed in the form of a condition assessment. No further hedgerow surveys or assessments are recommended, under the current proposals, all hedgerow features onsite are to be retained, should this be subject to change, it may be important to note that:
  - ix Regulation 4 of the Hedgerow Regulations 1997 sets out that:
  - x "For the purposes of section 97 (hedgerows) of the Environment Act 1995 and these Regulations, a hedgerow is "important" if it, or the hedgerow of which it is a stretch, -
    - has existed for 30 years or more; and
    - satisfies at least one of the criteria listed in part II of Schedule 1"
  - xi The criteria listed in Part II of Schedule 1 are divided into 2 main sections, namely 'Archaeology and History' and 'Wildlife and Landscape'. If a hedgerow meets any one of each of the criteria listed, it qualifies as important. The majority of these criteria are split into parts, with sub-criteria to be applied in turn to each hedgerow.
  - xii Consideration has only been given to the 'Wildlife and Landscape Criteria'. Criteria by which the importance of a hedgerow is judged in 'Wildlife and Landscape' terms are set out at criteria 6 – 8 of Schedule 1 Part II of the Regulations.
  - xiii Criterion 6 refers to the presence of rare, Priority or protected species within a hedgerow or records of such species, which are held by a biological records centre (or similar).
  - xiv In addition to this methodology, the Hedgerow Evaluation and Grading System (HEGS), which provides a rapid assessment of habitat quality, grading on a scale from +1 to -4 (with +1 being the highest ecological quality), was used to provide an indication of the conservation value of hedgerows present on site (Clements & Toft, 1993).

---

<sup>13</sup> Gilbert G., Gibbons D.W. and Evans J. (1998). *Bird Monitoring Methods: A manual of techniques for key UK species*. RSPB, Bedfordshire. - See more at: <http://www.cieem.net/birds#sthash.XztkCHsC.dpuf>

## APPENDIX 3: UK HABITAT SURVEY RESULTS

### Poor Semi-Improved Grassland (modified grassland)

Poor semi-improved grassland was found on site forming a field margin approximately 2m wide along a small part of the north-western part of the Site, with a sward height of between 10cm and 50cm. Trampled patches of shorter sward height were present around gateways and trackways on the north-western aspects. This habitat was dominated by Perennial ryegrass (*Lolium perenne*) with abundant Broad-leaved doc (*Rumex obtusifolius*)

### Poor semi-improved grassland (modified grassland)





### Tall Ruderal Vegetation

- xv Tall ruderal vegetation was marginally present within the Site as a habitat confined to the northern part of the Site. This was dominated by bramble, Rosebay willowherb, and common nettle, with occasional mugwort (*Artemisia vulgaris*), creeping thistle and spear thistle (*Cirsium vulgare*).

#### Tall ruderal vegetation:



#### Arable/ Winter Stubble:

- xvi The majority of the site comprised two large arable fields of winter stubble which had recently been harvested, leaving a stubble interspersed with arable weeds (see Tall Ruderal Vegetation for species) (It should be noted that the habitat photograph was taken previously to harvesting). The dominant species in this habitat was wheat (*Triticum Sp.*) With frequent ox-eye daisy (*Leucanthemum vulgare*).

## Arable land



## Native hedgerow with Trees

- xvii An intact species poor hedgerow with trees formed part of the Site boundary on the southern portion of the Site. This hedgerow (H2) was approximately 3m tall with a width of approximately 1.5m. It exhibited few signs of mechanical management, and did not look like it had been cut that season. The species composition was dominated by hawthorn and with occasional elder (*Sambucus nigra*). Standard trees were present within the hedgerow, predominantly consisting of ash and elder.

## Hedgerow

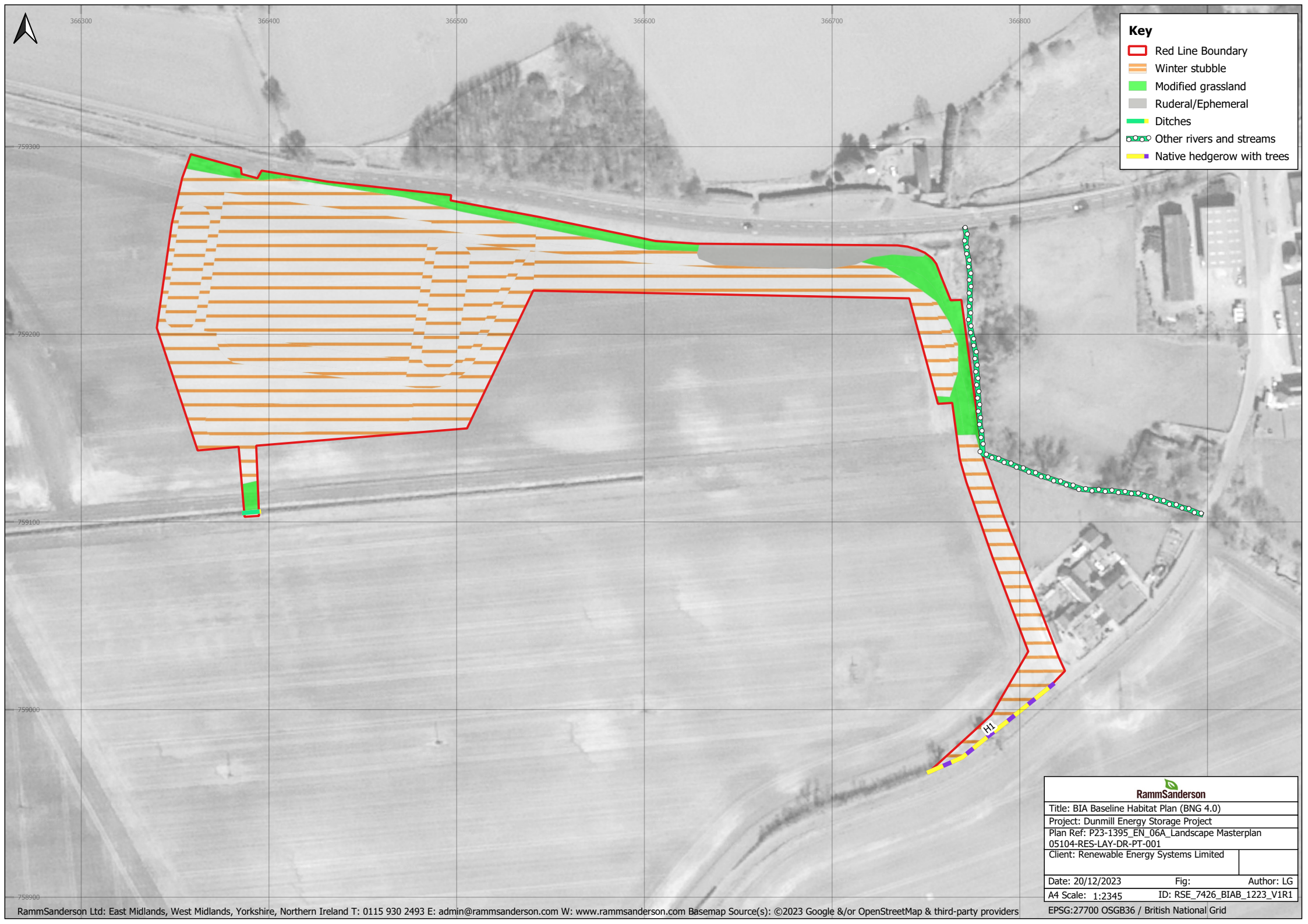


### Boundaries

- xviii In addition to the boundary hedgerows, a wet ditch was located along the southern boundary of the Site- the dominant species within this wet ditch was common reed ( *Australis phragmites*).

### Wet ditch boundary in southern part of the Site





**Key**

- Red Line Boundary
- Winter stubble
- Modified grassland
- Ruderal/Ephemeral
- Ditches
- Other rivers and streams
- Native hedgerow with trees

<b>RammSanderson</b>		
Title: BIA Baseline Habitat Plan (BNG 4.0)		
Project: Dunmill Energy Storage Project		
Plan Ref: P23-1395_EN_06A_Landscape Masterplan 05104-RES-LAY-DR-PT-001		
Client: Renewable Energy Systems Limited		
Date: 20/12/2023	Fig:	Author: LG
A4 Scale: 1:2345	ID: RSE_7426_BIAB_1223_V1R1	



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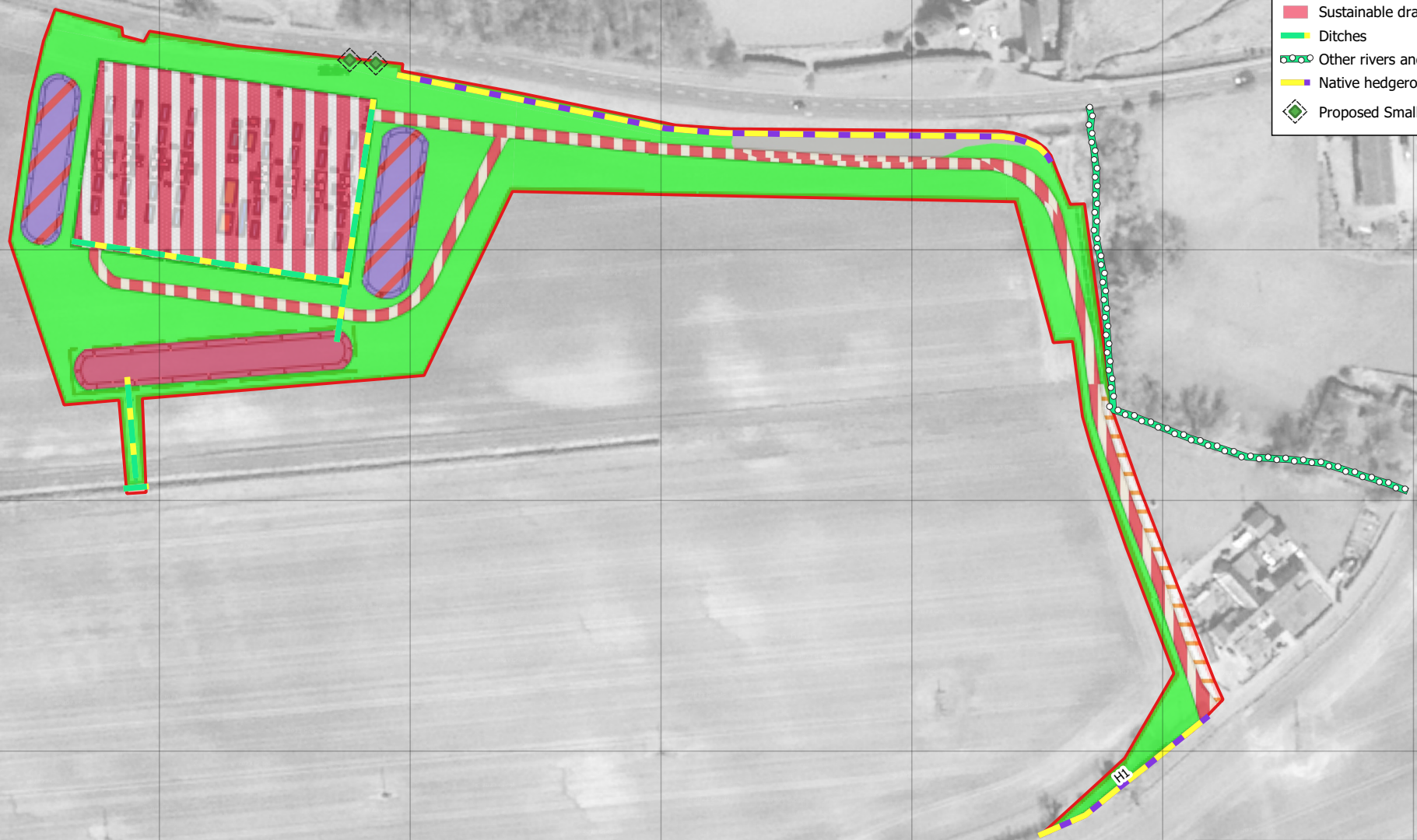
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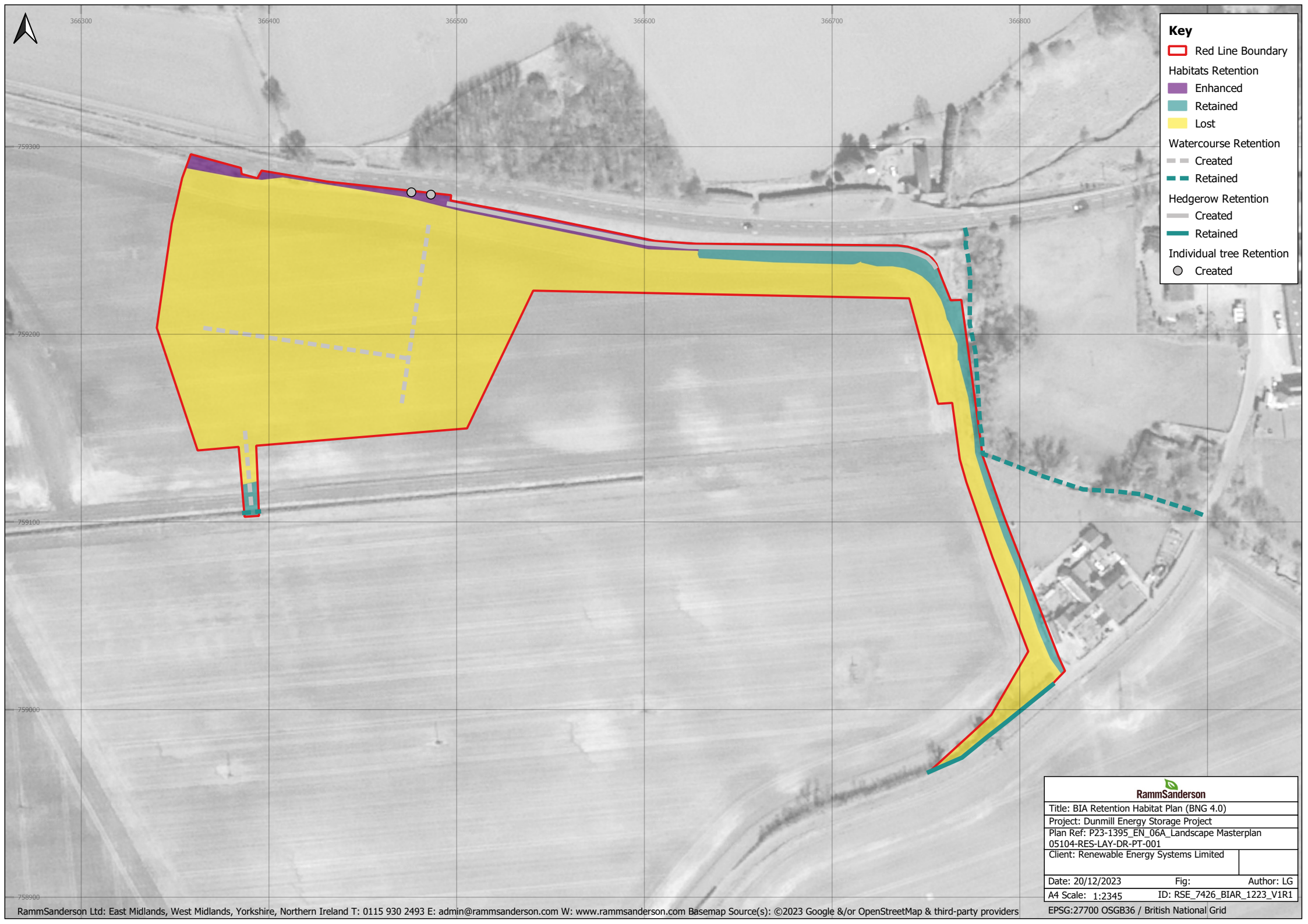
758900

**Key**

-  Red Line Boundary
-  Winter stubble
-  Developed land; sealed surface
-  Mixed scrub
-  Modified grassland
-  Ruderal/Ephemeral
-  Sustainable drainage system
-  Ditches
-  Other rivers and streams
-  Native hedgerow with trees
-  Proposed Small Urban Tree



 <b>RammSanderson</b>		
Title: BIA Proposed Habitat Plan (BNG 4.0)		
Project: Dunmill Energy Storage Project		
Plan Ref: P23-1395_EN_06A_Landscape Masterplan 05104-RES-LAY-DR-PT-001		
Client: Renewable Energy Systems Limited		
Date: 20/12/2023	Fig:	Author: LG
A4 Scale: 1:2345	ID: RSE_7426_BIAP_1223_V1R1	



**Key**

- Red Line Boundary
- Habitats Retention**
- Enhanced
- Retained
- Lost
- Watercourse Retention**
- Created
- Retained
- Hedgerow Retention**
- Created
- Retained
- Individual tree Retention**
- Created

<b>RammSanderson</b>		
Title: BIA Retention Habitat Plan (BNG 4.0)		
Project: Dunmill Energy Storage Project		
Plan Ref: P23-1395_EN_06A_Landscape Masterplan 05104-RES-LAY-DR-PT-001		
Client: Renewable Energy Systems Limited		
Date: 20/12/2023	Fig:	Author: LG
A4 Scale: 1:2345	ID: RSE_7426_BIAR_1223_V1R1	