

Donald Ward Limited

Ecological Assessment

Donald Ward Limited, Barnsley – Environment Agency Permit Application

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Acronyms/Abbreviations

Acronyms/Abbreviations	Definition
dBA	Decibel (A-weighted)
EA	Environment Agency
Hab Regs	Conservation of Habitats and Species Regulations 2017
LNR	Local Nature Reserve
SSSI	Site of Special Scientific Interest
WCA	Wildlife and Countryside Act 1981

Executive summary

- Tetra Tech Consulting Limited ('Tetra Tech') were commissioned by Donald Ward Limited ('the Applicant') to undertake an Ecological Assessment for an Environment Agency permit application for its site off Boulder Bridge Lane, Barnsley.
- The site is located in a small industrial estate on the north-eastern side of Barnsley, which is surrounded to the north, east and south by land within the Dearne Valley Wetlands Site of Special Scientific Interest (SSSI), designated for its diverse assemblage of birds.
- The Applicant is seeking a permit from the Environment Agency to resume operations for scrap metals recycling on the site. The site was previously in use for scrap metals recycling by a former occupier until its closure in November 2025.
- The site comprises entirely hardstanding and supports no habitats that could support protected species.
- The ecological assessment has concluded that there would be no significant noise or visual disturbance to breeding and non-breeding birds within the Dearne Valley Wetlands SSSI, or its component site Carlton Marsh Local Nature Reserve (LNR).
- There are therefore no ecological concerns associated with this site, and no further ecological surveys or assessments are required.

1.0 Introduction

1.1 Purpose and Scope of Report

- 1.1.1 Tetra Tech Consulting Limited (Tetra Tech) was commissioned by Donald Ward Limited ('the Applicant') to undertake an Ecological Appraisal for an Environment Agency (EA) permit application to operate a scrap metals recycling facility at a site off Boulder Bridge Lane, Barnsley (National Grid Reference: SE 375 104). The site was previously in use for scrap metals recycling by a former occupant until its closure in November 2025.
- 1.1.2 The EA in its response to the environmental permit application requested 'a habitat/ecological assessment' to assess the potential impact of the proposed activities on protected habitats, species and ecological receptors.
- 1.1.3 Given that the site was previously operating as a scrap metals recycling facility until November 2025 and comprises entirely hardstanding with no semi-natural habitats, the potential for protected species to occur within the site has been scoped out. The scope of this report is therefore limited to an assessment of the potential for operational impacts to the adjacent Dearne Valley Wetlands Site of Special Scientific Interest (SSSI), which is present to the north, east and south of the Boulder Bridge Lane industrial estate, and its component Carlton Marsh Local Nature Reserve (LNR), which overlaps with the SSSI.
- 1.1.4 This Ecological Assessment therefore presents the following information:
- a desk-based review of the nearby designated site(s) and the qualifying features potentially relevant to the operation of the Boulder Bridge Lane facility;
 - identification of potential pathways for impacts to qualifying features and designated sites as a result of operational activities;
 - an assessment of the potential effects to qualifying features and designated sites in accordance with CIEEM guidance; and
 - identification of any avoidance, mitigation or compensation measures required where ecologically significant effects are identified.
- 1.1.5 This report pertains to this site and scope of works only; recommendations included within this report are the professional opinion of an experienced ecologist and therefore the view of Tetra Tech.

1.2 Study Area and Zone of Influence

- 1.2.1 The site is an existing scrap metals recycling facility located in an industrial estate on Boulder Bridge Lane, Barnsley. The site is approximately 2.8 ha in size.
- 1.2.2 Aerial imaging available via Google Earth Pro was reviewed to assess the site in relation to its context in the wider landscape. The site is bound to the north, east and south by other similar industrial sites within the Boulder Bridge Lane industrial estate. A disused railway line with a woodland strip lies along the western boundary of the site. The post-industrial restored mine workings to the north, east and south of the industrial estate are designated as the Dearne Valley Wetlands SSSI, beyond which is arable land.
- 1.2.3 The term Zone of Influence is used to describe the geographic extent of potential impacts of a proposed development. The Zone of Influence is determined by the nature of the development and also in relation to designated sites, habitats or species which might be affected by the proposals.
- 1.2.4 For this site, the Zone of Influence is considered to be land on and immediately adjacent to the site.

1.3 Proposals

- 1.3.1 The Applicant is seeking an environmental permit to operate a scrap metals recycling facility. The site was previously in use for scrap metals recycling prior to its closure in November 2025; the site retained all of its previous equipment and has since been brought back into use by the Applicant.

1.4 Legislation

- 1.4.1 Relevant legislation is referred to throughout this report where appropriate. Their context and application is explained in the relevant sections of this report.
- 1.4.2 The relevant articles of legislation are:
- The Conservation of Habitats and Species Regulations 2017;
 - The Wildlife and Countryside Act 1981 (as amended);
 - The Protection of Badgers Act 1992;
 - The Countryside and Rights of Way Act 2000;
 - The Hedgerow Regulations 1997; and
 - The Natural Environment and Rural Communities Act 2006.
- 1.4.3 A summary of legislation relevant to protected or other species identified as potential constraints in this report is provided in **Appendix A**.

2.0 Methods

2.1 Desk Study

- 2.1.1 Baseline data pertaining to the Dearne Valley Wetlands SSSI were obtained from the government's Multi Agency Geographical Information for the Countryside (MAGIC) website accessed in July 2026.
- 2.1.2 The MAGIC website was also reviewed to identify any other statutory nature conservation designations within 2 km of the site such as Special Protection Areas (SPAs), Special Area of Conservation (SACs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs), and any Priority Habitats or Ancient Woodland within 1 km.
- 2.1.3 A 1:25,000 OS map was used to identify nearby features such as ponds or green corridors that could provide potential habitat or connectivity to other areas.

2.2 Ecological Assessment

- 2.2.1 The assessment method for the Ecological Assessment contained in this report in order to identify likely significant effects is provided in **Appendix B**.

2.3 Limitations

- 2.3.1 A habitat survey of the site was not undertaken because it comprises entirely hardstanding within an industrial estate. A review of the potential for protected species to occur in and around the site was therefore undertaken from publicly accessible aerial images and from the 1:25,000 Ordnance Survey map.

3.0 Results

3.1 Designated Sites

- 3.1.1 The desk study identified the presence of the Dearne Valley Wetlands SSSI approximately 60 m east of the site boundary at its nearest point. Part of the SSSI is present immediately adjacent to the north, east and south of the industrial estate in which the site is located, with the whole SSSI covering approximately 650 ha.
- 3.1.2 Carlton Marsh Local Nature Reserve (LNR) is present approximately 60 m to the east of the site and overlaps with, and is entirely within, part of the Dearne Valley Wetlands SSSI.

Dearne Valley Wetlands SSSI

- 3.1.3 The SSSI comprises approximately 650 ha of a mosaic of wetland, scrub, grassland and woodland on post-industrial restored mining land in South Yorkshire spanning the regions of Barnsley, Doncaster and Rotherham. The SSSI was formally notified by Natural England in 2022 and comprises 22 distinct land parcels along the River Dearne, of which the two northernmost units (Units 1 and 2) are closest to the site.
- 3.1.4 The SSSI was designated for the following nationally important features:
- breeding wetland birds; gadwall *Mareca strepera*, shoveler *Spatula clypeata*, garganey *Spatula querquedula*, pochard *Aythya ferina*, bittern *Botaurus stellaris* and black-headed gull *Chroicocephalus ridibundus*;
 - Breeding willow tit *Poecile montanus klienschmidtii*;
 - Breeding bird assemblage; and
 - Non-breeding gadwall and shoveler.
- 3.1.5 Unit 1 (Pool Ings and Sandybridge Dyke) lies to the north and east of the site and comprises approximately 41 ha of lowland fen, marsh and swamp habitat assessed as being in ‘favourable’ condition by Natural England when it was assessed in 2021 prior to being designated.
- 3.1.6 Unit 2 (Carlton Marsh) of the SSSI lies to the south of the site and comprises approximately 31 ha of standing open water and canal habitat also assessed as being in ‘favourable’ condition by Natural England in 2021.

3.1.7 The following qualifying bird species have been identified as potentially relevant to this Ecological Assessment (from a review of the supporting evidence prepared by Natural England for the notification of the SSSI¹):

- Breeding gadwall and pochard – recorded in Unit 2;
- Non-breeding gadwall and shoveler – recorded in Unit 2;
- Breeding willow tit – recorded in Units 1 and 2, with both units identified as supporting breeding pairs through multiple surveys undertaken since 2015 including radio tracking of several individuals in 2019. The small strip of woodland to the east of Boulder Bridge Lane (within Unit 1) has been identified as providing important connecting habitat between the breeding areas of Pool Ings and Carlton Marsh.; and
- Assemblage of breeding birds – both Units 1 and 2 support nationally important numbers of breeding birds in the mosaic of habitats.

Carlton Marsh LNR

3.1.8 The LNR is managed by the Yorkshire Wildlife Trust in partnership with Barnsley Council and is located entirely within Unit 2 of the Dearne Valley SSSI. The LNR is designated for its post-industrial habitat mosaic supporting breeding willow tit and its diverse assemblage of breeding birds, insects and plants. Given that the site is overlapping with the SSSI, it is considered appropriate to combine the designated features within the SSSI assessment rather than undertaking a separate assessment.

3.2 Habitats

3.2.1 There are no Priority Habitats or areas of Ancient Woodland mapped on MAGIC within or adjacent to the site. Some of the grassland within the Dearne Valley Wetlands SSSI is mapped as the priority habitat 'lowland meadows' and is therefore within 1 km of the site.

3.2.2 There are no semi-natural habitats within the site as it comprises entirely hardstanding within an industrial estate and was an operational metals recycling facility until November 2025.

3.3 Protected Species

3.3.1 As the site comprises entirely hardstanding, it is reasonable to assume that there will be no potential for protected species to be present because there are no habitats to support them.

¹ Natural England Board Paper – Dearne Valley Wetlands SSSI Confirmation of Notification January 2022, accessed online: [board-paper-nebpu-107-01.pdf](https://www.naturalengland.org.uk/Images/board-paper-nebpu-107-01.pdf)

3.3.2 No further consideration is therefore given to protected species in this Ecological Assessment.

4.0 Potential Impacts and Effects

4.1 Scoping

4.1.1 The operational activities for which the Applicant is seeking an environmental permit have been previously undertaken at the site up until November 2025 and were ongoing at the time at which the Dearne Valley Wetlands SSSI was designated. Those operational activities therefore formed part of the baseline in terms of the potential noise and visual disturbance to birds within the adjacent SSSI. Notwithstanding the previous operational period of the site, the following pathways for potential impacts have been identified on a precautionary basis within this ecological assessment:

- The potential for visual disturbance during operational activities to breeding and non-breeding wetland birds (gadwall, shoveler and pochard) and the breeding bird assemblage within the Dearne Valley Wetlands SSSI and Carlton Marsh LNR;
- The potential for noise and visual disturbance during operational activities to breeding willow tit in connected habitats outside the Dearne Valley Wetlands SSSI and Carlton Marsh LNR;
- The potential for noise disturbance during operational activities to breeding willow tit within the Dearne Valley Wetlands SSSI and Carlton Marsh LNR;
- The potential for noise disturbance during operational activities to breeding and non-breeding wetland birds (gadwall, shoveler and pochard) and the breeding bird assemblage within the Dearne Valley Wetlands SSSI and Carlton Marsh LNR; and
- The potential for dust smothering to habitats within the Dearne Valley Wetlands SSSI and Carlton Marsh LNR.

4.1.2 Potential impacts to the other SSSI qualifying species breeding bittern and black-headed gull are scoped out on the basis that these species do not occur within Units 1 and 2 of the SSSI, and are therefore outside the potential zone of influence of the proposed activities.

4.2 Potential visual disturbance to birds in the SSSI/ LNR

4.2.1 The nearest parts of the Dearne Valley Wetlands SSSI and Carlton Marsh LNR to the site are approximately 60 m west. The site is bound to the north, east and south by occupied plots within the Boulder Bridge Lane industrial estate, which includes other similar scrap metal recycling facilities and a car breakers yard. There is no direct line of sight between the site and the SSSI habitats due to the presence of other similar facilities on the land in between. It is therefore reasonable to conclude

that there is no potential for visual disturbance to any breeding or non-breeding birds within the SSSI from the proposed operations.

4.3 Potential noise and visual disturbance to willow tit outside the SSSI/ LNR

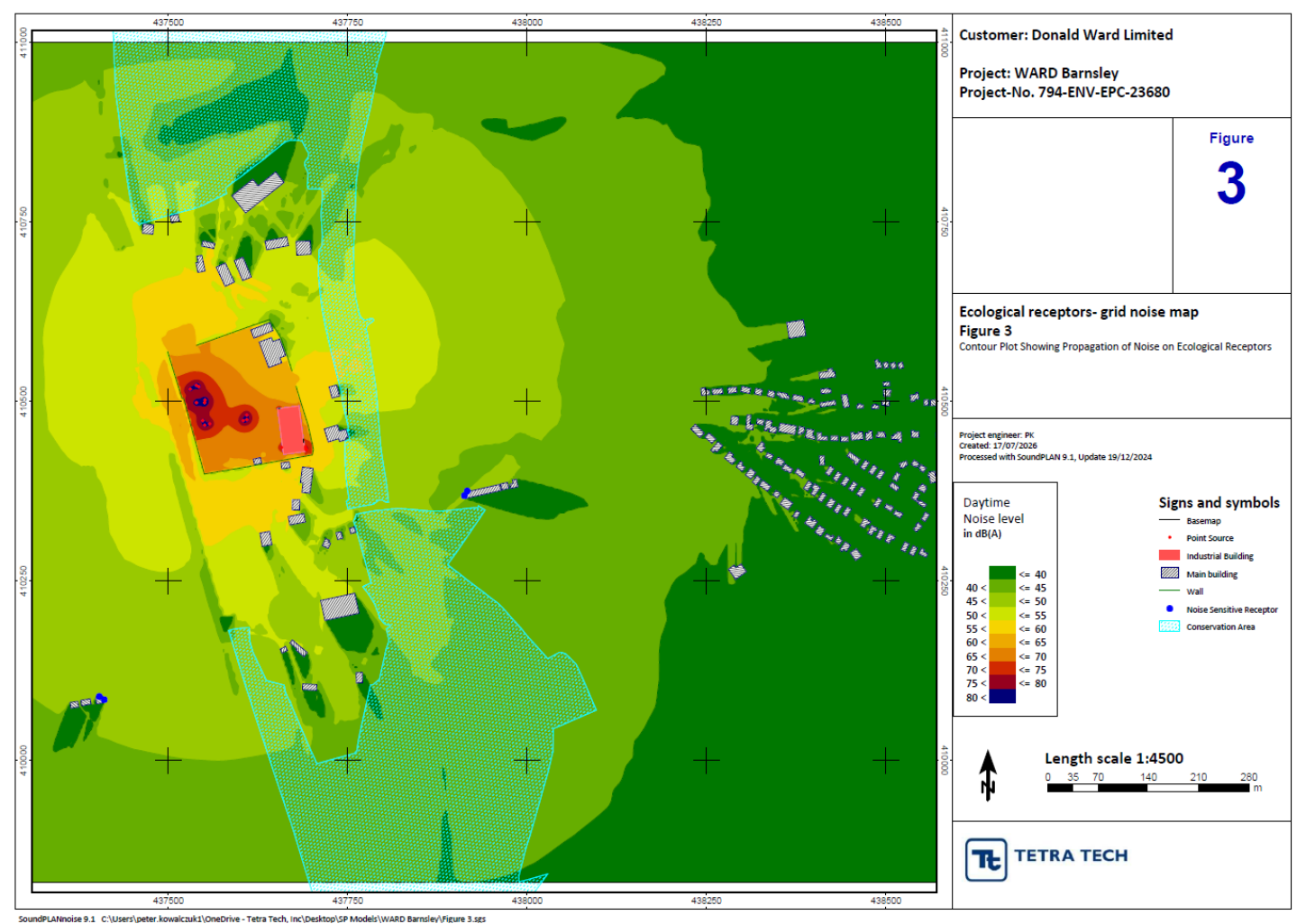
- 4.3.1 Surveys for willow tit (including breeding surveys and radio-tracking) were undertaken between 2015 and 2019 as part of the evidence base collected by Natural England to support the designation of the Dearne Valley Wetlands SSSI. These surveys did not record any willow tits within the woodland strip along the railway embankment that forms the western boundary of the site. There is therefore no potential for noise or visual disturbance to breeding willow tit that may be using habitats connected to but outwith the SSSI boundary.

4.4 Potential noise disturbance to willow tit within the SSSI/ LNR

- 4.4.1 A noise assessment has been undertaken by Tetra Tech on behalf of the Applicant. This included baseline noise monitoring at residential receptors on Shaw Lane (approximately 340 m south of the site boundary) and Fairfield Cottages (approximately 215 m south-east of the site boundary), which were undertaken when the Donald Ward Limited facility was not in operation and is therefore considered representative of the baseline conditions in the absence of the proposed activities.
- 4.4.2 The baseline noise modelling recorded daytime noise levels between 57 and 60dBA during daytime periods, with the levels dominated by existing industrial noise sources in the area including scrap handling activities at other sites in the Boulder Lane industrial estate which are similar in noise profile to those proposed by the Applicant. The nearest section of the SSSI (Unit 1) to the site (60 m east) is reasonably already experiencing higher baseline noise levels than this, because it is closer to the site than the residential receptors at Shaw Lane and Fairfield Cottages where the baseline noise levels were recorded at 57 – 60dBA. This area of the SSSI, which is a thin strip of woodland that borders the eastern edge of the Boulder Bridge Lane industrial estate supports at least one pair of breeding willow tit and is identified as an important habitat corridor for this species connecting the larger SSSI land parcels to the north (Pool Ings) and south (Carlton Marsh).
- 4.4.3 Modelled operational noise levels from the proposed activities at the site are predicted to not exceed 60dBA across the nearest part of SSSI Unit 1 (see Figure 3 below, extracted from the Noise Impact Assessment report). It is therefore concluded that there would be no noise disturbance to breeding or dispersing/ foraging willow tits in this part of the SSSI, because the predicted operational noise levels are within the ambient range. Furthermore, it is reasonable to conclude that willow tits in this habitat were not previously significantly disturbed by similar activities that were ongoing at the site prior to its closure in November 2025, because the five years of breeding bird surveys undertaken by Natural England to support the

designation of the Dearne Valley Wetlands SSSI between 2015 and 2019 regularly recorded willow tits in this habitat.

Figure 3 – Predicted operational noise levels across the Dearne Valley Wetlands SSSI (extracted from the Noise Impact Assessment)



4.5 Potential noise disturbance to birds within the SSSI/ LNR

- 4.5.1 The predicted operational noise levels across the majority of the SSSI will not exceed 55dBA (see Figure 3). Although no specific baseline noise monitoring has been undertaken within the SSSI, it is again reasonable to conclude that noise disturbance to other species of birds within the SSSI would not be significant. This is on the basis that the scientific evidence indicates that noise levels <55dBA are below the threshold at which disturbance to wading birds would be expected to occur. As discussed above in respect of willow tits, it is also important to consider the context of the site within the active industrial estate, and its previous use by the former occupier for similar activities which were ongoing at the time at which the SSSI was designated by Natural England. It is therefore concluded that there would be no significant noise disturbance to the wetland SSSI species gadwall, shoveler and pochard, or to the breeding bird assemblage of the SSSI/ LNR.

4.6 Potential dust smothering to habitats within the SSSI/ LNR

- 4.6.1 The nearest part of the Dearne Valley Wetlands SSSI and Carlton Marsh LNR is approximately 60 m west, and therefore this is outside the zone of influence for potential fugitive dust emissions (50 m). Furthermore, the implementation of appropriate operational measures to control fugitive dust emissions during operation would be sufficient to adequately remove any potential risk to the designated habitats. These measures are expected to provide an equivalent level of protection to those in place for the previous site operations, which were ongoing at the time at which the SSSI was designated by Natural England. Dust management at the site will be controlled in accordance with a Dust Management Plan (DMP) that will be approved by the Environment Agency should they issue the permit. The DMP will be incorporated within the management system for the site and will be maintained throughout the operational life of the facility.

5.0 Conclusions

- 5.1.1 The Applicant is seeking an environmental permit for the operation of a scrap metals recycling facility on a site in an industrial estate on Boulder Bridge Lane, Barnsley that was previously used for similar purposes prior to closure in November 2025.
- 5.1.2 The site comprises entirely hardstanding and there are therefore no habitats on the site that could support any protected species.
- 5.1.3 The site is within approximately 60 m of the Dearne Valley Wetlands SSSI and its component Carlton Marsh LNR, which support nationally important numbers of breeding and non-breeding birds. The SSSI units closest to the site support the wetland bird species gadwall, pochard and shoveler, breeding willow tit and an assemblage of breeding birds in the mosaic of post-industrial habitats.
- 5.1.4 A noise impact assessment has been undertaken on behalf of the Applicant and has demonstrated that predicted noise levels across the SSSI and LNR would not result in any significant disturbance to breeding or non-breeding birds. Similarly, no visual disturbance is predicted given the existing land use surrounding the site.
- 5.1.5 The designated sites lie beyond the zone of influence for impacts from fugitive dust emissions. Combined with effective dust management at the site to be implemented through a DMP, no significant effects from dust are predicted to arise at the SSSI and LNR.
- 5.1.6 It is therefore concluded that the proposed activities would not result in any significant effects to ecology features, and consequently no specific ecological mitigation or compensation measures are required.

Appendix A: Relevant Wildlife Legislation

The UK is no longer a member of the European Union (“EU”). EU legislation as it applied to the UK on 31 December 2020 is now a part of UK domestic legislation. EU legislation which applied directly or indirectly to the UK before 23:00 on 31 December 2020 has been retained in UK law to date as a form of domestic legislation known as ‘retained EU legislation’.

The Secretary of State for the Environment, Food and Rural Affairs and Welsh Ministers have made changes to parts of the Conservation of Habitats and Species Regulations 2017 (referred to as the 2017 Regulations) so that they operate effectively. Most of these changes involve transferring functions from the European Commission to the appropriate authorities in England. All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant.

Designated Sites

Special Protection Areas (“SPA”) and Special Areas for Conservation (“SAC”)

These sites in the UK no longer form part of the EU’s Natura 2000 ecological network. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (referred to as the 2019 Regulations) have created a national site network on land and at sea, including both the inshore and offshore marine areas in the UK. Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new national site network.

Wetlands of International Importance (Ramsar site)

Designated under the Convention on Wetlands of International Importance especially as Waterfowl Habitat 1971 (the Ramsar Convention), in the UK, these sites are treated as having the same level of protection as SPA’s and SAC’s.

Sites of Special Scientific Interest (“SSSI”)

Under the Wildlife and Countryside Act 1981 (as amended) it is an offence to carry out or permit to be carried out any operations likely to damage the SSSI. These operations are listed in the SSSI notification.

Locally Designated Sites

Local Wildlife Sites are sites with ‘substantive nature conservation value’. They are defined areas, identified and selected for their nature conservation value, based on important, distinctive and threatened habitats and species within a region. They are recognised as

important in local planning policy but do not have the statutory protection given to SSSI. They are usually selected by the relevant Wildlife Trust, along with representatives of the local authority and other local wildlife conservation groups.

Appendix B: Ecological Impact Assessment Methodology

Introduction

Ecological Impact Assessment (“EclA”) is the process of identifying, quantifying and evaluating the potential effects of development-related or other proposed actions on relevant habitats, species and ecosystems (relevant ecological features).

The assessment approach applied is based upon recognised good practice Guidelines for Ecological Impact Assessment in the UK and Ireland published by the Chartered Institute of Ecology and Environmental Management (“CIEEM”). The aims of this EclA are to:

- Identify relevant ecological features (i.e. designated sites, habitats, species or ecosystems) which may be impacted.
- Provide a scientifically rigorous and transparent assessment of the likely ecological impacts and resultant effects of the Project. Impacts and effects may be beneficial (i.e. positive) or adverse (i.e. negative).
- Facilitate scientifically rigorous and transparent determination of the consequences of the Project in terms of national, regional and local policies relevant to nature conservation and biodiversity, where the level of detail provided is proportionate to the scale of the development and the complexity of its potential impacts.
- Set out what steps would be taken to adhere to legal requirements relating to the relevant ecological features concerned.

The principal steps involved in the CIEEM approach can be summarised as:

- Ecological features that are both present and might be affected by the Project are identified (both those likely to be present at the time works begin and, for the sake of comparison, those predicted to be present at a set time in the future) through a combination of targeted desk-based study and field survey work to determine the relevant baseline conditions.
- The importance of the identified ecological features is evaluated to place their relative biodiversity and nature conservation value into geographic context, and this is used to define the relevant ecological features¹ that need to be considered further within the EclA process.
- The changes or perturbations predicted to result as a consequence of the Project (i.e. the potential impacts), and which could potentially affect relevant ecological features are identified and their nature described. Established best-practice, legislative requirements or other incorporated design measures to minimise or avoid impacts are also described and are taken into account.

- The likely effects (beneficial or adverse) on relevant ecological features are then assessed, and where possible quantified.
- Measures to avoid or reduce any predicted significant effects, if possible, are then developed in conjunction with other elements of the design (including mitigation for other environmental disciplines). If necessary, measures to compensate for effects on features of nature conservation importance are also included.
- Any residual effects of the Project are reported.
- Scope for ecological enhancement is considered.

In line with the CIEEM guidelines the terminology used within the EclA draws a clear distinction between the terms ‘impact’ and ‘effect’. For the purposes of the EclA these terms are defined as follows:

- Impact – actions resulting in changes to an ecological feature. For example, demolition activities leading to the removal of a building utilised as a bat roost.
- Effect – outcome resulting from an impact acting upon the conservation status or structure and function of an ecological feature. For example, killing/ injury of bats and reducing the availability of breeding habitat as a result of the loss of a bat roost may lead to an adverse effect on the conservation status of the population concerned.

Valuing Ecological Features

The data obtained through consultation, desk studies and field surveys have identified a variety of ecological features, not all of which require further consideration within the EclA. One of the key challenges in EclA is to decide which ecological features are important and should be subject to detailed assessment. CIEEM guidance states that it is only necessary to “undertake a systematic assessment of relevant ecological features that could be significantly affected (including adverse and beneficial effects)”. This is consistent with Environmental Impact Assessment (“EIA”) Regulations, which require the identification of likely significant effects. Such an approach also has the benefit of helping to keep the EclA focussed and manageable.

It is not necessary to “*carry out detailed assessment of ecological features that are sufficiently widespread, unthreatened and resilient to project impacts and will remain viable and sustainable*”, although this does not mean that efforts should not be made to safeguard wider biodiversity, and national policy documents emphasise the need to further the conservation and enhancement of biodiversity.

To support focussed EclAs there is a need to determine the scale at which the specific ecological features identified through the desk studies and field surveys undertaken for the Project are of value. The approach taken when valuing ecological features needs to be robust as it provides much of the rationale for the identification and further assessment of relevant ecological features.

Ecological features can be of value for a variety of reasons and the rationale used should be explained to demonstrate a robust selection process. Value may relate, for example, to the quality or extent of designated sites or habitats, to habitat/ species rarity, to the extent to which they are threatened throughout their range, or to their rate of decline. Importance may be defined by the quality or extent of designated sites or habitats, their rarity in a geographical context, and their rate of decline either locally or nationally.

Expert judgement has also been used as appropriate when assigning value, particularly where species or habitats are poorly known or guidance is lacking. Ecological features may be identified that are not included in lists of notable habitats and species, but that can be considered important on the basis of expert judgement e.g. because of their local rarity or because they enable effective conservation of other important features.

The value of ecological feature has been defined with reference to the geographical level at which it is important. The frames of reference used for this assessment, and based on CIEEM guidance, are:

- International
- National (Great Britain)
- Regional (South Yorkshire).
- County/ District (Barnsley).
- Local or Site - ecological features below the criteria for District value importance but with sufficient value to merit retention and/ or mitigation.
- Negligible - common and widespread ecological features of such low priority that they do not require retention or mitigation at the relevant location to otherwise maintain a favourable nature conservation status.

Identifying Potential Ecological Impacts

When describing potential impacts (and where relevant the resultant effects) reference is made to the following characteristics:

- Beneficial/adverse
- Magnitude
- Spatial extent
- Duration
- Reversibility
- Timing and frequency

Determining the Significance of Effects

The assessment approach follows the good practice guidelines for EcIA described in CIEEM. For each ecological feature only those characteristics relevant to understanding the

ecological consequences (effect) of the impact and its relative significance are described, based on the project description and the assumption that standard industry best practice would be applied (e.g. implementation of standard dust suppression and pollution prevention measures).

Potential impacts on relevant ecological features are assessed and a judgment reached on whether or not the resultant effect on conservation status or structure and function is likely to be significant. This process takes into consideration the characteristics of the impact, the sensitivity of the ecological feature concerned, and the geographic scale at which the feature is considered important.

CIEEM states that: “For the purposes of EclA a ‘significant effect’ is an effect that either supports or undermines biodiversity conservation objectives for ‘important ecological features’ (i.e. relevant ecological features) or for biodiversity in general. In broad terms, significant effects encompass impacts on the structure and function of defined application sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance and distribution).”

For nature conservation designations, other defined habitats and ecosystems the assessment considers what effect the potential impacts are likely to have on conservation objectives or interest/qualifying features. For ecosystems, consideration is given to whether a change in ecosystem structure and/or function is likely that would substantively alter its ecological integrity.

In considering effects on conservation status, reference is made to relevant available guidance on the current conservation status of the ecological feature under consideration. Effects will either be not significant (i.e. no ecologically meaningful effect on conservation status); or significant (i.e. an ecologically meaningful effect on conservation status).

Such judgements will be based, wherever possible, on quantitative evidence. However, where necessary the professional judgement of an experienced ecologist has been applied and explained.

For effects considered significant, the effect will also be characterised as appropriate (e.g. adverse or beneficial) and qualified with reference to the geographic scale at which the effect is significant (e.g. an adverse effect significant at a national level).

The scale of significance of an effect may not be the same as the geographic context in which the feature is considered important. For example, a local effect on a species of principal importance for nature conservation at the national level (as listed on the NERC Act s41) may not have a significant effect on the national population of that species.