Castle Hill, Huddersfield

Updated Ecological Impact Assessment

July 2019

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This report is valid for a period of 12 months from the issue date.

Contents

1 Introduction

1.1.1.1 This report presents an Updated Ecological Impact Assessment (EcIA) in relation to a proposed development at Castle Hill Side, Huddersfield HD4 6TA. The site (see Figure 1) extends to approximately 70 metres x 70 metres (max) and is located at approximate grid reference SE152140.

1.1.1.2 The proposed development involves the erection of a cafe/restaurant with bedrooms, interpretation facilities, car parking and servicing facilities. The development site area includes the access route; however the access route will not be subject to physical changes.

1.1.1.3 This report should be read in conjunction with the Preliminary Ecological Appraisal (PEA) for the site:

- *Quants Environmental Ltd. (2017). Castle Hill, Huddersfield. Preliminary Ecological Appraisal. April 2017.*

1.1.1.4 In accordance with current guidelines[1], the aims of this EcIA were to identify and evaluate all relevant ecological receptors, identify likely ecological impacts, identify mitigation / compensation measures and identify any residual effects.

Figure 1. Site area outlined in red

[1] CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Marine, September 2018 edition. Chartered Institute of Ecology and Environmental Management, Winchester.

2 Methodology

2.1 Desk Study

2.1.1.1 As described in the previous report[2], West Yorkshire Ecology Service (WYES) was contacted for searches of protected sites and records of protected species within a 2 km radius of the site centre. In addition, the following data sources were searched for statutorily protected sites and additional ecological data of relevance to the assessment such as off-site waterbodies:

- Multi Agency Geographic Information for the Countryside (MAGIC).
- Ordnance Survey 1:10,000 mapping.
- Aerial imagery.

2.2 Personnel

2.2.1.1 This Updated Ecological Impact Assessment (EcIA) and the Preliminary Ecological Appraisal (PEA) were undertaken by Toby Fisher CEnv MCIEEM[3] [4].

2.3 Preliminary Ecological Appraisal (PEA) Field Survey

2.3.1.1 As described in the previous report[2], a PEA field survey was undertaken at the site in 2017.

2.4 Ecological Impact Assessment

2.4.1.1 This Updated EcIA has been undertaken in accordance with the current standard guidelines[1].

2.5 Limitations

2.5.1.1 The PEA field survey was undertaken on 29th March 2017, i.e. outside the main survey season for phase 1 habitat survey (May to September). However it was possible to identify broad habitat types and to assess the habitat quality for bats and other protected / notable species. Overall, given the aims of the assessment, there were no significant limitations.

[2] Quants Environmental Ltd. (2017). Castle Hill, Huddersfield. Preliminary Ecological Appraisal. April 2017.

[3] Natural England Class Licence Registration No. 2015-10756-CLS-CLS - CL18 Level 2 (Bats).

[4] Natural England Class Licence Registration No. WML- CL08:2015-16681-CLS-CLS (Great Crested Newts).

3 Results

3.1 Desk Study

3.1.1.1 Information provided by WYES is reproduced in the previous report[2] and the key information is summarised below for ease of reference.

3.1.2 Species Records

Amphibians

3.1.2.1 Great crested newt: 3 records within 2 km dated 2005, 2008 and 2009. The nearest of these records is approximately 1.6 km west of the site.

3.1.2.2 Common toad, common frog, smooth newt and palmate newt records between 1 km and 2 km from the site.

Birds

3.1.2.3 Large number of bird records including several species listed on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 as Species of Principal Importance for the conservation of biodiversity in England and on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). Several of the Section 41 or Schedule 1 species records relate directly to the site itself, i.e. Linnet, Yellowhammer, Bullfinch, Dunnock and Song Thrush.

3.1.2.4 Species recorded within 2 km of the site include: Skylark, Mallard, Meadow Pipit, Tree Pipit, Swift, Linnet, Goldfinch, Stock Dove, Cuckoo, House Martin, Lesser Spotted Woodpecker, Yellowhammer, Kestrel, Brambling, Swallow, Lesser Black-Backed Gull, Black-Headed Gull, Grey Wagtail, Spotted Flycatcher, Wheatear, Willow Tit, House Sparrow, Tree Sparrow, Grey Partridge, Redstart, Wood Warbler, Willow Warbler, Green Woodpecker, Dunnock, Bullfinch, Starling, Whitethroat, Redwing, Song Thrush, Fieldfare and Mistle Thrush.

Hedgehog

3.1.2.5 One record >1 km from the site.

Brown Hare

3.1.2.6 Six records, none within 500 metres of the site

Bats

3.1.2.7 WYES provided 52 bat records within 2 km of the site. The species previously recorded in the area are: Daubenton's Bat, Noctule, Pipistrelle, Common Pipistrelle, Soprano Pipistrelle, Brown Long-Eared Bat, Bats and Vesper Bat species. None of the bat records are less than 700 metres from the site.

Badger

3.1.2.8 WYES provided six badger records within a 2 km radius of the site. None of these records are from within 1 km of the site.

3.1.3 Nationally and Internationally Designated Sites

3.1.3.1 The following nationally / internationally designated sites have been identified within 2 km of the site:

- Honley Station Cutting SSSI (Site of Special Scientific Interest) is located ~1.53 km south-west of the site. This is a Geological SSSI.

3.1.4 Locally Designated Sites

Sites of Scientific Interest (SSI)

3.1.4.1 One SSI is present within 2 km of the site:

- Hey Wood / West Wood SSI is located ~1.53 km south-west of the site.

Local Wildlife Sites (LWS)

3.1.4.2 Eight LWS are present within 2 km of the site:

- *Almondbury Common LWS* >1 km from the site.
- *Arkenley Lane LWS* >1 km from the site.
- *Arthur, Molly Carr & Roaf Woods LWS* is located ~0.47 km south of the site.
- ***Castle Hill LWS* includes the area of the site itself**.
- *Hey Wood / West Wood LWS* >1 km from the site.
- *Long Hill Plantation LWS* is located ~0.83 km north-east of the site.
- *Park Wood LWS* >1 km from the site.
- *Upper Park Wood LWS* >1 km from the site.

Kirklees – Sites of Wildlife Significance (SWS)

3.1.4.3 Two SWS are present within 2 km of the site:

- *Park Wood SWS* >1 km from the site.
- *Upper Park Wood SWS* >1 km from the site.

Local Nature Reserves (LNR)

3.1.4.4 Two LNR are present within 2 km of the site:

- ***Castle Hill LNR* includes the area of the site itself.**
- *Upper Park Wood LNR* >1 km from the site.

Kirklees Wildlife Habitat Network (KWHN)

3.1.4.5 The site lies within an area identified as part of KWHN.

3.2 Field Survey – Habitats

3.2.1 Overview

3.2.1.1 The site extends to approximately 70 metres x 70 metres and is located approximately 2.5 km south-south-east of Huddersfield town centre. The site is located in a prominent position at approximately 260 metres above sea level. The site is bordered on all sides by grassland and scattered scrub.

3.2.2 Hard Standing

3.2.2.1 The site is dominated by hard standing which is devoid of vegetation.

3.2.3 Grassland

3.2.3.1 Aside from hard standing, the only other habitat type present on the site is grassland. The grassland at the margins of the hard standing is dominated by species tolerant of trampling such as perennial rye-grass *Lolium perenne*, annual meadow-grass *Poa annua*, ribwort plantain *Plantago lanceolata*, creeping thistle *Cirsium arvense*, white clover *Trifolium repens*, daisy *Bellis perennis*, dandelion *Taraxacum officinale*, red dead-nettle *Lamium purpureum* and ragwort *Senecio jacobaea*.

3.2.3.2 Further from the margins of the car park, in areas less frequently trampled, additional species include Yorkshire fog *Holcus lanatus*, common bent *Agrostis capillaris*, red fescue *Festuca rubra*, creeping buttercup *Ranunculus repens* and self-heal *Prunella vulgaris*.

3.2.3.3 At the site's northern boundary, a ditch-and-bank supports semi-improved grassland typical of less-intense cutting and trampling such as cock's-foot *Dactylis glomerata*, false oat-grass *Arrhenatherum elatius*, meadow foxtail *Alopecurus pratensis*, hogweed *Heracleum sphondylium*, common nettle *Urtica dioica*, cleavers *Galium aparine* and white dead-nettle *Lamium album*.

3.2.4 Invasive Weeds

3.2.4.1 No evidence of invasive weeds such as Japanese knotweed was identified at the site

3.3 Field Survey – Birds

3.3.1.1 A limited range of birds was observed during the survey. Species observed within and immediately adjacent the site included carrion crow, goldfinch, wren and magpie.

3.3.1.2 No suitable bird nesting habitat was noted within the site. Birds may nest immediately outside the site in scattered hawthorn *Crataegus monogyna* scrub adjacent to the site access road to the north-east of the site.

3.3.1.3 Given the habitats and human disturbance levels, the site itself is not likely to support notable assemblages of species listed on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 during the breeding, wintering or passage periods.

3.4 Field Survey – Bats

3.4.1 Potential Roost Features

3.4.1.1 No features capable of supporting bat roosts are present within or immediately adjacent to the site.

3.4.2 Foraging / Commuting Habitats

3.4.2.1 Based on the nature of the habitats present and the site's geographic location at ~260m above sea level in a very exposed position, the site is considered likely to be negligible value for foraging / commuting bats.

3.5 Field Survey – Great Crested Newt

3.5.1.1 No waterbodies potentially suitable for breeding great crested newts have been identified within 500m of the site. This species is therefore very unlikely to occur at the site.

3.6 Field Survey – Badger

3.6.1.1 No evidence of badger was observed during the survey.

3.7 Field Survey – Other Fauna

3.7.1.1 Hedgehog and brown hare, both species of principal importance in England[5], could potentially occur within the site.

3.7.1.2 The habitats within the site are not considered likely to support reptiles due to site's geographic location, the nature of the habitats within the site, disturbance from people and vehicles and the limited availability of good quality habitat in the wider area.

[5] As listed in Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 as a Habitat of Principal Importance for the conservation of biodiversity in England.

3.7.1.3 No habitats suitable for resident populations of water vole, otter or white-clawed crayfish have been identified within or adjacent to the site.

4 Planning Policy

4.1 Kirklees Local Plan

4.1.1.1 Policy LP30 Biodiversity and Geodiversity of the Kirklees Local Plan[6] states:

- *"**Biodiversity and Geodiversity**: The council will seek to protect and enhance the biodiversity and geodiversity of Kirklees, including the range of international, national and locally designated wildlife and geological sites, Habitats and Species of Principal Importance and the Kirklees Wildlife Habitat Network…*
- ***Statutory Designated Sites**: Statutory designated sites, including the South Pennine Moors Special Protection Area (SPA) and Special Area for Conservation (SAC) and Sites of Special Scientific Interest (SSSI), are already highly protected through existing laws and legislation. In accordance with legislation, the Council will seek to ensure that harmful impacts to these areas as a result of development proposals are avoided. Development proposed within or outside a designated SSSI, likely to have an adverse effect on the site's special nature conservation features, will not normally be permitted. Exceptionally development will be allowed where the benefits of the development clearly outweigh the impacts on the site's special conservation features and measures are provided to mitigate harmful impacts…*
- ***Local Designated Sites & Important Local Ecological Features**: Proposals having a direct or indirect adverse effect on a Local Wildlife Site or Local Geological Site, Ancient Woodland, Veteran Tree or other important tree, will not be permitted unless the benefits of the development can be clearly shown to outweigh the need to safeguard the local conservation value of the site or feature and there is no alternative means to deliver the proposal. In all cases, full compensatory measures would be required and secured in the long term.*
- ***Habitats and Species of Principal Importance**: Proposals will be required to protect Habitats and Species of Principal Importance unless the benefits of the development clearly outweigh the importance of the biodiversity interest, in which case long term compensatory measures will need to be secured.*
- ***Biodiversity and Development**: Development proposals will be required to:-*
  - *i. result in no significant loss or harm to biodiversity in Kirklees through avoidance, adequate mitigation or, as a last resort, compensatory measures secured through the establishment of a legally binding agreement;*
  - *ii. minimise impact on biodiversity and provide net biodiversity gains through good design by incorporating biodiversity enhancements and habitat creation where opportunities exist;*
  - *iii. safeguard and enhance the function and connectivity of the Kirklees Wildlife Habitat Network at a local and wider landscape-scale unless the loss of the site and its functional role within the network can be fully maintained or compensated for in the long term;*
  - *iv. establish additional ecological links to the Kirklees Wildlife Habitat Network where opportunities exist; and incorporate biodiversity enhancement measures to reflect the priority habitats and species identified for the relevant Kirklees Biodiversity Opportunity Zone.*

[6] Kirklees Council (2019). Kirklees Local Plan Strategy and Policies. Adopted 27 February 2019.

4.2 National Planning Policy Framework (NPPF)

4.2.1.1 Paragraph 170 of the NPPF[7] states:

- *"Planning policies and decisions should contribute to and enhance the natural and local environment by:*
  - *a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
  - *b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
  - *c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*
  - *d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures…".*

4.3 ODPM Circular 06/2005

4.3.1.1 Paragraph 99 of ODPM (Office of the Deputy Prime Minister) Circular 06/2005[8] states:

- "*It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted. However, bearing in mind the delay and cost that may be involved, developers should not be required to undertake surveys for protected species unless there is a reasonable likelihood of the species being present and affected by the development. Where this is the case, the survey should be completed and any necessary measures to protect the species should be in place, through conditions and/or planning obligations, before the permission is granted. In appropriate circumstances the permission may also impose a condition preventing the development from proceeding without the prior acquisition of a licence...*"

[7] Ministry of Housing, Communities and Local Government (2019). National Planning Policy Framework (NPPF). February 2019. ISBN 978-1-5286-1033-9

[8] Office of the Deputy Prime Minister (ODPM) Circular 06/2005. Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning System. 16 August 2005.

5 Evaluation and Potential for Impacts

5.1.1.1 The valuation of the nature conservation interest of the ecological features present on the site and whether or not they are subject to detailed impact assessment is summarised in Table 1 below.

Table 1. Summary of Evaluation of Nature Conservation Interest and Potential for Impacts

Receptor	Evaluation Rationale	Value of receptor or Value of site to receptor	Potential for Impact	Subject to detailed assessment
Designated sites:				
Castle Hill LWS and LNR	Designated for its local value.	Local	Yes. The development site lies within the LWS and LNR boundary.	**Yes**
KWHN	Designated for its local value.	Local	Yes. The development site lies within the KWHN boundary.	**Yes**
Hey Wood / West Wood SSI	Designated for its local value.	Local	No. >1km from the site and unaffected by development.	No
Almondbury Common LWS; Arkenley Lane LWS; Arthur, Molly Carr & Roaf Woods LWS; Hey Wood / West Wood LWS; Long Hill Plantation LWS; Park Wood LWS; and Upper Park Wood LWS	Designated for their local value.	Local	No – distance and lack of connectivity.	No
Park Wood SWS; and Upper Park Wood SWS	Designated for their local value.	Local	No. >1km from the site and unaffected by development.	No
Upper Park Wood LNR	Designated for its local value.	Local	No. >1km from the site and unaffected by development.	No
Habitats:				
Hard Standing	Highly artificial – common and widespread.	Less than local	Yes – direct habitat loss	No, due to low value
Grassland	Heavily managed, easily recreated – common and widespread.	Less than local	Yes – direct habitat loss	No, due to low value

Receptor	Evaluation Rationale	Value of receptor or Value of site to receptor	Potential for Impact	Subject to detailed assessment
Fauna:				
Birds	No Section 41 species[5] are likely to occur at the site except on an occasional transitory basis.	Less than local	No potential for significant impacts due to absence of notable species.	No, due to low value
Bats	No potential roost features at the site. Site likely to be of negligible value for foraging bats.	Less than local	No potential for significant impacts due to absence of roosts and negligible foraging potential.	No, due to low value
Great crested newts	Not present	None	No	No
Badger and Other Fauna	Hedgehog and brown hare (Section 41 species[5]) could potentially occur at the site on an occasional transient basis.	Less than local	No potential for significant impacts due to likely small numbers, transient use and high availability of better quality habitats in immediate surroundings.	No

5.1.1.2 Therefore, the following ecological receptor are taken forward for further assessment:

- Castle Hill LWS and LNR.
- KWHN (Kirklees Wildlife Habitat Network).

6 Likely Significant Effects

6.1 Potential Impacts

6.1.1.1 Activities which could affect ecological receptors at the site comprise the following:

- Land-take within Castle Hill LWS, LNR and KWHN.
- Increased levels of disturbance (human activities, noise and/or lighting) resulting in disturbance to protected sites.
- Increased levels of dog fouling resulting in nutrient-enrichment of grassland.

6.1.1.2 The potential impacts on the identified ecological receptors resulting from these activities are assessed below. Mitigation is then considered before an assessment of residual impacts.

6.1.1.3 This assessment is based on the following drawing:

- Proposed Site Plan (drawing no. 2382 (0-)102. October 2018.

6.1.2 Construction Phase

6.1.2.1 Impacts during the construction phase comprise the following:

- Land-take within Castle Hill LWS, LNR and KWHN.
- Increased levels of disturbance (human activities and noise).

6.1.2.2 These impacts are assessed below.

Land-take within Castle Hill LWS, LNR and KWHN

6.1.2.3 The development will result in the loss of grassland and hard standing within the protected site. Given the low ecological value of these habitats within the site area, it is considered that land-take will not be significant at the local level.

Increased Levels of Disturbance

6.1.2.4 During the construction phase, disturbance from machinery and site personnel, if unmanaged, could potentially result in significant adverse effects on the locally protected sites.

6.1.3 Operational Phase

6.1.3.1 Impacts during the operational phase comprise the following:

- Increased levels of disturbance (human activities, noise and/or lighting).
- Nutrient enrichment via dog fouling.

6.1.3.2 These impacts are assessed below.

Increased Levels of Disturbance

6.1.3.3 During the operational phase, disturbance from human activities, noise and/or lighting could potentially result in significant adverse effects on the locally protected sites.

Nutrient Enrichment via Dog Fouling

6.1.3.4 Increased numbers of dogs being exercised at the site could potentially result in increased levels of dog fouling which could adversely affect the unimproved acid grassland within Castle Hill LWS, LNR and KWHN. Unimproved acid grassland can rapidly lose its ecological value if subject to nutrient enrichment from application of fertilisers or manure. This could result in a significant adverse effect at the local level.

6.2 Mitigation Measures

6.2.1 Financial Contribution

6.2.1.1 In relation to the mitigation measures presented below, there may be a requirement for a financial contribution from the developer to the local planning authority (Kirklees Council) to cover the installation and management of:

- Wildlife Information Boards; and
- Dog Waste Bins.

6.2.1.2 Therefore, it may be necessary for an appropriate financial contribution to be provided by the developer to Kirklees Council via the Community Infrastructure Levy (CIL).

6.2.2 Construction Environmental Management Plan (CEMP)

6.2.2.1 A Construction Environmental Management Plan (CEMP) will be prepared and implemented, in order to avoid adverse effects on Castle Hill LWS, LNR and KWHN within and adjacent to the site.

6.2.3 Grassland Seeding

6.2.3.1 One of the notable features of Castle Hill LWS, LNR and KWHN is the presence of acid grassland. Therefore, on completion of the construction phase, any disturbed ground will be seeded with an acid grassland seed mix and subsequently managed as semi-natural acid grassland. Standard utility grass seed mixes are not appropriate for use within the protected site and must not be used at the development site.

6.2.4 Other Planting

6.2.4.1 Any additional planting at the site will use only native species which are appropriate for use within the existing habitats present at Castle Hill LWS, LNR and KWHN.

6.2.5 Lighting Design

6.2.5.1 Measures to minimise the adverse effects of artificial lighting will be secured through a sensitive lighting design which includes the following:

- Use narrow spectrum bulbs to lower the range of species affected by lighting; and
- Reduce light-spill so that light reaches only areas needing illumination. Shielding or cutting light can be achieved through the design of the luminaire or with accessories, such as hoods, cowls, louvers and shields to direct the light; and
- Limit the times that lights are on to provide some dark periods for wildlife.

6.2.6 Wildlife Information Boards

6.2.6.1 To mitigate the potential for increased visitor numbers to result in adverse effects on the protected site (e.g. trampling, disturbance and dog fouling), site information for visitors will include information on the ecological value of the habitats and species at Castle Hill LWS and LNR.

6.2.6.2 A minimum of two permanent Wildlife Information Boards will be provided at the site. Each Wildlife Information Board will include site-specific information on the wildlife of Castle Hill and advice for visitors such as preventing dog fouling. The Wildlife Information Board will be designed and prepared by a specialist Wildlife Information Board supplier.

6.2.7 Dog Waste Bins

6.2.7.1 Increased levels of dog fouling (resulting from increased visitor numbers) have the potential to adversely affect unimproved acid grassland by altering the nutrient status of the soil and grassland.

6.2.7.2 A minimum of two additional dog waste bins will be provided at Castle Hill LWS and LNR.

6.2.8 Bird Boxes

6.2.8.1 In order to provide permanent bird nesting opportunities at the site, the following nest boxes will be installed on the building at the site:

- Minimum of 2x house martin nesting bowls to be attached to gables / eaves of new building.
- Minimum of 2x swift nest boxes to be attached to gables / eaves of new building.

6.3 Residual Effects and Planning Policy Compliance

6.3.1.1 Given the adoption of the mitigation measures presented above, it is considered that there will be no significant adverse effects on the identified ecological receptors (Castle Hill LWS, LNR and KWHN) via increased levels of disturbance (human activities, noise and/or lighting) or dog fouling. The provision of acid grassland seeding, Wildlife Information Boards for visitors, dog waste bins and bird boxes (secured via a planning condition / CIL payment) has the potential to result in a net overall ecological enhancement.

6.3.1.2 Given the adoption of the mitigation measures presented above, it is considered that the proposals will not have a direct or indirect adverse effect on Castle Hill LWS, LNR and KWHN. In accordance with Kirklees Local Plan Policy LP30[6], the conservation value of Castle Hill LWS, LNR and KWHN can be safeguarded via planning conditions and a CIL payment securing the mitigation measures described above.

6.3.1.3 It is concluded that the development proposals will comply with the NPPF[7] by contributing to and enhancing the natural and local environment by protecting and enhancing a site of biodiversity value (Castle Hill LWS, LNR and KWHN); and by minimising impacts on and providing net gains for biodiversity.