Ecological Impact Assessment

Transvaal Terrace/Carlinghow Hill, Batley

Fernbrook Associates Ltd

Report reference: R-3952-05
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Report Title:	Ecological Impact Assessment Transvaal Terrace/ Carlinghow Hill, Batley
Report Reference:	R-3952-05
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Contents

Summary

The proposals have engaged with the NPPF Mitigation Hierarchy and been able to avoid most potential significant effects at the Site.

Residual significant effects can be mitigated and compensated on site through the following documents:

- BS:42020 Biodiversity Management Plan (BMP)
- Natural England (NE) Bat Mitigation Class Licence (BMCL)
- Invasive Weed Management Plan (IWMP)

1. Introduction

1.1.1 Brooks Ecological Ltd was commissioned by Fernbrook Associates Ltd. to carry out an Ecological Impact Assessment (EcIA) for a Site referred to as land off Transvaal Terrace/ Carlinghow Hill, Batley, WF17 0AA (grid reference SE 23711 25110). It is proposed to re-develop the Site for residential use, with most of the existing buildings and hardstanding being removed.

1.1.2 The British Standard BS42020 recommends that a proportional assessment of ecological impacts should be made - such that decision making relating to the NPPF 'mitigation hierarchy', the planning balance', and the use of conditions is suitably informed.

1.1.3 The purpose of the EcIA report is to use the information gathered, alongside the proposals for the Site, to:

- identify any significant effects associated with the proposed development,
- set out any mitigation (including monitoring) required to address these effects, and to ensure compliance with legislation and policy,
- identify suitable enhancement,
- identify measures required to secure mitigation and enhancement,
- identify and assess any residual effects and their legal, policy and development management consequences.

1.1.4 This report adapts the format set out in the Chartered Institute for Ecology and Environmental Management (CIEEM) guidelines for Ecological Report Writing (December 2017).

2. Method

2.1 Scope of Assessment

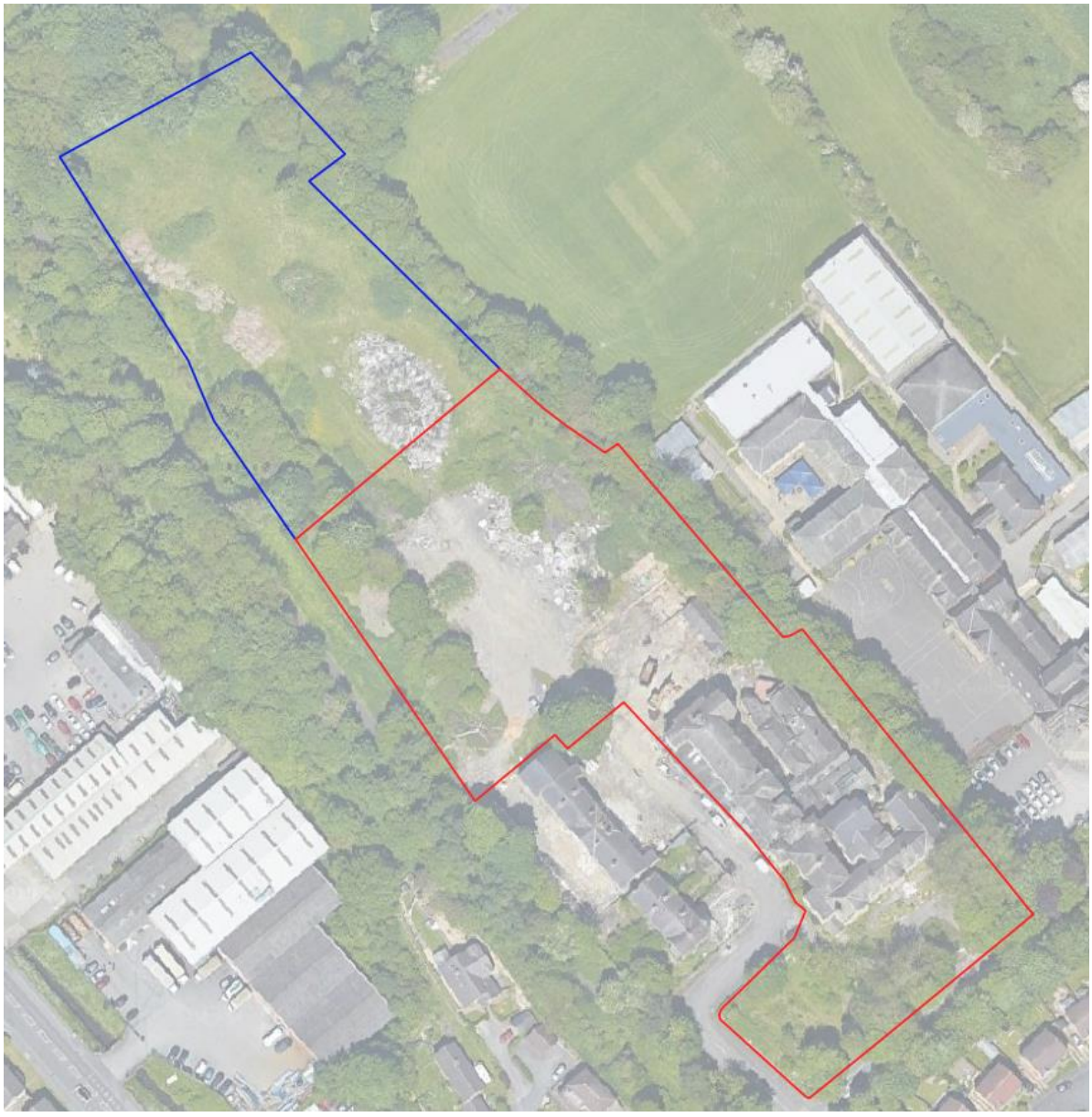
2.1.1 A Preliminary Ecological Appraisal of the Site was carried out in February 2019, with follow up surveys for bats and reptiles being undertaken throughout August, September and October 2019.

2.1.2 All land within both the red and blue line boundaries (as defined in Figure 2.1, overleaf) was surveyed; however, the purpose of this EcIA the Site extent is only land within the red line boundary.

2.1.3 The assessment uses a 2 km area of search around the Site for records of protected and notable species and locally or nationally designated wildlife sites.

2.1.4 The application site 'the Site' encompasses a former hospital building, together with associated hardstanding and former landscaped areas. Several buildings have long been demolished, with resulting rubble and fly-tipped material being piled within areas of hardstanding.

Figure 2.1 The Survey Site



2.1.5 To provide information on the Site's ecological value, the following studies have been carried out; with the relevant reports produced being:

- Brooks Ecological (March 2019). Preliminary Ecological Appraisal (R-3952-01).
- Brooks Ecological (September 2019). Bat Emergence Survey (R-3952-02).
- Brooks Ecological (October 2019). Bat Activity Survey (R-3952-03).
- Brooks Ecological (October 2019). Reptile Survey (R-3952-04).

2.2 Desk Study

2.2.1 A full desk study including consideration of local biological records, aerial photographs, local designations and planning guidance has been carried out.

2.3 Field Survey

Walkover – Extended Phase 1 Habitat Survey

2.3.1 The survey was carried out during February 2019 and followed Phase 1 Habitat Survey Methodology (JNCC, 2010).

Limitations

2.3.2 The survey was carried out in late winter/ early spring when many plant species have died back, however the habitat types could still be assessed at this time by the surveyor.

2.3.3 Whilst the majority of the site was accessible, at least 5% was occupied by dense impenetrable vegetation which could not be closely inspected.

Bat Emergence Surveys

2.3.4 Surveys were carried out in August 2019, using teams of up to seven surveyors. In terms of the survey effort, number of personnel required, and number of visits required to be able to properly evaluate the building(s) use by bats, we refer to the Bat Conservation Trust Survey Good Practice Guidelines (2016). However, these guidelines are not prescriptive, and we approach each site individually as required using our professional judgement and significant experience base.

Bat Activity Surveys

2.3.5 Seasonal surveys were carried out in August 2019 (summer) and October 2019 (Autumn), with the objective being to characterise how local bat populations make use of the Site, so that an accurate assessment of the potential impacts of development could be made. Transect and remote monitoring surveys were carried out to collect the following data (BCT survey guidelines 2016):

- The assemblage of bat species using the site;
- The relative frequency with which the site is used by different species;
- The nature of activity for different bat species, for example foraging, commuting and roosting.

Reptile Surveys

2.3.6 Seven official reptile survey visits being carried out between August and October 2019, as per the methodology outline in The Herpetofauna Worker's Manual (Gent and Gibson, 2003)

2.4 Assessment Method

2.4.1 In assessing the significance of effects, we refer to Section 5 of CIEEM (2018) - that a 'significant effect' is an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general. In relation to ecological features we consider the following factors in combination, including;

- the feature's value on an ascending scale from Site, to international value
- the site's position in the local landscape,
- its current management and
- its size, rarity or threats to its integrity

2.4.2 There are several tools available to aid this consideration, including established frameworks such as Ratcliffe Criteria or concepts such as Favourable Conservation Status. Also of help is reference to Biodiversity Action Plans in the form of the Local BAP and Section 41 of the NERC Act (2006) to determine if the site supports any Priority Habitats, Habitats of Principal Importance or presents any opportunities in this respect.

2.4.3 The assessment considers the development proposals set out below; from which the potential impacts can be summarised as:

- Vegetation and habitat removal
- Disturbance, pollution or interference arising from the Site's construction
- Disturbance, pollution or interference arising from the Site's operation

2.4.4 This report deals with any significant effects potentially arising from these impacts. It looks at how the mitigation hierarchy can be applied to any effects and the implications of any residual significant effects.

3. Ecology Baseline

3.1.1 A *summary* of the points salient to this assessment are set out below:

3.2 Designated Sites and Conservation Areas

3.2.1 Impacts on Local, National and International Designations or their interests have been ruled out at PEA Stage.

3.3 Kirklees Wildlife Habitat Network

3.3.1 Approximately a quarter of the Site (red line) lies within the Kirklees Wildlife Habitat Network (KWHN); see figure below.

Figure 3.1 Kirklees Wildlife Habitat Network (purple) in relation to the Site

3.3.2 To ensure the proposals conform with Policies PLP 30 & PLP 31 of the Kirklees Local Plan, the function and connectivity of the KWHN will need to be safeguarded and enhanced.

3.4 Habitats

3.4.1 The Site comprises of the following habitat types, all of which have been described and mapped below.

Figure 3.2 The Site's Habitats

Table 3.1 Summary of habitat features

Habitat Feature	Reference	Extent	Notes
Buildings	J3.6	0.22 ha	*Very low value habitat.*
Hardstanding (Bare Ground)	J4	0.40 ha	*Very low value habitat*.
Former amenity grassland (Poor Semi-improved grassland)	B6	0.09 ha	*Low value habitat – Site level only.* Likely to be used as foraging by a limited range of common birds and invertebrates.
Tall herb / ruderal vegetation	C3.1	0.45 ha	*Low value habitat – Site level only*. Likely to be used as foraging by a limited range of common birds and invertebrates.
Broadleaf Woodland – Semi-natural	A1.1.1	0.09 ha	*Low value habitat – Site level only*. Those areas that fall within the red line boundary are of low ecological value, being relatively young and poor in structure. This habitat will however provide foraging opportunities and shelter for groups such as birds, small mammals and invertebrates.
Scattered trees	Not referenced	-	*Low value habitat – Site level only*. *Trees planted within former landscaped areas. Mature specimens of greatest value.*

Potential future changes to the baseline

3.4.2 The Site's use and ecological baseline will likely be unchanged until the time of the proposed development.

3.4.3 In the absence of re-development, succession would likely result in the colonisation of bare ground by ephemeral vegetation, and the spread of tall ruderal and scrub vegetation.

3.5 Species and Species Groups

3.5.1 Potential constraints relating to relevant groups were investigated through the surveys carried out.

Table 3.2 Summary of relevant faunal issues

Species/ Group	Presence	Notes
Bats	The Site supports three small summer day roosts of common pipistrelle bat. Although legally protected, these roosts are of low conservation significance. The wider Site attracts only very low-level foraging activity and is not of importance to any local populations.	Direct impacts on three small bat roosts. Demolition will result in the permeant loss of three common pipistrelle day roosts. A Natural England (NE) Bat Mitigation Class Licence (BMCL) will need to be secured prior to any works commencing.
Reptiles	The Site provides some good habitat for this group. However, detailed survey has confirmed likely absence.	No direct impacts expected. Likely absence confirmed.
Badger	No evidence of badger activity was noted on Site and the current likely absence of this species can be reasonably concluded. However, the surrounding woodland presents good badger habitat and there is a risk that this species could become active at the Site in the intervening period before construction commences.	No direct impacts expected. Standard precaution is recommended to guard against badgers moving into the site following survey.
Invasive Non-native Species (INNS)	Japanese knotweed and Himalayan balsam are both present on Site.	Direct impacts expected Potential to spread these species throughout the Site and off-site.

4. Description of Proposed Development

4.1.1 The Site will be re-developed for residential use, as shown in the figure below.

4.1.2 Much of the existing hospital complex will be demolished, save for the older, original section to the southeast, which will be renovated / converted into flats.

4.1.3 Twenty residential units, including a mix of detached, semi-detached and terrace properties, will then be constructed across the rest of the Site, with associated gardens and infrastructure.

Figure 4.1 The proposed development

5. Impacts & Effects of the Proposed Development

5.1.1. Figure 5.1 below shows the development footprint in relation to the mapped habitats.

Figure 5.1 Development footprint and habitats

5.1.2. Figure 5.2 shows the comparison between habitat lost to the proposals and that which will be retained (and suitably protected) or re-instated.

Figure 5.2 Habitat lost and retained.

Table 5.1 Summary of impacts and effects

Feature	Impact	Stage	Significant Effects
Poor semi-improved grassland	Loss of 0.03 ha (33%) of rough neutral grass	Construction (Site preparation)	Minor negative impact. Not significant
Tall herb / ruderal vegetation	Loss of 0.19 ha (42%) of tall ruderal vegetation	Construction (Site preparation)	Minor negative impact. Not significant
Broadleaf Woodland – Semi-natural	No impact All woodland retained	-	-
Scattered trees	Small number of trees removed.	Construction (Site preparation)	Minor negative impact. Not significant
Bat roosts	Permanent loss of three small CP day roosts.	Construction (Demolition)	Minor negative impact. Not significant
Invasive Non-native Species	Spread of Japanese knotweed and Himalayan balsam	Construction Operation	Moderate negative impact Significant at a local level

6. Mitigation and Residual Effects

6.1.1. Any possible **avoidance** of unnecessary impacts has already been designed into the plan at this stage. The proposals will incorporate the following **mitigation** in relation to the identified **effects** above.

- BS:42020 Biodiversity Management Plan (BMP) – A BMP has already been produced; see R-3952-06. This has been designed in tandem with the Landscape Masterplan, produced by FDA Landscape.

- Natural England (NE) Bat Mitigation Class Licence (BMCL) – the Site will need to be registered under this class licence, or a full EPSML, prior to any works commencing. This is a legal requirement and should not be made the subject of any planning conditions.

- Invasive Weed Management Plan (IWMP) – A plan to deal with the issue of INNS will need to be put in place prior to any works commencing. This could be secured through a standard condition of planning.

Table 6.1 Summary of Mitigation and Residual Effects

Effect	Features	NPPF Hierarchy	Residual Effect
Loss of low value habitat	The BMP and landscaping plans show the creation of new high value habitat within POS, along with the better management of retained habitat and the creation of new garden plots.	**Compensation** *and* **Enhancement**	**Neutral**
Loss of bat roosts	The BMCL will detail the method by which demolition works will be completed to avoid significant impacts on bats. This will also detail replacement roost features.	**Mitigation**	**Neutral**
Spread of INNS	The IWMP will detail how INNS will be dealt with ahead of, and during construction, so as to minimise the risk of spreading INNS through the Site or within the wider landscape.	**Mitigation**	**Neutral**

7. Cumulative Effects

7.1.1. Kirklees Council's Planning Portal has been checked – Applications likely to act in combination with the effects identified in this assessment could not be identified.

7.1.2. A consultation response was received from Kirklees Council Conservation and Design Team, Biodiversity Officer on 04/12/2018; this did not raise any concerns with cumulative effects.

8. Offsite Measures or Compensation

8.1.1. Off Site compensation is not proposed.

9. Enhancement

9.1.1. Opportunities to provide enhancement, and how to secure this, have been identified in Table 6.1 above and will be detailed in the BMP document (see R-3952-06).

10.Monitoring

10.1.1. Specific ecological monitoring of the mitigation proposed would not be required.

10.1.2. The BMP document will identify any management specific monitoring which might be required in respect of habitat enhancement proposed.

11.Conclusion

11.1.1. Mitigation to be agreed by planning and Natural England will be able to address all significant effects resulting from the development.

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