

Preliminary Ecological Appraisal



Tyler
Grange

Froghall Road, Cheadle
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Contents:

Summary	
Section 1: Introduction, Context and Purpose	1
Section 2: Methodology	2
Section 3: Ecological Features and Evaluation	6
Section 4: Considerations in Respect of Future Development	15
Section 5: Conclusions and Recommendations	21

Appendices:

Appendix 1: Legislation and Planning Policy	
Appendix 2: Photographs	

Plans:

Proposed Site Layout	
14001_P01: Habitat Features Plan	



Summary

- S.1 This report has been prepared by Tyler Grange Group Ltd. on behalf of Bloor Homes. It sets out the findings of a Preliminary Ecological Appraisal (PEA) and Preliminary Bat Roost Assessment (PBRA) to inform a planning application for proposals at Froghall Road, Staffordshire (hereafter referred to as 'the Site').
- S.2 The site is located to the east of Froghall Road, measuring approximately 8.7 hectares and comprises improved neutral grassland, broad-leaved semi-natural trees, defunct hedgerow, hedgerow with trees and tall ruderal vegetation.
- S.3 The findings of the desk study, Extended Phase 1 habitat survey and preliminary roost assessment noted the following:
- Potential effects on statutory and non-statutory conservation designations:
 - a) The nature conservation sites within the 10km and 1km buffers for statutory and non-statutory sites are considered to be sufficiently distant as to avoid any adverse impacts from the proposed works if the outlined mitigation strategies are implemented.
 - Habitats within the site are mostly of negligible importance with some scattered trees, improved neutral grassland and hedgerows with trees, considered to provide some ecological importance and value within the context of the site. Recommendations for the inclusion of new native trees, shrubs and hedgerow species throughout site, with the eastern area of the site being used to mitigate the small-scale loss of any habitats.
 - Potential effects on protected and priority species:
 - a) Amphibians: Negligible potential for amphibians (including great crested newt) to be present within the site aquatically or terrestrially; with the creation of two attenuation basins improving the overall site habitat for amphibians;
 - b) Bats: Low and moderate potential for roosting bats has been identified in three trees. All three trees are to be retained as part of the proposals and therefore no adverse impacts on roosting bats are anticipated;
 - c) Birds: Suitable breeding habitat for common and widespread bird species identified in the boundary vegetation and trees on site. Through pre-clearance checks of these areas prior to removal and through the planting of new native trees and shrub areas, the negative impacts to birds will be avoided and compensated for;
 - d) Hedgehog: Negligible potential for hedgehog presence but precautionary working methods during construction and implementation of hedgehog highways have been recommended to maintain habitat links to adjacent land and limit impacts to individuals that may use the site; and
 - e) Badger, reptiles, water vole, otter: negligible potential for these species to utilise this site – no further action is required.



- S.4 Through the implementation of a sensitive landscape scheme and creation of habitats such as the attenuation basins, the potential impacts on habitats and species within the site can be adequately mitigated for. Recommendations for the improvement of retained habitats and the introduction of bat and bird boxes seek to enhance the overall ecological value within the site and should be developed to ensure no net loss of biodiversity.
- S.5 In conclusion, it is considered that development within the site of the scale proposed would be in conformity with both Local and National legislation relating to biodiversity. Opportunities also exist to enhance the biodiversity value of the site and achieve Biodiversity Net Gain with a detailed landscaping scheme. All potential effects on protected/ notable protected species would also be avoided or adequately mitigated.



Section 1: Introduction, Context and Purpose

Introduction

- 1.1. This report has been prepared by Tyler Grange Group Ltd. on behalf of Bloor Homes. It sets out the findings of a Preliminary Ecological Appraisal (PEA) and Preliminary Bat Roost Assessment (PBRA) to inform a planning application for proposals at Froghall Road, Cheadle, Stoke-on-Trent (hereafter referred to as 'the site').
- 1.2. The site is located at National Grid Reference SK 01282 44834, measuring approximately 8.7 hectares. It is understood that the ecology work is required to accompany a planning application for a residential development comprising c.228 dwellings.

Purpose

- 1.3. This report:
 - Uses available background data and results of field survey to describe and evaluate the ecological features present within the likely 'zone of influence'¹ of the proposed development;
 - Describes the actual or potential ecological issues and opportunities that may arise as a result of the sites' future redevelopment;
 - Where appropriate, makes recommendations for mitigation of adverse effects and ecological enhancement, to ensure conformity with policy and legislation listed in **Appendix 1**; and
 - Identifies further work required to inform a future planning application if relevant.
- 1.4. This assessment and the terminology used are consistent with the 'Guidelines for Ecological Impact Assessment in the UK and Ireland' (CIEEM, 2019)², and 'Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017)³

¹ Defined as the area over which ecological features may be subject to significant effects as a result of activities associated with a project and associated activities (CIEEM 2016)

² Chartered Institute of Ecology and Environmental Management (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester. <https://cieem.net/wp-content/uploads/2019/02/Combined-EcIA-guidelines-2018-compressed.pdf>.

³ Chartered Institute of Ecology and Environmental Management (2017) Guidelines for Preliminary Ecological Appraisal <https://cieem.net/wp-content/uploads/2019/02/Guidelines-for-Preliminary-Ecological-Appraisal-Jan2018-1.pdf>



Section 2: Methodology

Data Search

- 2.1 The aim of the data search is to collate existing ecological records for the Froghall Lane site as a whole, and the surrounding area. Obtaining existing records is an important part of the assessment process as it provides information on issues that may not be apparent during a single survey, which by its nature provides only a 'snapshot' of the ecology of a given site.
- 2.2 The data search has been undertaken for a 10km radius around the site for European statutory sites, 2km radius around site for national statutory sites and non-statutory sites, and a 2km search radius was utilised for protected and priority⁴ species records.
- 2.3 The Staffordshire Ecological Records (SER) centre was contacted for details of protected and priority species and non-statutory sites. The information from SER was requested on 6th May 2021 and received on 14th May 2021. Where relevant records were identified, the information provided has been incorporated into the report with due acknowledgement.
- 2.4 The Multi-Agency Geographic Information for the Countryside website⁵ was accessed for information on the location of statutory designated nature conservation sites within a 10km radius (for sites of European designation) and 2km (for sites of national designation) of site.
- 2.5 The Staffordshire Moorlands District Council website was consulted for details of relevant local planning policies and supplementary planning guidance.
- 2.6 The Staffordshire Biodiversity Action Plan (SBAP) was consulted for priority habitats and species subject to conservation action, to assist with the evaluation of ecological features and to inform site enhancement strategies.

Extended Phase I Habitat Survey

- 2.7 An 'extended' Phase I habitat survey was undertaken on 4th May 2021 by Mr Nick Bell; Mr Bell is an experienced field ecologist, a member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and holds Natural England licences for both bats and Great Crested Newt (GCN). The technique was based upon Phase I survey methodology (JNCC, 2010)⁶. As the standard Phase I Habitat survey methodology is largely concerned with vegetation communities only, the survey was 'extended' in accordance with the *Guidelines for Baseline Ecological Assessment* (IEA 1995)⁷ to include:
- Preliminary searches for evidence of protected or conservation-notable species/ species-groups (including bats; great crested newts; badger; water vole; reptiles; and otter), and for habitats or features likely to support them if direct evidence is absent; and

⁴ UK priority species and habitats are those subject to conservation action and referred to as Species of Principal Importance (SoPIs) or Habitats of Principal Importance (HoPIs). They are listed at Section 41 [42 in Wales] of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act states that local planning authorities must have regard for the conservation of both SoPIs and HoPIs.

⁵ <https://magic.defra.gov.uk/>

⁶ Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey – a technique for environmental audit. JNCC, Peterborough. <http://data.jncc.gov.uk/data/9578d07b-e018-4c66-9c1b-47110f14df2a/Handbook-Phase1-HabitatSurvey-Revised-2016>.

⁷ Guidelines for Baseline Ecological Assessment (IEA 1995); Taylor & Francis; 1st edition (10 Aug. 1995)



- The identification of other constraints (e.g. non-native invasive plant species) or opportunities (e.g. opportunities for micro-siting or enhancement) that may be present at the Site.

- 2.8 Note was taken of the more conspicuous fauna and any evidence of, or the potential for, the presence of protected notable flora and fauna. A basic inventory of the habitats and a representative species list for the site was produced. Where access allowed, adjacent habitats were also considered in order to assess the site within the immediate landscape and to provide information with which to assess possible impacts within the immediate landscape surrounding the site.
- 2.9 The weather conditions for the survey were warm, overcast with a light wind and a temperature of 13°C.

Preliminary Bat Roost Assessment

- 2.10 A preliminary bat roost assessment (PBRA) of the trees present within the site was undertaken to assess their potential to support roosting bats. This survey was undertaken alongside the 'Extended' Phase 1 habitat survey. The surveys followed standard methodologies (Mitchell-Jones, A.J., 2004; Mitchell-Jones, A.J. and McLeish, A.P., 2004; Collins, 2016) which are described below.
- 2.11 As there are no buildings within the site boundary, the PBRA focused solely on trees and comprised a ground level inspection of all trees present at the site on the 4th May 2021 to determine the potential of each tree to support roosting bats. During this survey, Potential Roost Features (PRFs) that may be used by bats, as identified within the BCT Good Practice Guidelines (Collins, 2016)⁸, were sought. These included the following:
- Woodpecker holes, rot holes, knot holes arising from naturally shed branches and man-made holes;
 - Hazard beams and other vertical or horizontal cracks and splits (such as frost-cracks) in stems or branches;
 - Partially detached platey bark;
 - Cankers;
 - Other hollows or cavities, including butt-rots;
 - Partially detached ivy with stem diameters in excess of 50mm; and
 - Bird, bat or dormouse boxes.
- 2.12 Evidence of the presence of bat roosts was also sought. These signs include:
- Bat droppings in, around or below a PRF;
 - Odour emanating from a PRF;
 - Audible squeaking at dusk or in warm weather; and,
 - Visible staining below a PRF.
- 2.13 The potential of each tree at the site to support roosting bats has been categorised against the criteria described below in **Table 2.1**.

⁸ Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd Edition. The Bat Conservation Trust, London.



Table 2.1: Categorising Potential Bat Roosts

Suitability	Description of Roosting Habitats
Negligible	Negligible habitat features on-site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection conditions and surrounding habitat.

Limitations

- 2.14 No limitations or constraints to survey were encountered during the Extended Phase I survey.
- 2.15 The findings of this report are valid at the time of writing. Owing to the dynamic nature of ecological resources, if more than 12 months have elapsed since the report was written, advice should be sought to determine whether update work is required. The findings of the report should not be relied upon without this advice.
- 2.16 This report is also partly based on 3rd party data held by the Local Record Centre, which Tyler Grange Group Ltd. cannot guarantee the accuracy of.

Evaluation

- 2.17 The evaluation of habitats and species is defined in accordance with published guidance (CIEEM, 2019). The level of importance of specific ecological feature is assigned using a geographic frame of reference, with international being the most important, then national, regional, county, district, local and lastly, within the site boundary only.
- 2.18 Evaluation is based on various characteristics that can be used to identify ecological features likely to be important in terms of biodiversity. These include siter designations (such as SSSI's), or for undesignated features, the size, conservation status (locally, nationally or internationally), and the quality of the ecological feature. In terms of the latter, quality can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats) or species populations or assemblages. In the case of the evaluation of the value of fauna at the Site, an assumed valuation of each ecological feature has been given based on the habitats observed at the Site during the initial survey. Where further surveys are required, the valuation may be subject to variation following the interpretation of survey results.



Quality Control

- 2.19 All ecologist at Tyler Grange Group Ltd are members of CIEEM, or are working towards membership and act under the direction of members, and abide by the Institute's Code of Professional Conduct.



Section 3: Ecological Features and Evaluation

Site Context

- 3.1. The site is located adjacent to the east of Froghall Road (A521), which runs due north from the town centre of Cheadle, Staffordshire. The site is largely surrounded by farmland, with residential development to the south and south-west. The site itself comprises grazed, improved neutral grassland, with scattered trees and hedgerow along much of the site boundaries, with some internal defunct hedgerow running roughly east-west through the centre of site.

Protected Sites

Statutory Designated Sites

- 3.2. There are no sites of European designation within 10km of the site. However, there are two sites of national designations within 2km of the site, they are:
- Cecilly Brook, located 0.9km to the south of the site and measures approximately 6.5 hectares; it is designated as a Local Nature Reserve (LNR) due to it being one of the most important sites for water vole *Arvicola amphibius* in Staffordshire, and is therefore a **locally important** site; and,
 - Hales Hall Pool, located 0.9km to the south of site and measures approximately 3 hectares; it is designated as a Local Nature Reserve for its aquatic flora, specifically greater tussock sedge *Carex paniculata* and lesser reedmace *Typha angustifolia*, of which the latter is now considered to be rare in the county of Staffordshire⁹, and therefore, Hales Hall Pool is a **locally important** site.

Non-Statutory (Local) Designated Sites

- 3.3. The data search returned seven non-statutory designated sites within 2km of the site. They are a combination of Local Wildlife Sites (LWS) and Biodiversity Alert Sites (BAS); these sites have gained local designation as they contain most of the best remaining areas of semi-natural habitat found in the county; BAS sites are of lesser significance on a county basis, because of lower intrinsic quality, smaller size or damage or disturbance¹⁰. The seven sites of **local importance** are as follows:
- Cheadle Fish Ponds, located 0.9km to the south of the site; designated as a LWS for its two ponds supporting aquatic flora and fauna;
 - Adams Hollow, located 1km to the north of site; designated as a 'Retained BAS' for its narrow stream valley with deciduous woodland comprising the stream bank;
 - Gibbridding Wood, located 1.4km to the east of site; designated as a LWS for its broadleaved ancient woodland, which also contain two fields of semi-improved neutral grassland, where some unimproved, species-rich areas can be found;
 - Gorsey Wood, located 1.5km to the north-east of the site; designated as a 'Retained BAS' for its wooded valley with beech *Fagus sylvatica* and sycamore *Acer pseudoplatanus*;
 - Lockwood Pastures, located 1.7km to the north-east of the site; designated as a LWS for its species-rich meadow with wet flushes, adjacent to the River Churnet;

⁹ <https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1009378>

¹⁰ http://www.staffs-ecology.org.uk/html2015/images/1/17/Staffordshire_SBI_Guidelines.pdf



- Kingsley Holt, located 1.8km to the north-east of the site; designated as a LWS for its beech woodland with streams and neutral grassland; and
- Hawksmoor Nature Reserve, located 2.0km to the south-east of the site; designated as a LWS for its ancient broadleaved woodland with bracken and bluebell ground flora and some areas featuring wet woodland flora species.

Habitats and Flora

3.4. A review of the Multi Agency Geographic Information for the Countryside (MAGIC) system identified the following priority habitat within 2km of the site (with the nearest distance provided for each priority habitat), although none of the following priority habitats occur within the site itself:

- Ancient Woodland – Lock Wood and Lockwood Waste Wood (1.3km), Gibridding Wood (1.4km), Waste Wood (1.5km) and Monk's Wood (1.7km);
- Coastal and floodplain grazing marsh – Banks of the River Churnet, east of Lockwood Waste (1.6km);
- Good quality semi-improved grassland – Surrounding Gibridding Wood (1.5km) and south of Hag Wood (1.7km);
- Lowland Meadow – South of Hag Wood (1.7km);
- Lowland heathland – Cheadle Park (1.4km); and,
- Open Mosaic Habitat – East of Lawns Farm 2.0km.

3.5. The habitats present across the site are summarised below, along with a description of the composition of the main plant species present and an assessment of their importance, the habitats are as follows:

- Broad-leaved, semi-natural trees;
- Defunct hedge, species-poor;
- Hedge with trees, native species-rich;
- Improved neutral grassland; and
- Tall ruderal.

Broad-leaved, semi-natural trees (Photograph 1)

3.6. The north-western site boundary comprises some young to early mature broad-leaved, semi-natural trees, species include ash *Fraxinus excelsior*, and English oak *Quercus robur*. Although individually these trees provide little-to-low ecological value, as a collective, they can provide food, shelter and nesting opportunities for birds, bats and invertebrates, therefore, considered to be of **site ecological importance**.

3.7. There are four large, mature broad-leaved trees running east-west through the centre of site (Plan **14001_P01**); species comprising ash, English oak and sycamore *Acer pseudoplatanus*. Due to their mature age and structure, the trees provide ecological value, particularly trees T5 and T6, which support potential bat roosting features (discussed in Section 3.28). Therefore the line of mature broad-leaved trees running through the centre of site are considered to be of **site ecological importance**.



- 3.8. The eastern and south-eastern site boundaries contain some occasional broad-leaved trees, species include ash, English oak, cherry *Prunus avium*, and silver birch *Betula pendula*. As with the western site boundary, individually these trees provide little-to-low ecological value, but as a collective, they can provide food, shelter and nesting opportunities for birds, bats and invertebrates, therefore, considered to be of **site ecological importance**.

Defunct hedge, species-poor (Photograph 2)

- 3.9. Hedgerow H2, running centrally through the site comprises predominantly hawthorn *Crataegus monogyna*, with occasional blackthorn *Prunus spinosa* and elder *Sambucus nigra*, and was found to be in poor condition through extensive flailing with a large gap present towards its south-western end. Due to the large gap and general poor condition, the hedgerow itself is unlikely to provide significant 'habitat corridors' and limited breeding/ nesting opportunities for birds. However, the line of mature broad-leaved trees, discussed in Section 3.7 are located along the defunct hedgerow line, and therefore as a collective habitat are considered to offer ecological value. Furthermore, although extensively flailed, with a large gap, the hedgerow is approximately 300 metres long and therefore qualifies as UK BAP Priority Habitat; hedgerow H2 is therefore of **local ecological importance**.

Dry Ditch (Photograph 3)

- 3.10. A dry ditch runs parallel with hedgerow H4 (see Section 3.13), located along the south-eastern site boundary. The ditch was found to dry during the Extended Phase 1 survey, which was conducted subsequent to periods of heavy rainfall in early May 2021; it is therefore considered that the ditch located on site remains dry throughout the majority of the year. Furthermore, the ditch did not contain any species of flora which would usually be associated with areas of inundation. The dry ditch is therefore considered to be of **negligible ecological importance**.

Hedge with trees, species-rich (Photograph 4)

- 3.11. Hedgerow H1, located along the north-western site boundary, bordering Froghall Road, comprises ash, blackthorn, dog rose *Rosa canina*, hawthorn, hazel *Corylus avellana* and sycamore. Although flailed in places, hedgerow H1 measures around 2.5 metres in height, 1 metre wide and approximately 190 metres in length. Species-rich hedgerow such as this provide shelter and nesting opportunities for birds, invertebrates and other species.
- 3.12. Hedgerow H4 is located along the south-eastern site boundary and comprises ash, alder *Alnus glutinosa*, blackthorn, elder, ivy *Hedera helix* and sycamore. This hedgerow measure 3 metres in height, 1 metre in width and approximately 230 metres in length, making it the largest hedgerow on site. Due to its size and species diversity the hedgerow will provide shelter and nesting opportunities for birds and provide a linear feature for commuting mammals such as bats.
- 3.13. Both hedgerows H1 and H4 meet the criteria for "Important" hedgerows within the Hedgerow Regulations (1997)¹¹ (contains up to six woody species, aggregate gaps do not exceed 10% of their length, standard trees averaging one tree per 50 metres and situated adjacent to bridleways and footpaths); both hedgerows also qualify as UK BAP priority habitat¹², as such the hedgerow with trees is considered to be of **local ecological importance**.

¹¹The Hedgerows Regulations 1997; Sub-paragraph 7:

<https://www.legislation.gov.uk/ukxi/1997/1160/schedule/1/made>

¹² UK BAP Priority Habitats – Hedgerows: [Hedgerows \(UK BAP Priority Habitat description\) \(jncc.gov.uk\)](#)



Hedgerow, species-poor (Photograph 4)

- 3.14. Hedgerow H3 is located along the north-eastern site boundary and is set back slightly and used for screening purposes; species contained within H3 are hawthorn and elder. The hedgerow measures 1.5 metres in height, 75cm wide and approximately 120 metres in length and has been moderately flailed. Despite the low species diversity and relatively poor condition, hedgerow H3 meets the criteria for UK BAP Priority Habitat due to its length and is therefore considered to provide **local ecological importance**.
- 3.15. Hedgerow H5 is located along the south-western site boundary, bordering the gardens of the residential plots to the south, and therefore comprises mixed hedge due to mixed management; species include hazel, cherry laurel *Prunus laurocerasus*, and privet *Ligustrum ovalifolium*. Due to the poor species diversity, mixed management with gaps, Hedgerow H5 is considered to provide **negligible ecological importance**.

Improved Neutral Grassland (Photograph 5)

- 3.16. The majority of the site is composed of improved neutral grassland, with recorded species being consistent with haylage grassland management. The sward was relatively short, due to the time of year during which the survey was conducted; dominant species within the sward included: cocks foot *Dactylis glomerata*, meadow fox tail *Alopecurus pratensis*, red fescue *Festuca rubra* and Yorkshire fog *Holcus lanatus*, with frequent herbs such as common mouse ear *Cerastium fontanum*, common sorrel *Rumex acetosa*, creeping buttercup *Ranunculus repens*, meadow buttercup *Ranunculus acris*, spear thistle *Cirsium vulgare*, wavy bitter cress *Cardamine flexuosa*, white clover *Trifolium repens*, and with occasional broad leaved dock *Rumex obtusifolius* and nettle *Urtica dioica* mainly found around the field margins.
- 3.17. Although the fields are split into two roughly separate land parcels by hedgerow, species diversity is largely consistent throughout, although the southern field has marginally more meadow buttercup as a dominant species. Due to the low species diversity of this grassland, it is considered to be of **negligible ecological importance**.

Tall Ruderal (Photograph 6)

- 3.18. Tall ruderal vegetation is present along most of the field margins, although much more conspicuous along the north-western boundary (bordering Froghall Road), the central hedgerow and north-eastern site boundary. The ruderal vegetation present on site forms an understorey to hedgerows H1, H2 and H3, with no sporadic patches present within the main field areas. Species present were bramble *Rubus fruticosus*, broad-leaved dock, common sorrel, creeping buttercup, nettle, ribwort plantain *Plantago lanceolata* and silverweed *Potentilla anserina*. Although the ruderal vegetation forms an understorey to the hedgerows outlined above, the extent of this habitat is fairly limited, measuring no more than 40cm in width from the base on the hedgerows, offering limited shelter and foraging opportunities for mammals and invertebrates. It is therefore considered that this habitat feature provides **negligible ecological value** for the site.

Habitats Adjacent to Site

- 3.19. Roads border the site to the north-west (Froghall Road) and south-east (Hammersley Hayes Road) with residential plots and associated gardens forming a rough 'L' shape adjacent to the site's south-western corner. Beyond the northern, eastern and south-eastern site boundaries



there are arable and grazed improved neutral grassland fields with hedgerow boundaries containing limited trees dotted along the hedgerow lines.

Biodiversity Net Gain Assessment

- 3.20. In terms of habitat areas, the site comprises predominantly poor condition improved grassland (8.6ha), which is categorised in the Defra 2.0 metric as 'Modified Grassland'. Approximately 0.1ha of the site is covered by tall ruderal vegetation in poor condition. **Table 3.1** below sets out the baseline biodiversity value of the site (excluding ditches/hedgerows/trees, which are to be retained and are treated separately in the metric).

Table 3.1 – Baseline Biodiversity Summary

Habitat	Unit Value
Improved/modified grassland – Poor Condition	17.20
Tall ruderal vegetation – Poor Condition	0.20
Total	17.40

Protected and Priority Fauna

Amphibians

- 3.21. SER provided five amphibian records for within a 2km radius of site, two being common toad *Bufo bufo* and three of which being GCN records. Two of the GCN records are dated from 2006 and relate to the same location – three small ponds at Olde Thornbury Farm, which is located approximately 850 metres east of the site, with the third record being taken in 2014, located 1.7km north of site, close to the village of Kingsley.
- 3.22. There are no open waterbodies on site. There is one pond within 250m of the site boundary, which is located 230 metres from the eastern site boundary. The pond is roughly elliptical in shape and of moderate size, measuring approximately 20 metres in length.
- 3.23. At the time of survey, the improved grassland (which comprises the majority of the Site), tall ruderal vegetation and hedgerows provide only sub-optimal habitat for terrestrial GCN.
- 3.24. Although there is one pond within 250 metres of the site boundary, the pond is situated on the opposite side of Froghall Road to the site, which considering the busy nature of the road, will likely form a significant barrier to the free movement of GCN from ponds located on the western side of Froghall Road. Furthermore, no records of GCN within the pond have been returned by SER. As the site offers limited opportunities for GCN in their terrestrial stage, the site is considered to be of **negligible** importance for amphibians and are unlikely to be impacted by the proposals.

Birds



- 3.25. SER returned records of 71 bird species; many records are from locations which provide different habitats to those found on the site, for example, 30 of the 71 returned species were recorded in Hawksmoor Nature Reserve (LWS), a predominantly woodland habitat (located 2km east from site), with species such as goshawk *Accipiter gentilis* ('Red List' species of Birds of Conservation Concern (BoCC)), pied flycatcher *Ficedula hypoleuca* ('Red List' BoCC) and wood warbler *Phylloscopus sibilatrix* (BAP priority species), all of which are unlikely to be found within the habitats present on site. Furthermore, both Hales Hall Pool and Blakehall Fishery combined, returned approximately one quarter of the total bird records (415 of 1500 bird records), with the majority of species being waterfowl, gulls and waders, which are of less relevance to the habitats found on site.
- 3.26. With regards to bird species of more relevance to site, there are three records of barn owl (*Tyto alba*), most recently in 2011, recorded 2km from site; five records of linnet, most recently recorded in 2012 and 39 records of lapwing *Vanellus vanellus*, most recent record being 1.5km from site, recorded in 2014 – all of which are Staffordshire BAP priority species and 'Red List' species of Birds of Conservation Concern.
- 3.27. The site comprises common and widespread habitat types that are considered unsuitable for rare and notable species, such as the ones outlined above. The habitats present on site could be used by some nesting birds, namely the trees, hedges and tall ruderal, and the improved managed grassland is currently of low value to ground nesting birds, such as lapwing and skylark *Alauda arvensis*, due to haylage management and grazing by livestock. Although the habitats are not optimal for birds, they do provide some limited foraging or nesting potential. Based on this, the site would support no more than individuals, single pairs or a very small assemblage of birds. As such, the site is considered to be of **negligible** importance for birds.

Invertebrates

- 3.28. SER provided 71 records of invertebrates within 2km radius of site. None of the returned species are afforded European or UK protection. However, the following species are Staffordshire BAP priority species:
- Solitary bees - orange-tailed mining bee *Andrena haemorrhoa* (recorded in 2014, 1.7km east of site), buffish mining bee *Andrena nigroaenea* (recorded in 2012, 1.9km north of site), red mason bee *Osmia bicornis* (recorded in 2010, 1.9km north of site) and blue mason bee *Osmia caerulea* (recorded in 2007, 1.9km north of site).
- 3.29. The improved neutral grasslands comprising the majority of site has a low species diversity and are not considered diverse enough to support rare or notable invertebrate assemblage. As such, the site is considered to be of **negligible** importance for invertebrates.

Mammals

Bats

- 3.30. SER provided 68 records of bats within a 2km radius of the site. Records relate predominantly to pipistrelle species, with common and soprano pipistrelle *Pipistrellus pipistrellus* accounting for 42 of the total records. Two species of *Myotis* have been recorded: Daubenton's Bat *Myotis daubentonii* and Whiskered Bat *Myotis mystacinus*, although *Myotis* species only accounts for 13 of the total records for bats; with noctule *Nyctalus noctule* and brown long-eared bats



Plecotus auritus being recorded six and five times, respectively. The majority of records relate to commuting and foraging observations; however six accounts of roosts have been recorded, all of which relate to common pipistrelle.

- 3.31. Three trees located on site have the potential to support roosting bats. Two trees (T1 and T5) were graded as having 'Low' bat roosting potential, with one tree (T6) being graded as having moderate bat roosting potential and are summarised in **Table 3.2**. There are no buildings on site.

Table 3.2: Trees with Bat Roosting Potential

Tree Number and Species	Description of Potential Roost Feature	Tree Photograph
T1 - Oak	A mature oak tree with 70% ivy coverage that is considered to provide some roosting potential for crevice dwelling bat species. Approximate location – SK 01088 44953 Low Potential for Roosting Bats	
T5 - Sycamore	A mature sycamore, with cavity above an old pruning wound, situated on the northern aspect of the tree, approximately 3 metres in height, offering roosting potential for crevice dwelling bat species. Approximate location – SK 01241 44909 Low Potential for Roosting Bats	



T6 - Oak	A mature oak containing three features providing moderate bat roosting potential; the first being a series of cracks along dead wood on a north-facing limb, approximately 2.8 metres in height; the second being a vertical crack on a northern limb, 3 metres in height and the third being a cavity on a south facing limb overhanging the southern field, 2.5 metres in height. Approximate location – SK 01274 44938 Moderate Potential for Roosting Bats	
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- 3.32. The main habitat on site consists of improved grassland which is sub-optimal for foraging bats. The site does provide some foraging and commuting opportunities along the field boundaries i.e. the trees and hedges, tall ruderal vegetation and scattered scrub.
- 3.33. Due to the reasons outlined above, the site in general is considered to be of **negligible** ecological importance for bats. However, bats are included in the Staffordshire BAP priority species list, and therefore mitigation measures are discussed in **Section 4**, along with the requirement for sensitive felling of trees T1 and T5, should they be required for removal.

Badger

- 3.34. SEN provided 12 records of badger within a 2km radius of Site; the most recent record is also the nearest to site, recorded in 2014 approximately 0.6km from site. All other records relate to locations over 1km away, with most records being over 1.5km from the site boundary. No records of badger were returned for the site itself.
- 3.35. There was no evidence of badger setts or activity recorded on site or within 30m where access was possible. No mammal runs were present leading on/ off site, through hedgerows and other site boundaries. The site is therefore considered to be of **negligible** importance for badger.

Hedgehog

- 3.36. SER returned 13 records of hedgehog within 2km of site, with the nearest record coming from Hammersley Hayes Road, which is adjacent to the south of site. Hedgehog, or evidence of, were not recorded during the extended phase I survey and the habitat on site provides limited resting and foraging features, although some features are suitable enough (such as the hedgerow with trees on the eastern boundary and scattered tall ruderal) to support small numbers of hedgehog; the site is therefore considered to be of **negligible** importance for hedgehog, however enhancements and sensitive working methods for hedgehog are discussed in **Section 4**.



Otter and Water Vole

- 3.37. One record of otter was returned by SER, dating from 2002 from the River Churnet (1.8km north-east of site), with 43 records of water vole within a 2km radius of site. The vast majority of water vole records relate to Cecilly Brook LNR, which is designated for its population of water vole, as described in Section 3.2.
- 3.38. There are no suitable habitats for otter and water vole either on site, or immediately adjacent to it, with no watercourses either on site or immediately adjacent to it, which could feed into Cecilly Brook and therefore indirectly impact upon water vole and otter. Therefore, the site is considered to be of **negligible** importance for otter and water vole.

Reptiles

- 3.39. SER provided two historic records of grass snake *Natrix Helvetica*, from 1927 and 1987, within a 2km radius of site. The site largely comprises improved grassland which is generally sub-optimal for reptiles, due to limited availability of foraging habitat and the lack of cover which would leave reptiles at risk of predation. The site is therefore considered to be of **negligible** importance for reptiles.

Other Species

- 3.40. The site has a low potential to be used by individual Section 41 species which include (but are not exclusive to) brown hare *Lepus europaeus*, which are a Staffordshire BAP priority species. LERN returned nine records of brown hare within 2km of site, although only one of which was recorded within 1km of Site. The habitat on site does not provide suitable enough ecological features to support significant numbers of brown hare, or other notable mammal species.

Non-native / Notifiable Weeds

- 3.41. No non-native species / notifiable weeds (species listed as Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended)) were recorded during the survey and are therefore not considered further in this study.



Section 4: Considerations in Respect of Future Development

Site Context

- 4.1. The proposed plans (Plan 1: Proposed Site Layout) indicate that the grazed improved neutral grassland comprising the majority of the site will be developed upon. With the exception of the species-rich hedgerow with trees on the eastern boundary (local importance), the majority of habitats within the site are not considered to be important beyond the site level, the loss of any trees, hedgerow and improved grassland areas should still be compensated for in the new site planting scheme.

Designated Sites

- 4.2. There are no designated sites present on site, and no European designated sites within 2km of the site. There are however two sites of local designation within 2km of the site, they are:
- Cecilly Brook LNR; and,
 - Hales Hall Pool LNR.
- 4.3. These statutory designated sites are separated from the site by greenspace, farmland, existing residential development and roads, and as such no direct impacts on the above-named designated sites are considered likely. Local Nature Reserves are primarily designated for public recreation as well as nature and as such no adverse impacts arising from additional recreational use are anticipated.

Non-Statutory Designated Sites

- 4.4. Of the seven non-statutory designated sites, Cheadle Fish Ponds and Adams Hollow are the only local designation within 1km of the site. Cheadle Fish Ponds is designated for its aquatic habitat and is separated from site by two medium-sized residential developments and an expanse of farmland. Adams Hollow, being designated for its narrow stream and associated valley/ stream embankment, is separated from site by Froghall Road and approximately 0.7km of farmland to the north of site. As both Cheadle Fish Ponds and Adams Hollow are designated for their habitat, direct impacts upon these designations are considered unlikely, due to the numerous barriers, such as residential development and roads, between the site and the designations.
- 4.5. All of the remaining five locally designated sites, located between 1.4km and 1.8km from site are designated for their flora and habitats and are considered sufficient enough distance from the site, with no linking habitat corridors to avoid impacts. It is therefore considered unlikely that the non-statutory sites will be impacted by the proposals.

Habitats and Flora

- 4.6. All habitats on site that are of **local** and **site ecological importance** should be retained where possible within the new plans. Where this is not possible, mitigation strategies should be put in place to reduce the overall impact of the loss, as described below.



- 4.7. The species-rich hedgerows with trees (H1 and H4), a UK BAP Priority habitat with local ecological importance, located on the north-western and south-eastern site boundaries shall be retained as part of the proposed plans and therefore will not be impacted by the proposals.
- 4.8. Although the defunct hedgerow running centrally through site (H2) is of negligible ecological value, to comply with Staffordshire Moorlands local planning policy NE 2, which states “woodlands, healthy trees and hedgerows are retained and integrated within a proposed development unless the need for, and benefits of, the development clearly outweigh their loss”, this hedgerow shall be retained as part of the proposed plans, and shall be ‘planted-up’ with native berry-bearing shrub and hedgerow species in order to in-fill gaps, thus creating an improved habitat corridor, while providing increased shelter and feeding opportunities for wildlife.
- 4.9. Hedgerows H3 and H5 comprise relatively few species, however, they are to be retained as part of the proposed plans, as they offer value in screening and soft landscaping. It is recommended that these hedgerows are subject to additional planting in order to increase their species diversity and enhance the biodiversity of the site.
- 4.10. On-site trees are predominantly confined to the site boundaries and, as such, shall be retained as part of the proposals. To comply with Staffordshire Moorlands local planning policy NE 2, regarding tree planting, the proposals include the creation of 99 metre wide ‘stand-off’ area to the east of site (west of Broad Hays Farm) and additional tree planting to create a new northern site boundary (Plan 1), which shall be planted with native UK native trees within the development’s landscape scheme – to include species such as oak, beech and other large UK tree species. The additional tree planting and creation of the Public Open Space (Stand-off area) shall improve the green infrastructure of the site and contribute towards Staffordshire Moorlands Green Infrastructure plan (Policy C 3), which states “The Council will... develop integrated networks of high quality and multi-functional green infrastructure”.
- 4.11. All other habitats affected by the new development plans are of **negligible ecological importance** and do not require any mitigation for their loss therefore are not considered further in this report.
- 4.12. A high-level Biodiversity Net Gain assessment has been undertaken of the proposals using the Defra Metric 2.0. It should be noted that such assessments are not mandated in existing local or national policy, but emerging national policy in the form of the forthcoming Environment Bill will mandate such assessments to be completed on all development. This exercise has, therefore, been undertaken to demonstrate the future compliance of any detailed application with policy which is likely to be in place at the time of future applications.
- 4.13. As a detailed landscape scheme/strategy is not available at this point, the indicative masterplan (**Plan 1** appended to this report) has been used to assess the likely post-development value of the site. Given the absence of such detail, the following assumptions have been made:
- 75% of the areas designated for development in the parameters would comprise built form (houses/roads etc.) and 25% of the areas designated for development in the parameters would comprise poor condition amenity planting (i.e. road verges, rear gardens, shrubs);



- The attenuation features would be planted with a suitable wetland mixture within and around the basin to enhance their value/design;
- The areas designated as 'greens' in **Plan 1** would comprise 50% amenity grassland for public recreation, with 50% set aside for more diverse grassland planting of a better condition;

4.14. **Table 4.1** below summarises the post-development value of the site taking into account these assumptions, and also compares this to the pre-development value.

Table 4.1 – Post-development Biodiversity Summary

Habitat	Area (ha)	Unit Value	Notes
Developed land	4.14	0	Built form
Amenity grassland (or other equivalent low distinctiveness poor condition habitat)	1.38	2.66	Areas of parameters designated for development which would inevitably be rear gardens/road verges/shrubberies
Sustainable Urban Drainage Feature – Moderate Condition	0.16	0.39	Attenuation features
Grouped tree planting – Moderate Condition	0.91	1.39	Groups of tree planting across site
Amenity grassland – Poor Condition	1.51	2.91	Areas of greenspace for public recreation
Neutral grassland – Moderate Condition	1.51	10.90	Areas of greenspace set aside for more diverse wildflower planting
Total	8.7	18.25	
Pre-Development	8.7	17.40	
Unit Gain		+0.85	
% Gain		+4.89	



Fauna

Amphibians

- 4.15. The likelihood of GCN or other amphibians to have presence on site is considered to be exceptionally low, due to the lack of suitable waterbodies on site and only one pond within 250m of the site boundaries; therefore breeding and terrestrial habitat is considered sub-optimal. Amphibians are therefore unlikely to be impacted upon by the proposals.
- 4.16. With the creation of two attenuation basins (Plan 1), habitats for amphibians shall be improved, while reducing habitat fragmentation and increasing connectivity through additional wildlife features and corridors, allowing species such as GCN and other amphibians to adopt the Site.

Birds

- 4.17. Whilst the majority of the habitats within the site do not present suitable foraging or nesting habitats for birds, the scattered broad-leaf trees (see plan **14001_P01**) and sections of scrub and hedgerows do provide nesting opportunities for a range of common and widespread bird species.
- 4.18. During the construction phase of the proposed works, all vegetation should be timetabled for outside 'core' nesting bird season (i.e. conducted between September and February) to avoid active nests and the legislation which is afforded to them. If this is not possible and clearance is required within the nesting bird season (i.e. between March and August inclusive), an experienced ecologist must be present at the time of any tree felling or scrub/ hedgerow clearance to check for evidence of active bird nests. If an active nest is found, a sufficient buffer zone will be implemented around the nest commensurate with the species, tolerance of human activity and stage of nesting. Works can only proceed within that area once a suitably qualified ecologist (SQE) has determined the nest is no longer active.
- 4.19. It should be noted that some species of bird (i.e. doves, pigeons) can nest year-round so even if site clearance activities are conducted outside of the 'core' nesting season, site contractors must show due diligence and cease works and seek advice from a SQE if they suspect the presence of an active nest.
- 4.20. To enhance the value of the site to nesting birds post-development it is recommended that a range of bird boxes targeting species of conservation concern are installed in appropriate positions on new dwellings. Species targeted should comprise house sparrow *Passer domesticus* and swift *Apus apus*.

Invertebrates

- 4.21. The site is considered to be of **negligible** importance for invertebrates and therefore unlikely to be impacted by the proposals.
- 4.22. However, through the application of green infrastructure provisions, such as native tree, shrub and wildflower planting within the retained eastern section of site and the creation of two attenuation basins, any minor losses in invertebrate habitat will be adequately compensated for, if not providing improved and more suitable habitat for invertebrates.



Mammals

Bats

- 4.23. During the extended phase I survey and preliminary roost assessment, all trees on site were checked for bat roosting potential. Four trees, labelled T1, T5 and T6 on plan **14001_P01**, are considered as having no more than moderate potential for roosting bats. Currently, all three trees are being retained as part of the new development plan and therefore, any bats using these trees will not be directly impacted by the proposals.
- 4.24. Should the three trees, categorised as having bat roosting potential be required for removal, sensitive felling techniques, such as 'soft felling' shall be implemented for the trees with 'Low' bat roosting potential (T1 and T5), whereas tree T6 would require additional bat survey. This would include two nocturnal surveys (dusk emergence and dawn re-entry). This visit would need to take place during the peak bat survey season of May and August, with the other being carried out between May and September. Following the results of the survey, further recommendations can be made regarding bat mitigation strategies.
- 4.25. The hedgerows on site may provide some commuting and foraging opportunities for bats, however, with increased native species planting to infill any gaps and appropriate hedgerow management (allowing hedgerows to grow to 3 metres in height, where practicable), and with the addition of two attenuation basins and additional tree planting, foraging and commuting opportunities for bats may be improved.
- 4.26. With any residential development there is potential for impacts to foraging and commuting bats resulting from use of inappropriate lighting, both during construction and operation of the site. To avoid longer term impacts, it is recommended that the layout of the site should include a sensitively designed lighting scheme. The lighting scheme should avoid light spill of greater than 1 Lux at tree canopy height onto any retained, adjacent, or newly created habitat features (including hedgerows, trees and ponds).
- 4.27. Through the application of green infrastructure provisions recommended throughout **Section 4**, such as native tree and scrub planting, any minor losses for bats will be adequately compensated for, and it is recommended that bat boxes be placed on suitable trees within the Site to enhance the value for roosting bats post-development.

Badger

- 4.28. With limited badger records within a 2km radius of site, and no signs of badger being recorded during the extended Phase 1 survey, it is considered unlikely that badger will be impacted upon by the proposals. However, as badger frequently move throughout their wider territories, and badger setts can be excavated in new locations, a further badger survey prior to development is recommended. Additionally, during the construction phase of the development, sensitive working methods for badger are recommended, which include providing ramped access/ egress for any excavations which are to be left open overnight, capping of temporarily exposed pipe systems out of work hours and safe storage of chemicals.



Hedgehog

4.29. Hedgehog are a priority species and therefore afforded consideration in planning policy, as they are in population decline and efforts should be made to conserve this species and enhance sites for hedgehog wherever possible, by creating 'hedgehog highways' (appropriately sized gaps under garden and boundary fencing to allow the free movement of hedgehog) and implementing safe working methods; as such the construction phase of the proposed works should be conducted following sensitive working methodologies which should comprise, but not be limited to:

- Storing site materials in skips or off the ground in pallets;
- Ensuring any excavations are left ramped or with an exit should any hedgehogs or other small mammals become trapped;
- Capping any pipework overnight.

Otter and Water Vole

4.30. There is no suitable habitat for otter and water vole either on site, or immediately adjacent to it and impacts on these species are therefore considered to be negligible. There is no recommendation for further surveys, licensing or mitigation.

Reptiles

4.31. As the site largely comprises managed improved grassland, which is generally sub-optimal for reptiles, it is considered unlikely that reptiles will be impacted by the proposals.



Section 5: Conclusions and Recommendations

- 5.1. The proposals for the land east of Froghall Road will require the removal of some areas of habitat that currently provide some ecological value within the site and have the potential to support species such as bats, birds and hedgehogs – all of which require protection and consideration. Several recommendations have been made throughout **Section 4** that would mitigate the potential impacts and, in some cases, improve the ecological value of the site.
- 5.2. A planting scheme that includes native UK tree and scrub species, rich in berries that provide wildlife with a valuable food resource, should be planted within the new landscape scheme and around the new boundaries of the site to ensure compliance with NE 2 and C 3 of the Staffordshire Moorlands Local Planning Policy. This will compensate for any loss of trees and scrub and encourage wildlife back into the site post-construction.
- 5.3. Sensitive working methodologies throughout the construction phase will help reduce disturbance to wildlife on site. This should include:
 - Storing materials off the ground and ensuring excavations are left ramped;
 - The use of a sensitively designed lighting scheme to reduce impacts to foraging and commuting bats;
 - Carrying out works outside of the core nesting period for birds;

Biodiversity Net Gain Considerations

- 5.4. Subject to the confirmation of finalised site layouts and a sensitive landscape scheme, a full Biodiversity Net Gain (BNG) calculation of the site will need to be undertaken. Based on the parameters plan and broad green infrastructure strategy submitted with the application (**Plan 1** appended to this report), it has been calculated that the proposals do have the ability to achieve a measurable net gain in biodiversity and therefore be compliant with existing and emerging national policy relating to biodiversity.



Appendix 1: Legislation and Planning Policy

The Conservation of Habitats and Species Regulations 2012 (as amended).

- A1.1 The Habitat Regulations transpose EEC Council Directive 92/43 (The Habitats Directive) into UK law. The regulations place duty upon the relevant authority of the UK government to identify sites which are of importance to the habitats and species listed in Annexes I and II of the Habitats Directive. Those sites which meet the criteria are, in conjunction with the European Commission, designated as Sites of Community Importance, which are subsequently identified as Special Areas of Conservation (SAC) by the European Union member states. The regulations also place a duty upon the UK government to maintain a register of European protected sites designated as a result of EC Directive 79/409/EEC on the Conservation of Wild Birds (The Birds Directive). These sites are termed Special Protection Areas (SPA) and, in conjunction with SACs, form a network of sites known as Natura 2000.
- A1.2 The regulations also provide for the protection of individual species of fauna and flora of European conservation concern listed in Schedules 2 and 4, respectively. Schedule 2 includes species such as otter and great crested newt for which the UK population represents a significant proportion of the total European population. It is an offence to deliberately kill, injure, disturb or trade these species in the UK. Schedule 4 plant species are protected from unlawful destruction, uprooting or trade under the regulations.

Natural Environment & Rural Communities (NERC) Act 2006

- A1.3 The NERC Act 2006 places a duty on authorities to have due regard for biodiversity and nature conservation during the course of their operations. Section 41 of the Act requires the publication of a list of habitats and species publish which are of principal importance for the purpose of conserving biodiversity. The Section 41 list is used to guide authorities in implementing their duty to have regard to the conservation of biodiversity.

The Wildlife and Countryside Act (WCA) 1981

- A1.4 The WCA, as amended, consolidates and amends pre-existing national wildlife legislation in order to implement the Bern Convention and the Birds Directive. It complements the Conservation (Natural Habitats. &c.)
- A1.5 Regulations 1994 (as amended), offering protection to a wider range of species. The Act also provides for the designation and protection of national conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSIs).
- A1.6 Schedules of the act provide lists of protected species, both flora and fauna, and detail the possible offences that apply to these species.

The Countryside and Rights of Way (CRoW) Act 2000



- A1.7 The CROW Act, introduced in England and Wales in 2000, amends and strengthens existing wildlife legislation detailed in the WCA. It places a duty on government departments and the National Assembly for Wales to have regard for biodiversity and provides increased powers for the protection and maintenance of SSSIs.
- A1.8 The Act also contains lists of habitats and species (Section 74) for which conservation measures should be promoted, in accordance with the recommendations of the Convention on Biological Diversity (Rio Earth Summit) 1992.

National Planning Policy

National Planning Policy Framework (NPPF), July 2019

- A1.9 The updated National Planning Policy Framework (NPPF) was published in February 2019 and sets out the Government's planning policies for England and how these should be applied. It replaces the first National Planning Policy Framework published in March 2012. Paragraph 11 states that:

"Plans and decisions should apply a presumption in favour of sustainable development."

- A1.10 Section 15 of the NPPF (paragraphs 170 to 177) considers the conservation and enhancement of the natural environment. Paragraph 170 states that planning and decisions should contribute to and enhance the natural and local environment by:

"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); 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; and minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures"

- A1.11 Paragraph 171 states that plans should distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.
- A1.12 Paragraph 174 states that in order to protect and enhance biodiversity and geodiversity, plans should:
- "Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
 - promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity."



A1.13 When determining planning applications, Paragraph 175 states that local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- a) "if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons⁵⁸ and a suitable compensation strategy exists; and
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity."

A1.14 As stated in paragraph 176 the following should be given the same protection as habitats sites:

- a) "potential Special Protection Areas and possible Special Areas of Conservation;
- b) listed or proposed Ramsar sites; and
- c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites."

A1.15 Paragraph 177 states that the presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats site is being planned or determined.

Office of the Deputy Prime Minister (ODPM) Circular 06/2005: Biodiversity and Geological Conservation - Statutory Obligations and their Impact within the Planning System

A1.16 ODPM Circular 06/05 was prepared to accompany PPS9, however continues to be valid, and material in the consideration of planning applications since PPS9's replacement by the NPPF. ODPM Circular 06/05 provides guidance on applying legislation in relation to nature conservation and planning in England.

A1.17 Part I considers the legal protection and conservation of internationally designated sites (namely candidate Special Areas of Conservation (cSACs), SACs, potential Special Protection Areas (pSPAs), SPAs and Ramsar sites) and Part II considers the legal protection and conservation of nationally designated sites, namely Sites of Special Scientific Interest (SSSIs). Part III considers the protection of habitats and species outside of designated areas (particularly UK Biodiversity Action Plan species and habitats, which it states are capable of



being a material consideration in the preparation of local development documents and the making of planning decisions. Part IV considers species protected by law and states that the presence of a protected species is a material consideration in the consideration of a development proposal that, if carried out, would be likely to result in harm to the species or its habitat and that 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.

Local Planning Policy

Staffordshire Moorlands Local Plan

A1.18 The Staffordshire Moorlands Local Plan is a District wide development plan which replaces the Staffordshire Moorlands Core Strategy, Biddulph Area Action Plan (AAP) and previous Local Plan to provide a framework for delivering development for the period 2014 to 2033. The Local Plan was adopted on 9th September 2020.

Policy NE 2: Trees, Woodland and Hedgerows:

A1.19 The Council will protect existing trees, woodlands and hedgerows, in particular, ancient woodland, veteran trees and ancient or species-rich hedgerows from loss or deterioration. This will be achieved by:

- Requiring that existing woodlands, healthy trees and hedgerows be retained and integrated within a proposed development unless the need for, and benefits of, the development clearly outweigh their loss;
- Requiring new developments to provide tree cover that secures a good level of sustainability through tree retention, planting and soft landscaping, including where possible the on-site replacement of any trees that are removed with sufficient tree planting to replace or increase the canopy cover on-site as appropriate. Landscaping schemes will also be required to mitigate against negative landscape impact and complement the design of new development and make provision for future maintenance. Where it is not possible to secure this new or replacement tree planting within the site, the Council will work with applicants to ascertain if a suitable site(s) can be found off-site for replacement planting in the locality;
- Resisting development that would directly or indirectly damage existing ancient woodland, veteran trees and ancient or species-rich hedgerows.

A1.20 The Council will refer to its adopted Tree Strategy in the consideration of proposals; and will in general seek to retain as many trees and as much hedgerow on site as possible.

Policy C 3: Green Infrastructure:

A1.21 The Council will, through partnership working with local communities, organisations, landowners and developers, develop an integrated network of high quality and multi-functional green infrastructure that will:

- a) Support and improve the provision of open space, sport and recreational facilities for local communities and enhance the settings of neighbourhoods;
- b) Link existing and potential sites of nature conservation value and historic



landscape features, create new wildlife habitats, increase biodiversity, and increase tree cover where it is appropriate to the landscape;

c) Enhance the natural, man-made and cultural features that are crucial to the local landscape and create opportunities for the restoration of degraded landscapes and the enhancement of the urban fringe;

d) Mitigate the negative effects of climate change and maximise potential climate change benefits including effective flood risk and waterways management;

e) Create appropriate access for a wide range of users to enjoy the countryside, including improved linkages to and provision of formal and informal recreation opportunities and accessible woodland areas, encouraging walking, cycling and horse riding;

f) Contribute to the diversification of the local economy and tourist development through the enhancement of existing, and provision of new facilities.

The Council will identify, protect and enhance Green Infrastructure assets through the Green Infrastructure Strategy.

Staffordshire Moorlands Biodiversity Action Plan (SBAP)

A1.22 The Staffordshire Moorlands Biodiversity Action Plan list the following relevant habitats as priority habitats for the region:

- Lowland wood-pasture and parkland, native woodland, ancient/ diverse hedgerows, arable field margins, lowland acidic grassland, lowland calcareous grassland, lowland heath, lowland wet grassland, unimproved neutral grassland, inland saltmarsh, mosses, reedbeds, rivers and streams

A1.23 The SBAP also lists the following species of conservation concern:

- Brown hare, noctule bat, otter, pipistrelle bat, water vole, barn owl, farmland seed-eating bird species, grey partridge, lapwing, nightjar, skylark, snipe, woodcock, Atlantic salmon, grass snake, great crested newt, natterjack toad, bog bush-cricket, ground nesting solitary bees, small pearl-bordered fritillary, white-faced darter, white-clawed crayfish, dyer's greenweed, floating water-plantain, grass wrack pondweed, native black poplar, pink meadow cap.



Appendix 2: Photographs

Photograph 1 – Broad-leaved, Scattered Trees; Central Section of Site



Photograph 2 – Dry Ditch, South-Eastern Boundary of Site



Photograph 3 – Defunct Species-poor Hedgerow; Central Section of Site



Photograph 4 – Hedgerow with Trees, Species-rich; North-western Site Boundary



Photograph 5 - Improved Neutral Grassland; Northern Field, View Looking South, with Central Defunct Hedgerow in Background



Photograph 6 - Tall Ruderal Vegetation; North-Western Site Boundary



Plans:

Plan 1: Proposed Site Layout

Plan 2: 14001_P01: Habitat Features Plan



Key

Site Boundary

Existing Trees

Existing Hedgerows

Proposed Hedgerows

Green & Blue Infrastructure

Residential Development Parcels

Self/Custom Build

Gateways (Primary & Secondary)

Primary Footpath/Cycleways

Landmarks/Focal Points

Avenue

Street

Lane

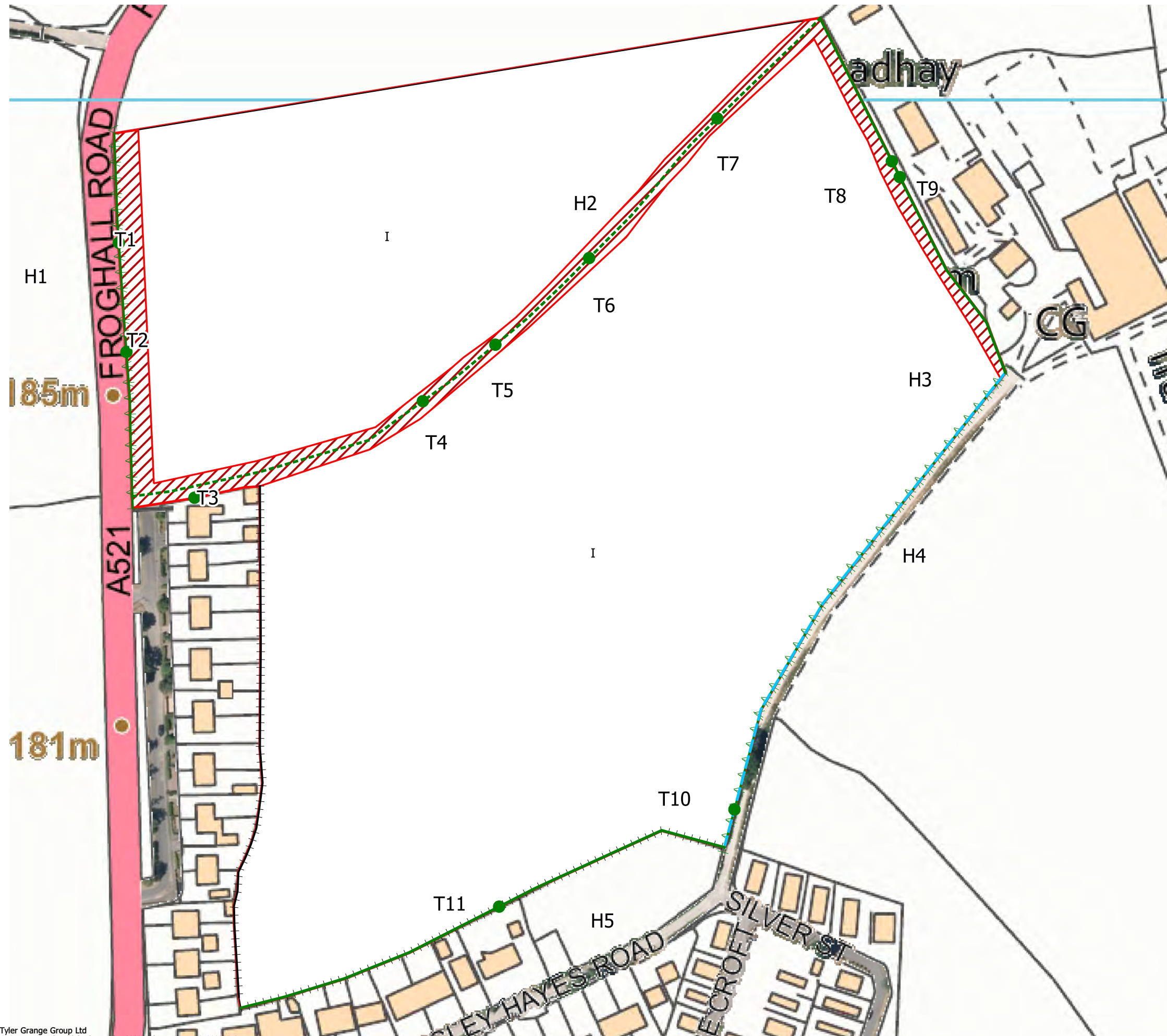
Shared Drive

Squares/Mews

Square

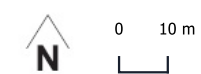
Proposed Trees (Indicative Locations)





Legend

-  Site boundary
-  Improved grassland
-  Tall ruderal
-  Hedge and trees - native species rich
-  Hedge defunct - species poor
-  Intact hedge - Species poor
-  Dry ditch
-  Fence



Project	Land to the east of Froghall Road
Drawing Title	Habitat Features Plan
Scale	As Shown (Approximate)
Drawing No.	14001/P02
Date	14.07.2021
Checked	TH/NB



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