AMENDED

KJ Ecology Ltd

Preliminary Ecological Appraisal and Biodiversity Net Gain for Main Street, Sturton, Brigg.

July 2021

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Executive Summary

Tom Strawson of Qudos Homes Ltd is planning to build 14 dwellings on land off Main Street, Sturton, Brigg. To comply with planning procedures Tom Strawson of Qudos Homes Ltd commissioned Kevin Johnson of KJ Ecology Ltd to carry out a Preliminary Ecological Appraisal on the 28th June 2021.

The proposed development site is on land South of Main Street, Sturton, Brigg (Grid Ref SE 9697 0447). The proposed development is 3.4kms to the South-west of the market town of Brigg and 6.6kms South-east of Scunthorpe.

The proposed development is on three horse paddocks. A 'L' shaped entrance paddock with a low stone wall with a wooden fence and metal gate next to Main Street. The West side has a Privet (*Ligustrum ovalifolium*) hedge around the neighbouring house before it becomes a post and wire fence. The Eastern boundary is a wooden panel fence. The Southern boundary is a line of trees with a mature Ash (*Fraxinus excelsior*) tree clad in Ivy (*Hedra helix*). The Eastern boundary is a mature Hawthorn (*Crataegus monogyna*) hedge with an entrance to the Eastern paddock. At the Southern end of this field is the floor remains of a stable block. This field has several mature fruit trees in such as Plum (*Prunus domestica*) at the Southern end. The Western paddock has mature Hawthorn hedges on the East and West side, the line of trees on the Northern boundary and no boundary on the Southern side. The Eastern paddock has a mature Hawthorn hedge on the North-western and Southern sides. The rest of the boundary is a mixture of garden boundaries from Wooden Panel fences to brick walls to Leyland Cypress (*x Cupressocyparis leylandii*) hedge.

The immediate vicinity consists of dwellings and gardens, a new housing development to the West, fields with hedges and a Woodland copse.

On the 1st July 2021 the following methodologies were carried out on for the proposed development dwelling at Main Street, Sturton, Brigg:

1. Desk top study – To establish what protected habitats and species are within 2kms of the proposed development on Main Street, Sturton, Brigg;
2. Preliminary Ecological Appraisal – Used to identify the likelihood of any protected species been found on the site, identify any features, habitats or species which would constitute potential constraints to any development which might take place, and to make recommendations for mitigation and/or further survey work, as appropriate. This survey included a nesting bird survey and a Preliminary Bat Roost Assessment;
3. Biodiversity Net Gain Assessment to establish if the proposals will leave the site in a better ecological state then they started out with.

The surveys found that:

1. The desk top study revealed that there are numerous Local Wildlife Sites (LWS) within 2kms of the proposed development, including Stainwells Road verge LWS. The project site is in the Manton and Twigmoor SSSI, Manton Stone Quarry SSSI and Cleatham Quarry SSSI Impact Risk Zone and the project will have no impact on the SSSIs. There are several protected species recorded within 2kms of the planned development from Brown Long-eared bat (*Plecotus auritus*) to Badger (*Meles meles*). The Birds of Conservation Concern Red Data list for the area includes species such as Skylark (*Alauda arvensis*) and Starling (*Sturnus vulgaris*). No protected plant species were recorded within the area;
2. The Preliminary Ecological Appraisal found a mature Ash tree clad in Ivy (Target Note 2) had a low possibility of being a bat roost. There was a mature Pear Tree (Target Note 1) which had plenty of opportunities for invertebrates and nesting birds with holes in where it had rotted away and missing bark. The mature hedges did have old birds' nests in such as Blackbird (*Turdus merula*). Numerous invertebrates were seen from Meadow Brown (*Maniola jurtina*) butterflies to White Tailed Bumble Bee (*Bombus lucorum*) feeding on the flowers for example White Clover (*Trifolium repens*);

3. The Biodiversity Net Gain shows that the original horse paddocks gave 2.35 habitat units. The construction of 14 dwellings and associated features including verges planted up with a lowland meadow mix as per Appendix 6 will give 2.94 habitat units. Overall this is an 25.17% increase in the biodiversity habitat units and exceeds the minimum 10% required. The original survey of the field gave 1.38 hedgerow units. The boundary hedgerow will remain the same but the Line of trees will be removed. The central hedgerow will have the Northern half removed and the Southern half will be reduced in height and size. This will see it being reduced from a moderate hedge to a poor condition hedge. 260m of new native mixed hedge will be planted, so giving an overall hedgerow units of 1.38. This is a 33.13% increase in hedgerow units and is greater than the 10% minimum required. At the moment the addition of bird boxes, bat boxes and insect houses are not taken into account by the biodiversity metric but the addition of them will enhance biodiversity on site. Overall these improvements will be beneficial for wildlife

From these survey results, KJ Ecology Ltd has no objections to the proposed 14 dwellings on horse paddocks off Main Street, Sturton, Brigg, as long as the following recommendations are followed:

1. If the proposed development is to start in the bird nesting season (March to mid-September), then a nesting bird survey will be required by an ecologist, as all nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended). If a nesting bird is found, then only when the ecologist has given the all clear can building take place in that area;
2. A large Ash Tree (Target Note 2) is clad in Ivy, so has a low bat potential. As all bats and their roosts are protected by the Wildlife and Countryside Act 1981 (as amended), then a bat survey will be required in the bat season (May to September) before the tree is cut down;
3. As bats, birds and insects are in the area it is suggested that some bat/ bird boxes and insect houses are situated around the site;
4. All new planting should be wildlife friendly. A variety of native species should be used from the meadow grassland on the nature reserves to the trees being planted to the native rich mix hedgerow;
5. To maintain the good score for Biodiversity Net Gain, a good meadow mix should be used. All new trees should be wildlife friendly such as Rowan (Sorbus aucuparia). These all need managing to maintain their wildlife potential.

Main Report

1 Introduction

1.1 Terms of Instruction

Tom Strawson of Qudos Homes Ltd is planning to build 14 dwellings on land off Main Street, Sturton, Brigg. To comply with planning procedures Tom Strawson of Qudos Homes Ltd commissioned Kevin Johnson of KJ Ecology Ltd to carry out a Preliminary Ecological Appraisal on the 28th June 2021.

The purpose of the Preliminary Ecological Appraisal is to identify the likelihood of any protected species been found on the site, identify any features, habitats or species which would constitute potential constraints to any development which might take place, and to make recommendations for mitigation and/or further survey work, as appropriate. This survey included a nesting bird survey and a Preliminary Bat Roost Assessment on any of the trees close to the site.

1.2 Site Location

The proposed development site is on land South of Main Street, Sturton, Brigg (Grid Ref SE 9697 0447) as shown in Map 1, (See Appendix 1). The proposed development is 3.4kms to the South-west of the market town of Brigg and 6.6kms South-east of Scunthorpe.

1.3 Site Description

The proposed development is on three horse paddocks (Photos 1 to 4, Appendix 2). A 'L' shaped entrance paddock with a low stone wall with a wooden fence and metal gate next to Main Street (Photo 5, Appendix 2). The West side has a Privet (*Ligustrum ovalifolium*) hedge around the neighbouring house before it becomes a post and wire fence. The Eastern boundary is a wooden panel fence (Photo 1, Appendix 2). The Southern boundary (Photo 6, Appendix 2) is a line of trees with a mature Ash (*Fraxinus excelsior*) tree clad in Ivy (*Hedra helix*). The Eastern boundary is a mature Hawthorn (*Crataegus monogyna*) hedge with an entrance to the Eastern paddock (Photo 2, Appendix 2). At the Southern end of this field is the floor remains of a stable block. This field has several mature fruit trees in (Photo 7, Appendix 2) such as Plum (*Prunus domestica*) at the Southern end. The Western paddock has mature Hawthorn hedges on the East and West side (Photos 3 and 8, Appendix 2), the line of trees on the Northern boundary (Photo 6, Appendix 2) and no boundary on the Southern side. The Eastern paddock (Photos 4 and 8, Appendix 2) has a mature Hawthorn hedge on the North-western and Southern sides. The rest of the boundary is a mixture of garden boundaries from Wooden Panel fences to brick walls to Leyland Cypress (*x Cupressocyparis leylandii*) hedge.

The immediate vicinity consists of dwellings and gardens, a new housing development to the West, fields with hedges and a Woodland copse.

1.4 Proposed Development

It is proposed to build 14 dwellings on land off Main Street, Sturton, Brigg as per planning application.

1.5 Report Limitations

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The ecological data in this report is only valid for 18 months from the survey date of 1st July 2021, as wildlife, especially Protected Species move about and natural conditions can change over time.

1.6 Background to KJ Ecology Ltd

On the 28th June 2021 KJ Ecology Ltd was appointed to carry out a Preliminary Ecological Appraisal (comprising of a nesting bird survey and a Preliminary Bat Roost Assessment) on land off Main Street, Sturton, Brigg. KJ Ecology Ltd is an independent Ecological Consultancy run by Kevin Johnson BSc Pgd PGCE MCIEEM (Member of the Charted Institute of Ecology and Environmental Management) and has several years of experience in environmental consultancy work. This work has ranged from working on the rail, roads, airports, house building projects, barn conversions and pipeline work. Kevin Johnson was initially an Ecology and Environmental Lecturer at various colleges and taught students how to carryout surveys and about the environment. Kevin Johnson then went on to work for a number of ecological consultancies such as Penny Anderson Associates, which is one of the original environmental consultancy companies and is well respected.

2 Methodology

2.1 Desk top study

The purpose of a desk study is to identify any statutory and non-statutory sites of nature conservation importance (such as Special Areas of Conservation (SACs), Sites of Special Scientific Interest (SSSIs) and County Wildlife Sites (CWSs)) and Protected Species within reasonable distance of the site.

The sources of information used in the desk top study included:

- Lincolnshire Environmental Records Centre;
- Multi-Agency Geographic Information for the Countryside (MAGIC);
- National Biodiveristy Network.

2.2 Preliminary Ecological Appraisal

A Preliminary Ecological Appraisal was carried out to Joint Nature Conservation Committee (JNCC) and Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines on the 1st July 2021 by Kevin Johnson of KJ Ecology Ltd who has numerous years' experience in carrying out Preliminary Ecological Appraisals. The perimeter of the site was walked then the area was walked in a zig-zag fashion, so that as much wildlife information could be recorded about the site. The immediate area around site was also surveyed for signs of wildlife and how they may influence the proposed development. Two hours were spent on the site looking for signs of wildlife and any species seen were recorded using the DAFOR scale. The DAFOR scale is a way of quantifying the abundance of species on the site as a percentage of the area. All fauna were given a Rare recording unless they were in abundance. The DAFOR scale used was:

Dominant	Most common species within the survey area >75%
Abundant	Really very common in the survey area.
Frequent	Found the species in several places in the survey area and there was usually more than just a few individuals in each of these places. Also if a species was very common in that part, with many individuals and covered a substantial area.
Occasional	Species that occur in several places in the survey area, but whose populations are usually not very big. Can be used if very common in one small area of habitat within the survey area, but occupies just a small area.
Rare	Species that occur as a small number of individuals in the survey area. This small number of individuals may be located in one place, or scattered over several different locations.

The survey included a nesting bird survey which involved looking out for signs of nests and other indications were also used such as families (adult birds with accompanying juveniles), juvenile birds, adults carrying food, adults carrying nesting material, and piles of droppings/ food remains.

A Preliminary Bat Roost Assessment was also undertaken and carried out to Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines 2016. Using ladders, binoculars and an endoscope, all trees were fully examined for potential access points, and any signs of bats. These signs included droppings, live or dead animals, urine or fur staining, feeding remains, and scratch marks. This work was undertaken by licenced bat worker Kevin Johnson (2018-34450-SCI-SCI) of KJ Ecology Limited who is fully

trained in bat surveys and has been carrying out bat surveys for over 10 years.

2.3 Biodiversity Net Gain

On the 1st July 2021 a baseline assessment was done for the site. This involves identifying each habitat including linear habitats and measuring the identified area. Each habitat was then evaluated for its habitat condition using The Biodiversity Metric 2.0 Technical Supplement and ecological connectivity. This information was then added to The Biodiversity Metric 2.0 (December 2019) created by DEFRA and Natural England. This programme automatically adds Habitat Distinctiveness and calculates the habitat units on site.

The proposed illustrative Masterplan was then used along with the recommendations of the Biodiversity Enhancement Plan to enter the data for the new proposed habitats into The Biodiversity Metric 2.0 (December 2019). This included habitat type, area in hectares, desired condition and ecological connectivity. Using this data and the baseline data, The Biodiversity Metric 2.0 (December 2019) would then calculate if there has been any Biodiversity Net Gain.

2.4 Survey Constraints

There were no constraints on the survey when it was carried out on the 1st July 2021. The weather was warm (14 - 17C) with 70 to 60% cloud cover and a Light North-north-westerly breeze.

3 Survey Results

3.1 Desk top study

The desk top study revealed the following results:

3.1.1 Habitats

The desk top study revealed that there are numerous Local Wildlife Sites (LWS) within 2kms of the proposed development (Map 2, Appendix 1). These include Stainwells Road verge LWS and various Priority Habitats for example Traffords Covert – Deciduous Woodland BAP as listed in Appendix 3. The proposed development will have no impact on these sites. The project site is in the Manton and Twigmoor SSSI, Manton Stone Quarry SSSI and Cleatham Quarry SSSI Impact Risk Zone and the project will have no impact on the SSSIs.

'Impact Risk Zones are a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts' (Natural England, 2021). The potential risks at the proposed development site to Manton and

Twigmoor SSSI, Manton Stone Quarry SSSI and Cleatham Quarry SSSI are detailed in Appendix 4. The risks include helipad and air pollution from livestock, and poultry. The proposed development site for 14 dwellings on land to the South of Main Street, Sturton, Brigg will not activate any of these criteria, so will not have an impact on the SSSI.

The site is within a Nitrogen Vulnerable Zone for Surface and Ground Water. There are numerous habitats within the area which can support or provide opportunities for wildlife, including aquatic habitats, woodland, hedges, farmland, buildings and gardens.

3.1.2 Protected Species

There are several protected species recorded within 2kms of the planned development on Main Street, Sturton, Brigg as shown in Appendix 3 and includes Brown Long-eared bat (*Plecotus auritus*) to Badger (*Meles meles*). The Birds of Conservation Concern Red Data list for the area includes species such as Skylark (*Alauda arvensis*), Starling (*Sturnus vulgaris*) and House Sparrow (*Passer domesticus*). No protected plants were recorded within the area.

Other species can utilise the site such as Swifts (Apus apus) which are on the Birds of Conservation Concern Amber list. Other declining species have been recorded within the area and include the Hedgehog (*Erinaceus europaeus*).

3.2 Preliminary Ecological Appraisal

A Preliminary Ecological Appraisal was carried out on the 1st July 2021 by Kevin Johnson BSc Pgd PGCE MCIEEM, who has numerous years' experience in carrying out survey work. The species results of the Preliminary Ecological Appraisal can be found in Appendix 5 and a UK Habitat map of the site was produced (Map 3, Appendix 1).

The Preliminary Ecological Appraisal found that the fields were a False Oat Grass (*Arrhenatherum elatius*) dominated field interspersed with the occasional herbaceous plant for example Hogweed (*Heracleum sphondylium*). Skylarks were heard singing in the neighbouring fields. The mature Ash tree clad in Ivy (Target Note 2) (Photo 9, Appendix 2) had a low possibility of being a bat roost. There was a mature Pear Tree (Target Note 1) which had plenty of opportunities for invertebrates (Photo 10, Appendix 2) and nesting birds with holes in where it had rotted away and missing bark. The mature hedges did have old birds' nests in such as Blackbird (*Turdus merula*). Numerous invertebrates were seen from Meadow Brown (*Maniola jurtina*) butterflies to White Tailed Bumble Bee (*Bombus lucorum*) feeding on the flowers for example White Clover (*Trifolium repens*). There were no other signs of protected species on site.

3.3 Biodiversity Net Gain

A Biodiversity Net Gain Assessment was carried out on the 1st July 2021 and updated on the 14th July 2022 for land off Main Street, Sturton, Brigg. The results from the Biodiversity Metric 2.0 (December 2019) can be seen with the associated programme.

As it is a small site and the data has to be added as hectares, the figures were rounded up to the third decimal place. The ex-horse paddocks were False Oat Grass dominant with patches of undesirable species for example Common Nettle (*Urtica dioica*) and Broad-leaved Dock (*Rumex obtusifolius*). Both species indicative of horse paddocks. These fields have been managed for horses and so the fields are classified as Modified grassland. There are a range of other species besides White Clover etc, such as Black Knapweed (*Centaurea nigra*) which are good for wildlife but the cover of Undesirable species is more than 25%. This means that the Habitat condition can only be classed as Poor. There is a small orchard with Plum and Pear trees. As these trees are within the village the orchard is classified as Urban – Orchard. These were mature half-standards with the same grass mixture as the paddocks. There was no evidence of browsing and the trees had plenty of dead wood, especially Target Note 1, which is a mature Pear tree which had a limb taken or broken off and has rotted away. This has created a great opportunity for invertebrates. For this reason, the orchard areas have been classed as Fairly Poor for their Habitat Condition. There is a small concrete area which used to have the stables on. This has been classified as Urban - Developed land; Sealed Surface. This has no habitat condition so was recorded as N/A – Other.

On the habitat distinctiveness scale the paddocks have a Low distinctiveness score and the Orchards have a Medium distinctiveness scale, due to the number of species they support. As per guidelines, this means that they have a low Ecological Connectivity. The whole area is not within the local strategy, so has low strategic significance. When this data is added to The Biodiversity Metric 2.0 (December 2019), it gave 2.35 habitat units.

The boundary will remain the same as it belongs to the neighbours. The line of trees is predominantly Mature Ash with some Hawthorn. As the gaps in the hedge are greater than 10%, then the Habitat Condition can only be Poor. The Western hedge is a mixture of native Hedgerow species such as Hawthorn with fruit trees in, for example Apple. The mixture of species classifies this hedge as Native Species Rich Hedgerow with trees. The hedge has a height of over 2m and about 2m in depth with no disturbed ground, so is classified as being of Moderate Condition. The central hedge and the Southern boundary hedge are Hawthorn hedgerows that are both over 2m high and 2m

wide with undisturbed ground. This means that they are classified as Native Hedgerow and their Habitat Condition is Moderate.

The hedgerows have a Low and Medium habitat distinctiveness score, so under the guidelines they have a Low Ecological Connectivity. The whole area is not within the local strategy, so has low strategic significance. When this data is added to The Biodiversity Metric 2.0 (December 2019), it gave 1.04 hedgerow units for the site.

On the proposed plans, 14 houses with garages/ gardens will be on the site, along with an access road. The access road (Habitat condition: Urban - Built linear features) will have no ecological value or ecological connectivity. The houses, garages and gardens will be a mixture of habitats. The houses and garages can be used to provide nesting sites for birds and roost sites for bats, yet at the same time have no ecological value as no plants can grow on them. This is the same for the garages and driveways. The gardens will vary in habitat. Some will just be grass and others will be wildlife havens full of nectar rich plants etc. The owners will be encouraged to plant wildlife friendly plants to encourage insects. This range of habitats gives the classification of Urban - Suburban/ mosaic of developed/ natural surface. This has a low distinctiveness but if the owners are encouraged to plant wildlife friendly plants then a Fairly Poor condition can be reached. Four trio's of traditional local variety fruit trees will be planted to replace the lost orchard which will provide nectar for insects and fruit for owners/birds/insects and will be good for wildlife. These will be classed as Urban - Orchard. 38 medium trees will be planted on site and as it is in an urban setting will be classed as Urban – Street tree. If looked after these will attain a Moderate condition. Along the road, the verges will be planted up with wildflower mix (Appendix 6) which will give a Lowland meadow feel. These areas will be classified as Grassland – Lowland meadows and will be managed appropriately. If the verges are managed appropriately, they should achieve a Moderate condition. The creation of the 14 houses and its associated features will create 2.94 Habitat units. This is a 25.17% increase in Habitat units and meets the minimum 10% required.

The Line of Trees will be removed to make way for the houses and the central hedge will have the Northern part removed, and the Southern part will be reduced in height, and width. This will take the central hedge from Moderate condition to Poor condition. The Western and Southern hedges will be retained as they are. New native mixed hedges will be planted around the site along the road creating a total of 260m of new hedge. As the hedges will not have the height and width etc, they will only attain a Poor Habitat Condition. Overall these changes will create 1.38 Hedgerow units

which is a 33.13% increase in Hedgerow units and meets the minimum 10% increase required.

4 Evaluation and Recommendations

4.1 Evaluation

From the Desktop Ecological Assessment the proposed 14 dwellings on a field off Main Street, Sturton will have no effect on any wildlife sites such as Scawby Park LWS and BAP site. This is mainly due to the type of development (dwellings on a grass field) and the distance between the development, and the wildlife sites. The proposed development is in the Manton and Twigmoor SSSI, Manton Stone Quarry SSSI and Cleatham Quarry SSSI Impact Risk Zone and the project will not trigger any of the criteria, so will have no impact on the SSSIs.

The desktop study revealed several protected species within 2kms of the site from Brown Long-eared bat to Badger. The Preliminary Ecological Appraisal found no signs of Protected species on site. There is an Ash tree covered in Ivy (Target Note 2) which has low bat potential. As all bats and their roosts are protected under the Wildlife and Countryside Act 1981 (as amended) a bat survey will be required on the tree between May and September before it can be removed.

There are some Birds of Conservation Concern Red Data species within the area such as Skylark and they do utilise the neighbouring grass fields. This will not affect the development but the Preliminary Ecological Appraisal did find old nests in the hedges. As all nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended), then if works are to commence during the bird nesting season (March to mid-September), then a nesting bird survey will be required. Works can only commence within an area, once the ecologist has given the all clear that there are no nesting birds.

Numerous invertebrates were seen on the site, so the planned planting of lowland meadow mixture for the grass verges, native rich mix hedgerows and flowering trees will be beneficial for invertebrates. This planting regime will also benefit other wildlife such as birds which will forage on the invertebrates and the fruits.

The Biodiversity Net Gain shows that the original horse paddocks gave 2.35 habitat units. The construction of 14 dwellings and associated features including verges planted up with a lowland meadow mix as per Appendix 6 will give 2.94 habitat units. Overall this is an 25.17% increase in the biodiversity habitat units and exceeds the minimum 10% required. The original survey of the field gave 1.38 hedgerow units. The boundary hedgerow will remain the same but the Line of trees will be removed. The central hedgerow will

have the Northern half removed and the Southern half will be reduced in height and size. This will see it being reduced from a moderate hedge to a poor condition hedge. 260m of new native mixed hedge will be planted, so giving an overall hedgerow units of 1.38. This is a 33.13% increase in hedgerow units and is greater than the 10% minimum required. At the moment the addition of bird boxes, bat boxes and insect houses are not taken into account by the biodiversity metric but the addition of them will enhance biodiversity on site. Overall these improvements will be beneficial for wildlife.

4.2 Recommendations

KJ Ecology Ltd has no objections to the proposed 14 dwellings on horse paddocks off Main Street, Sturton, Brigg, as long as the following recommendations are followed:

1. If the proposed development is to start in the bird nesting season (March to mid-September), then a nesting bird survey will be required by an ecologist, as all nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended). If a nesting bird is found, then only when the ecologist has given the all clear can building take place in that area;
2. A large Ash Tree (Target Note 2) is clad in Ivy, so has a low bat potential. As all bats and their roosts are protected by the Wildlife and Countryside Act 1981 (as amended), then a bat survey will be required in the bat season (May to September) before the tree is cut down;
3. As bats, birds and insects are in the area it is suggested that some bat/ bird boxes and insect houses are situated around the site;
4. All new planting should be wildlife friendly. A variety of native species should be used from the meadow grassland on the nature reserves to the trees being planted to the native rich mix hedgerow;
5. To maintain the good score for Biodiversity Net Gain, a good meadow mix should be used. All new trees should be wildlife friendly such as Rowan (*Sorbus aucuparia*). These all need managing to maintain their wildlife potential.

5 Legislation and Policy Guidance

In the 1960s and 1970s concerns were raised about the loss of wildlife habitats and species. This led to The Convention on the Conservation of European Wildlife and Natural Habitats 1979 (Berne Convention) which came into force in 1982. The aim of this Convention is to conserve wild flora and fauna and their natural habitats; Promote cooperation between countries in their conservation efforts and, give particular emphasis to endangered and vulnerable species including migratory species.

In the UK this Convention was implemented by the creation of the Wildlife and Countryside Act 1981 (as amended). This Act was further strengthened by the Countryside and Rights Of Way Act 2000.

The UK has signed up to the EEC Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna 1992 (Habitats Directive). The aim of the Habitats Directive is to contribute towards ensuring bio-diversity by means of the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States. The UK transposed the Habitats Directive into The Conservation (Natural Habitats, &c.) Regulations 1994. To consolidate all the various amendments made to this Act, The Conservation of Habitats and Species Regulations 2017 has been introduced.

The UK has also signed up to The Convention on the Conservation of Migratory species of Wild Animals 1979 (The Bonn Convention) which came into force in 1983 and so is therefore party to various agreements.

5.1 Protected Species

5.1.1 European Protected Species

Water Voles (*Arvicola amphibius*), Otters (*Lutra lutra*), Bats and Great Crested Newts (*Triturus cristatus*) are classed as European Protected Species. All European Protected Species are protected under Schedules 5 and 6 of the Wildlife and Countryside Act 1981 (as amended) and are also protected under Schedule 2 of the Conservation of Habitats and Species Regulations 2012. They are listed under Appendix III of the Bern Convention and Annex IV of the EC Habitats Directive. These species also have their habitats listed under Appendix II of The Bonn Convention and therefore the UK has an obligation to protect their habitat, including links to important feeding areas.

In relation to a development these laws and regulations make it illegal for a person to:

- Intentionally or recklessly kill, injure or take a European Protected Species;
- Intentionally or recklessly -
  - Damage or destroy any structure or place which any European Protected Species uses for shelter or protection;
  - Disturbs any such European Protected Species while it is occupying a structure or place which it uses for shelter or protection; or
  - Obstructs access to any structure or place which any such European Protected Species uses for shelter or protection;

- Deliberately or recklessly disturbs wild animals of any species in such a way as to be likely significantly to affect :
  - The ability of any significant group of animals to survive, breed, or rear or nurture their young; or
  - The local distribution or abundance of that species;
- Possess or transport European Protected Species or any part of a them, unless acquired legally;
- Sell (or offer for sale) or exchange European Protected Species, or parts of European Protected Species.

This legislation applies, regardless of the life stage (including eggs).

A European Protected Species Licence is required to carry out any activity that would otherwise involve committing an offence.

5.1.2 Amphibians

All amphibians are protected under Schedule 5 of the Wildlife and Countryside Act, 1981 (as amended). Under Section 9(4b and c) of the Wildlife and Countryside Act 1981 (as amended), it is an offence to :

- Disturb any GCN while it is occupying a structure or place which it uses for shelter or protection; or
- Obstructs access to any structure or place which a GCN uses for shelter or protection.

Under Section 9(5a and b) of the Wildlife and Countryside Act 1981 (as amended) it is an offence to :

- Possess or transport all Amphibians or any part of a them, unless acquired legally;
- Sell (or offer for sale) or exchange Amphibians, or parts of Amphibians.

GCN and Pool Frog (*Rana lessonae*) are also protected under Schedule 2 of The Conservation of Habitats and Species Regulations 2010. To avoid prosecution under these laws during development of the site, all precautions have to be taken to ensure that no intentional harm is done to these species and any disturbance or obstruction of access is done under licence.

5.1.3 Badgers

Badgers (*Meles meles*) are fully protected in the UK by the Protection of Badgers Act, 1992 and by Schedule 6 of the Wildlife and Countryside Act, 1981(as amended). This makes it an offence to:

- Wilfully kill, injure, take, possess or cruelly treat a badger
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett.

Disturb a badger while it is occupying a sett. *(Disturbance could include digging or scrub clearance within 30m of the sett, and*

therefore advice should be sought before carrying out such activities).

5.1.4 Birds

All wild birds are protected under Part 1: 1(1) of the Wildlife and Countryside Act, 1981 which states that:

1 Protection of wild birds, their nests and eggs.

(1)Subject to the provisions of this Part, if any person intentionally or recklessly —

(a) kills, injures or takes any wild bird;

(b) takes, damages, destroys or otherwise interferes with the nest of any wild bird while that nest is in use or being built; or

(ba) at any other time takes, damages, destroys or otherwise interferes with any nest habitually used by any wild bird included in Schedule A1;

(bb) obstructs or prevents any wild bird from using its nest;

(c) takes or destroys an egg of any wild bird,

they shall be guilty of an offence.

To avoid committing an offence no works should be carried out on a structure/ feature that is being used by nesting birds. Nesting is deemed to be over when the young have fully fledged.

Certain species which are listed in Schedule 1 of the Wildlife and Countryside Act receive special protection. In these cases any form of intentional or reckless disturbance when they are nesting or rearing dependant young, constitutes an offence.

5.1.5 Plants

Schedule 8 of the Wildlife and Countryside Act, 1981 (as amended) lists a range of rare plants that need protection such as Early Spider Orchid (*Ophrys sphegodes*) and wild plants exploited for commercial reasons for example English Bluebells. Section 13 of the Wildlife and Countryside Act, 1981 (as amended) states that it is illegal to:

1(a) Intentional picking, uprooting or destruction of plants on Schedule 8;

1(b) Unauthorised (by landowner) intentional uprooting of any wild plant not included in Schedule 8;

2(a) Selling, offering for sale, possessing or transporting for the purpose of sale, any plant (live or dead, part or derivative) on Schedule 8;

2(b) Advertising for buying or selling such things.

5.1.6 Reptiles

Common lizard (*Zootoca vivipara*), Slow worm (*Anguis fragilis*), Adder (*Vipera berus*) and grass snake are all protected under Schedule 5 of the Wildlife and Countryside Act, 1981 against

intentional injuring, killing or selling. For development sites in England, Wales or Scotland, to avoid prosecution under the Wildlife and Countryside Act 1981 (as amended), wherever works will impact on slow worms, common lizards, adders and/or grass snakes there must be evidence that every reasonable effort was made to avoid breaking the law – including proof of adequate surveys and mitigation plans. Mitigation measures should, ideally, be agreed with Natural England.

Only the Sand Lizard (*Lacerta agilis*) and Smooth Snake (*Coronella austriaca*) are fully protected under the Wildlife and Countryside Act, 1981 (Section 9) and Regulation 9 of the Conservation of Habitats and Species Regulations 2010 against :

- Killing, injuring or capture;
- Damaging or destroying a breeding or resting site;
- Intentionally obstructing access to a place used for shelter;
- Keeping, transporting or selling.

This means that not only are the animals themselves protected but so are their habitats.

5.2 National Planning Policy Framework

The National Planning Policy Framework (NPPF) was published on the 27th March 2012 and updated on the 24th July 2018 and further updated on the 19th February 2019. The NPPF sets out the Government's planning policies for England and how these should be applied. As this is an ecological report, the ecological side of the NPPF will be dealt with here. One part of the NPPF is in achieving sustainable development (Chapter 2) and how to secure net gains through the implementation of plans and the application policies with applications in presumption on favour of sustainable development.

Paragraph 8 (iii) states - **An environmental objective** – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

To achieve sustainability and Biodiversity Net Gain, planning policies should make effective use of land, and conserve, and enhance the Natural Environment. Effective use of land can be achieved by:

- Supporting developments of underutilised land and buildings;
- Recognising the multiple benefits from both urban and rural land;
- Developments that would enable new habitat creation or improve public access to the countryside;

- Recognise that some undeveloped land can perform many functions, such as for wildlife, recreation, flood risk mitigation, cooling/shading, carbon storage or food production.

To conserve and enhance the Natural Environment, leading to Biodiversity Net Gain, planning policies and decisions should contribute to and enhance the natural and local environment by:

- Protecting and enhancing the intrinsic value and beauty of the countryside e.g. Areas of Outstanding Beauty and Nature Reserves (Local and National);
- Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. These include Wildlife Corridors, the Stepping Stones that connect them and areas identified by national, and local partnerships for habitat management, enhancement, restoration or creation;
- 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.

6 References

Chartered Institute of Ecology and Environmental Management (2012) Technical Guidance Series : Guidelines for Preliminary Ecological Appraisal, [Online], CIEEM. Available at: http://www.cieem.net/ [Members only]

Collins, J (ed.) (2016) Bat Surveys for Professional Ecologists : Good Practice Guidelines – 3rd Edition, London, BCT

Convention on the Conservation of European Wildlife and Natural Habitats, Bern, 19.IX.1979, Brussels, EC

Convention on the Conservation of Migratory Species of Wild Animals, UNEP/CMS, Bonn

Countryside Rights of Way Act 2000 (c.37) London: HMSO

DEFRA (2021) MAGIC, [Online] DEFRA. Available at: http://magic.defra.gov.uk/MagicMap.aspx [accessed 15th July 2021]

Gilbert G, Gibbons DW, Evans J. (1998) *Bird Monitoring Methods: Breeding Bird Survey* (pages 389-393). RSPB

Joint Nature Conservation Committee (2010) Handbook for Phase 1 habitat survey: A technique for environmental audit, JNCC, Peterborough

Ministry of Housing, Communities and Local Government (2019) National Planning Policy Framework, Available at https://www.gov.uk/guidance/national-planning-policy-framework [accessed 1st July 2019]

NBN (2021) NBN Atlas, [Online] NBN. Available at: https://records.nbnatlas.org/ [accessed 15th July 2021]

Ordnance Survey (2021) Getamap, [Online] Ordnance Survey. Available at: https://getamap.ordnancesurvey.co.uk [accessed 15th July 2021]

Protection of Badgers Act 1992 (c.51) London: HMSO

The Conservation of Habitats and Species Regulations 2017 (No. 1012) London: HMSO

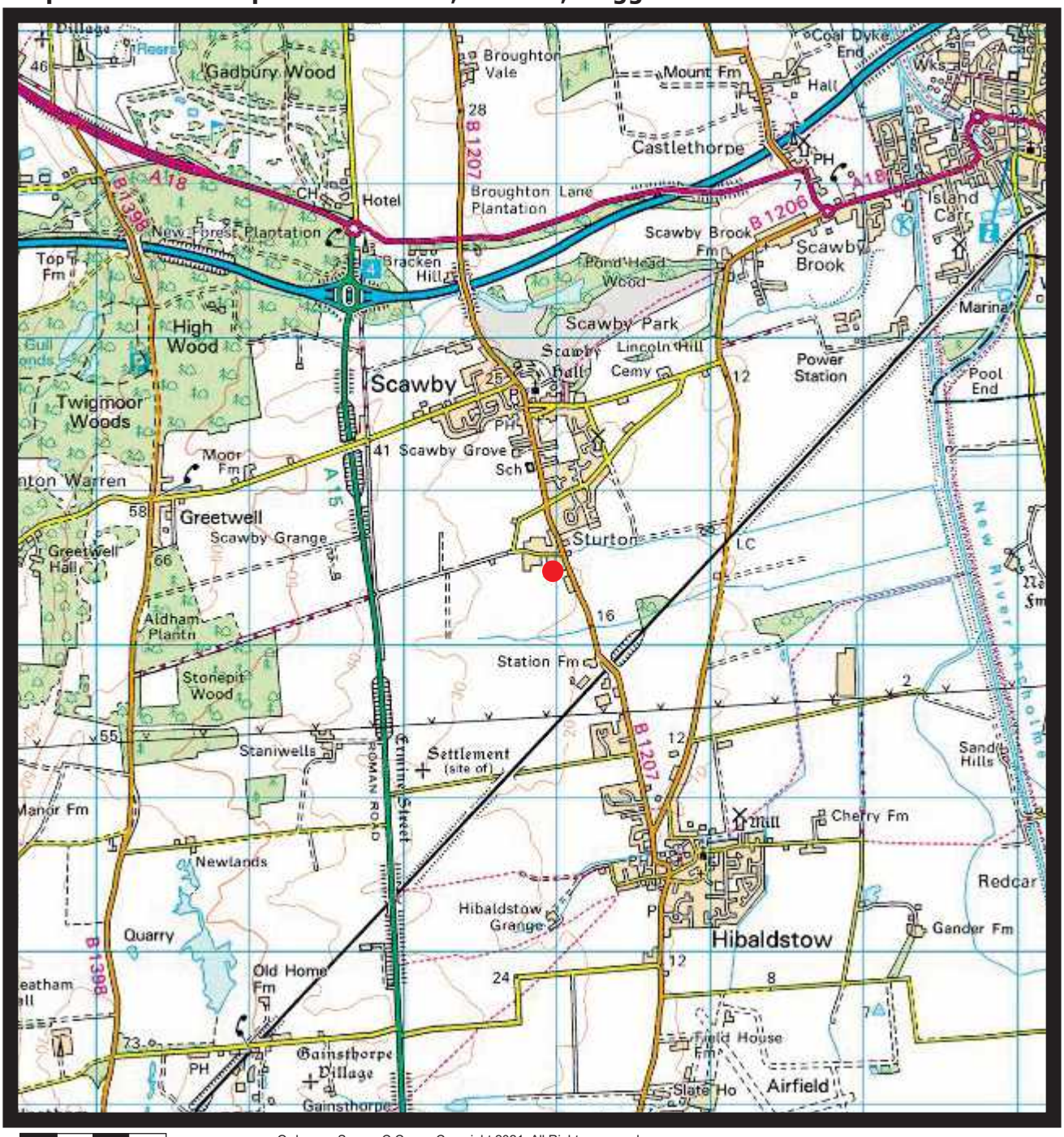
Wildlife and Countryside Act 1981 (as amended) 2004 (c.39) London: HMSO

Appendicies

Appendix 1

Maps

Map 1: Location Map of Main Street, Sturton, Brigg.



0 0.5 1km

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Licence Number 100020449. Plotted Scale 1:40,000

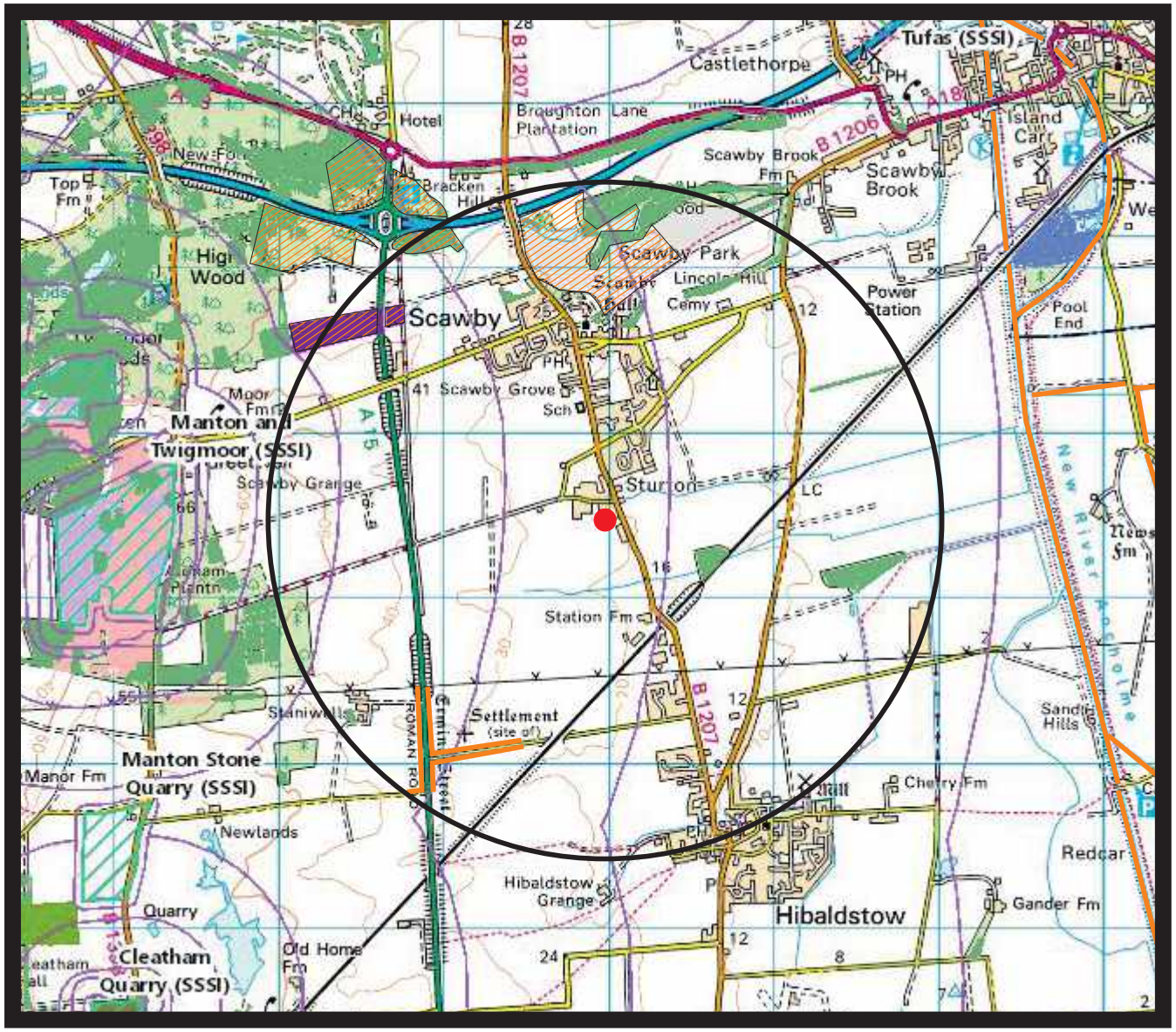
Site Plan 1:40,000

Legend

Location of site

KJ Ecology Ltd
Drawn by : KJ
Date : 16/07/2021

Map 2: Location of Conservation sites in relation to Main Street, Sturton, Brigg.



Legend

- Location of site
- 2km zone around site
- SSSI
- SSSI Impact Risk Zone
- Priority Habitat Traditional Orchard
- Priority Habitat Deciduous Woodland
- Priority Habitat Lowland Dry Acid Grassland
- Priority Habitat Floodplain Grazing Marsh
- Priority Habitat Lowland Heathland
- Priority Habitat Purple Moor Grass and Rush Pasture
- Local Wildlife Site
- Local Linear Wildlife Site

0 0.5 1km

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Site Plan 1:40,000

KJ Ecology Ltd
Drawn by : KJ
Date : 16/079/2021

KJ Ecology Ltd
Kevin Johnson BSc Pgd PGCE MCIEEM

Main St, Sturton
PEA & BNG Survey

Map 3: Habitat Map of Main Street, Sturton, Brigg.

0 10 20m

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Site Plan 1:1,000

Legend

- Modified Grassland
- Orchard
- Line of trees
- Stable base
- Priority Habitat Hedgerow
- Target Note

KJ Ecology Ltd
Drawn by : KJ
Date : 16/07/2021

Appendix 2

Photos

Photos for Main Street, Sturton, Brigg.

Photo 1: View South of entrance paddock

Photo 2: View East at South end of Entrance paddock

Photo 3: View West of West paddock

Photo 4: View North of East Paddock

Photo 5: North boundary

Photo 6: Boundary between entrance paddock and West paddock

	
Photo 7: Plum tree in entrance paddock	Photo 8: View South of East paddock
	
Photo 9: Target Note 2	Photo 10: Target Note 1

Appendix 3

Protected Sites and Species

Protected Sites within 2kms of Main Street, Sturton, Brigg

Site Name	Level of Protection
Staniwells Road verges	LWS
Scawby Park	LWS & BAP
Top Farm Fields	LWS & BAP
First Wood South	LWS & BAP
First Wood North	LWS & BAP
Beckingham Shaw Wood	LWS & BAP
Beaulah Wood	LWS
Railway Plantation	BAP
Traffords Covert	BAP

Protected Species within 2kms of Main Street, Sturton, Brigg

Common Name	Scientific Name
Amphibians	
Common Toad	
Common Frog	
Great Crested Newt	
Mammals	
Otter	*Lutra lutra*
Badger	*Meles meles*
Daubenton's Bat	*Myotis daubentonii*
Whiskered/Brandt's Bat	*Myotis mystacinus/ Myotis brandtii*
Natterer's Bat	*Myotis nattereri*
Noctule Bat	*Nyctalus noctula*
Common Pipistrelle Bat	*Pipistrellus pipistrellus*
Soprano Pipistrelle Bat	*Pipistrellus pygmaeus*
Brown Long-eared Bat	*Plecotus auritus*
Reptiles	
Grass-snake	
Adder	
Birds	
Lesser Redpoll	*Acanthis cabaret*
Skylark	*Alauda arvensis*
White-fronted Goose	*Anser albifrons*
Tree Pipit	*Anthus trivialis*
Ringed Plover	*Charadrius hiaticula*
Hen Harrier	*Circus cyaneus*
Cuckoo	*Cuculus canorus*
Lesser Spotted Woodpecker	*Dendrocopus minor*
Corn Bunting	*Emberiza calandra*
Yellowhammer	*Emberiza citrinella*
Herring Gull	*Larus argentatus*
Grasshopper Warbler	*Locustella naevia*
Grey Wagtail	*Motacilla cinerea*
Yellow Wagtail	*Motacilla flava*
Spotted Flycatcher	*Muscicapa striata*
Curlew	*Numenius arquata*
Whimbrel	*Numenius phaeopus*
House Sparrow	*Passer domesticus*
Tree Sparrow	*Passer montanus*
Grey Partridge	*Perdix perix*
Black Redstart	*Phoenicurus ochruros*
Willow Tit	*Poecile montana*
Marsh Tit	*Poecile palustris*

Woodcock	*Scolopax rusticola*
Turtle Dove	*Streptopelia turtur*
Starling	*Sturnus vulgaris*
Redwing	*Turdus iliacus*
Song Thrush	*Turdus philomelos*
Fieldfare	*Turdus pilaris*
Mistle Thrush	*Turdus viscivorus*
Barn Owl	*Tyto alba*
Lapwing	*Vanellus vanellus*

Appendix 4

SSSI Impact Risk Zone Assessment

SSSI Impact Risk Zone Assessment for Main Street, Sturton, Brigg

Development Category	If the development is highlighted below then the Local Planning Authority should consult Natural England
All Consultations	
Infrastructure	Airports, helipads and other aviation proposals.
Wind & Solar Energy	
Minerals, Oil & Gas	Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction
Rural Non-Residential	
Residential	
Rural Residential	
Air Pollution	Livestock & poultry units with floorspace > 500m², slurry lagoons > 750m² & manure stores > 3500t).
Combustion	
Waste	
Composting	
Discharges	
Water Supply	

(Natural England, 2021)

Appendix 5

Preliminary Ecological Appraisal Results

Survey Results for Main Street, Sturton, Brigg.

Common Name	Scientific Name	DAFOR
Trees		
Lombardy Poplar	*Populus nigra cv 'Italica'*	R
Garden Plum	*Prunus domestica*	O
Garden Pear	*Pyrus communis sp.*	O
Ash	*Fraxinus excelsior*	O
Apple	*Malus domestica*	O
Leyland Cypress	*x Cupressocyparis leylandii*	O
Shrubs		
Bramble	*Rubus fruticosus agg.*	O
Ivy	*Hedra helix*	O
Elder	*Sambucus nigra*	O
Hawthorn	*Crataegus monogyna*	O
Blackthorn	*Prunus spinosa*	O
Dog Rose	*Rosa canina agg.*	R
Herbaceous plants		
White Clover	*Trifolium repens*	O
Ribwort Plantain	*Plantago lanceolata*	O
Hedgerow Crane's-bill	*Geranium pyrenaicum*	R
Common Nettle	*Urtica dioica*	O
Broad-leaved Dock	*Rumex obtusifolius*	O
Daisy	*Bellis perennis*	O
White Dead-nettle	*Lamium album*	R
Greater Plantain	*Plantago major*	R
Hairy Tare	*Vicia hirsute*	R
Creeping Buttercup	*Ranunculus repens*	O
Tufted Vetch	*Vicia cracca*	R
Selfheal	*Prunella vulgaris*	R
Hogweed	*Heracleum sphondylium*	O
Creeping Thistle	*Cirsium arvense*	O
Perennial Sow-thistle	*Sonchus arvensis*	R
Nipplewort	*Lapsana communis*	R
Goosegrass	*Gallium aparine*	R
Prickly Sow-thistle	*Sonchus asper*	R
Hedge Mustard	*Sisymbrium officinale*	R
Dandelion	*Taraxacum officinale agg*	O
Germander Speedwell	*Veronica chamaedrys*	R
Lesser Burdock	*Arctium minus*	R
Scentless Mayweed	*Tripleurospermum inodorum*	R
Upright Hedge-parsley	*Torillis japonica*	R
Cut-leaved Crane's-bill	*Geranium dissectum*	R
Groundsel	*Senecio vulgaris*	R
Knotgrass	*Polygonum aviculare*	R
Common Field Speedwell	*Veronica persica*	R
Common Mallow	*Malva sylvestris*	R
Ragwort	*Senecio jacobaea*	O
White Bryony	*Bryonia dioica*	O
Spear Thistle	*Cirsium vulgare*	R
Common Mouse-ear	*Cerastium holosteoides*	R
Ground Ivy	*Glechoma hederacea*	R
Bristly Ox-tongue	*Helminthotheca echioides*	O
Cow Parsley	*Anthriscus sylvestris*	R

Hedge Woundwort	*Stachys sylvatica*	R
Hop Trefoil	*Trifolium campestre*	R
Black Knapweed	*Centaurea nigra*	R
Large Bindweed	*Calystegia sylvatica*	R
Spearmint	*Mentha spicata*	R
Field Bindweed	*Convolvulus arvensis*	R
Red Clover	*Trifolium pratense*	R
Common Chickweed	*Stellaria media*	R
Weld	*Reseda luteola*	R
Goat's-beard	*Tragopogon pratensis agg.*	R
Rhubarb	*Rheum rhabarbarum*	R
Black Horehound	*Ballota nigra*	R
Ground Elder	*Aegopodium podagraria*	R
Common Poppy	*Papaver rhoeas*	R
Grasses		
False Oat Grass	*Arrhenatherum elatius*	D
Red Fescue	*Festuca rubra*	F
Yorkshire Fog	*Holcus lanatus*	O
Perennial Ryegrass	*Lolium perenne*	O
Barren Brome	*Bromus sterilis*	O
Cocksfoot	*Dactylis glomerata*	O
Field Brome	*Bromus arvensis*	O
Small-leaved Timothy Grass	*Phleum bertolonii*	R
Meadow Foxtail	*Alopecurus pratensis*	R
Mammals		
Rabbit (signs)	*Oryctolagus cuniculus*	R
Birds		
Barn Swallow	*Hirundo rustica*	R
Carrion Crow	*Corvus corone*	R
Skylark	*Alauda arvensis*	R
Chiffchaff	*Phylloscopus collybita*	R
Goldfinch	*Carduelis carduelis*	R
Wood Pigeon	*Columba palumbus*	R
Blackbird	*Turdus merula*	R
Yellowhammer	*Emberiza citrinella*	R
Wren	*Troglodytes troglodytes*	R
House Sparrow	*Passer domesticus*	R
House Martin	*Delichon urbicum*	R
Butterflies		
Meadow Brown	*Maniola jurtina*	R
Small Tortoiseshell	*Aglais urticae*	R
Red Admiral	*Vanessa atalanta*	R
Ringlet	*Aphantopus hyperantus*	R
Other Insects		
Common Carder Bee	*Bombus pascuorum*	R
White Tailed Bumble Bee	*Bombus lucorum*	R
Common Blue Damselfly	*Enallagma cyathigerum*	R
Cuckoo Bee	*Psithyrus sylvestris*	R
Red-tailed Bumble Bee	*Bombus lapidaries*	R
Blue Bottle Fly	*Calliphora vomitoria*	R

Common Wasp	*Vespula vulgaris*	R
Honey Bee	*Apis mellifera*	R
Greenbottle Fly	*Lucilia Caesar*	R
Buff-tailed Bumblebee	*Bombus terrestris*	R

Appendix 6

Plant List

Wildflower mix for grassland

Common Name	Scientific Name
Lady's Bedstraw	*Galium verum*
Black Medick	*Medicago lupulina*
Bulbous Buttercup	*Ranunculus bulbosus*
Meadow Buttercup	*Ranunculus acris*
Bladder Campion	*Silene vulgaris*
White Campion	*Silene alba*
Wild Carrot	*Daucus carota*
Cowslip	*Primula veris*
Ox-eye Daisy	*Leucanthemum vulgare*
Field Forget-me-not	*Myosotis arvensis*
Rough Hawkbit	*Leontodon hispidus*
Common Knapweed	*Centaurea nigra*
Wild Mignonette	*Reseda lutea*
Hoary Plantain	*Plantago media*
Ribwort Plantain	*Plantago lanceolata*
Field Scabious	*Knautia arvensis*
Self-heal	*Prunella vulgaris*
Common Sorrel	*Rumex acetosa*
Common St John's-wort	*Hypericum perforatum*
Common Toadflax	*Linaria vulgaris*
Bird's-foot Trefoil	*Lotus corniculatus*
Viper's Bugloss	*Echium vulgare*
Yarrow	*Achillea millefolium*
Corn Poppy	*Papaver Rhoeas*
Musk Mallow	*Malva Moschata*
Salad Burnet	*Sanguisorba Minor*
Yellow rattle	*Rhinanathus Minor*
Hedge Bedstraw	*Galium album*
Meadow Crane's-bill	*Geranium pratense*
Meadow Vetchling	*Lathyrus pratensis*
Goat's-Beard	*Tragopogon pratensis*
Greater Knapweed	*Centaurea scabiosa*
Pignut	*Conopodium majus*
Wild Clary	*Salvia verbenaca*
Common Bent	*Agrostis capillaris*
Red Fescue	*Festuca rubra*
Crested Dog's-Tail	*Cynosurus cristatus*
Yellow Oat-Grass	*Trisetum flavescens*
Meadow Fescue	*Festuca pratensis*
Meadow Foxtail	*Alopecurus pratensis*
Sheep's Fescue	*Festuca ovina*

List of Native Hedgerow shrub Plants

Common Name	**Scientific Name**	Comments
Blackthorn	*Prunus spinosa*	Important for Butterflies; good nesting thicket. flowers very early in the year, and good source of nectar and insects for birds in spring
Dog Rose	*Rosa canina*	Important for Birds on fruit; insects on flowers
Dogwood	*Cornus sanguinea*	The berries are enjoyed by and attract wildlife.
Field Maple	*Acer campestre*	Good shelter plant
Field Rose	*Rosa arvensis*	Low growing, clump forming shrub, which provides excellent food for birds.
Guelder Rose	*Viburnum opulus*	Produces large, white flowers and red fleshy fruit which attract a variety of animals Important for Birds; wood mouse attracted by fruit; insects on flowers flower early, and nectar and pollen attract insects
Hawthorn	*Crataegus monogyna*	Forms the basis for many hedges: tough, fast growing, good source of food for birds and insects. Mammals; birds for berries; many insects; wood mouse eats fruit; good protection for nesting birds. Hawthorn flowers and fruits on old growth, so trimming should to be carried out very carefully, preferably only on alternate years.
Hazel	*Corylus avellana*	Slow growing, but valuable in wildlife hedge. It supports large variety of insects, produces nuts in August-September
Holly	*Ilex aquifolium*	Fruits for birds, nesting cover, deer browse: only females produce berries
Honeysuckle	*Lonicera periclymenum*	Important for Bees and other insects
Privet	*Ligustrum vulgare*	Dense hedge plant which retains foliage all year round, except in harsh winters, making it an excellent refuge for wildlife. White flowers produced in July are attractive to insects. Black berries make it an extremely valuable food source for foraging birds. Do not use the domestic variety *.L ovalifolium*
Spindle	*Euonymus europaeus*	Good host for bean aphid; Fruit poisonous to mammals
Wayfaring Tree	*Viburnum lantana*	Produces white flowers in May, followed by red berries in September. It attracts wildlife all year round-important for birds; wood mouse attracted by fruit; insects on flowers
Yew	*Taxus baccata*	Forms thick shelter hedge : all parts poisonous to mammals, so should not be planted where livestock can get near