

Screening Ecological Assessment

Chelveston Non-Recyclable Plastic to Fuel Facility

Introduction

Dallol Energy Ltd, in conjunction with Greenfield Properties (UK) Ltd, propose to develop a Non-Recyclable Plastic to Fuel Facility, on the outskirts of Chelveston village (NN10 0SU). Desktop, habitat, and, flora and faunal studies have been undertaken to ascertain any likely adverse effect on the ecology due to the operation of the new facility. The proposed Non-Recyclable Plastic to Fuel Facility is not considered to be a major development in relation to the Town & Country Planning (Environmental Impact Assessment) Regulations 2017, but will require an environmental permit to operate. An application to vary the existing environmental permit for the site is in preparation, and will be submitted to the Environment Agency prior to operation commencing.

The screening environmental assessment took into account walkover surveys of the site, enquiry of the current occupant of the site, and reference to two recent major development applications in the Chelveston area¹. It is considered that conditions in the locality have not changed significantly in the intervening period, and that background ecological data are still relevant when considering the current planning application.

This screening ecological assessment takes account of consultation comments from the Senior Environmental Planner at Northamptonshire County Council at the time of a recent application for a Small Waste Incineration Plant (SWIP) development on the same site. The SWIP development did not proceed beyond the planning stage, and is superseded by the proposed Non-Recyclable Plastic to Fuel Facility.

GF Environmental Ltd is familiar with the local situation in the Chelveston area, having undertaken air quality and ground contamination studies to support the recent planning application for the wind farm and anaerobic digestion plant on the former US Air Force airfield to the east of Chelveston village. This screening environmental assessment follows relevant guidance set out in Biodiversity Supplementary Planning Guidance Document for Northamptonshire (August 2015).

Desktop Assessment Methodology

Information was obtained from the following organisations in order to ascertain the current background ecological status of the site:

- Natural England;
- Bedfordshire, Cambridgeshire, Northamptonshire and Peterborough Wildlife Trust;
- Bedford Badger Group;
- Bedfordshire Bat Group;
- Bedfordshire and Luton Biodiversity Recording and Monitoring Centre;
- North Northamptonshire Badger Group;
- Northamptonshire Bat Group;
- Northamptonshire County Bird Recorder;
- Northamptonshire Herpetofauna Recorder;
- Northamptonshire Botanical Society for the British Isles; and
- National Biodiversity Network Database.

Further information for the surrounding areas was obtained via the Multi-Agency Geographic Information for the Countryside (MAGIC) database which contains authoritative geographic information about the natural environment from across government. The website² is managed by Natural England on behalf of the Department of Environment Food and Rural Affairs (DEFRA).

This desktop study was supported by survey evidence from two recent ecological impact assessments, associated with developments covering the same geographic area, and it is therefore considered that the area around the proposed development site, on the outskirts of Chelveston, is well understood with regard to its ecological status and presence of endangered species.

¹ The applicant was advised by the Environmental Health Officer for East Northamptonshire District Council that

² <http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx>

Site Description

The proposed development seeks to reinstate a site previously used as an industrial waste processing site. The entire site is currently covered in a hard concrete slab. There are mounds of inert shredded tyre waste on the northern perimeter, a large area prone to holding standing water (caused by blocked site drains) and a derelict building that was damaged beyond repair by fire several years ago.

The new facility will receive non-recyclable plastic (including waste polystyrene, polyethylene and polypropylene) which will be unloaded for storage in a warehouse before processing. Processing will include the densification of the plastic wastes, before heating in a reduced oxygen environment and in the presence of a bauxite catalyst in order to depolymerise the waste into hydrocarbon gases ranging from Liquid Petroleum Gas (LPG) to heavy wax. The majority of the gases produced are in the liquid fuel range (petrol and diesel), and are separated into their individual components in a fractionation column. The cyclone combustor providing heat to the process uses a mixture of process-derived LPG and non-condensable gases in order to heat the waste plastics.

A number of individual process kilns will discharge to air from the proposed facility, and the cyclone combustor will also include a release to atmosphere. However, these points will all discharge through a common chimney for emissions monitoring and control, with the incorporation of a blower fan to ensure that the exhaust velocity is constant no matter how many kilns are connected. As a worst-case scenario, the discharge is assumed to release at the emission limit concentrations specified in the Industrial Emissions Directive (IED). There are not thought to be any other significant releases to atmosphere which may impact on the discharges from the process.

Local Setting

The development site is located within an existing small industrial estate, and is bounded on all sides by arable farmland, with the exception of the north which contains the World Rubber manufacturing site. There is an area of coniferous woodland with an associated hedgerow located ~250 metres to the north-east of the development site, with further deciduous woodland ~500 metres to the north, across some arable farmland. To the south, the site is bounded by Upper Higham Lane with arable farmland beyond, with further deciduous woodland ~500 metres to the south east. Figure 1 shows the nearest features of ecological interest to the site.

Figure 1 Aerial Photograph Showing Nearest Features of Ecological Interest



Designated Ecological Sites

The development site itself is not subject to any statutory or non-statutory nature conservation designations. Northamptonshire County Council's Biodiversity Checklist recommends detailed assessment for developments within 3km of the Upper Nene Valley Gravel Pits SPA, so this was used as the basis for determining the requirements for additional assessment.

A search undertaken using the MAGIC website showed that there is only one ecological habitat with a statutory designation within 3km of the site; Yelden Meadows SSSI. The Upper Nene Valley Gravel Pits SSSI, SPA and Ramsar Site is ~4.3km from the development site at its nearest point, as shown in Figure 2. The development site is denoted by the red square and the shaded area represents a radius of 3km around the site.

Figure 2 Designated Ecological Sites Within 3km of the Development Site



The Upper Nene Valley Gravel Pits SSSI, SPA and Ramsar to the north west of the development site comprises a chain of both active and disused sand and gravel pits including open water, reed swamps, marshes, pastures and grasslands. The range of habitat types, and the varied topography of the lagoons, regularly provide valuable resting and feeding conditions for more than 20,000 wintering water birds, especially ducks and waders. The Upper Nene Valley Gravel Pits SPA is at a significant distance from the development site and is not in the prevailing wind direction, so it is considered that the operation of the proposed Non-Recyclable Plastic to Fuel Facility is highly likely to have an insignificant effect on the designated habitat.

Yelden Meadow SSSI is ~1.6km to the east of the site, and is designated because the meadow represents a fine example of species-rich, unimproved neutral grassland occurring on clay in North Bedfordshire. The grassland community on the site is an example of *Alopecurus pratensis-Sanguisorba officinalis* flood meadow. This community type is noted for a species-rich, varied sward of grasses and herbs which has been maintained traditionally as a hay meadow with grazing during the winter. Decline in this type of habitat has primarily been due to agricultural improvement and such losses are still continuing, although the Yelden Meadow SSSI is noted as being in "Favourable" condition in its citation³.

Ecological Survey of the Development Site

The development site is comprised of hardstanding in a generally poor state of repair, and was partially flooded on the day of the walkover survey, due to blocked surface water drains in part of the site. The site has been, and is currently used for the storage of waste tyres which contain

³

<https://designatedsites.naturalengland.org.uk/ReportConditionSummary.aspx?SiteCode=S1005059&ReportTitle=Yelden%20Meadows%20SSSI>

contaminants such as heavy metals, which could accumulate in the shallow water of the blocked drain and on the surface of the hardstanding. This would imply that it has low ecological status for any species (flora or fauna), especially given that development site is contained within a semi-active industrial estate.

The piles of tyres and hard-standing would not be an attractive area for animal species to inhabit due to disturbance through the continual removal and addition of waste tyres, vehicle movements and other commercial noise, and agricultural activities in the farmland adjacent to the site.

The following photographs show the current condition of the site and its general unsuitability for ecological habitation.

Figure 3 Condition of the Development Site Observed During the Walkover Survey



Three site walkover surveys were undertaken to ascertain the general ecological value of the land enclosed within the boundary of the proposed development site, and to identify the main habitats and associated plant species, with notes on faunal species using the site also recorded. The surveys were undertaken at dusk in October 2017 and March 2018.

The site was examined for evidence of the potential presence of protected species or species of conservation concern, and observations were made of general faunal activity during the survey. Discussions were also held with the current landowner with regards to recent observations of specific faunal species as detailed below:

Bats

For a tree to be classed as having some potential for roosting bats it would usually support one or more of the following characteristics:

- obvious holes, e.g. rot holes and old woodpecker holes;
- dark staining on the tree below a hole;
- tiny scratch marks around a hole from bats' claws;
- cavities, splits and/or loose bark from broken or fallen branches, lightning strikes etc.;

- very dense covering of mature ivy over trunk.

The copse area to the north of the site was considered as a potential site to support a bat roost, as was the derelict building on site. However, visual investigation showed that there is no evidence of habitation in either place. The copse is mainly of immature coniferous trees with none of the features identified above as being suitable for bat habitation. The derelict building was constructed entirely of steel and cladding, and is often lit with artificial light from the industrial activity that takes place all around the site. Approximately 80% of the old roof was destroyed during the recent fire and is laying at ground level.

Enquiry of the landowner confirms that no pre-existing evidence of roosts are advised. A visual survey undertaken at dusk for a period of one hour on three different occasions recorded no sightings of bats on the wing. There is no intention to disturb the copse but the derelict building will be cleared. As no evidence of any bat habitation was found or previously reported in the area, no further survey was deemed necessary.

Badgers

Enquiry of the landowner confirms that no pre-existing evidence of badger sets are advised. No badger sets were found on or near the development site, however, it is noted that an infrequent badger run is located adjacent to hedge/fence on the road side of the adjacent field boundary at ~90m from the site boundary. There is no intention for the Non-Recyclable Plastic to Fuel Facility to disturb either the existing fence or hedging.

Other Mammals

Enquiry of the landowner confirms that no pre-existing evidence of habitation by other mammals are advised. There is no evidence of any other wildlife habitat on the development site. There is evidence of a rabbit warren on the northern boundary of the adjacent field. The Planning Authority commented that piles of waste tyre material to the north of the site could provide a potential habitat for certain species. However, upon inspection it was evident that this material is an inert material made from tyre fibres, with a high degree of metal shards within the fibres, which would be injurious to small mammals. No evidence was found of nests of any description. Further survey was deemed unnecessary.

Great Crested Newts

Enquiry of the landowner confirms that no pre-existing evidence of Great Crested Newts are advised. There is previous evidence of ponds existing in the field adjacent to the site. However, this area is now a small sump 1m x 3.5m in area surrounded by a small copse. The sump is filled by the field drain that enters it and drained via sink hole. The water at the time of the walkover survey was fast moving and an unlikely habitat for Great Crested Newts. Detailed investigation revealed no evidence of newts or newt activity throughout the development site. This sump would not be disturbed by the proposed development.

The area to the north of the site intended for development is often flooded with standing water. There is potential that this area may also provide a habitat for newts. However, there are no recorded sightings of newts or newt activity here either. The area under water is regularly disturbed by wheeled vehicles and as such it should be considered as both temporary and unsuitable for habitation by Great Crested Newts or other amphibian species.

Birds

No occurrence of breeding/wintering birds was found on site. One abandoned pigeon nest and one broken swallow or similar nest was evident.

The results from a recent survey of bird activity, measured on the former US Air Force airfield are summarised in the following table.

Occurrence	Species
0	Goldfinch
1	Buzzard, Carrion Crow, Chaffinch, Golden Plover, Jackdaw, Lapwing, Linnet, Little Owl, Magpie, Pied Wagtail, Redwing, Stock Dove, Starling, Snipe, Wood Pigeon, Yellow Hammer.

Occurrence	Species
2	Meadow Pipit, Red-Legged Partridge.
3	Field Fare, Rook, Skylark

Breeding Bird Survey Results on the Wind Farm site and surrounding area:

Occurrence	Species
0	Bullfinch, Corn Bunting, Dunnock, Great-Spotted Woodpecker, Grey Partridge, Pheasant, Wheatear.
1	Black Cap, Blue Tit, Buzzard, Carrion Crow, Goldfinch, Greenfinch, Great Tit, Jackdaw, Little Owl, Lesser Whitethroat, Mallard, Pied Wagtail, Red-Legged Partridge, Reed Bunting, Rook, Swallow, Song Thrush, Wren, Yellow Hammer.
2	Jackbird, Lapwing, Linnet, Moorhen, Stock Dove, Whitethroat, Willow Warbler, Yellow Wagtail.
3	Wood Pigeon
4	Chaffinch
6	Robin
9	Meadow Pipet

The baseline ornithological survey for the nearby airfield development identified only one target species which was recorded at the site during the wintering bird survey, namely Golden Plover, which is listed under Annex 1 of the Birds Directive. However, at the numbers recorded, the bird population at the airfield site is considered to be of no more than low importance at the local level, and is assumed to apply similarly to the proposed development site. The development of the Non-Recyclable Plastic to Fuel Facility will have no effect on these recorded bird sightings or wintering activities at the airfield site.

Common Reptiles

Enquiry of the landowner confirms that no pre-existing evidence of occupation of the site by common reptiles are advised. No evidence of reptiles was found within the boundary of the site, nor in the surrounding areas; all likely reptile refuges were checked (under tyres, sheets of corrugated metal, etc.). A previous study nearby using 500 refugia in similar reptile habitats also had no results.

Invertebrates

There are no habitats within the site such as grassland, hedgerows, ponds and ditches which would be able to support invertebrate species.

Flora

The walkover survey of the development site revealed no flora of significance at the site given the existing developed and active nature of the site.

Northamptonshire County Council Biodiversity Checklist

Reference was made to the guidance in the Council's Biodiversity Supplementary Planning Guidance document which provides a Biodiversity Checklist to enable applicants to identify the range of ecological information required to support an application. The Biodiversity Checklist was completed and is appended to this document (Appendix 1).

The responses to Q1 and Q2 indicated that the proposed Non-Recyclable Plastic to Fuel Facility development was of a scale and at a sufficiently large distance (>3km) that did not require further assessment in relation to the Upper Nene Valley Gravel Pits SPA.

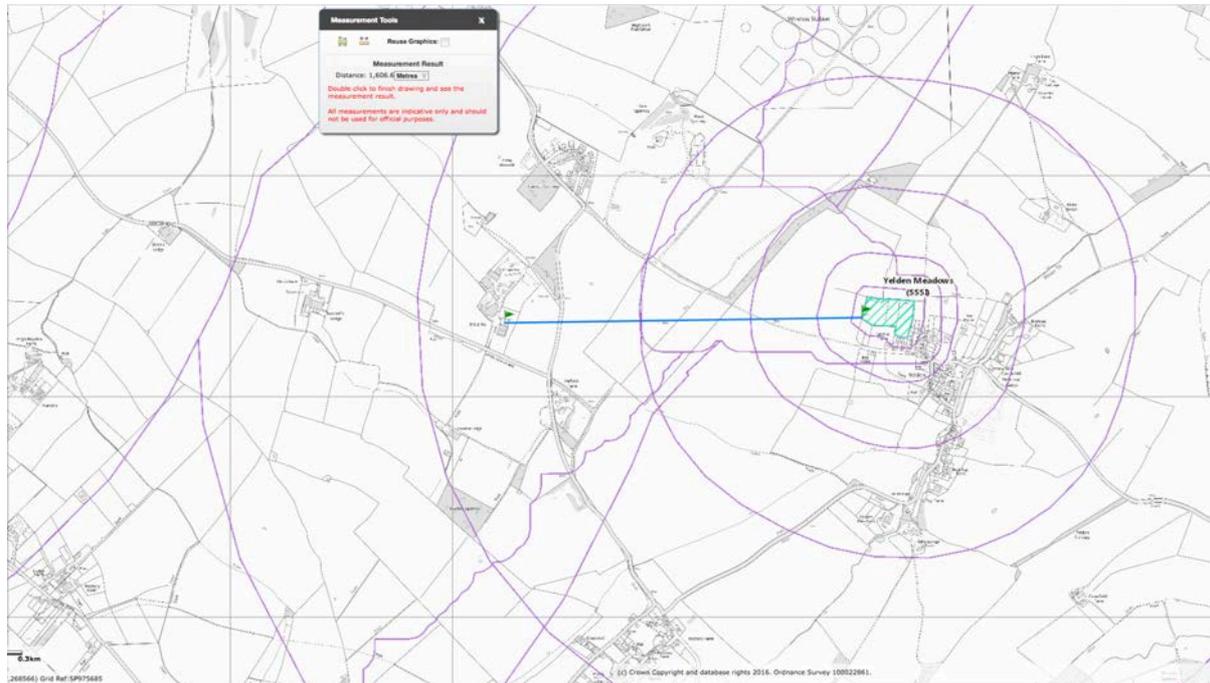
The responses to Q3, Q4 and Q5 indicated that as the proposed development site was within the Impact Risk Zone of the Yelden Meadows SSI, and nearby woodland habitats, an assessment of the impact of emissions from the proposed development was required at these locations. The results from these assessments are summarised in the following section.

Screening Assessment for Deposition Within Nearby Ecological Habitats

The response to Q3 of Northamptonshire County Council's Biodiversity Checklist, identified the fact that the proposed development site was within the Impact Risk Zone of the Yelden Meadows SSSI. The following figure shows the location of the proposed development site in relation to the SSSI,

which is situated ~1.6km to the east.

Figure 4 Location of the Development Site Relative to the Yelden Meadows SSSI



A detailed deposition assessment was undertaken for the Yelden Meadows SSSI based upon the results from detailed atmospheric dispersion modelling using ADMS Version 5.2^{4,5}. The ADMS model calculates the dispersion of pollutant emissions from industrial sources on the basis of input data relating to the location and discharge conditions for the chimney. This includes the height of the chimney, the diameter of the chimney, the exit temperature and the emission rates for oxides of nitrogen (NO_x) and sulphur dioxide (SO₂). The height of the chimney was determined initially by a D1 calculation⁶, and confirmed by an iterative assessment of chimney height using the ADMS model.

The input data for the screening ecological assessment are summarised in the table below.

Parameter	Value
Chimney Height (m)	35
Chimney Internal Diameter (m)	0.67
Efflux Temperature (K)	325
Actual Volumetric Flowrate (Am ³ /s)	5.86
Efflux Velocity (m/s)	16.6
NO _x Emission Rate (g/s)	1.46
SO ₂ Emission Rate (g/s)	0.36

Data from the SCAIL and APIS websites^{7,8} show that current levels of nitrogen deposition within the Yelden Meadows SSSI currently exceed the 10 kgN/ha/yr lower critical load. However, the increase in nitrogen deposition at the nearest point within the Yelden Meadows SSSI, as a result of emissions of NO_x from the proposed Non-Recyclable Plastic to Fuel Facility, is likely to be of the order of ~0.1% of current levels. An increase of this magnitude can be screened out as insignificant in relation to relevant guidance⁹ from the Environment Agency and Natural England.

The exceedence of a Critical Load is not a quantitative estimate of damage to a particular habitat, but represents the potential for damage to occur. There is no evidence in the available literature to

⁴ ADMS 5, Atmospheric Dispersion Modelling System, User Guide, Version 5.2. November 2016

⁵ Environmental Visage Ltd, Atmospheric Dispersion Modelling - Assessment of a Proposed Plastic Pyrolysis Plant Near Chelveston. January 2018

⁶ Technical Guidance Note (Dispersion) D1, Her Majesty's Inspectorate of Pollution (1993)

⁷ <http://www.scail.ceh.ac.uk/cgi-bin/combustion/input.pl>

⁸ <http://www.apis.ac.uk/src/select-a-feature?site=1005059&SiteType=SSSI&submit=Next>

⁹ <https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit>

indicate that the Yelden Meadows SSSI is suffering as a consequence of nitrogen deposition from nearby sources. Accordingly, on this basis, the incremental increase in nitrogen deposition attributable to emissions of NO_x from the proposed Non-Recyclable Plastic to Fuel Facility is very small and is unlikely to have a measurable effect on the integrity of the neutral grassland habitat site.

Similar conclusions were drawn for acidic deposition due to emissions of NO_x and SO₂ from the proposed Non-Recyclable Plastic to Fuel Facility. The predicted increase represented a value equivalent to ~0.7% of current background levels, although in this instance the critical load of 4 keq/ha/yr is not exceeded, with the total deposition (process + background) representing a value equivalent to 40% of the critical load.

Increases in background concentrations of NO_x and SO₂ at the Yelden Meadows SSSI represent <1% of their respective annual critical levels, and so can be screened out as insignificant.

Similar deposition assessments were carried out for the two woodland habitats to the north of the development site. Increases in nitrogen and acidic deposition at the deciduous woodland ~500 metres to the north of the development site were estimated to be <1% of current levels, and so can be screened out as insignificant. The conclusions were slightly higher for the coniferous woodland ~250 metres to the north of the development site, where nitrogen and acidity deposition rates were estimated to be ~4% of current levels. However, there is considerable headroom between current acidity deposition rates and the site-specific critical load, and there is no risk of an exceedence.

Accordingly, on the basis of Natural England's guidance¹⁰, the impact of emissions from the proposed Non-Recyclable Plastic to Fuel Facility can be screened out as insignificant, and detailed ecological assessment is not required.

Summary and Conclusions

A site walkover and desktop study of the local ecology was undertaken for the local area in the vicinity of the proposed Non-Recyclable Plastic to Fuel Facility, with additional reference to ecological surveys for nearby land associated with recent planning applications for the Chelveston area. The key findings are summarised below:

Designations. The site itself is not subject to any statutory or non-statutory nature conservation designation. The nearest statutory designation of relevance to ornithology is the Upper Nene Valley Gravel Pits SSSI/pSPA, located approximately 4.3km to the north-west. The nearest designated site is 1.6km to the east at the Yelden Meadows SSSI with the designation being due to its neutral grasslands. Non-statutory woodland habitats are situated within ~500 metres to the north and south of the development site.

Surveys. Two site walkover visits were undertaken during October 2017 and March 2018 and included observations from the resident landowner. General faunal activity, such as birds or mammals observed visually or by call during the walkover, was recorded and detailed above.

Habitats. The site is a previously developed waste management site that is currently used for the storage of waste tyres and offers no viable habitat to species given the high potential for disturbance at a working site. Furthermore, the fact that the tyres are likely to have some degree of heavy metal contamination would render surface water collecting on site as unsuitable for species requiring water.

Results & Evaluation. Only one target species was recorded in significant numbers at a nearby site during the wintering bird survey, namely Golden Plover, which is listed under Annex 1 of the Birds Directive. However, at the numbers recorded, the population at the nearby site is considered to be of no more than low importance at the local level, and would not be at risk from the operation of the proposed development. No protected species were identified at the proposed development site.

Nitrogen and acidic deposition assessments for the Yelden Meadows SSSI and the nearby woodland habitats showed that emissions of oxides of nitrogen and sulphur dioxide from the proposed Non-Recyclable Plastic to Fuel Facility will have an insignificant impact on the integrity of these ecological habitats.

¹⁰

Natural England's Impact Risk Zones for Sites of Special Scientific Interest (*For use by Local Planning Authorities to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites and determine when to consult Natural England*) User Guidance. March 2016

It is considered that the proposed Non-Recyclable Plastic to Fuel Facility will have a negligible effect on flora and fauna in the locality for the following reasons:

- There are no significant flora or faunal species on or near the development site, that could be affected by the operation of the Non-Recyclable Plastic to Fuel Facility;
- The development site is not suitable as a habitat for ground species or roosting species, due to the developed nature of the site and absence of suitable habitats to occupy;
- The development site and nearby surroundings are subject to frequent disturbance from vehicle movements, waste treatment operations and agricultural operations such as ploughing, harvesting and land spreading;
- No protected species were observed at the site; and,
- The site will have a chimney optimised for its dispersion characteristics by a D1 stack height calculation, and detailed atmospheric dispersion modelling, to minimise potential environmental impacts associated with emissions to atmosphere from the facility.

Geoff Fynes



Director, GF Environmental Ltd
21st May 2018

Appendix 1 Biodiversity Checklist

Appendix 1 Biodiversity Checklist

Section 1A Designated Sites and Priority Habitats (1APP Question 13b)

Please answer ALL questions		Please tick <input checked="" type="checkbox"/> as appropriate	
Q1	<p>Is the application for any of the following:</p> <ul style="list-style-type: none"> Residential development which would increase the number of units (e.g. C1, C2, C3) Tourism or leisure facilities (e.g. D2) New car park, or an increase to capacity of an existing car park <p style="text-align: center;">AND</p> <p>Within 3km of the Upper Nene Valley Gravel Pits SPA?</p>	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
Q2	<p>Is the application for Industrial development/warehousing (e.g. B2, B8)</p> <p style="text-align: center;">AND</p> <p>Within 1km of the Upper Nene Valley Gravel Pits SPA?</p>	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
<p>If you have answered YES to Q1 or Q2 above, please contact Natural England and refer to the Upper Nene Valley Gravel Pits SPA Supplementary Planning Document</p>			
Q3	<p>Please check whether and how the application could affect a SSSI (at http://magic.defra.gov.uk). Based on the map search results:</p> <p>Is the application located within an Impact Risk Zone for a SSSI</p> <p style="text-align: center;">AND</p> <p>For a proposal which falls into a category specified for that Impact Risk Zone?</p>	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
Q4	<p>Is the development on or within 100m of a Local Wildlife Site, Potential Wildlife Site or Local Nature Reserve?</p>	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
Q5	<p>Are there any of the following:</p> <ul style="list-style-type: none"> Semi-natural habitats (e.g. woodland, grassland, pond, reedbed, orchard) Previously developed (brownfield) land Watercourse (e.g. stream, lake, ditch) <p>on, adjacent to or near the development site?</p>	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
<p>If you have answered YES to ANY of the questions above</p> <p>Further information is required to support your application to show how the proposal has accounted for the potential impacts</p> <p style="text-align: center;">Answer 'YES' in response to 1APP Question 13b</p>			<p>Please go to section 1B</p>
<p>If you have answered NO to ALL Questions 1-5 above</p> <p style="text-align: center;">Answer 'NO' in response to 1APP Question 13b</p>			<p>Please go to section 2A</p>

Section 1B

If the answer is 'YES' to any of the questions in section 1A, the application documents must include a Biodiversity Statement which demonstrates the following:

- Extent and location of habitats and features that could be affected
- Likely impacts to designated sites/priority habitat
- How alternative designs and locations have been considered
- How adverse impacts will be avoided
- How any unavoidable impacts will be mitigated²³ or reduced
- How impacts that cannot be avoided or mitigated will be compensated²⁴
- Proposals for biodiversity enhancements

Any protected species statements required as indicated by section 2 below should be integrated within the Biodiversity Statement. These reports may form part of a wider Environmental Impact Assessment.

Reports might not be required where applicants are able to provide pre-application correspondence from Natural England which confirms that they are satisfied that the proposal will not have an adverse impact on the **SPA** or **any SSSI or NNR**.

NOW PLEASE COMPLETE SECTION 2

Section 2 Protected Species (1APP Question 13a)

Section 2A

Please answer ALL of the questions in column A below, and tick the box in column B if the answer is 'YES'.

For each question, the black dots in column C indicate those species with a 'reasonable likelihood' of being present, and for which further surveys may be required.

In the shaded row please tick the appropriate boxes to summarise all species surveys which may be required.

If **ANY** of the boxes in column B have been ticked in response to any of the questions tick **'YES' in response to 1APP Question 13a**, and go to **section 2B**.

If **NONE** of the boxes in column B have been ticked in response to any of the questions tick **'NO' in response to 1APP Question 13a**, and go to **section 3**.

Please note that the above list does not include all protected species and all circumstances where species may be affected. In all circumstances legislation pertaining to protected species still applies and it is the responsibility of the developer to ensure that protected species and habitats are not impacted as a result of development. If protected species are found during the course of development, work should be halted and advice sought.

23 Mitigation = measures which minimise the duration, intensity and/or extent of impacts which cannot be avoided entirely

24 Compensation = measures which counterbalance the impacts, amending damage or loss

DEVELOPMENT PROPOSALS THAT WILL TRIGGER A POSSIBLE PROTECTED SPECIES SURVEY	Tick if YES <input checked="" type="checkbox"/>	Species protected by law and for which further surveys may be required							
		Bats	Barn owl	Dormouse	Breeding birds ²⁵	Amphibians	Water vole	Badger	Otter
Will the proposed works affect ²⁶ existing buildings/ structures with ANY of the following features? <ul style="list-style-type: none"> • Clay-tiled pitched roofs • Loft spaces (including bell towers etc) • Hanging tiles • Wooden cladding • Open soffits • Underground structures such as (but not exclusively) cellars, air raid shelters, ice-houses, tunnels • Bridge structures, aqueducts or viaducts especially over water or wet ground • Dense climbing plants • Bird boxes (especially owl boxes) or bat boxes which have previously been fitted • Large agricultural buildings, particularly but not exclusively those of a traditional construction • Other buildings in a derelict or decayed state in a rural location 	<input type="checkbox"/>	•	•		•				
Are there streams, rivers, lakes or other watercourses/ aquatic habitat on or within 200m of the proposals?	<input type="checkbox"/>	•			•		•		•
Will the proposals affect ²⁶ any areas of mature deciduous woodland, field hedgerows over 1m tall and over 0.5m thick, or scrub well connected to woodland or hedgerows on or adjacent to the site?	<input type="checkbox"/>	•		•	•			•	
Will the proposals affect ²⁶ any of the following <ul style="list-style-type: none"> • Old and veteran trees • Trees with obvious holes, cracks, cavities or heavy vegetation • Trees with a girth over 1m at chest height 	<input type="checkbox"/>	•	•		•				
Is the proposal a major application within 500m or any other application within 200m of a pond?	<input type="checkbox"/>					•			
Will the proposal affect ²⁶ mature/overgrown gardens over 0.25ha, any rough grassland or derelict/brownfield land, railway land, allotments, on or adjacent to the site?	<input type="checkbox"/>				•	•			•
Will the proposal affect species-rich meadows or grassland on or directly adjacent to the site?	<input type="checkbox"/>				•				
Please tick boxes to indicate all protected species that may be affected by the development		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25 In Northamptonshire most likely kingfisher, little ringed plover, peregrine, hobby, red kite, quail and Cetti's warbler

26 Direct impacts such as removal or modification, or indirect through disturbance such as runoff, noise, dust, lighting or increased recreational use

Section 2B Assessments ONLY for those species potentially impacted by the development as identified in section 2A

For any species identified in section 2A as potentially impacted by the proposed development:

1. Contact the Northamptonshire Biodiversity Records Centre (www.northantsbrc.org.uk) for existing species records for the area
2. Conduct preliminary survey²⁷ to establish potential for habitat to support the species
3. Using the results of the preliminary survey, determine whether A or B below applies.

Please tick the relevant box below (☑) and attach corresponding assessment to application

A	IF THE PRELIMINARY SURVEY INDICATES MODERATE/HIGH LIKELIHOOD OF PROTECTED SPECIES BEING PRESENT, A FULL SURVEY AND MITIGATION STATEMENT ARE REQUIRED	<input type="checkbox"/>
<p>PLEASE INCLUDE:</p> <ul style="list-style-type: none"> Extent and location of species populations (including supporting habitats and features) that could be affected (more detailed surveys will be required) Likely impacts on species populations How alternative designs and location have been considered How adverse impacts will be avoided wherever possible How unavoidable impacts will be mitigated or reduced How impacts that cannot be avoided or mitigated with be compensated Proposals for biodiversity enhancements <p>Please note: a protected species licence may be required in order to carry out these works. Please refer to Natural England guidance.</p>		

B	IF THE PRELIMINARY SURVEY INDICATES LITTLE OR NO LIKELIHOOD OF PROTECTED SPECIES BEING PRESENT, OR THERE ARE NO LIKELY IMPACTS TO SPECIES, FULL SURVEY IS NOT REQUIRED	<input checked="" type="checkbox"/>
<p>Please provide the information required to demonstrate that there will be little or no likelihood of protected species being present, or there are no likely impacts on species. This can be in the form of a brief statement or letter from a suitably qualified person.</p>		

To improve the quality of the data held by the Northamptonshire Biodiversity Records Centre, applicants are encouraged to submit to the Centre data generated by protected species surveys.

If a biodiversity statement is to be submitted with the application as required by section 1B, then please include any species surveys as well.

NOW PLEASE COMPLETE SECTION 3

²⁷ Surveys should:

- Be of appropriate scope and detail
- Be conducted at an appropriate time of year, in suitable weather conditions and using recognised methodologies
- Be undertaken by an appropriately qualified and experienced person
- Include copies of any correspondence with nature conservation organisations (such as Natural England, Environment Agency)

Section 3 Validation checklist

Please mark with an X in the shaded column ALL biodiversity information included with this application resulting from the prompting of the biodiversity checklist.

Please note that if all required information is not included with the application then it will NOT be validated.

* required for all applications

	Tick if included
Biodiversity Checklist SECTION 1A* (designated sites and priority habitats)	X
Section 1B Biodiversity Statement	X
Biodiversity Checklist SECTION 2A* (protected species)	X
Section 2B Protected Species Survey(s)/statement(s)	
Bats	
Barn owl	
Dormouse	
Breeding birds	
Amphibians	
Water vole	
Badger	
Otter	
Reptiles	
Correspondence from nature conservation organisation/local authority/other (as indicated by the checklist)	

Office use only	
Required	Attached
X	
X	

Thank you for completing this checklist. Please return to the local authority all completed sections, along with the application and all supplementary information indicated above.