Ecological Scoping

for

Proposed Extension, Pentney Quarry,
Pentney

on behalf of

Middleton Aggregates Limited

June 2017

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planning and designing environments for life

Quality management		
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Quality standards

This report is certified BS 42020 compliant and has been prepared in accordance with The Chartered Institute of Ecology and Environmental Management's (CIEEM) Technical Guidance Series '*Ecological Report Writing'* and Code of Professional Conduct.

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Non-technical summary

The Landscape Partnership was commissioned by Stephen Daw Ltd on behalf of Middleton Aggregates Ltd. to undertake an Ecological Scoping exercise in support of a proposed extension of an existing quarry at Pentney Quarry.

The scoping exercise identified local designated sites and discusses the potential for the proposed extension to impact upon these. Mitigation/avoidance and site enhancement measures are proposed.

The proposed quarry extension is considered to have potential to give rise to minor adverse impacts upon nationally and internationally designated sites in the local area; it is anticipated that these could be resolved through appropriate mitigation design.

1 Introduction

1.1 Commission

1.1.1 The Landscape Partnership was commissioned by Stephen Daw Ltd to carry out an Ecological Scoping exercise on behalf of Middleton Aggregates Ltd., for a proposed extension to Pentney Quarry at Pentney in west Norfolk.

1.2 Legislation and Policy background

1.2.1 There is a range of protection given to sites and species. Sites may be designated at local, national, European or global importance for nature conservation. Species may be protected by European-scale legislation or protected at varying levels of national protection.

1.2.2 The Local Planning Authority has policy to protect features of nature conservation value within its Local Plan. Other regulators have policies relating to the consents issued by them.

1.2.3 Further information is given in Appendix 1.

1.3 Reporting standards

1.3.1 This report was written in compliance with British Standard 42020:2013 'Biodiversity — Code of practice for planning and development' and the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct.

1.3.2 This report was prepared in accordance with the CIEEM 'Guidelines for Ecological Report Writing' as updated December 2015.

1.3.3 The report was prepared by Dr Jo Parmenter CEcol CEnv, Director of The Landscape Partnership, an ecologist with in excess of 25 years' experience in the field.

1.4 Site location and context

1.4.1 The site is situated adjacent and to the north of the River Nar, around 3km to the southwest of the village of Pentney, in West Norfolk. Access to the site is from Abbey Road to the east. The site comprises two grass fields, currently mown for hay / silage and is contiguous with the plant site of the existing quarry, which lies to the west. The land to the north and east is also grassland.

1.4.2 The Ordnance Survey Grid Reference for the approximate centre of the proposed development site is TF693124. A plan showing the site is provided at Figure 01.

1.5 Description of the Project

1.5.1 The Operator of Pentney Quarry, Middleton Aggregates Ltd, is looking to put forward land as an extension in the forthcoming 'call for sites' by Norfolk County Council as part of the Review of their Minerals Local Plan.

1.5.2 As part of the review process, applicants are required to provide information concerning proximity of the site to environmentally sensitive sites designated at a local, national or international level. Where the site is within a certain distance of designated sites (between 250m and 5km from an internationally designated site (that distance being dependent upon the special interest features for which that site is designated); 3km of a biological SSSI, or 250m of a locally designated site (County Wildlife Site, Local Nature Reserve or Roadside Nature Reserve)), Norfolk County Council require supporting information to be provided.

1.5.3 If consented, the scheme would be likely to require dewatering to a depth of c5.5m below current ground level.

1.6 Objectives of this report

1.6.1 The objective of this report is to provide information with regard to the potential for the mineral extraction proposals to give rise to adverse impacts upon the designated sites and details of how these may be mitigated.

1.7 Previous ecological studies

1.7.1 There are no known previous ecological studies of the site.

1.8 Duration of appraisal validity

1.8.1 The assessment, conclusions and recommendations in this report are based on the studies undertaken, as set out in this report, and the stated limitations. This appraisal is based on the project as described and any changes to the project would need the appraisal to be reviewed. Unless otherwise stated, the assessment, conclusions and recommendations given assume that the site habitats will continue to be used for their current purpose without significant changes until development takes place. However, changes in use or management may occur between the time of the survey and proposals being implemented. Ecological features may change naturally at any time; for example species may be lost from existing sites or colonise new areas. Our knowledge of the ecology of the site enables us to provide an estimate of the duration of the validity of the surveys carried out and hence the applicability of this appraisal, so that any future need for review and update of this appraisal, or the surveys described within it, and the date by which such updates would become necessary, can be identified.

1.8.2 The table below sets out the duration of validity of each element of each information source. If the proposed development is delayed beyond the stated timescale, update surveys or further investigations would be required.

Duration of validity of information source

Information source	Date undertaken	Duration of validity from date undertaken	Notes
Desk study (Magic Map and other online sources)	13th June 2017	2 years	Further data may become available; for example new wildlife sites may be designated

2 Methodology

2.1 Desk study methodology

2.1.1 A desk study was undertaken on 13th June 2017, for an area within an approximate 6km radius of the centre of the site as shown on Figure 01.

2.1.2 The Magic website (www.magic.gov.uk) was used to identify European and national designated sites within a 5km radius, including Local Nature Reserves, and the NBIS website was used to identify locally designated sites (County Wildlife Sites and Roadside Nature Reserves) within a 1km radius. A search was also made for areas of Ancient Woodland within a 1km radius. The Magic website was accessed on 13th June 2017.

Limitations to desk study methodology

2.1.3 The desktop study was limited to a search for designated sites and ancient woodland sufficient to inform Norfolk County Council's site review process. The site was viewed remotely using aerial imagery and map sources were also consulted, however no site-based work was carried out.

2.2 Assessment methodology

2.2.1 The assessment was undertaken in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Professional Guidance Series 'Guidelines for Ecological Impact Assessment [EcIA] in the UK and Ireland' (Second Edition January 2016).

2.2.2 In summary, the impact assessment process involves

- identifying and characterising impacts;
- incorporating measures to avoid and mitigate (reduce) these impacts;
- assessing the significance of any residual effects after mitigation;
- identifying appropriate compensation measures to offset significant residual effects; and
- identifying opportunities for ecological enhancement.

2.2.3 The hierarchical process of avoiding, mitigating and compensating ecological impacts is explained further below.

2.2.4 In EcIA it is only essential to assess and report significant residual effects (those that remain after mitigation measures have been taken into account). However, it is considered good practice for the EcIA to make clear both the potential significant effects without mitigation and the residual significant effects following mitigation, particularly where the mitigation proposed is experimental, unproven or controversial; or to demonstrate the importance of securing the measures proposed through planning conditions or obligations.

2.2.5 Assessment of the potential impacts of the extension area takes into account both on-site impacts and those that may occur to adjacent and more distant ecological features. Impacts can be positive or negative. Negative impacts can include

- direct loss of wildlife habitats;
- fragmentation and isolation of habitats through loss of connectivity;
- disturbance to species from noise, light or other visual stimuli;
- changes to key habitat features; and
- changes to the local hydrology, water quality, nutrient status and/or air quality.

2.2.6 Negative and positive impacts on nature conservation features are characterised based on predicted changes as a result of the proposed activities. In order to characterise the impacts on each feature, the following parameters are considered

- the magnitude of the impact;
- the spatial extent over which the impact would occur;
- the temporal duration of the impact and whether it relates to the construction or operational phase of the development;
- the timing and frequency of the impact; and
- whether the impact is reversible and over what timeframe.

2.2.7 Both short term (i.e. impacts occurring during the site clearance and construction phases) and long term impacts are considered.

Conservation status

2.2.8 The extent to which the extension area may have an effect upon ecological features should be determined in the light of its expected influence on the integrity of the protected site or ecosystem. The integrity of protected sites is considered specifically in the light of the site's conservation objectives. Beyond the boundaries of designated sites with specific nature conservation designations and clear conservation objectives, the concept of 'conservation status' is used. Conservation status should be evaluated for a study area at a defined level of ecological value. The extent of the area used in the assessment relates to the geographical level at which the feature is considered important.

- for habitats, conservation status is determined by the sum of the influences acting on the habitats and its typical species that may affect its long-term distribution, structure and functions as well as the long-term survival of its typical species within a given geographical area; and
- for species, conservation status is determined by the sum of influences acting on the species concerned and inter-relationships that may affect the long-term distribution and abundance of its populations within a given geographical area.

Confidence in predictions

2.2.9 It is important to consider the likelihood that a change or activity will occur as predicted and also the degree of confidence in the assessment of the impact on ecological structure and function.

- **Certain** probability estimated at above 95%
- **Probable** probability estimated above 50% but below 95%
- **Possible** probability estimated above 5% but below 50%
- **Unlikely** probability estimated as less than 5%.

Cumulative impacts

2.2.10 Consideration is also given to the potential for the development proposal to give rise to significant negative impact in combination with other proposed development in the local area.

Overall assessment

2.2.11 An overall assessment of value and impact is provided, and this is based upon the highest level of value of any of the features or species present or likely to be present on the site, and similarly the overall assessment of impact would be the impact of greatest significance.

Limitations to assessment methodology

2.2.12 The proposal to extract mineral from the extension to the quarry is still at a very early stage, and hence assessment is restricted to a brief consideration of the potential of the proposed extension to give rise to any adverse impacts upon designated and non-designated sites and habitats, and where appropriate, to put forward proposals to mitigate, or offset such impacts, and a brief discussion of potential enhancement opportunities.

2.3 Mitigation hierarchy

2.3.1 The following principles underpin EcIA and have been followed, where applicable, in this assessment:

- **Avoidance** Seek options that avoid harm to ecological features (for example, by locating the proposed development on an alternative site or safeguarding on-site features within the site layout design).
- **Mitigation** Adverse effects should be avoided or minimised through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation.

- **Compensation** Where there are significant residual adverse ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.
- **Enhancement** Seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.

3 Results

3.1 Desk study results

Sites of European importance

3.1.1 The following sites of European importance (Ramsar, Special Protection Area, Special Area of Conservation) were identified:

Site	Key habitat/features of interest
Norfolk Valley Fens SAC	The Norfolk Valley Fens SAC comprises a series of valley-head spring-fed fens. Such spring-fed flush fens are very rare in the lowlands. Most of the vegetation is of the small sedge fen type, mainly referable to M13 Schoenus nigricans – Juncus subnodulosus mire, but there are transitions to reedswamp and other fen and wet grassland types. The individual fens within the SAC vary in their structure according to intensity of management and provide a wide range of variation.

3.1.2 The SAC lies just beyond the search area but is included here for completeness. It is not shown in Figure 01.

Sites of national importance

3.1.3 The following sites of national importance were identified within the search area:

Site	Key habitat/features of interest
Blackborough End Pit SSSI	This geological SSSI is an important site for the demonstration of regional stratigraphy and erosional relationships in the Lower Cretaceous. Here the Carstone rests on Leziate Beds, and the normally intervening Dersingham Beds are absent. It is therefore a key locality for the demonstration of sub-Carstone erosion (Albian) and the cutting out (removal) southwards of the successively older rock units by that formation.
East Winch Common (SSSI)	East Winch Common comprises an area of predominantly wet acid heathland on shallow peat of a type that has become rare in west Norfolk. Many wet hollows are present containing diverse fen and mire communities. One rare plant species occurs and also several uncommon species. The site is surrounded by young woodland.
River Nar (SSSI)	The River Nar originates as a spring-fed stream, west of Mileham in Norfolk and flows for 42km before joining the River Great Ouse at Kings Lynn, where a sluice prevents the penetration of seawater at high tide. The River combines the characteristics of a southern chalk stream and an East Anglian fen river. Together with the adjacent terrestrial habitats, the Nar is an outstanding river system of its type.
East Walton & Adcocks Common (SSSI)	These two commons, which lie about one kilometre apart have a similar topography, vegetation and management and are notable for a complex set of basin-shaped depressions separated by chalky ridges which were formed under periglacial conditions. Active springs are also a feature. The varied topography has resulted in a mosaic of habitats ranging from fen or occasionally open water in the depressions to chalk grassland or scrub on the intervening ridges.

3.1.4 The location of designated site relative to the proposed extension is shown in Figure 01. East Walton & Adcocks Common lies outside the search area but is included here for completeness. It is not shown in Figure 01.

Sites of local importance

3.1.5 The following sites of local importance were identified within the search area:

Site	Key habitat/ features of interest
South of West Bilney Warren (CWS 429)	A coppice woodland with a grassy groundflora and some wetland interest associated with a small stream.
Valetta Meadow (CWS 431)	An area of damp to well-drained neutral grassland situated on sandy soil adjacent to a large coniferous plantation and bounded by mature hedgerows.

Pentney Gravel Pits (CWS 532)	Previous phases of mineral extraction at the site have delivered well-vegetated flooded workings supporting associated wetland and dry grassland vegetation.

3.1.6 There is no Ancient Woodland in the search area. Other CWS lie at greater distance from the proposed extension and are not considered further.

3.1.7 The location of designated sites relative to the proposed extension is shown in Figure 01.

4 Evaluation of conservation status and impact assessment

4.1 Assessment rationale

4.1.1 The assessment is based on the ecological data presented within this report. Future changes in the wildlife present on site after a period of time has elapsed are outside the scope of this report, unless specifically stated.

4.2 Evaluation of conservation status and assessment of designated sites

4.2.1 The ecological value of the site is considered below and in accordance with species legislation and planning policy as outlined in Appendix 1.

4.2.2 The proposals are considered to have potential to give rise to the following impacts upon designated wildlife sites:

- Noise disturbance
- Visual disturbance (including lighting impacts)
- Dust deposition
- Severance of groundwater flow

4.2.3 No other impacts can be foreseen.

Sites of European importance

Site	Distance from extension site (approx.)	Direction	Potential for impact
Norfolk Valley Fens SAC	5km	NE	The SAC lies just beyond the search area but is included here for completeness. It is considered that, although the component sites of the Norfolk Valley Fens SAC are spring fed (water dependant) and the proposed minerals extraction would have potential to sever sub-surface flows, the distance between the site and the SAC is such that hydrological impacts upon the designated site and the floral and fauna interest present are extremely unlikely. The designated site lies at a distance from the proposed extension site such that visual and noise impacts or dust deposition are very unlikely.

Sites of national importance

Site	Distance from extension site (approx.)	Direction	Key habitat/features of interest
Blackborough End Pit SSSI	2.6km	NW	It is considered that, given the distance between the quarry and the designated site and the nature of this site (a geological SSSI), there is no [potential for the proposals to give rise to impacts upon designated features.

East Winch Common (SSSI)	2.8km	N	The proposed mineral working lies outside Natural England's SSSI Impact Risk Zone for this site but is within the 3km search area. Although East Winch Common supports areas of wetland which are groundwater fed, the designated site lies at some distance from the quarry and is appears to be hydrologically distinct from this section of the Nar Corridor, being separated from the Nar floodplain by areas of higher ground. Hydrological impacts upon the designated site and associated interest are considered unlikely. The designated site lies at a distance from the proposed extension site such that visual and noise impacts or dust deposition are very unlikely.
River Nar (SSSI)	C30m	S	The proposed extension site lies within Natural England's SSSI Impact Risk Zone for this SSSI and this category of project. Although the Nar is fed by groundwater from the chalk, excavation of minerals at other sites in this part of the floodplain has been shown not to influence the hydrology of the SSSI. There are no tributary watercourses which discharge to the Nar in the vicinity of the proposed extension which might create surface water connectivity between the new excavation and the river, and water used during the extraction process for washing etc. is recycled through an existing system of settlement ponds; there is consequently no potential for water from the extraction processes to enter the River Nar There is some potential for noise, dust and visual disturbance to this section of the SSSI due to its close proximity to the proposed extraction site, however minerals operations have continued in this area for a number of years with no evidence of disbenefit to the SSSI and it is anticipated that the current good practice measures designed to minimise any such impacts would continue to be employed and provide effective mitigation. This could be considered further in any future planning application and the detail of the mitigation measures required set out in a CEMP or similar document.
East Walton & Adcocks Common (SSSI)	5km	NE	This SSSI lies just beyond the search area but is included here for completeness given its co-designated status as an SAC. It is considered that, although the SSSI is spring fed (water dependant) and the proposed minerals extraction would have potential to sever sub-surface flows, the distance between the site and the SAC is such that hydrological impacts upon the designated site and the floral and fauna interest present are extremely unlikely. The designated site lies at a distance from the proposed extension site such that visual and noise impacts or dust deposition are very unlikely.

Sites of local importance

Site	Distance from Site (approx.)	Direction	Key habitat/ features of interest
South of West Bilney Warren (CWS 429)	210m	N	The designated site lies a short distance to the north of the quarry and consequently may be subject to noise, visual disturbance or dust deposition. It is anticipated that the current good practice measures designed to minimise any such impacts would continue to be employed and would provide effective mitigation. Screening bunds along the northern margin of the void would reduce visual impact. This could be considered further in any future planning application and the detail of the mitigation measures required set out in a CEMP or similar document. The CWS features some wetland interest associated with a small stream but this wetland area appears to be surface-fed; there is no evidence to suggest spring input The proposed extraction is not anticipated to result in any changes to stream flow.
Valetta Meadow (CWS 431)	650m	NW	This CWS lies well beyond the search area of 250m but is included here for completeness. The designated site lies to the northwest of the quarry but is visually buffered by the presence of a large block of woodland between the two. There is some potential for minor noise or dust deposition to occur. It is anticipated that the current good practice measures designed to minimise any such impacts would continue to be employed and would provide effective mitigation. This could be considered further in any future planning application and the detail of the mitigation measures required set out in a CEMP or similar document. The CWS has no wetland interest and so excavation and any associated dewatering would not result in any detriment.
Pentney Gravel Pits (CWS 532)	725m	NE	This CWS lies well beyond the search area of 250m but is included here for completeness. The designated site lies to the northeast of the quarry and consequently may be subject to noise, visual disturbance or dust deposition. It is anticipated that the current good practice measures designed to minimise any such impacts would continue to be employed and would provide effective mitigation, including to an adjacent caravan and leisure facility at this waterbody. Screening bunds along the northern margin of the void would reduce visual impact. This could be considered further in any future planning application and the detail of the mitigation measures required set out in a CEMP or similar document. The CWS features wetland interest associated with waterbodies (former minerals workings) which is understood to be springfed from the northeast. The proposed extraction is not anticipated to result in any changes to spring input in this part of the CWS which

			would be seperated from the extension site by a deep water-filled void.

4.3 Cumulative impacts

4.3.1 There are no known cumulative impacts.

5 Mitigation and Avoidance measures

5.1 Avoidance measures

5.1.1 The following impact avoidance measures have been identified and will be delivered:

- Good practice measures with regard to dust generation and noise reduction would continue to be employed
- Site lighting would remain at the current, minimal levels

5.2 Proposed mitigation for known impacts

5.2.1 Bunds should be installed as a minimum along the northern margin of the void to reduce visual disturbance to CWS 429.

5.2.2 With the exception of boundary ditches the ecological interest of the extension site is likely to be fairly minimal, although any future planning application would consider potential impacts upon any habitat and/or protected wildlife interest and future detailed mitigation design may need to take this into account.

5.3 Compensation for ecological impacts

5.3.1 No compensatory habitat creation or management is proposed.

6 Enhancement options

6.1 Ecological enhancement

6.1.1 Ecological enhancements aim to improve the quality of the site and the immediate vicinity for native flora and fauna. These enhancements can also provide aesthetical appeal and can add value to the proposed development.

6.1.2 Possible enhancement opportunities specific to the development proposals for this site are provided below. It is not anticipated that all these options would be utilised. The options are limited to habitat enhancements; and species specific enhancement options would need to be developed at the time of a future planning application and following a more detailed ecological survey and assessment.

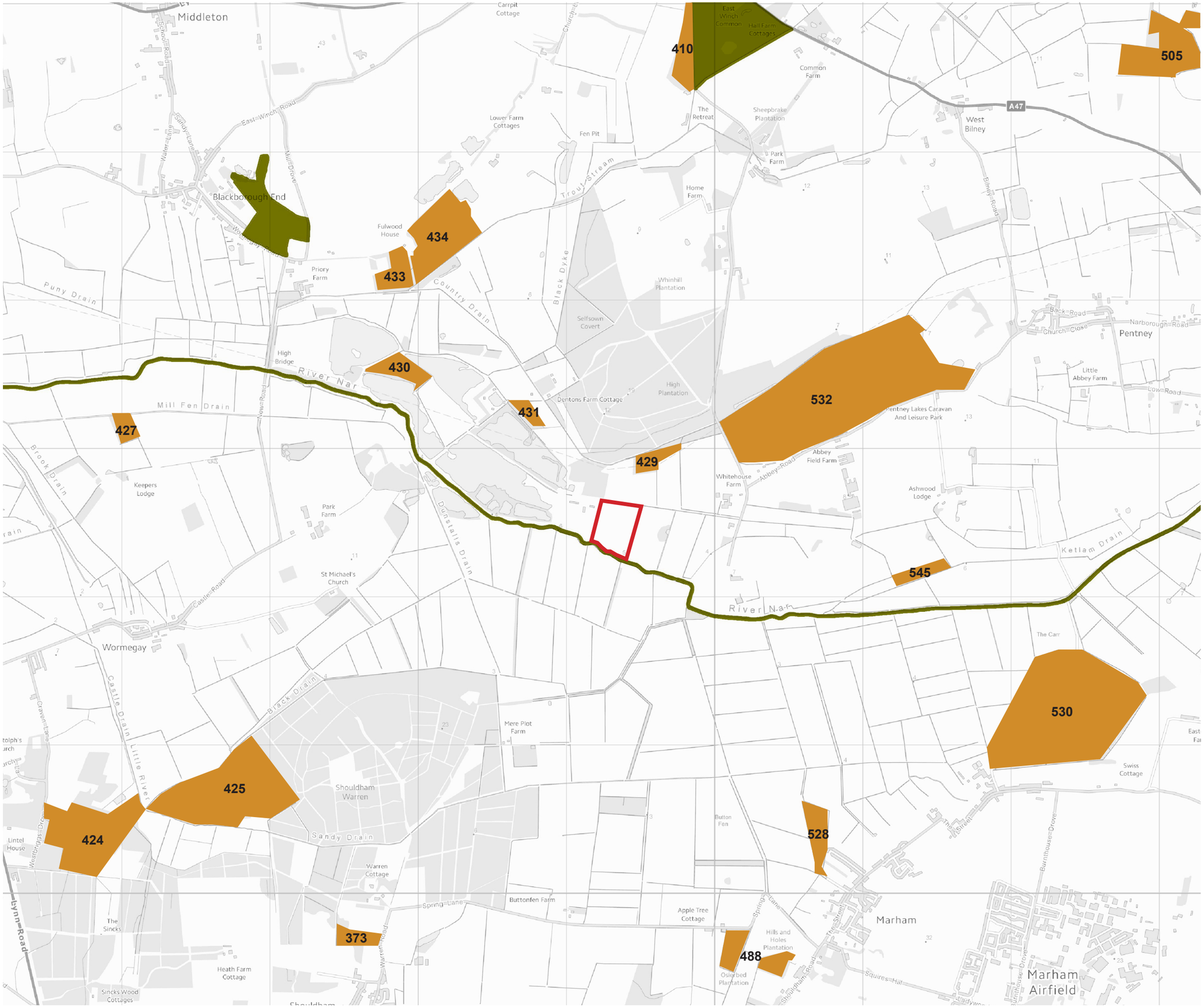
6.2 Habitat enhancement options

6.2.1 This site lies in an area of soils and hydrology which have been shown through previous phases of site working to have the capability to support spring-fed fen and mire communities and species rich grassland on shallow skeletal soils.

6.2.2 Safeguarding constraints associated with nearby RAF Marham require a restoration design which minimises large open water areas and reedbed, which are capable of supporting large/flocking birds, and maximises the extent of wet woodland. Smaller areas of wet fen-grassland would also be created.

6.2.3 Use of a local seedbank harvested from the nearby wetland CWS would allow a grassland and wetland system of potential ecological interest to develop in this area; alternatively, areas of wet bare ground could be left unseeded for a period of time and a flora allowed to develop naturally. It is anticipated that this might be colonised by locally uncommon wetland species.

Figures



Key

- Site boundary
- Sites of Special Scientific Interest
- 410 County Wildlife Sites

E17841 Pentney Quarry, Kings Lynn

Ecological designations

Figure 01

Scale 1:25,000

June 2017

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Appendix 1

Legislative and policy context

There are a number of pieces of legislation, regulations and policies specific to ecology which underpin this assessment. These may be applicable at a European, National or Local level. References to legislation are given as a summary for information and should not be construed as legal advice.

Birds Directive

The European Community Council Directive on the Conservation of Wild Birds (79/409/EEC), normally known as the Birds Directive, sets out general rules for the conservation of all naturally occurring wild birds, their nests, eggs and habitats. It was superseded by the 'new' Birds Directive (2009/147/EC) which generally updated the previous directive.

These requirements are interpreted into English law by the Wildlife and Countryside Act 1981 (as amended) with regard to protection of birds, and the Conservation of Habitats and Species Regulations 2010 with regard to the registration and regulation of Special Protection Areas.

Habitats Directive

The European Community Council Directive on the Conservation of Natural Habitats of Wild Fauna and Flora (92/43/EEC), normally known as the Habitats Directive, aims to protect the European Union's biodiversity. It requires member states to provide strict protection for specified flora and fauna (i.e. European Protected Species) and the registration and regulation of Special Areas of Conservation.

These requirements are interpreted into English law by the Conservation of Habitats and Species Regulations 2010 with regard to European Protected Species and the registration and regulation of Special Areas of Conservation.

Conservation of Habitats and Species Regulations 2010

The Conservation of Habitats and Species Regulations 2010 interpret the Birds Directive and Habitats Directive into English and Welsh law. For clarity, the following paragraphs consider the case in England only, with Natural England given as the appropriate nature conservation body. In Wales, the Countryside Council for Wales is the appropriate nature conservation body.

Special Protection Areas and Special Areas of Conservation are defined in the regulations as a 'European site'. The Regulations regulate the management of land within European sites, requiring land managers to have the consent of Natural England before carrying out management. Byelaws may also be made to prevent damaging activities and if necessary land can be compulsorily purchased to achieve satisfactory management.

The Regulations define competent authorities as public bodies or statutory undertakers. Competent authorities are required to make an appropriate assessment of any plan or project they intend to permit or carry out, if the plan or project is likely to have a significant effect upon a European site. The permission may only be given if the plan or project is ascertained to have no adverse affect upon the integrity of the European site. If the competent authority wishes to permit a plan or project despite a negative assessment, imperative reasons of over-riding public interest must be demonstrated, and there should be no alternatives to the scheme. The permissions process would involve the Secretary of State and the option of consulting the European Commission. In practice, there will be very few cases where a plan or project is permitted despite a negative assessment. This means that a planning application has to be assessed by the Local Planning Authority, based on information provided by the applicant, and the assessment must either decide that it is likely to have no significant effect on a European site or ascertain that there is no adverse affect upon the integrity of the European site.

Government policy is for Ramsar sites (wetlands of global importance) to be treated as if they were European sites within the planning process.

Appropriate Assessment

Appropriate Assessment is required in certain instances under the Conservation of Habitats and Species Regulations 2010. Regulation 61 says that

> *61.—(1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which-*
>
> *(a) is likely to have a significant effect on a European site or a European offshore marine site*

(either alone or in combination with other plans or projects), and

(b) is not directly connected with or necessary to the management of the site, must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.

(2) A person applying for any such consent, permission or other authorisation shall provide such information as the competent authority may reasonably require for the purposes of the assessment or to enable them to determine whether an appropriate assessment is required.

(3) The competent authority shall for the purposes of the assessment consult the appropriate nature conservation body and have regard to any representations made by that body within such reasonable time as the authority may specify.

(4) They must also, if they consider it appropriate, take the opinion of the general public, and if they do so, they must take such steps for that purpose as they consider appropriate.

(5) In the light of the conclusions of the assessment, and subject to regulation 62 (considerations of overriding public interest), the competent authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).

(6) In considering whether a plan or project will adversely affect the integrity of the site, the authority must have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which they propose that the consent, permission or other authorisation should be given.

The competent authority is typically the local planning authority. The Appropriate Assessment contains the information the council require for the purposes of their assessment under the Habitat Regulations.

The Habitat Regulations also are applicable to local authority land use plans and policies. If a policy or plan is likely to have a significant effect upon a European site, the permission may only be given if the policy or plan is ascertained to have no adverse affect upon the integrity of the European site. This approach gives rise to a hierarchy of plans each with related appropriate assessments. For example, the appropriate assessment of a Regional Spatial Strategy will affect policies within a Core Strategy, which will then need its own appropriate assessment, and so on.

European Protected Species

European Protected Species of animals are given protection from deliberate capture, injuring, killing, disturbance or egg taking / capturing. Their breeding sites or resting places are also protected from damage or destruction, which does not have to be deliberate. A number of species are listed as European Protected Species, with those most likely to be considered in planning applications being bats, dormouse, great crested newt and otter. Natural England may give a licence for actions that are otherwise illegal, subject to them being satisfied on the three tests of no alternatives, over-riding public interest, and maintenance of the species in favourable condition.

European Protected Species of plant are also listed and given protection. These species are generally very rare and unlikely to be present in proposed development sites.

Wildlife and Countryside Act 1981

The Wildlife and Countryside Act 1981 has been amended many times, including by the Countryside and Rights of Ways Act 2000. It contains provisions for the notification and regulation of Sites of Special Scientific Interest, and for protected species.

The Regulations regulate the management of land within Sites of Special Scientific Interest, requiring land managers to have the consent of Natural England before carrying out management.

All public bodies are defined as 'S28G' bodies, which have a duty to further the nature conservation of Sites of Special Scientific Interest in the undertaking of their functions. In practice, this prevents planning applications being permitted if they would harm a Sites of Special Scientific Interest as it would be a breach of that duty.

The Act makes it an offence to intentionally kill, injure, or take any wild bird, take, damage or destroy the nest of any wild bird while that nest is in use or being built, or take or destroy an egg of any wild bird. Special

penalties are available for offences related to birds listed on Schedule 1, for which there are additional offences of disturbing these birds at their nests, or their dependent young.

The Act makes it an offence to intentionally kill, injure or take any wild animal listed on Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places. Some species have lesser protection under this Act, for example white-clawed crayfish, common frog and toads are protected from sale only, and reptile species other than smooth snake and sand lizard are protected from intentional killing or injury but they are not protected from disturbance and their habitat is not protected. It is also an offence to intentionally pick, uproot or destroy any wild plant listed in Schedule 8.

National Planning Policy Framework

The National Planning Policy Framework dated March 2012 (NPPF) replaces previous Government Policy in relation to nature conservation and planning, which was set out in Planning Policy Statement 9. Paragraph 109 of the NPPF says that the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible.

Paragraph 113 describes policy for designated sites, where Local Planning Authorities should set criteria based policies against which proposals for any development on or affecting protected wildlife or geodiversity sites or landscape areas will be judged. Further policy is within paragraph 118, where Local Planning Authorities should aim to conserve and enhance biodiversity when determining planning applications by applying the following principles:

- if significant harm 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;
- opportunities to incorporate biodiversity in and around developments should be encouraged;
- planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.
- Paragraph 115 adds protection to biodiversity within areas designated for their landscape value. It says that great weight should be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to landscape and scenic beauty. The conservation of wildlife and cultural heritage are important considerations in all these areas, and should be given great weight in National Parks and the Broads.

Government circular 'Biodiversity And Geological Conservation – Statutory Obligations and their Impact Within the Planning System' referenced ODPM 06/2005 and Defra 01/2005 has not been replaced and remains valid. It sets out the legislation regarding designated and undesignated sites and protected species, and describes how the planning system should be take account of that legislation. It does however pre-date the NERC Act 2006 (see below) which includes a level of protection for a further list of habitats and species regardless of whether they are on designated sites or elsewhere.

Natural Environment and Rural Communities (NERC) Act 2006

This Act includes a list of habitats and species of principal importance in England. Local Authorities are required to consider the needs of these habitats and species when making decisions such as on planning application.

Local Planning Authority's planning policy

The Local Planning Authority has policies relating to biodiversity conservation.

Species Legislation

The following table provides an overview of legislation with regard to species.

Protected Species	Legislation			
	Wildlife & Countryside Act, 1981	**The Conservation of Habitats and Species Regulations, 2010**	**Natural Environment & Rural Communities (NERC) Act, 2006**	**Protection of Badgers Act, 1992**
Plants (certain 'rare' species)	✓	✓[1]	✓	
Invertebrates (certain 'rare' species)	✓	✓[2]	✓	
White-clawed Crayfish	✓		✓	
Great Crested Newt, Natterjack Toad, Pool Frog	✓	✓	✓	
Other amphibians	✓[3]		✓	
Sand Lizard, Smooth Snake	✓	✓[4]	✓	
Other reptiles	✓[5]		✓	
Breeding Birds	✓	✓	✓	
Wintering Birds (certain 'rare' species)	✓	✓	✓	
Bats	✓	✓	✓	
Dormouse	✓	✓	✓	
Water Vole	✓		✓	
Otter	✓	✓	✓	
Badger				✓

1 Nine species present in the UK with very specialised habitat requirements are European Protected Species
2 Fisher's Estuarine Moth, Large Blue Butterfly and Lesser Whirlpool Ram's-horn Snail are European Protected Species
3 The four other native amphibian species (smooth and palmate newts, common frog and common toad) are protected against trade only under this act.
4 Smooth Snake and Sand Lizard are European Protected Species
5 The four other native reptile species (common lizard, slow worm, grass snake and adder) are protected against intentional killing, injuring and trade under this act.