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ENERGY AND CLIMATE CHANGE ENVIRONMENT AND SUSTAINABILITY INFRASTRUCTURE AND UTILITIES LAND AND PROPERTY MINING, QUARRYING AND MINERAL ESTATES WASTE RESOURCE MANAGEMENT



GALLAGHER ESTATES LTD

WYKHAM PARK FARM, OXFORDSHIRE

ENVIRONMENTAL STATEMENT ADDENDUM – ECOLOGY

August 2013



your earth our world



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ENERGY AND CLIMATE CHANGE ENVIRONMENT AND SUSTAINABILITY INFRASTRUCTURE AND UTILITIES LAND AND PROPERTY MINING AND MINERAL PROCESSING MINERAL ESTATES AND QUARRYING WASTE RESOURCE MANAGEMENT



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1 INTRODUCTION

1.1 Introduction

- 1.1.1 This report has been prepared on the behalf of Gallagher Estates as an addendum to the Environmental Statement (ES) submitted on the 4th March 2013. The ES was submitted in connection with an outline planning application for a residentially led mixed-use development on approximately 50 hectares (ha) of land south of Banbury, Oxfordshire. The outline planning application was submitted to Cherwell District Council (CDC) as the authority responsible for determining the application.
- 1.1.2 This report should be read in conjunction with the submitted ES.
- 1.1.3 On the 19th April 2013, Cherwell District Council requested under Regulation 22 (1) of the Town and Country Planning (Environmental Impact Assessment) further information to be submitted with respect to the Ecological Impact Assessment and these items are considered in separate sections within this document as follows:
 - Chapter 2 Surveys and Impact Assessment for Great Crested Newts;
 - Chapter 3 Survey and Impact Assessment for White-lettered Hairstreak; and
 - Chapter 4 Assessment of impacts on the District Wildlife Sites Salt Way potential Local Wildlife Site and Bretch Local Wildlife Site.
- 1.1.4 This report also considers the consultation response made by Cherwell District Council's Ecologist on the Ecological Impact Assessment (dated 16th May 2013).



2 GREAT CRESTED NEWTS

2.1 Introduction

- 2.1.1 Cherwell District Council have requested further information as Natural England indicated that the information supplied in the ES was insufficient to provide advice on the likely impact on Great Crested Newts (GCNs) *Triturus cristatus*.
- 2.1.2 Presence/absence surveys and population assessments (if necessary) for GCN were requested in order that suitable mitigation can be incorporated into the application.

2.2 Methodology

Desk Study and Pond Scoping

- 2.2.1 Ordnance Survey maps were reviewed to identify any water bodies within 500m of the site. The pond locations are shown on Drawing Number B7.10. Ponds P1 and P2 are located approximately 240m to the north-west of the site and Pond P3 is located approximately 240m to the west of the site. Ponds P4 and P5 are located approximately 500m from the south-western corner of the site in the grounds of a school. Pond P6 is situated approximately 60m to the south of the site.
- 2.2.2 Additionally, where access was available, Wardell Armstrong LLP assessed the waterbodies within 500m of the site boundary (where possible) for their potential to provide suitable breeding habitat for great crested newt. This pond scoping exercise was undertaken on the 16th May 2013.
- 2.2.3 Pond 6 could not be scoped for its suitability or surveyed because access was not granted by the landowner. Contact was attempted by letter and through a door knocking exercise on several occasions, but all attempts were unsuccessful.
- 2.2.4 This pond was not visible on aerial photographs but may be concealed by trees. This suggests that the pond is heavily shaded. There is also evidence that this pond may be dry. OS maps show that this pond is fed by a ditch. Part of this ditch occurs along the southern boundary of the site which was found to be heavily overgrown and dry. The ditch entered a culvert at the site boundary and appeared to continue in an easterly direction for an unknown distance downstream. The approximate diameter of the single culvert pipe is 375mm, but it was found to be almost 100% blocked (see Flood Risk Assessment). This suggests that little, if any, water has flowed along this ditch recently and therefore the water level in Pond P6 is likely to be low or not



present.

- 2.2.5 The scoping survey is based on the Habitat Suitability Index (HSI), of ponds on or within 500m the site. The HSI has been developed as a way of evaluating habitat quality and quantity for great crested newts. The HSI score is now required as part of the Natural England disturbance licensing system for each water body that would be subject to activities likely to result in adverse impacts to a local GCN population. The HSI is a numerical index between 0 and 1 (with 1 being optimal habitat) and uses ten suitability indices, all of which are factors thought to affect GCN but can only be calculated for still waterbodies and not moving watercourses. The HSI can be broken down into:
 - <0.5 = Poor
 - 0.5 0.59 = below average
 - 0.6 0.69 = average
 - 0.7 0.79 = good
 - >0.8 = excellent

GCN Surveys

- 2.2.6 The principal guidance for undertaking GCN surveys is provided in the English Nature document '*Great crested newt mitigation guidelines*' (August 2001). Further guidance on survey effort is also provided in the Method Statement Template for a Natural England disturbance licence application introduced in January 2008 (revised in April 2013).
- 2.2.7 The guidelines recommend that up to four visits should be undertaken in order to determine presence / likely absence of great crested newts under a survey licence from Natural England.
- 2.2.8 If GCN presence is confirmed, then two additional survey visits are undertaken (giving a total of 6), in order to carry out a GCN population size class assessment.
- 2.2.9 These surveys need to be undertaken between the months of mid-March and mid-June, with at least two (for presence / likely absence) or three (for population size class) of these surveys undertaken between mid-April to mid-May.
- 2.2.10 Surveys for GCNs were undertaken on the 16th, 20th, 23rd, 29th May 2013. As GCNs



were present in Ponds 1 and 5, a further two surveys of these ponds were undertaken on the 6^{th} and 13^{th} June 2013.

2.2.11 Three survey methods are recommended in the guidelines: torchlight inspections after dusk, overnight "bottle-trapping" and egg searching. All three survey methods were employed where appropriate and safe to do so.

Torch Light Survey

2.2.12 This method involves scanning the pond at night using a high powered torch (with a minimum of 50,000 candle power). This method can be a simple and effective way of detecting newts in clear ponds, however in turbid or heavily vegetated ponds can be limiting.

Bottle Trapping

2.2.13 This method involves setting traps, which are made from 2-litre plastic bottles, around the margins of the pond at a density of approximately one trap per two metres of shoreline. Guidelines recommend that traps should be set at dusk and checked between 0600 and 1100 hours the following morning. This can be one of the most effective methods for detecting the presence of GCNs, particularly in turbid or heavily vegetated ponds.

Egg Searching

2.2.14 This method involves searching submerged vegetative material (both live and dead) for GCN eggs. As this method requires the eggs to be 'unwrapped' from the leaf to confirm identification this has the potential to increase predation and exposure of the eggs to UV rays. Consequently only small areas of vegetation are systematically unwrapped and once GCN has reliably been identified this method is terminated. Egg searching can be an effective method for detecting presence of great crested newts, however eggs can prove difficult to find in heavily vegetated ponds, where a small population is present, or where vegetation is not easily accessible.

Survey Limitations

2.2.15 Access was not granted by the landowner to survey Pond P6 and therefore this pond could not be surveyed.

2.3 Results and Evaluation

2.3.1 An Extended Phase 1 Habitat survey was undertaken in August 2012 (refer to the ES



for detailed description of habitats on site). There are no water bodies present on site and the watercourse shown on OS maps to be located along the southern boundary of the site was dry. This was checked during a pond scoping visit in May 2013. No aquatic species were present to indicate that it had recently held water.

- 2.3.2 A review of OS maps identified 6 water bodies within 500m of the site and the locations of the water bodies are shown on Drawing Number B7.10.
- 2.3.3 A summary of the water bodies identified is provided in Table 1 below:

Table 1 – Water body /Course Description and HSI Score –Land North of Harbury Lane							
Pond / Stream	Pond / Stream Pond Access and Status						
Reference		Suitability					
P1	Surrounded by trees and scrub	0.66 – Average					
P2	Very small pond heavily shaded	0.28 – Poor					
Р3	Small pond at corner of field boundary with no aquatic	0.49 - Poor					
	vegetation – connected to hedges/trees	0.43 1 001					
P4	Small woodland pond feeding into an underground	0.41 – Poor					
	watercourse	0.41 1 001					
P5	School pond surrounded by lawns and amenity planting but	0.79 – Good					
	nearby fields	0.70 0000					
P6	No Access Available	No score assigned					

2.3.4 The ponds P1 to P5 were subject to further surveys and the results are summarised in Table 2 below:

Table 2: GCN survey results for suitable ponds within 500m of the land north of Harbury Lane								
Pond Number	Methods Employed	GCNs	Population Size Class					
		Present	(Peak Count)					
Pond P1	Bottle-trapping;	Y	Medium (34 – 20.05.13)					
	Torchlight; Egg-							
	search							
Pond P2	Torchlight	Ν	-					
Pond P3	Bottle-trapping	Ν	-					
Pond P4	Torchlight	Ν	-					
Pond P5	Torchlight, Egg-	Y	Medium (30 – 20.05.13)					
	search	Eggs found						
Pond P6	-	Not surveyed	-					

2.3.5 Pond P2 and Pond P4 were too shallow to use bottle-traps. No suitable aquatic vegetation to egg-search was present in Ponds P2, P3 and P4. Pond P5 was lined and



therefore bottle-traps could not be used. Pond P3 was very turbid and therefore only bottle-trapping was employed at this pond. The egg-search in Pond P1 was limited as most of the vegetation in the pond comprised reeds.

2.3.6 Smooth newts, common frog and fish were observed in Pond P1. No amphibians were observed in Ponds P2, P3 and P4. Smooth and palmate newts, common frog and dragonfly larvae were observed in Pond P5.

2.4 Impact assessment

- 2.4.1 The results indicate that 'medium' sized populations of GCNs are present in Ponds P1 and Pond P5. The suitability of Pond P6 for GCN and the presence/ likely absence of GCN could not be confirmed for Pond P6 due to access restrictions.
 - 2.4.2 The planning authority has a responsibility to consider the "Three Tests" under the Conservation of Habitats and Species (Amendment) Regulations 2012 when determining a planning application where there is a potential for an European Protected Species (EPS) to be affected. The first two tests relate to the need for the development and the existence of alternatives. The third test (under Regulation 53 (9)(b) of the Conservation of Habitats and Species (Amendment) Regulations 2012) considers whether the proposed development will result in significant impacts on the favourable conservation status of a European Protected Species. In order to do this, if an EPS is present, it must be demonstrated that adequate compensation and mitigation can be put in place as part of the development so that the conservation status of the species is maintained.
 - 2.4.3 In addition, in order to comply with the Town and Country Planning (Environmental Impact Assessment Regulations) (England and Wales) Regulations 1999, the ES must include information which identifies all likely significant effects of the development on the environment and describe the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment. In the absence of survey information on Pond 6, it is possible to assess potential impacts on GCN based on the available evidence on the habitats present both on and off-site, combined with information on GCN ecology. A suitable mitigation strategy can be proposed and implemented should GCN be present which will ensure that residual impacts on GCN after mitigation are negligible.
 - 2.4.4 In order to assess the potential impacts on GCN in the Ponds P1, P5 and potentially P6, available evidence on the ponds, the habitat immediately surrounding this



ponds, intervening habitats between the ponds and the site and the habitats located on site has been considered.

Habitats close to the ponds

- 2.4.5 Research has shown that the majority of a GCN population remains very close to its breeding pond (with most adults captured within 50m of ponds during pitfall trapping operations and very few animals captured at distances greater than 100m).¹ Pond P1 is located over 240m from the site and therefore it is anticipated that a significant proportion of any GCN population present at this pond would be found in the habitats in the immediate vicinity of the pond, which includes trees, scrub and tussocky grassland, and not in the limited terrestrial habitats within the site.
- 2.4.6 Pond P5 is located 500m from the site's southern boundary and therefore it is anticipated that the significant proportion of the GCN population present in this pond would be found in the habitats in the immediate vicinity of the pond, woodland and grassland meadow located nearby, and not in limited terrestrial habitat within the site 500m away.
- 2.4.7 From aerial photographs, it also appears that habitats which occur in the immediate surroundings of Pond P6, which include gardens and a field of grassland could potentially be of more value to GCN, as opposed to the arable land on site. It is therefore considered likely that a significant proportion of any GCN population which may be using Pond P6 would be using the immediate habitats around the pond rather than the limited terrestrial habitats on site.

Intervening habitats

2.4.8 The A361 road is located between Pond P1 and the site which could form a significant barrier to GCN dispersal from Pond P1 into the site. GCN from P1 would also have to cross arable land in order to enter the site.

¹ English Nature (2004) *English Nature Research Report 576: An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt* Triturus cristatus. English Nature, Peterbrough.



- 2.4.9 Pond P5 is separated from the site by Wykham Lane and an extensive area of arable land which GCN may not disperse across in order to enter the site.
- 2.4.10 There are no significant barriers to dispersal between the site and Pond P6.

Habitats on site

2.4.11 The terrestrial habitats on the site, notably the hedgerows, have the potential to be used by amphibians as resting places and for foraging and over wintering. To a lesser extent, arable habitat could also be used by amphibians, but this habitat is of less value to these species.

2.4.12 It is has calculated that for:

Pond P1 – 7.1ha of the application site is located within 250-500m of the pond; of which 1190m is hedgerow and 0.21ha is woodland;

Pond P5 – 0.05ha of the site is located within 250-500m of the pond; of which 200m is hedgerow;

Pond P6 – 0.2ha of the site is located within 100m of the pond; 6.6ha is located within 100-250m of the pond; and 12.8 ha are located within 200-500m of the pond. Of land within the site within 500m of Pond P6 1936m is hedgerow habitat.

Potential impacts

- 2.4.13 Given the above factors, it is considered likely that at most only a very small number of GCN from the populations based at the off-site ponds could potentially be present in the site and also that these individuals would mainly be restricted to the hedgerows and woodland habitats within the site.
- 2.4.14 The proposed development on site is considered to have two main potential impacts on GCN. These are loss of potential terrestrial habitat and harm/disturbance to individual GCN during site clearance works and archaeological investigations.
- 2.4.15 The proposed development would result in the permanent loss of arable land from the site and is the main habitat present on site within 500m of Ponds P1, P5 and P6. If any GCN populations should be present at P6, it is considered extremely unlikely



that any GCN using this pond in addition to GCN using Ponds P1 and P5 would forage within the arable fields in significant numbers. Therefore it is considered probable that there will be no significant adverse impact on GCNs as a result of the loss of poor quality terrestrial habitat (arable fields).

- 2.4.16 The woodland habitat (0.2ha semi-natural broad-leaved woodland) and the majority of the hedgerows are being retained as part of the development. It is considered probable that the small loss of hedgerow habitat (12% of the total hedgerows on site) to the development will have negligible impacts on GCN which are present in the off-site ponds as the majority of the suitable habitat within the site is being retained, more suitable terrestrial habitats are currently present in the vicinity of the ponds and hedgerow habitats also occur in the surrounding areas.
- 2.4.17 There are opportunities to enhance the site for biodiversity and the development proposals include for the provision of balancing ponds and other wetland features, areas of open space and landscaping. These elements of the development have the potential to provide beneficial impacts to amphibians, including GCNs, by providing new aquatic and more suitable terrestrial habitats on site.
- 2.4.18 Individual GCN could potentially be harmed /disturbed if present when site clearance works are being undertaken. It is considered extremely unlikely that any GCN from Pond P1 will be present within the parts of the site that fall within 500m of these ponds. In relation to Ponds P5, the only part of the site to fall within 500m of these ponds would be a short section of the southern boundary which is being retained. The risk of harm and disturbance to any GCN which may be present in Ponds P1 P5 is therefore considered to be low. It is therefore considered probable that the impacts of harm and disturbance on individual GCN, from Ponds P1 and P5, will be negligible and thus the site clearance operations are considered unlikely to affect the favourable conservation status of GCN populations in the local area. As such the third test would be passed and therefore the implementation of mitigation measures under a disturbance licence from Natural England under the Conservation of Habitats and Species (Amendment) Regulations 2012 would not be required.
- 2.4.19 As Pond P6 is located closer to the site, if GCN are present in this pond, the likelihood of GCN being present in the site is greater than for Ponds P1 and P5. However, given the factors stated above, it is unlikely that a significant proportion of any GCN population based at Pond P6 would be present in the hedgerows in the parts of the site that fall within 500m of Pond P6. The hedgerows in these parts of



the site are being retained, however there will be significant ground disturbance within close proximity to these habitats in addition to a break being introduced into one hedgerow.

- 2.4.20 It is therefore considered probable that in addition to some limited habitat disturbance, a small number of individual GCNs could potentially be harmed / disturbed, if a population is present in Pond P6. This would represent a minor adverse impact on GCN populations in the local area. The potential loss of a few individual GCNs during site clearance operations is considered unlikely to affect the overall favourable conservation status of GCN populations in the local area.
- 2.4.21 As the survey has identified the presence of GCNs in Ponds P1 and P5, the habitat areas have been inputted into Natural England's Rapid Risk Assessment Tool to determine if a European Protected Species Development licence is required. If the Rapid Risk Assessment finds the risks to be 'Green offence highly unlikely' or 'Amber offence is likely', it may be possible to undertake works within the site using Reasonable Avoidance Measures which would negate the need for a licence.
- 2.4.22 The Rapid Risk Assessment Tool suggests that for Ponds P1 and P6 an offence is 'amber likely' and for Pond 5 an offence is 'green highly unlikely,' provided that no GCNs are harmed as a result of the works.

2.5 Mitigation

- 2.5.1 The Rapid Risk Assessment Tool suggests that for Ponds P1 and P6 an offence is 'amber likely' and for Pond 5 an offence is 'green highly unlikely,' provided that no GCNs are harmed as a result of the works.
- 2.5.2 Of the land which falls within 500m of Pond P5, only the southern hedgerow is considered suitable for GCNs and as this is being retained the risk of harm to GCN is likely to be extremely low and therefore a licence application and mitigation measures in connection with Pond P5 is not required.



- 2.5.3 For Ponds P1 and P6 the risk of an offence being committed is 'amber likely'. Natural England recommends in these cases that reasonable avoidance measures (RAM) should be employed during site clearance works (including archaeological investigation works), construction and landscaping works to decrease the risk to GCN. If the risk to GCN can be reduced through implementing RAMs then a licence will not be required.
- 2.5.4 A draft method statement for employing RAMS during the archaeological investigations and construction/landscaping works is attached as Appendix 1.
- 2.5.5 A tool box talk and method statement will be given to contractors to notify them of the potential presence of a protected species, the methods employed to protect GCN and what to do if one is discovered.
- 2.5.6 If GCN are encountered during the archaeological, site clearance or construction works, works will cease and advice sought from Natural England.

3 WHITE-LETTER HAIRSTREAK AND OTHER BUTTERFLIES

3.1 Introduction

- 3.1.1 The white-letter hairstreak *Satyrium w-album* is a UK BAP priority species. There are three historic records of white-letter hairstreak along the Salt Way (Grid Reference SP453387).
- 3.1.2 Cherwell District Council's Ecologist suggested that surveys for this species, as well as for other butterflies interest, should be undertaken at the site and along the Salt Way and the potential impacts upon this species assessed.

3.2 Methodology

Elm Survey

3.2.1 White-letter hairstreak are reliant on elm species (wych elm *Ulmus glabra* is favoured) which is the sole food-plant of their larvae. Colonies of this species are small and can be focussed on a small group of trees or an individual tree. Flowering elms are required for successful larval development as the larvae move to and feed on flower buds immediately after they hatch. Therefore the potential presence of white-letter hairstreak on site can be determined from the presence of flowering elm species on the site.



- 3.2.2 A survey was undertaken on 21^s May 2013 to map the occurrence of elm within the site, although it is recognised that the survey was undertaken outside the optimum time of year to record flowering elm species as elms usually flower in February and March. However as a precautionary approach all elm species were recorded within the site as abundant foliage enabled identifying the presence of elm species even though they weren't in flower.
- 3.2.3 Regarding other butterfly interest at the site, the assessment was based on habitat data and incidental sightings of butterflies observed on site. Small whites and peacock butterflies were observed along the hedgerow adjacent to the Saltway. The site is primarily arable land which is assessed as being of negligible value to butterflies and other invertebrates. The field margins in the arable fields were either non-existent or narrow. The hedgerows would represent the most suitable habitat for butterflies on site, which could support some other common species such as gatekeeper or small tortoiseshell, however the spray drift from fertilisers and pesticides used on the arable fields are considered likely to negatively affect the populations and diversity of butterflies that may be present in the hedgerows.
- 3.2.4 The site is therefore assessed overall as being of poor/negligible value for butterfly species. Post-development, it is anticipated that there will be beneficial impacts on butterflies and other invertebrates resulting from the cessation of arable farming, the creation of habitats (including wildflower meadows and balancing ponds / wildlife ponds) and the enhancement of the retained woodland and hedgerow habitats.
- 3.2.5 It is considered highly unlikely that the habitats to be significantly affected by the development, i.e. loss of 12% of the total hedgerows present on site, will give rise to significant adverse impacts on these species and, given the above assessment, specific surveys for butterflies were therefore not undertaken.
- 3.2.6 The assessment above was agreed with Cherwell District's Council's Ecologist. Please refer to correspondence in Appendix 2.

3.3 Results

Within the Site

3.3.1 No mature elm trees were recorded in the hedgerows within the site or along the northern boundary of the site which is adjacent to the Saltway (Tree Survey Report by Wardell Armstrong 2013).



- 3.3.2 During the subsequent site survey on 21st May 2013, saplings and hedgerow shrubs of Wych elm were found to occur occasionally in hedgerows H1, H4 and H16 while English elm *Ulmus procera* was found to occur occasionally in Hedgerows H14 and H15. (Refer to drawing WM10671/B7.1 for locations of hedgerows).
- 3.3.3 None of these hedgerow shrubs showed signs of having flowered earlier in the year.

Along the Saltway

- 3.3.4 A number of immature saplings of elm were recorded along the northern boundary edge of the Salt Way. A cluster of six mature elm trees, in the vicinity of where the historic record of white-letter hairstreak was previously recorded, were located in the northern boundary edge of the Salt Way close to an existing housing development. No signs of these elms having flowered earlier in the year were visible.
- 3.3.5 These mature trees, located off-site, provide the most suitable habitat for whiteletter hairstreak within the area included in the survey.

3.4 Impact Assessment

- 3.4.1 From a review of the Parameter Plan JJG043-027, Hedgerow H1 present along the southern boundary of the Salt Way "green lane" is to be retained and buffered from the site development by a 10-12m wide landscape strip. The cluster of mature elms present along the northern edge of the Salt Way (close to the corner of the existing housing development to the north east of the site) will not be affected by the proposed development.
- 3.4.2 There are a number of existing gaps along the southern edge of the Salt Way where unofficial pedestrian access is gained onto the site. There may be the need to remove some smaller trees and scrub to create slightly wider gaps but the removal of mature trees will be avoided where possible. However the tree survey did not record mature elm trees within Hedgerow H1 along the Salt Way therefore the potential to lose potential habitat of the white-letter hairstreak as a result of the development is negligible.
- 3.4.3 Elm shrubs are also present within hedgerows H4, H14, H15 and H16. H4, H15 and H16 are considered to have the potential to be deemed 'important' under wildlife and landscape criteria of the Hedgerow Regulations 1997 and therefore the



proposed development has sought to retain as much of these hedgerows as possible. H14 is a boundary hedgerow and will also be retained as part of the development.

- 3.4.4 Overall the impact from the loss of potential habitat for white-letter hairstreak that is present within the site as a result of the development is negligible. It is considered probable that there will be beneficial impacts as a result of the development for white-letter hairstreak and other butterflies and invertebrates through appropriate landscape planting and management of habitats within the completed development.
- 3.4.5 The cessation of arable farming may benefit butterflies and other invertebrates overall and increase invertebrate diversity at the site. The enhancements will also increase butterfly and invertebrate diversity at the site, e.g. increase in aquatic invertebrates as a result of pond creation and increase in butterflies and other invertebrates due to wildflower meadow planting, creation of new landscape buffers and enhancement and management of retained woodland and hedgerow habitat.

3.5 Specific Enhancement measures proposed for white-letter hairstreak

- 3.5.1 As an enhancement measure for white-letter hairstreak, it is proposed that the retained hedgerows within the site will be managed to allow some of the elm shrubs (in particular wych elm) to grow to maturity as standard hedgerow trees.
- 3.5.2 Elm species resistant to Dutch elm disease will also be included in planting mixes for new hedgerows and landscape buffers on the site, in particular where these areas occur close to the Salt Way.

4 DISTRICT WILDLIFE SITES

4.1 Introduction

4.1.1 Cherwell District Council's Ecologist requested that the impact of the development on the Bretch Local Wildlife Site and the potential Salt Way Local Wildlife Site should be addressed.

4.2 Impacts on the Bretch Local Wildlife Site (LWS)

- 4.2.1 There could be a potential indirect impact as a result of an increase in recreational pressure from new residents on the Bretch LWS as the Salt Way pLWS connects the proposed development to this site.
- 4.2.2 The Bretch LWS comprises a mosaic of habitats including rough grassland, scrub and



trees with a stream. There are also pockets of lowland calcareous grassland and lowland meadow priority UK BAP habitats. The site is not known to support any UK BAP priority species, red data book species, nationally scarce species or red/amber birds of conservation concern. It is an abandoned ironstone working which connects to the Giants Cave Local Geological Site and is used as a local picnic area.

- 4.2.3 The availability of green open space within the proposed development for picnics and recreation will be more attractive to new residents for everyday recreational use. In particular, there are opportunities to design the eastern area of public open space within the site as an area of informal natural greenspace. This space is more likely to be used by residents which may alleviate impact on other areas of greenspace nearby (including the LWS). There are also opportunities to manage this area for nature conservation and develop it as a wildlflower meadow (which is one of the BAP habitats present in the Bretch LWS).
- 4.2.4 New residents are also considered more likely to visit the larger Easington Park (located approximately 1km to the north of the site which includes more facilities such as a children's playground) than visiting the small (2.3ha) LWS which is located approximately 1.9km west from the site by foot (approximately a 23 minute walk). Any additional use of the Salt Way from the proposed development is considered likely to be in relation to travel from "A to B" and therefore not result in a substantial increase in a number of visitors diverting from the Salt Way into the LWS. The number of additional visitors to the LWS due to the proposed development is therefore considered probable to be relatively low.
- 4.2.5 The Bretch LWS is used as a local picnic area and it is considered likely that the current recreational pressures on the site are minor (to potentially moderate adverse during the summer months) with the most likely impacts being noise disturbing wildlife and minor trampling of the BAP grassland habitats which are only found in pockets on the site.
- 4.2.6 Aerial photography shows well worn paths located throughout the LWS site. The majority of visitors, including the new residents at Wykham Park farm, to the LWS are likely to remain on existing footpaths especially if they are regularly maintained. Similarly, residents of the new development at Wykham Park Farm which may cycle to the Bretch LWS via the Salt Way pLWS are also likely to remain on the constructed cycle paths and not cycle over vegetation on a regular basis.



4.2.7 It is therefore considered unlikely that any increase in visitors to the LWS due to the new development will significantly impact the UK BAP grassland habitats in the LWS.

4.3 Impacts on the Salt Way potential LWS

- 4.3.1 The records received from Thames Valley Environmental Records Centre did not provide any information on this potential LWS and hence it was not included in the ES assessment. It is understood from Cherwell District Council that it may be designated in the future for its wildlife value and its value as a "green lane".
- 4.3.2 The proposed LWS is the Salt Way from Broughton Road near Bretch LWS to the junction with bridleway 45 (near Grange Road). Therefore approximately half of the potential LWS defines much of the northern site boundary of the proposed development. It is a surfaced path lined either side with a wide strip of mature tree line/hedgerow and scrub.
- 4.3.3 The development has the following potential ecological impacts on the Salt Way which are highlighted in bold and described below:

Damage due to the proposed access points

- 4.3.4 There are a number of existing gaps along the southern edge of the Salt Way where unofficial pedestrian access is gained onto the site. It is proposed that there will be three pedestrian /cycleway access points from the proposed development site onto the Salt Way which are shown in the Design and Access Statement (Figure 11). To reduce damage to the existing "green lane" these access points will be aligned through the existing gaps in the southern tree line of the Salt Way.
- 4.3.5 There may be need to remove some smaller trees and scrub to create slightly wider gaps but the removal of mature trees will be avoided where possible. The canopies of the trees either side of the gaps will however remain connected which will retain the continuity of the wildlife corridor for bats. New strategic planting will reinforce the framework of existing vegetation along the Salt way where necessary. It is therefore considered unlikely that there will be a significant impact on the integrity of the Salt Way in its value as a "green lane".
- 4.3.6 The possible loss of a few trees and scrub (if necessary) will be compensated for by the tree and shrub planting in the 10-12m wide landscape buffer being created alongside the Salt Way where it adjoins the development.



Increase in recreational pressure from use through by new residents

- 4.3.7 The Salt Way is part of the National Cycle Network (Route 5) and this section is also designated footpath and bridleway. During the ecological surveys, a significant number of people have been observed walking, cycling and riding throughout the day along the Salt Way and as such it is considered probable that this proposed LWS is already subject to at least a moderate level of use in the day.
- 4.3.8 It is considered likely that much of the increased weekday usage of the Salt Way will be for the purpose of reaching Bloxham Road and travelling into Banbury town centre for work or leisure. Therefore the increase in weekday use may only adversely impact one section (approximately half) of the proposed LWS. An increase in pressure along the whole length of the proposed LWS as far as the Bretch LWS may be expected at weekends. The Salt Way is unlit and therefore its usage at night by people is likely to be much less.
- 4.3.9 The lighting strategy for the site, as stated in paragraphs B.7.313 of the ES, will maintain dark movement corridors along the periphery of the site to minimise impacts on bat species. The Salt Way will therefore remain unlit and so its usage by the new residents at night is likely to be low which will decrease disturbance on local wildlife at night.
- 4.3.10 The surfaced track on the Salt Way is well defined and therefore it is anticipated that pedestrians, horse riders and cyclists will keep to this track and therefore disturbance to the tree-line will not be significant.
- 4.3.11 It is considered likely that although there will be probably be an increase in the number of individuals using this route due to the proposed development during the day this will not result in significant impacts on the integrity of the Salt Way pLWS or disturbance to wildlife.

Light and noise impacts

4.3.12 The Salt Way is already subject to some light and noise pollution from the playing fields and residential areas to the north. There will also be periodic short bouts of noise from groups and individuals travelling along the Salt Way. It is considered likely that the local wildlife has become habituated to this background level of sound and light disturbance as birds and bats were recorded roosting and foraging along the Salt Way, deer were observed here and there were signs of badger paths.



- 4.3.13 The Salt Way will be unlit at night and so its usage by the new residents at night is likely to be low which will minimise disturbance on local wildlife at night.
- 4.3.14 Any additional noise and light from the proposed development may have short term adverse impacts during construction, although no night-time working will occur, but overall the development is considered unlikely to have significant long term adverse impact on wildlife using the Salt Way. A Construction Environmental Management Plan for the site will include measures to minimise disturbance and protect the overall integrity of the pLWS during Construction.

Loss as a green buffer south of Banbury

- 4.3.15 The mitigation measures within the Landscape Sensitivity and Capacity Report (2010) refer to the opportunity to reinforce the Salt Way as a green corridor, linking the Sor Brook Valley to the surrounding network of footpaths around Wykham Park Farm. The additional buffer planting (a 10-12m wide strip) proposed along the northern boundary of the development adjacent to the Salt Way is considered likely to reinforce the structure of the green corridor and enhance its ecological merit. Native species included in the planting mix will provide foraging and roosting opportunities for wildlife. It is considered likely that this will actually increase the Salt Way's value as a "green lane" and wildlife corridor and provide buffering for the proposed LWS from the surrounding existing and proposed development.
- 4.3.16 The southern boundary of the proposed development will be improved through planting enhancements in the existing plantation strip, improvements to the existing ditch through the addition of a swale to act as a SUD and a 3m wide strip of tree and shrub planting. This will create a wide green buffer between the new proposed boundary of the built up area of Banbury, albeit further south, and the wider countryside and will have both terrestrial and aquatic opportunities for wildlife.
- 4.3.17 It is therefore considered probable that there will be negligible impacts on the pLWS resulting from the potential loss of the buffer as the buffer defining the south of Banbury will not be lost and will in fact be increased.

Isolation of the Salt Way green lane from the countryside

4.3.18 Three hedgerows that cross the site from north to south are to be retained and will still connect the Salt Way to the wider countryside south of the proposed development. The retained hedgerows will not form rear or side boundaries of development where appropriate maintenance cannot be provided. Appropriate



management of retained hedgerows will be instigated so as to maximise their value to birds and other wildlife. These improvements to these hedgerows will increase their value as wildlife corridors connecting the Salt Way to the wider countryside.

- 4.3.19 A network of public open space is also proposed within the site, largely focussed along the existing landscape features, but also within new greenways created between existing clearings on-site. Tree and hedgerow species will be maintained and enhanced where possible to form focal points along key views within the site. New strategic planting will reinforce the framework of existing vegetation. Species will be selected to optimise habitat creation and ecological diversity. These will provide additional opportunities for wildlife and provide additional connectively across the site and out to the wider countryside.
- 4.3.20 The impact of isolation is therefore considered to be negligible due to retained, enhanced and additional connectivity provided by the development.

Beneficial Impacts of the Proposed Development on the Salt Way LWS

- 4.3.21 The comments made by Cherwell District Council's Ecologist in her consultation response (dated 16th May 2013) include a statement that the Salt Way green corridor is currently in poor condition due to lack of management with sections of the hedgerow overgrown and gappy and the grass margins are dominated by bramble and scrub.
- 4.3.22 Cherwell District Council's Ecologist suggests that a public space such as this is more likely to be respected and valued if it has an attractive appearance and suggests that an enhancement scheme for the improvement and long term management of the Salt Way. The Ecological Assessment had already specified a variety of measures to enhance the biodiversity at the site (also see Section 5 of this addendum), including enhancement of the Salt Way habitat.

Summary

- 4.3.23 It is considered that the that although there will be probably be an increase in the number of individuals using this Salt Way LWS route due to the proposed development during the day this will not result in significant impacts on the integrity of the Salt Way pLWS or disturbance to wildlife.
- 4.3.24 The development proposals outline a variety of enhancement measures which will include measures to improve the management and condition of the Salt Way LWS



habitat. Overall it is considered that the development will provide beneficial impacts and that the LWS will still be able to operate as an effective wildlife corridor and provide habitats for local species that are present.

5 ECOLOGICAL ENHANCEMENT

5.1 Introduction

5.1.1 Cherwell District Council's ecologist included a comment that enhancement measures for the Salt Way are included as part of the permission. The ES already contains a number of enhancement measures to improve the biodiversity opportunities within the proposed development scheme. The following section sets out measures that are already specified in the ES to benefit wildlife and additional measures are outlined which can be incorporated specifically to assist the enhancement of the site for the white-letter hairstreak and the Salt Way district LWS.

Ecological Enhancements Specified in the ES

5.1.2 The following ecological enhancements have already been specified in the ES:

Informal Parkland Grassland Areas in POS

- Wildflower meadow planting (Emorsgate Seed-mix EM1)
- Bulb planting species to include daffodil, crocus, snowdrop, bluebell and pignut

Existing and retained hedgerows

- Gapping up the hedgerow with suitable local species (out of species list for new hedgerows)
- Management to establish at least 1 hedgerow tree for every 50m length of hedgerow,
- Introduction of a management regime to facilitate use of the hedgerow by wildlife.
- Hedgerow flora planting (Emorsgate Seed-Mix EH1)
- Erection of 8 bat-boxes (4 x Schwegler 2F Bat Box, 4 x Schwegler 2FN Bat Box)
- Erection of 18 nest-boxes (6 x 26mm hole nest-box , 6 x 32mm hole nest-box , 6 x open-fronted nest-boxes)
- 1 x artificial hibernacula for reptiles and amphibians

North-west woodland

• Creation of 1 x glade



- Selective thinning of trees where required
- Woodland flora planting (Emorsgate Seed Mix EW1)
- Erection of 8 bat-boxes (4 x Schwegler 2F Bat Box, 4 x Schwegler 2FN Bat Box)
- Erection of 9 nest-boxes (3 x 26mm hole nest-box , 3 x 32mm hole nest-box , 3 x open-fronted nest-boxes)

Wetland areas/surface water attenuation features

- Marginal and aquatic planting (can include Emorsgate Seed Mix EP1 Pond Edge Mixture, also aquatic planting of species which are used for amphibian egg laying)
- 1 x artificial hibernacula for reptiles and amphibians
- Creation of 1 3 smaller ponds for wildlife

New Hedgerow Planting

- To comprise a mixture of the following species hawthorn, blackthorn, elder, field maple, dog-rose, field rose, hazel
- Standard trees every 50m to comprise ash, pedunculate oak, Scot's pine

Landscape structural planting of trees/shrubs

- Native trees and shrubs as listed for new hedge planting
- Trees/shrubs with a known attraction to wildlife rowan, holly, dogwood, guelder rose, silver birch
- Additional fruiting shrubs which provide food for badgers wild cherry, crab apple

<u>Management</u>

Long-term management of habitats for wildlife will be covered under an Ecology and Landscape Management Plan for the site. This will increase the site's value for wildlife and maintain this value in the future.

The development is at the outline planning stage and therefore enhancements can only be detailed at this stage which the applicant is likely to construct as part of the initial stages of the development i.e. landscaping, public open space and infrastructure. More detailed proposals on the above will be supplied at the reserved matters and detailed planning application stages.

There are opportunities to design the eastern area of public open space within the site as an area of informal natural greenspace. This space is more likely to be used by residents which may alleviate impacts on other areas of greenspace nearby and



the Local Wildlife Sites from an increase in recreational pressure. There are also opportunities to manage this area for nature conservation and develop it as a wildflower meadow.

Additional Biodiversity Measures

- 5.1.3 In addition to the mitigation measures already outlined in the ES, as part of an enhancement measures for white-letter hairstreak, the landscaping and planting proposals will include planting of Dutch-elm disease resistant species, particularly close to the Salt Way. Retained hedgerows will also be managed to allow elm species to mature into standard trees within the hedgerows.
- 5.1.4 Areas of scrub will be cleared from the Salt Way, where adjacent to the site, and appropriate new planting and sowing of meadow mix will be undertaken along the grass margins of the Salt Way to enhance the poor condition of this pLWS. These measures will also be specified in the Ecology and Landscape Management Plan.

6 CONCLUSIONS

6.1 Introduction

- 6.1.1 This addendum has been prepared to address the comments made by Cherwell District Council and provides further information with respect to the Ecological Impact Assessment undertaken in connection with the proposed residentially led mixed-use development on land south of Banbury, Oxfordshire at Wykham Park Farm.
- 6.1.2 This addendum provides information on the potential impacts of the development on great crested newts, white-letter hairstreak, the Bretch LWS and potential Salt Way LWS site. The results of the impact assessments (as summarised below) indicate that no major-moderate adverse impacts upon GCNs, white-letter hairstreak or the LWSs is predicted as a result of the proposed development and that proposed enhancement measures to be implemented as part of the development are likely to result in beneficial impacts for species and habitats.

Great Crested Newts

6.1.3 It is concluded that there will be no significant adverse impact on great crested newt populations in the local area as a result of the proposed development. It is considered that the proposals will provide an opportunity to enhance the habitats



present at the site for the benefit of great crested newts by providing potential new aquatic breeding and good quality terrestrial habitat. With the implementation of Reasonable Avoidance Measures during any archaeological investigations and site clearance and construction/landscaping works, it is considered that the risk of harm to individual newts will be negligible and no European Protected Species Disturbance Licence will be required to undertake these works.

White-letter hairstreak

6.1.4 Overall the loss of potential habitat for white-letter hairstreak from the Salt Way and the site as a result of the development is considered to have negligible impacts on this species as the most suitable habitat for this species located off-site is not being affected. It is considered that there will be beneficial impacts as a result of the development for the white-letter hairstreak and other butterflies and invertebrates through appropriate planting and management of habitats within the proposed development and cessation of arable farming. Enhancement measures include allowing elm shrubs to mature to standard trees within the planting scheme.

Salt Way potential Local Wildlife Site

- 6.1.5 It is considered that although there will be probably be an increase in the number of individuals using this Salt Way pLWS route due to the proposed development during the day this will not result in significant impacts on the integrity of the Salt Way pLWS or increase disturbance to wildlife.
- 6.1.6 The development proposals outline a variety of enhancement measures which will include measures to improve the management and condition of the Salt Way pLWS habitat, where adjacent to the site. Overall it is considered that the development will provide beneficial impacts and that the pLWS will still be able to operate as an effective wildlife corridor and provide habitats for local species that are present.

Bretch District Local Wildlife Site

- 6.1.7 It is considered unlikely that an increase in visitors to the LWS due to the new development will significantly impact the UK BAP grassland habitats in the LWS given the distance of the LWS from the site and the availability of alternative green open space within the development and in Banbury to the north.
- 6.1.8 There are opportunities to design the eastern area of public open space within the



site as an area of informal natural greenspace. This space is more likely to be used by residents which may alleviate impact on other areas of greenspace nearby (including the LWS). There are also opportunities to managed this area for nature conservation and develop it as a wildflower meadow (which is one of the BAP habitats present in the Bretch LWS).

Appendices

Appendix 1 Method Statement -Great Crested Newts

Appendix 1 – Great Crested Newt - Method Statement

Introduction

- 1. Great crested newts (GCN) rely on waterbodies (typically ponds, but also slow moving small water courses) for breeding but otherwise they spend much of their time on dry land. They may enter a period of low activity as temperatures fall below 5°C. This generally begins in late September and by the end of November most amphibians are dormant for much of the time. Amphibians seek refuge over winter in sites similar to those sought during the day such as an underground crevice or crack, a void in a tree stump or bank or under refugia such as piles of rock or dead wood. Adult GCN migrate to breeding ponds in spring, and sometimes as early as the first frost free days, at the end of January.
- 2. On land amphibians engage in foraging, dispersing and resting. Foraging takes place mostly during hours of darkness over a range of habitats that support invertebrate species. Movement at night may reduce the risk of predation and desiccation.
- 3. Whilst on land, outside the over-wintering period, GCNs may require refuges from extremes of weather (i.e. high temperatures and dry periods) and may rest in areas of dense vegetation, under refuges or underground.
- 4. During the GCN surveys undertaken in May/ June 2013 'medium' sized populations of GCNs were found to be present within two ponds (Ponds P1 and P5) which are located within 500m of the site. Ordnance Survey Mapping indicates a third pond (Pond P6) within 500m of the site, but access to survey this waterbody was not granted. For the purposes of the impact assessment it was assumed that a GCN population is also present within Pond P6.
- 5. There is a risk that a low number of GCNs could be disturbed or harmed by site clearance works and construction activities undertaken in the hedgerows and associated field margin habitats. This risk is increased if these works are undertaken during the amphibian hibernation period as GCNs could potentially hibernate in the hedgerows.
- 6. Natural England's 'Rapid Risk Assessment' tool suggests that site clearance works on the parts of the site within 500m of Ponds P1 and P6 is 'likely' to result in an offence and 'highly unlikely' to result in an offence for the parts of the site within Pond P5, provided that no GCNs are harmed as a result of the works.
- 7. Of the part of the site which falls within 500m of Pond P5, only the southern

hedgerow is considered suitable for GCNs and as this is being retained the risk of harm to GCN is likely to be extremely low and therefore no licence application in connection with Pond P5 is required.

8. For the parts of the site within 500m of Ponds P1 and P6 the risk of an offence being committed is considered to be 'likely'. It may be possible to reduce this risk by implementing what Natural England call 'Reasonable Avoidance Measures' which would be employed during site clearance works (including archaeological investigation works) and construction and landscaping works to decrease the risk of harm to GCN. Provided that no GCN are at risk of harm from the site development, through the implementation of RAMs, then likelihood of committing an offence is reduced and a licence from Natural England is not considered necessary.

Method Statement

 The following Reasonable Avoidance Measures (RAMs) will be implemented prior to and/or during (A) archaeological investigation works and (B) site clearance / construction works:

(A) Archaeological Investigation Works

For operations such as archaeological investigations, the potential for disturbance to habitats will be temporary with habitats being reinstated soon after the investigations are complete and as such the following Reasonable Avoidance Measures will be implemented *within 250m from pond P1 and pond P6*:

- In order to prevent damage to retained hedgerows and trees, excavations near these habitats will be undertaken in accordance with BS5837:2012 – Trees in relation to construction;
- The required tree root protection zones along retained hedgerows will be clearly marked to prevent excavations from encroaching into this habitat;
- A 10m buffer along the hedgerows within 250m of Ponds P1 and P6 will be clearly marked. Where possible, the archaeological investigations should be designed to avoid excavations in this area in the first instance;
- Archaeological excavation works will not be undertaken within 10m of the hedgerows between 1st November and 28th February or outside these times when night time temperatures are consistently below 5 degrees Celsius i.e. when GCN can be expected to be hibernating / activity expected to be low or negligible;

- Archaeological excavation works which need to be undertaken within 10m of the hedgerows will only be able to proceed between March and October when night-time temperatures are consistently above 5°C. An Ecologist will be required to hand-search and undertake destructive searches of the proposed excavation area where it falls within the 10m buffer area. An Ecologist will then need to be present to check the edges of the backfill before it is used to infill the excavation if the excavations are left open overnight;
- If taller grassland vegetation and scrub is present in areas to be disturbed by the archaeological excavations, the vegetation will be cut to 150mm and a short sward maintained prior to any archaeological investigations works, in order to increase the area's unsuitability for GCN;
- The duration of time that the excavations will be left open will be kept to a minimum (as risk of harm to GCN is reduced the shorter the duration of the works); and
- Wooden planks will be positioned within any open excavations to allow any animals (including GCN) to escape.

(B) Construction Works

The construction operations will occur over a long time period and habitat loss will be permanent and as such the following Reasonable Avoidance Measures will be implemented *within 500m from Ponds P1 and P6*:

- In order to prevent damage to retained hedgerows and trees, excavations near these habitats will be undertaken in accordance with BS5837:2012 – Trees in relation to construction;
- The required tree root protection zones along retained hedgerows will be clearly marked to prevent excavations from encroaching into this habitat;
- Site clearance works within 10m of the hedgerows in addition to uprooting and removing sections of hedgerow will not be undertaken between 1st November and 28th February or outside these times when night time temperatures are consistently below 5 degrees Celsius i.e. when GCN can be expected to be hibernating / activity expected to be low or negligible;
- Prior to site clearance and hedgerow removal works, any tall grassland vegetation and scrub scheduled to be cleared within the field margins will be cut to 150mm and a short sward maintained prior to any construction works, in

order to increase the area's unsuitability for GCN;

- An Ecologist will undertake a watching brief of site clearance works where they fall within 10m of a retained hedgerow. A watching brief will also be undertaken during any hedgerow removal works where the ground is to be disturbed. This will involve a hand-search of the habitats to be cleared followed by a destructive search as the topsoil is stripped. The works in these areas will only be undertaken between March and October when the night-time temperatures are consistently above 5°C;
- Materials which could potentially be used by amphibians as refuges and which need to be stock piled on site will either be sited more than 500m from Ponds P1 and P6, or if this is not practicable will be temporarily stock-piled within 500m, but will be stored above ground (e.g. on wooden pallets) and wrapped in a suitable membrane or stored in bags to prevent use by GCN as hibernacula;
- The length of the site clearance works will be kept to a minimum (risk of harm to GCN is reduced the shorter the duration of the works);
- Wooden planks will be positioned within any open excavations to allow any animals (including GCN) to escape; and
- The earth within the areas of the site cleared for construction and landscaping works will be compacted to make these areas more unsuitable for GCN.

Time constraints

10. The following activities will be constrained by the GCN overwintering season (November to January inclusive) and bird breeding season (March to August inclusive).

Table 1: Timing of Activities												
Activity	Month											
	JAN	FEB	MAR	APR	ΜΑΥ	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Hedgerow –												
cutting only.												
No ground												
disturbance.												
Hedgerow												
removal												
(after												
cutting)–												
uprooting												
hedgerow												
Hedgerow												
cutting &												
uprooting												
(if done												
together)												
Site												
clearance												
works*												

 $\ensuremath{^*}$ within 10m of retained hedgerows and in the presence of an ecologist

- Period in which activity can be undertaken

Appendix 2 Correspondence with Cherwell District's Council's Ecologist

Pritchard, Allison

From: Charlotte Watkins [mailto:Charlotte.Watkins@Cherwell-DC.gov.uk] Sent: 25 July 2013 15:36 To: Coe, Abigail Cc: Laura Bailey Subject: RE: Wykham Park Farm - 13/00321/OUT - Butterflies

Dear Abigail,

Following our conversation I can confirm that I consider the approach below entirely reasonable as regards butterfly interest on site and I am satisfied that this will give us enough information to consider this aspect without further survey. Regards

Charlotte

Dr Charlotte Watkins Ecology Officer

Cherwell District Council Tel no: 01295 227912 Ext:7912 Mobile: 07867 983287 email: <u>charlotte.watkins@cherwell-dc.gov.uk</u> www.cherwell.gov.uk

From: Coe, Abigail [<u>mailto:acoe@wardell-armstrong.com</u>] Sent: 25 July 2013 15:10 To: Charlotte Watkins Subject: Wykham Park Farm - 13/00321/OUT - Butterflies

Dear Charlotte

It was good speaking to earlier regarding the proposed development at Wykham Park Farm (13/00321/OUT).

As discussed, we undertook a habitat assessment for white letter hairstreak in which we mapped the elm species that were present on site and along the section of the Saltway adjacent to the site. A cluster of six mature elm trees, in the vicinity of where the historic record of white-letter hairstreak was previously recorded, were located in the northern boundary edge of the Salt Way close to an existing housing development. Elm species were recorded in five of the hedgerows within the site, but these were all saplings or managed as hedgerow shrubs. The mature trees were considered to offer the most suitable habitat for white-letter hairstreak.

As an enhancement measure for white-letter hairstreak, we are proposing to allow some of the elm species which are present in the retained hedgerows to grow to maturity. We also propose to include elm species within the planting mix for the new hedgerows.

Regarding other butterfly species, we have based our assessment on habitat data and incidental sightings of butterflies observed on site. Small whites and peacock butterflies were observed along the hedgerow adjacent to the Saltway. In summary, the site is primarily arable land which we have assessed as being of negligible value to butterflies. It was noted that field margins in the arable fields were either non-existent or narrow. The hedgerows would represent the most suitable habitat for butterflies on site, which could support some other common species such as gatekeeper or small tortoiseshell, however the spray drift from fertilisers and pesticides used on the arable fields are considered likely to affect the populations and diversity of butterflies that may be present in the hedgerows. The site is therefore assessed overall as being of poor/negligible value for butterfly species. Post-development, we anticipate that there will be beneficial impacts on butterflies resulting from the cessation of arable farming, the creation of habitats (including wildflower meadows and balancing ponds / wildlife ponds) and the enhancement of the retained woodland and hedgerow habitats.

We have set out the above assessment in the ES addendum which was in response to the Regulation 22 request and with reference to your email to Laura Bailey dated 17th April 2013.

We would be grateful to receive your early confirmation that the above assessment provides you with enough information to enable you to determine the planning application in relation to white-letter hairstreak and other butterflies and that further survey information will not be required in this case.

Many thanks Abi

Abigail Coe Senior Ecologist MCIEEM Wardell Armstrong LLP 22 Windsor Place Cardiff Wales CF10 3BY

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