CHERWELL DISTRICT COUNCIL

MEMORANDUM

To: Andrew Lewis – Principal Planning Officer
(Development Management)

From: Paul Evans – Ecology Officer
(Enforcement – Development Management)

Date: 20th July 2018

Ref: 18/00825/HYBRID, Heyford Park Camp Road Upper Heyford Bicester OX25 5HA - Ecology Comments

Having reviewed the above detailed application and submitted documents, I have the following comments to make in respect to Chapter 8 Ecology of the Environmental Statement (ES) and supporting documents including Appendix 8.4 Biodiversity Impact Assessment (BIA).

The level and scope of surveys that have been undertaken to inform the impact assessment appear to be sufficient and the methods identified as being used in the ES follow best practice. However the original survey reports are referenced, but have not been submitted with the ES, therefore it is not possible to review these in order to fully assess whether they are sufficient and follow best practice, an assumption has therefore been made. The ES follows the relevant industry specific (CIEEM) guidance and assessment methodology for Environmental Statement.

Generally within the ES there is a lack of detail around the mitigation measures with a reliance on the future production of a CEMP and LEMP. There is also a lack of detail around some of the activities proposed, for example filming activities and levels of visitor activity. This lack of detail makes it difficult to assess the impacts/effects of the proposals on the identified important ecological features (paragraph 8.4.59) and to therefore agree with the nature and significance of any effects and the resulting residual effects detailed in the ES and summarised in Tables 8.2 & 8.3. My comments are therefore based on what information has been submitted. Provision of further information on the scope of activities, predicted visitor levels, draft CEMP and LEMP would assist in better understanding of the impacts of the proposals.

<u>Local Policy</u>

Cherwell Local Plan Part 1 Adopted 20th July 2015
Policy ESD 10: Protection and Enhancement of Biodiversity and the Natural Environment details a number of elements some of which the proposals accord with, however the proposals will result in the loss of an area of a site of biodiversity value of local importance (Local Wildlife Site (LWS)) and the development would have a detrimental effect on Habitats and Species of Principal Importance (HPI) in England (Under Section 41 of the NERC Act 2006), it is therefore questioned whether the proposals accord with following element of policy ESD10 particularly given my comments on the net gain calculation below.

Protection and enhancement of biodiversity and the natural environment will be achieved by the following: Development which would result in damage to or loss of a site of biodiversity or geological value of regional or local importance including habitats and species of principal importance for biodiversity will not be permitted unless the benefits of the development clearly outweigh the harm it

would cause to the site, and the loss can be mitigated to achieve a net gain in biodiversity/geodiversity
Policy Villages 5: Former RAF Upper Heyford, details a number of elements relating to ecology and biodiversity; Key site specific design and place shaping principles listed within the policy include:
Proposal must demonstrate that the conservation of heritage resources, landscape, restoration, enhancement of biodiversity and other environmental improvements will be achieved across the whole of the site identified as Policy Villages 5.

- *The conservation and enhancement of the ecological interest of the flying field through appropriate management and submission of an Ecological Mitigation and Management Plan, with biodiversity preserved and enhanced across the site identified as Policy Villages 5, and wildlife corridors enhanced, restored or created including the provision for habitat for great crested newts and ground nesting birds in particular. A net gain in biodiversity will be sought*
- *Developments should protect and enhance the Local Wildlife Site (including the new extension to the south)*
- *Visitor access, controlled where necessary, to (and providing for interpretation of) the historic and ecological assets of the site*
- *Provision of Green Infrastructure links to the wider development area and open countryside*

The proposals do not accord with Policy Villages 5 to protect the Local Wildlife Site (LWS) as they would result in the loss of 7.1hectares of the LWS from the area within the Southern Bomb Stores. In addition without sufficient detail on what further filming activities are proposed within the LWS it is not possible to fully assess the significance of the impact of these activities on the LWS. At this stage it can be assessed that the filming activities will have an impact which would not protect or enhance the LWS, instead having a potential detrimental effect on its nature conservation interest.

The Biodiversity Impact Assessment (BIA) submitted demonstrates a net gain in biodiversity, but the evidence to back up the figures within the BIA calculator and achievability of the timescale and condition of the habitat creation are lacking, calling into question whether the proposal does achieve net gain in biodiversity, see my comments below on net gain for further detail.

Green Infrastructure Strategy has been submitted that seeks to link the wider development area to the wider countryside. However the element of this strategy regarding visitor access to the Flying Field Park (Parcel 28), Core Visitor Destination Area (Parcel 29) and Control Tower Park (Parcel 30) is likely to have a negative impact on the breeding birds present in this area e.g. Skylarks. This would conflict with the first ecology related point from Policy Villages 5 listed above.

<u>Minimising Impacts on and Providing Net Gains in Biodiversity</u>

It is important that all of the mitigation measures contained within the ES (Section 8.5 & 8.6 and Table 8.2 & 8.3) are secured within a suitable condition to ensure it is all followed and delivered if the proposal is given permission. This will ensure the effects/impacts of the proposed development are minimised.

Paragraph 109 of the National Planning Policy Framework details 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, contributing to the Government's commitment to halt the overall decline in biodiversity,…."

In line with this and local policy ESD 10, A Biodiversity Impact Assessment (BIA) calculation has been submitted (Appendix 8.4) with the results of this detailed in 8.9 of the ES. Paragraph 8.9.2 details that a final Habitat Impact Score of +20.45 will result from the proposed development thereby

delivering a net gain for biodiversity. This score is largely relying on the creation of 30.82ha of unimproved calcareous grassland, as detailed in section 8.6 and on Figure 8.7, to compensate for the loss of calcareous grassland from the Local Wildlife Site and losses of other grassland types on the rest of the site. Whilst the submission of a BIA is welcomed there are queries regarding figures within the BIA as to whether they reflect the current situation on the ground, if the proposal/predictions for future habitat are accurate and therefore over whether net gain for biodiversity will be achieved should the development proceed;

The BIA details that 10.97 ha of "moderate" condition unimproved calcareous grassland will be lost within the development, there are no details within the application showing where the different habitat conditions are located on site and the rationale/evidence for coming to these habitat conditions conclusions. If for example "good" condition unimproved calcareous grassland was being lost this would result in an overall net loss.

The BIA details that "Good" condition unimproved calcareous grassland will be created within 10 years, this is a very ambitious target not only in terms of the speed of establishment of the grassland but also in terms of its target condition given. It is important to note that Warwickshire County Council (WCC) the authors of the BIA have updated the BIA in May 2018 to version 19.0. This version removes the option to include the creation of Unimproved Calcareous Grassland, due to a review of scientific evidence by WCC showing that habitat creation sites may take many decades before they achieve a similar level of interest (condition) to old grasslands (i.e. existing none creation sites).

In addition, the review of scientific evidence by WCC has also shown the re-assembly of invertebrate assemblages on creation sites is a much slower process than establishment of vegetation communities. The ES details an invertebrate assemblage of County value, including protected and notable species, associated with the grassland to be impacted by the proposals. The mitigation proposed to deal with this impact is the creation of Unimproved Calcareous Grassland at the western end of the site approximately 2.5km from the area of grassland to be lost. This is a considerable distance for less mobile invertebrates to travel from existing habitat to colonise the created habitat, that is once the created habitat is at a suitable condition/stage to meet the habitat requirements of those invertebrates. The target condition of "Good" within 10 years given in the BIA would include the presence of a similar invertebrate assemblage to that present in the grassland being lost. Given what is outlined above the ability to achieve the target condition of "Good" within 10 years is questioned.

Paragraph 8.9.2 of the ES details that "soil sampling and investigation will be carried out to ensure the habitat creation and management prescriptions are suitably tailored to the conditions", this indicates that the current detailed conditions of the area identified for habitat creation are not known, therefore the reliability of the difficultly of creation/restoration score within the BIA is also questioned.

As the compensation grassland is so crucial to the mitigation of the scheme there should be a greater certainty of creation success and realistic about the ability to gain a certain condition within a certain time period. Certainty is also required about the availability of this land to be secured by the applicant to come under there control to enable the habitat creation to be undertaken.

The BIA is a useful tool but it does not take into account location of created habitat. From an ecological point of view the current proposed location for the compensatory habitat is not the most appropriate, it is important that habitats are created in the places where they are connected to priority habitats and designated site (LWS) thereby enhancing ecological connectivity. The compensatory habitat would be better placed being created directly adjacent to the current LWS on

adjoining arable fields between the application site, Ardley Cutting & Quarry SSSI to the northeast and the Northern Bomb Stores. This would also be an easy and more rapid route for colonisation of species from the existing habitat, e.g. invertebrates and would provide better connectivity for movement of species in the wider landscape e.g. Great Crested Newts.

I would recommend the BIA is revised using version 19.0 and considering the points outlined above to gain a more realistic view of net gain.

Mitigation Measures

There are a number of individual mitigation measures mentioned throughout chapter 8 of the ES. These measures should be integrated with the CEMP, GI Strategy and LEMP to ensure a coordinated approach to mitigation of impacts of the proposals on habitats and species on site and within the zone of influence.

It is noted from paragraphs 8.5.41 & 8.6.8 of the ES that in order to mitigate the effects of the new filming activities it is proposed to carry out and have approved by the LPA an Environmental Risk Assessment for each filming project as part of the LEMP. Whilst the intention is welcomed it is difficult to know whether this would in practice protect the LWS and associated species from impacts whilst ensuring the habitat is still managed in a favourable condition. There is also a time and resource element for the LPA to review and approve these depending on the number and complexity of the filming activities that occur each year.

Lighting

There are sensitive ecology receptors (8.4.59) with regard to light contained within the development site due to there importance for foraging and commuting bats and other light sensitive wildlife. The impact of lighting resulting from all phases of the development on these receptors is identified within the Environmental Statement, the mitigation measures are identified within paragraph 8.8.6 as being carried out through careful design.

Lighting impacts should be considered in each of the Environmental Risk Assessments submitted for filming activities, within the CEMP and LEMP documents.

A suitable condition should be attached to any permission detailing the submission for approval of an appropriate lighting scheme for the development prior to the commencement of each development phase. This is an example of what could be included;

Prior to the commencement of development for each phase or development parcel a lighting scheme in accordance with the recommendations within the Environmental Statement and supporting surveys shall be agreed in writing with the local planning authority and thereafter carried out in accordance with the approved scheme.

Details of permanent external lighting must be submitted to, and approved by the local planning authority, prior to being erected.

Great Crested Newts

As detailed in 8.5.29 of the ES the proposed development will result in the loss of four ponds utilised by and 25.76ha of suitable terrestrial habitat for Great Crested Newts (GCN). The site contains two significant large GCN populations and the adjacent site at Letchmere Farm (shown on Figure 8.7)

containing a medium population. Mitigation is proposed with replacement ponds provided on a 2:1 ratio, created in areas to provide "stepping stones" between the three populations, with habitat around the northern bomb stores to be managed appropriately for GCN. This appears to be a broadly sensible approach and will need to be approved by Natural England as part of securing an EPS licence before development can proceed if planning permission is granted. The replacement ponds should be designed to mimic the ponds that are being lost for example using similar construction materials and profiles.

The ponds created should be located within the proposed cat proof fence detailed in paragraph 8.6.6 of the ES, from the plans submitted it is difficult to see if this is currently the case. The cat proof fence will provide protection from potential increased predation of GCN and reptiles, it is however likely it will prevent movements of mammal species such as Badgers and European Brown Hare.

A newt corridor is indicated on Figure 8.7, sufficient green infrastructure should be provided at either end of this corridor to link it to GCN habitat that is being retained. The composite parameter plan shows that this corridor will also form a primary pedestrian/cycle route, therefore there is required to be sufficient habitat adjacent to this route for newts to move to the corridor and along to the retained and created ponds and terrestrial habitat. The newt corridor is also identified where on the composite parameter plan there are primary vehicular and HGV access routes, for the newt corridor to be effective safe passage for the newts will need to be ensured for example through the provision of tunnels under these vehicular and HGV routes linking to terrestrial GCN habitat either side.

GCN would benefit from any compensatory habitat being created on the fields directly adjacent to the current LWS on adjoining arable fields between the application site, Ardley Cutting & Quarry SSSI to the northeast and the Northern Bomb Stores. This would allow for enhanced connectivity between the GCN populations and habitat on the application site and those known to be present at Ardley Cutting & Quarry SSSI.

<u>Birds</u>

A range of grassland and farmland birds including Red and Amber listed Birds of Conservation Concern (BoCC) and Biodiversity Action Plan (BAP) species of Meadow Pipet, Linnet, Grey Partridge, Skylark, Corn Bunting, Song Thrush, Yellowhammer and Curlew are identified from site. The value of the breeding bird assemblage is assessed as being of local value, with the pair of Curlew alone assessed as being of regional value. Breeding birds will be impacted by the loss of a suitable grassland habitat and by the disturbance associated with the proposed filming activities in parcel 27 and visitors to the proposed visitor destination areas in parcels 28 & 30.

This impact on the breeding bird assemblage is proposed to be mitigated through provision of compensatory calcareous grassland, installation of cat proof fence and management measures within the CEMP & LEMP, to result in a not significant to neutral residual impact. The compensatory habitat and structural/buffer planting will take time to develop to be in a condition where it can be utilised by the species being displaced from the existing habitats being lost or disturbed, therefore advanced/early establishment of the compensatory habitat ahead of any losses and increased disturbance would be welcomed. Breeding birds present within parcels 30 & 28 will be subject to increased disturbance from visitors that management measures proposed will be unlikely able to control and these areas will not benefit from protection from increased predation pressures as they will be outside the cat proof fence.

The impact on Curlew is assessed as being adverse in the absence of mitigation, with mitigation proposed to result in a neutral residual effect. The mitigation proposed in paragraph 8.6.9 of the ES that the compensatory grassland created as shown on figure 8.7 will provide alternative habitat for Curlews is questioned. Unimproved calcareous grassland that is to be created is not known to be a habitat type generally utilised by Curlews with them preferring meadows and moorland habitat.

Barn Owls were suspected to be to be present in Building 370 (Paragraph 8.4.50) but no internal inspection was carried out due to access restrictions. A survey of this building to confirm and categorise its use by Barn Owls should be carried out to inform the design stage and ensure appropriate mitigation is put in as required.

Badgers

The indicative location of the replacement Badger Sett identified on Figure 8.7 is outside the security cat proof fence and in close proximity to the footpath/bridleway route which is proposed along the southern boundary of the southern bomb stores (parcel 27 east & parcel 23). The security cat proof fence will separate the new replacement main sett from the outlier setts identified on Figure 8.5 and be slightly restrictive to Badger movements across the site into the wider countryside to foraging areas. Close proximity to the footpath/bridleway of the replacement sett may pose disturbance issues. Other options for location of the replacement sett should therefore be considered to overcome the issues outlined above.

Landscape and Ecology Management Plan (LEMP)

The production of a Landscape and Ecology Management Plan (LEMP) (paragraph 8.5.5 of the ES) to guide the establishment and management of retained habitats and created as part of the mitigation including schedule of monitoring of habitats and target species (paragraph 8.5.5 & 8.6.6 of the ES), is welcomed should permission be granted, to ensure biodiversity is managed in favourable condition in the long term. This will ensure the effects that could potentially result from neglect of management or failure of the mitigation is not realised. The LEMP should integrate with the current Flying Field Ecological Management Plan and include the continued appropriate management of the LWS and other areas of ecological interest of the flying field.

Given the long build out anticipated for this development the LEMP should be in place at the early stages and reviewed as necessary at each phase of the development with a submission and approval from the LPA. This should be secured by an appropriately worded condition, BS42020:2013 Biodiversity – Code of Practice for Planning and Development has the following model condition wording which could be used or adapted;

A landscape and ecology management plan (LEMP) shall be submitted to, and be approved in writing by, the local planning authority prior […to the commencement or occupation …] of the development [or specified phase of development]. The content of the LEMP shall include the following.
a) Description and evaluation of features to be managed.
b) Ecological trends and constraints on site that might influence management.
c) Aims and objectives of management.
d) Appropriate management options for achieving aims and objectives.
e) Prescriptions for management actions.
f) Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period).
g) Details of the body or organization responsible for implementation of the plan.
h) Ongoing monitoring and remedial measures.

The LEMP shall also include details of the legal and funding mechanism(s) by which the long-term implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery. The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the HMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The approved plan will be implemented in accordance with the approved details.

There should be in place an agreement to ensure that the management body that takes on long-term responsibility for implementation of the LEMP (management of the ecological areas) is to do so in strict accordance with the details contained therein.

Green Infrastructure

Should the development be given permission, advanced or early establishment of the green infrastructure and ecological mitigation would be welcomed. This would help aid the mitigation of impacts of the proposal on habitats and species, by providing alternative suitable habitat and connectivity to species displaced by the development to colonise/use as an alternative to those habitats that will be lost under the proposals.

The use of only native local provenance sourced species for planting/seeding within the semi-natural habitats contained with the GI and mitigation/compensation habitat would enhance the conservation value of the created habitats and there integration with existing habitats to be retained. This should be secured by an appropriately worded condition, BS42020:2013 Biodiversity – Code of Practice for Planning and Development has the following model condition wording which could be used or adapted;

Where it is intended to create semi-natural habitats, all species used in the planting proposals [… insert details of planting plans, etc. …] shall be locally native species of local provenance unless otherwise agreed in writing with the local planning authority.

Construction Environment Management Plan (CEMP)

The production of a Construction Environment Management Plan (CEMP) identified in paragraph 8.5.2 of the ES is welcomed and will form a key document to mitigate the construction phase impacts of the proposals on habitats and species should permission be granted. The CEMP should include as a minimum the method statements laid out in paragraph 8.5.4 of the ES along with any addition mitigation measures outlined in the ES that are relevant to the construction phase of development. The CEMP should also define the roles and responsibilities of an Ecological Clerk of Works (ECoW) which it is recommended should be appointed.

A suitably worded condition should be included within any decision notice to ensure the submission to the authority for approval of a CEMP document. BS42020:2013 Biodiversity – Code of Practice for Planning and Development has the following model condition wording which could be used or adapted;

No development shall take place (including demolition, ground works, vegetation clearance) until a construction environmental management plan (CEMP: Biodiversity) has been submitted to and approved in writing by the local planning authority. The CEMP (Biodiversity) shall include the following.
a) Risk assessment of potentially damaging construction activities.
b) Identification of "biodiversity protection zones".

c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements).
d) The location and timing of sensitive works to avoid harm to biodiversity features.
e) The times during construction when specialist ecologists need to be present on site to oversee works.
f) Responsible persons and lines of communication.
g) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person.
h) Use of protective fences, exclusion barriers and warning signs.

The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority.

Ecological Clerk of Works (ECoW)

The appointment of an Ecological Clerk of Works (ECoW) is recommended, should this proposal be given permission, as this will be a key link to the delivery of the CEMP, update of surveys where appropriate prior to each phase, implementation of ecological mitigation and future management of these areas. The appointment of an ECoW should be secured by an appropriate condition, BS42020:2013 Biodiversity – Code of Practice for Planning and Development has the following model condition wording which could be used or adapted;

No development shall commence until the role and responsibilities and operations to be overseen by an ecological clerk of works (ECoW) have been submitted to and approved in writing by the local planning authority. The appointed person shall undertake all activities, and works shall be carried out, in accordance with the approved details.

Update Surveys

The majority of the baseline surveys relied upon for the assessments within the ES date from the 2016 approximately 2 years ago, with the Great Crested Newt data being much older from 2014. Some update surveys for Phase 1 Habitat Survey, Hedgerow Assessments, Bat and Badger surveys were carried out in 2017. It is generally considered best practice that ecology surveys have a shelf life of two/three years before they require updating (BS42020:2013). Also the proposed development is proposed to take place over a 20-year period (paragraph 8.4.62 of ES), over which time the status and distribution of habitats and species across the site can change.

Therefore should permission be granted appropriately worded conditions should be put in place to ensure surveys are updated prior to each phase of the development as required, the mitigation measures can then be updated accordingly to minimise impacts to habitats and species on site, reflecting any changes the surveys may identify. BS42020:2013 Biodiversity – Code of Practice for Planning and Development has the following model condition wordings which could be used, adapted and/or combined;

If the [… development or a specified phase of development…] hereby approved does not commence (or, having commenced, is suspended for more than 12 months) within X years from the date of the planning consent, the approved ecological measures secured through Condition X shall be reviewed and, where necessary, amended and updated. The review shall be informed by further ecological surveys commissioned to i) establish if there have been any changes in the presence and/or

abundance of [… insert relevant habitat and/or species …] and ii) identify any likely new ecological impacts that might arise from any changes.

Where the survey results indicate that changes have occurred that will result in ecological impacts not previously addressed in the approved scheme, the original approved ecological measures will be revised and new or amended measures, and a timetable for their implementation, will be submitted to and approved in writing by the local planning authority prior to the commencement of development [… or specified phase of development …]. Works will then be carried out in accordance with the proposed new approved ecological measures and timetable.

Where the approved development is to proceed in a series of phases over X years, further supplementary ecological surveys for […insert relevant habitat and/or species …] shall be undertaken to inform the preparation and implementation of corresponding phases of ecological measures required through Condition(s) XX. The supplementary surveys shall be of an appropriate type for the above habitats and/or species and survey methods shall follow national good practice guidelines.