

Ecological review of 19/000053/CM : Proposed sand and gravel quarry with progressive restoration using site derived and imported inert material to agricultural parkland, public access and nature enhancement

The above application has come with an suit of ecological data, and interpretation.

I feel there are still a few areas that will require some additional work and or interpretation that will need to be brought forward by the applicant.

Firstly protected sites.

The application site is 650m away from the Hurcott and Podmore pools SSSI. This SSSI is a highly dependent on the surrounding hydrology. This was identified by Natural England during the initial consultation.

The ecological report considers the application site to be far enough away from the SSSI for it not to impact on the hydrology.

However, the SSSI features of interest are very susceptible to fluctuations in water levels both from surface and ground water levels.

The applicant has also submitted a Hydrological report that deals with hydrological impact on the local Hydrology.

The Hydrological report identifies that ground water from the site discharges into the Wanerton Brook which is the principal water course in the Podmore and Hurcott SSSI . Hence, I am concerned that this flow of water may be impacted on by the proposal.

The flow of ground water onto the SSSI is important to the Hydrology/ ecology of the site.

Whist hydrology is not my area of expertise, the applicant hydrology report appears to indicate that following the delivery of the development the permeability levels of the site will change due to the importation of impermeable fill and this gives me the concern a concern that this change in permeability will impact on the ground water flow reaching the Wanerton brook and this will result in an impact on the hydrology/ ecology of the of the SSSI.

Given the high levels of dependency the SSSI, has on the its surrounding hydrology a risk exists that the application will cause harm to a nationally important ecological asset.

I feel that I need to see some additional work that specifically looks at the hydrological relationship between the application site and the SSSI and to model what the change in this relationship will occur during the operation and following reinstatement of the application.

If changes are suspected then the ecological impacts of any change would then need to be considered.

Protected Species.

The majority of protected species concerns have been adequately dealt with by the applications ecologist, but there are few areas where some additional work, I feel, is needed.

Bats .

There is a bat roost on site and a potential for a couple of additional roosts based within trees on site. The application has dealt with these concerns in an appropriate manner.

The applicant ecologist has also carried out a site bat activity survey and identified the site is used for commuting and foraging for a range of bat species, including species that are rare within the county context.

My concern is that these bats are commuting/foraging across this site from unknown locations and a risk exists that if the application severs the bats' foraging or commuting routes, harm can come to these protected species.

I feel that this concern can be addressed through the construction of dark corridor maps that show how, at a minimum, commuting routes can be maintained throughout the application operation phases. Some of these bat species are extremely light phobic and I feel the detail of these corridors needs to be approved prior to the application being approved, as the creation of these corridors has some potential to impact on the size and nature of the operation of this application.

The bat survey only addresses the potential of roosts within the boundary of the application site. The operational phase of this application is highly disruptive and some of the bat species identified are rare and highly susceptible to the effects of disturbance and light.

Hence, I feel a risk exists that active bat roosts that may or may not exist within boundary features that surround the application site (e.g. woodland), may be negatively impacted upon by the development.

In order to address this concern, the obvious answer would be to survey the boundary features for bats. However, if this is not possible, I would like the comfort of understanding why a 10m buffer is felt to be significant to not cause disturbance to an active bat roost from a quarrying operation. We will also need to see, before approval, that a suitable lighting scheme can be produced to allow the operation phases of the application to proceed without allowing light levels to increase around boundary features.

Otter.

The application dismisses otter as being unlikely to be present on the site. The application site is 110m away from the river Stour and there is an otter record from 2016 not far from this point. Otters are a highly mobile animal that utilise both aquatic and terrestrial environments. So, I feel that additional work is needed to consider this protected species' needs and potential impacts this proposal will have on otter.

Farm land birds.

The applicant's ecological survey identifies the presence of Skylark. This is red listed section 42 Farm land Bird that is a material concern for a planning application.

The proposed renovation works will provide similar habitat for this species post operation. However given the decade plus operational time of this application and the fragile conservation status of this species. I feel some element of mitigation for the loss of habitat for this species during the operational phase of the application will need to be considered.

Comment on the Propose Mitigation and Enhancements Measures.

My main concern relates to the location of the provision of acid grassland.

Acidic grassland habitat is locally distinctive and a threatened and important part of the ecology of the landscape this application lies. Hence it is highly appropriate that this habitat forms the backbone of the ecological mitigation strategy of this application.

Acidic grassland is naturally found on the low PH nutrient poor sand soils which this application is based on.

The restoration plan is showing this habitat being provided around the boundaries of the agricultural fields. Acid grassland soils need to be very nutrient poor and low in PH, this is in conflict to the requirements of most agricultural production. Hence, a means of separating the two different soil types and prevent nutrient leaching through the ground and air would be needed to successfully maintain the acidic grassland habitat. Acidic grassland species are also harmed through over shading such as being adjacent to hedgerow or tree line and through the nutrient deposition caused through leaf fall from trees and other deciduous plants.

Acidic grassland need also to have in place a means of consistently removing nutrients from the habitat. This is most naturally achieved through grazing or more invasively through the establishment of an annual mechanical cut and collect.

I would like the applicant, given the above concerns, to demonstrate how the provision of the proposed mitigation is viable in the shown locations or perhaps look to consolidate this mitigation in a an are or areas where the soil type and management this habitat requires can be controlled.

Bat and bird box features ,

Part of the mitigation is to provide various bat and bird box features. I am concerned with the proposal that these are provided in part in less durable materials like timber. Given the length of time these mitigation features need to last I feel that all the mitigation needs to be in the form of woodcreat or other more durable materials.

