Staffordshire Wildlife Trust

22/01612/FULM

The National Memorial Arboretum Croxall Road Alrewas Burton Upon Trent Staffordshire DE13 7AR

Creation of Memorial Woodland to include reworking ground levels, reshaping of the existing pond, food/drinks outlet, a multi-use building, multi-user pathways, water features with associated landscaping and utilities.

SUMMARY – **Objection**- further information/ amendments required.

The proposal will have unacceptable impacts on priority habitats and species, and would destroy an area that meets criteria for Local Wildlife Site designation. These impacts could be avoided with an amended design. The assessments submitted have underestimated the value of the habitats and species present, and failed to take account of previous records for the area.

We are disappointed that pre-application consultation with SWT, when ecology issues were raised clearly with the applicant, has had no effect on the scheme design. However a more sensitive design, that retains and enhances the unusual habitats formed here, could be positive for wildlife. The pandemic showed us how very important nature on our doorsteps is for our physical and mental health. A memorial has the opportunity to reflect this by adopting a landscape-led approach that respects the unique qualities of this location.

Staffordshire Wildlife Trust would be pleased to take part in further discussions as to how objectives for both ecology and public use may be achieved.

Required prior to determination:

1. Further surveys and assessment to confirm the area's potential Local Wildlife Site status
2. Amended design to avoid, retain and enhance priority habitats, include river restoration, and retain existing priority species onsite.
3. Updated BNG metric.
4. Further survey for otter
5. Provision of new features for otters, birds, reptiles and invertebrates

Documents reviewed:

- Preliminary Ecological Appraisal and eDNA Survey Report dated 18 October 2022, Crestwood Environmental Ltd.
- Breeding Bird Survey dated 2 August 2022, Crestwood Environmental Ltd.
- Terrestrial and Aquatic Invertebrate Scoping Survey Report 4 March 2022 Crestwood Environmental Ltd.
- Badger Report 18 October 2022 Crestwood Environmental Ltd.
- Otter and Watervole Survey 04/03/2022 Crestwood Environmental Ltd.
- Biodiversity Net Gain Assessment 18 October 2022 Crestwood Environmental Ltd.
- Landscape Masterplan Rev D dated 25 October 2022

NATURE RECOVERY NETWORK

The site is mostly within the Wetland and Woodland Habitat Connectivity Opportunity Areas, with the southern portion also being within a Grassland HCO. This means there should be a balance between wetland, grassland and woodland habitats appropriate to the site.

The site is within the Transforming the Trent Valley landscape restoration project, and should seek to contribute to its aims for river restoration, wetland habitats and access to nature, as well as heritage and landscape improvement.

The site is within the River Trent valley among a range of wetland and other habitats, and is directly adjacent the River Trent, River Tame and an old railway line which are all linear habitat corridors.

DESIGNATED WILDLIFE SITES

Local Wildlife Sites/ potential LWS

The site appears to meet the criteria for designation as a Local Wildlife Site (LWS), referring to the Guidelines for the selection of Sites of Biological Importance in Staffordshire Version 6.03 (March 2020). As LWS are a material consideration within planning decisions, the status of the site needs to be determined, and then considered with regard to local and national policy.

The Terrestrial and Aquatic Invertebrate Scoping Survey Report states:
'Ground nesting solitary bees (*Andrena bicolor* and *Nomada fabriciana*) found during the field surveys are listed as Staffordshire Local Biodiversity Action Plan (LBAP)

species. The presence of ground nesting solitary bees also meets the species criteria for a Staffordshire Local Wildlife Site.' How this meets the criteria is not explained, and potentially requires further assessment.

In addition, the habitats on site are suitable for grizzled skipper (*Pyrgus malvae*), which the survey could not detect as it did not include the flight season for this species. If it were found to be a breeding site, the area concerned would meet LWS criteria for butterflies and moths.

Any site with an assemblage of 6 or more species of odonata (dragon and damselflies), where these are established breeding populations, meets criteria for a Site of Biological Importance. The Invertebrate survey recorded 5 species of odonata; however the survey was not targeted at this group and so more may be present. The survey also did not establish whether they were breeding, but this may be assumed given the suitable wetland habitats present. A survey of the waterbodies on site for nymphs would give a clearer picture of odonata on the site.

The breeding bird assemblage on the site meets the Local Wildlife Site bird criteria for fen habitat. It and possibly for open water and for lowland wet grassland bird assemblages if likely/ possible species are confirmed to be breeding.

HABITATS

Priority Habitats

Priority habitats are considered to be those listed as Habitats of Principal Importance for Conservation within the NERC Act 2006 plus those listed in the Staffordshire BAP.

The site supports a number of priority habitats: Reedbeds, Lowland mixed deciduous woodland, Open Mosaic Habitat on Previously Developed Land, and a Pond. These need to be retained and enhanced, as part of properly using the mitigation hierarchy (firstly avoiding and retaining habitats of high value). However, there would be losses to most of these habitats as the scheme seeks to heavily modify the area and establish a largely wooded landscape. While woodland is a key habitat for the area, there is already a lot of woodland within the landscape and a good variety of wetland habitats is also key.

An ideal design would be led by the existing landscape and would enhance the current habitats, to increase floral diversity, structural diversity (a mix of bare ground, short, medium and tall vegetation and scrub) aquatic flora and river restoration. This could involve:

1. Adding additional seed to provide more nectar over the year, as well as seasonal colour.

2. Maintaining and creating bare ground invertebrate fearless like bee beaches, mounds and microcliffs- potentially using attractive shapes and patterns.

3. Controlling scrub in some areas and planting flowering and berry-bearing scrub species such as crab apple, dogwood and broom.

4. Enhancing the existing pond with suitable aquatic species, more shallow reedbed areas and a more varied bank shape.

5. Creating new small seasonal ponds for dragonflies and amphibians

6. Planting a few selected trees of conservation value such as Black Poplar.

7. Creating a small area of 'ornamental brownfield' to showcase that a more formal areas of gravel/ sand and planting can look good and support our rare insects.

8. Restoring the River Trent banks to form a backwater or oxbow lake, and more natural bank profile, while providing greater flood capacity.

We feel that a different, sympathetic design would be innovative and provide an interesting visitor experience that actively conserves the priority species present. This would reflect the huge therapeutic role nature has played in our collective experience of the covid pandemic.

Biodiversity Net Gain

Lichfield District Council's biodiversity SPD requires a 20% measurable net gain from developments over a certain size. The supplied metric 3.1 shows a net gain of 22.59 habitat area units, which translates to 31.63% gain. However, the value of the existing habitats has not been accurately accounted for in the calculation. The metric also highlights that habitat trading rules have not been satisfied, as some high distinctiveness habitats would not be replaced like-for-like.

Much of the site should be accounted for as Open Mosaic Habitats, a priority habitat of high distinctiveness, which would score more highly and result in greater loss of units. The kind of mosaic of habitat and its structure, with bare ground, is very important for invertebrates. While it may look like 'waste ground', there are ways to manage this landscape that are more visually appealing while maintaining its unique value.

There would be an overall loss of reedbed and ponds, high distinctiveness habitats, which does not comply with the mitigation hierarchy- these areas could be retained. The losses are also not fully compensated by the same type of habitat. There would be a net loss of mixed scrub and bramble scrub, medium distinctiveness habitats, which requires the same broad habitat or higher.

While in some locations swapping habitats against the trading rules may be appropriate, where landscape change is desired. Woodland is a suitable habitat to create to some degree, but it is not the main priority for the area. Given the amount of woodland already present in the wider site and landscape, and the importance of wetland mosaic habitats, the habitat mix needs to better reflect local nature priorities.

The River Trent has not been included in the assessment. The metric 3.1 guidance states that any area within 10m of the bank top is the riparian zone and considered a functional element of the river, so should be included in the baseline. The application site boundary extends to the edge of the river. It is not however clear which boundary has been used for the metric calculations, as the landscaping masterplan shows a stand-off from the river, and the habitat plan edge includes part of the riverbanks but not all. We would recommend the river is included, as the scheme presents very good opportunities for river restoration and making the most of landscape and visual features in this part of the site.

The site is a different type of landscape from the rest of the arboretum, with its own character and wildlife interest, and arguably the most value for wildlife, due to the fact that it has revegetated naturally and is undisturbed. This is a great opportunity to enhance and manage this existing area, with a focus on open wetland, meadow and scattered trees, and for the public to contribute to the conservation of scarce and important species.

We feel that the design could be altered to disturb less of the site, enhance the existing habitats ecologically and visually, while allowing people to enjoy the open landscape of the wetlands, river and lake. A design more in harmony with the nature that has established will be more appropriate and forge a more unique connection with nature, reflecting the importance that natural outdoor spaces had for all of us during the pandemic. While we appreciate the Arboretum's focus on trees, there are other potential options for the community to support appropriate habitats, species or memorial features in memory of loved ones. This might include donating towards bird and butterfly features, adopting a section of boardwalk or sowing wildflower seeds.

Flood management and drainage

The Flood Risk Assessment confirms that the site is within the functional floodplain, in Flood Zone 3b. Modelling indicates that although there would be a loss of floodplain as a result of the landscaping of the site, there are no off site impacts in the post development, although flow routing across the site may change.

Groundwater is also shown to pose a high risk of flooding to the site. Complete mitigation of fluvial and groundwater flooding is unfeasible due to the depth of flooding seen at the site (approx. 1-2m).

While the proposed use is deemed to be water compatible, some aspects of the development such as retail outlets would not be. The effect of annual flooding and mud deposition etc. on the proposed development would be a regular impact that would need to be managed, and access to the public would likely need to be restricted during flood events.

We support comments from the Environment Agency requiring further information and amended design to manage flood risk.

Any ground raising would need to be balanced by floodplain compensation. This could potentially be achieved by reprofiling the River Trent banks to create a more natural channel. The River Trent is a major focus for habitat restoration within Staffordshire, and particularly within the Transforming the Trent Valley project area. As a heavily modified river along much of its length, a variety of projects and developments along the river course have sought to restore natural bank topography, reinstate features and re-connect the river with its floodplain. The current proposal misses an opportunity to restore the river along the northern boundary and enhance it for visitors. The borough boundary line may represent the former shape of the river, as it follows old meanders in other areas, This would be a great opportunity to create a backwater or oxbow lake to recreate an ancient feature here and mark the boundary as well as creating an interesting wetland viewpoint.

Ground works and Soils

It is not clear how much re-modelling will be required on the site, and where any spoil may be deposited- this could have additional impacts.

SPECIES

The Preliminary Ecological Appraisal, and all the further species survey reports, have failed to include a full data search from Staffordshire Ecological Record. This has resulted in the many priority and notable species recorded on the site in the last 20 years being ignored.

Bats

No roosting features were found, and bat activity surveys concluded that the site is of local importance for bats, with eight species detected using the site.

Great Crested Newts, Amphibians

Assessment of the pond found no evidence of GCN. However, other common amphibians including Common Toad, a priority species, may be present and the assessment has not taken this into account with regard to the potential impact of re-landscaping large areas.

Reptiles

A reptile survey was conducted according to the submitted documents - we have not had sight of this. If reptiles are present, large-scale remodelling will require the trapping and removal of animals prior to construction. However a lighter touch could retain reptiles on the site with appropriate precautions.

Badgers

The surveys undertaken conclude that badgers commute and forage within the site, and likely have a sett in the surrounding area, but no active sett was found within the site or 30m from the boundary. The recommended precautions including pre-commencement checks for badger are suitable.

Birds

A large number of priority and notable birds have been recorded on the site in recent years, but this has not been reflected in the Breeding Bird survey assessment due to the lack of a data search. These previous records indicate a number of birds use the site that were not found in the birds surveys, and also potentially provide evidence of regular breeding.

The Breeding Bird Survey itself recorded 30 species on the site, 7 of which were confirmed breeding, 11 probably breeding, and 9 possible breeders. Highlight were 3-6 pairs of Cetti's warbler (schedule 1 protected species) probably breeding, along with a number of priority species: Cuckoo (possible), Song Thrush (probable), Dunnock (possible breeding) and Reed warbler (confirmed).

The report concludes that the site does not meet LWS criteria. However this would appear to be incorrect, as considering the confirmed breeding species, the site meets bird criteria for fen habitat.

Only 3 survey visits were undertaken instead of the usual 6 required to confirm breeding. If all confirmed, probable and possible breeding species were taken to be definitely breeding on the site, the results also meet criteria for open water and for lowland wet grassland bird assemblages.

The report concludes that several pairs of priority and amber listed birds would lose habitat due to the proposals, and that reedbed and scrub habitats should be retained. While woodland creation would favour some species, the mix of habitats that enables the current bird population to breed successfully would be largely lost, as well as being subject to much more disturbance.

We feel the site meets LWS criteria for birds, subject to regular breeding of key species being confirmed.

An amended design would minimise impacts to important birds. Any impacts to the current habitats would however have an effect on birds, and so any residual impacts would need to be mitigated elsewhere on (or off) the site as a whole.

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Otter and water vole

The submitted survey covered sections of the River Trent and River Tame outside of the site, finding a potential otter couch in the River Trent, and no signs of water vole. It concludes that otter is likely present within the Site and the Survey Area.

However, the survey did not cover the most critical section of the Trent within the application site, due to access restrictions. Nor did it appear to cover the pool within the site. Critical areas within the site need to be re-surveyed to ensure otter use is fully recorded, as this species is highly protected. An otter resting place here would potentially present a constraint to any works in this area that could disturb otters.

ACCESS TO NATURE

Providing access to enjoy and engage with nature is central to our vision for Staffordshire, as well as the Trent Valley. The pandemic showed us how very important nature on our doorsteps is for our physical and mental health, and so it would be fitting to reflect this within any memorial.

We feel that a sensitive design would enable visitors to enjoy the varied landscape here while allowing much of the site to be undisturbed. Maintaining an open vista would allow good views of the river and lake, while the naturally varied habitats from woodland through reedbeds and bare areas lend themselves to exploration and multiple experiences as the visitor moves from enclosed to open spaces.

There could be many opportunities for visitors to engage with different habitats, and support/ donate to adopt features or conserve particular species such as butterflies, dragonflies or otters.

The following would allow good access and engagement while maximising the wildlife and flood management of the site:

Raised walkways/ boardwalks

River viewing platform and potential viewing tower

Bird hides

Willow structures

Pond dipping platforms

Information and activity shelter

Natural benches

Scrapes and ditches/ water features

Regards,

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