
Application Ref: 23/01837/FULM

Proposal: Proposed ground mounted photo voltaic solar farm and battery energy storage system with associated equipment, infrastructure, grid connection and ancillary work.

Location: Land To The West Of Main Street, Kelham

Date: 17/09/2024

1.0 Documents Reviewed

1.1. I have reviewed the following documents to inform my comments:

- Ecological Appraisal (No Doc Ref. RevB – 10/10/2023 – fpcr Environment & Design Ltd.);
- Bird Report (No Doc Ref. RevD – 19/10/2023 – fpcr Environment & Design Ltd.);
- Biodiversity Metric pdf extracts (No Doc Ref. – no date – no author);
- Outline Construction Environmental Management Plan (Doc. Ref, HC1002/OCEMP – October 2023 – Sirius Planning) and;
- Landscape Masterplan (Drwg. Ref. HC1002/5/16 Rev 1 – 20/06/2024 – Sirius Planning).

2.0 Comments

Scope of Ecology Surveys

2.1. The proposed development has been supported by an ecological appraisal. This has involved field survey work to determine the habitats present and faunal surveys concerning great crested newt, wintering and breeding birds. These surveys span the period April 2020 to April 2023. Although the habitat surveys were undertaken at slightly sub-optimal timings (i.e., October and April) given the broad habitats identified as being present, I do not consider this to be a significant constraint in this instance. In all other aspects the survey timings and methodologies utilised have followed the relevant best practice guidelines and appear to have been undertaken competently. Therefore, there is nothing to indicate that the information cannot be relied upon to inform the decision-making process.

Potential Ecological Impacts

2.2. Key conclusions summarised from the Ecological Appraisal are listed below, and based on the information submitted I would concur with these.

Designated Sites

2.3. The proposals would not have any impact on any site afforded either a statutory or non-statutory designation due to its nature conservation interest.

Habitats

2.4. Most of the site is formed by arable land with species-poor grassland margins, both of which are of low to negligible biodiversity value.

2.5. The field compartments are bounded by native species hedgerows that represent 'hedgerow' habitat of principal importance (i.e., they are a priority habitat). Small sections will be lost to provide access points but will be compensated for by new planting proposals.

- 2.6. The small number of mature trees present will be retained.

Priority or Notable Species

Badger

- 2.7. There is badger activity associated with the application site boundary and adjacent land. Potential impacts would be mitigated by the adoption of best practice methods involving ecological supervision of scrub clearance and working methods during construction activity.

Bats

- 2.8. The small number of mature trees within the site provide the only potential roosting opportunities for bats. These will be retained, but may require additional assessment should the proposals change or heavy pruning be required.
- 2.9. Boundary hedges provide suitable commuting/foraging corridors for bats. Except for a small number access gaps, these will be retained, and whilst there is no lighting proposed for the operational phase, lighting during construction work should be positioned to ensure that hedgerows remain unlit.

Birds

- 2.10. The site supported a breeding and wintering bird assemblage typical of the habitats present and which is formed mainly by common and widespread species. The main mitigation measures required are ecological supervision if vegetation clearance cannot take place outside of the bird nesting season.

Great Crested Newt

- 2.11. Although a small population of great crested newt were recorded in an offsite pond ca. 180m from the application site boundary, this pond is subject to periodic drying and it is considered unlikely that great crested newt would be present within the site; however, precautionary working methods are recommended.

Summary Conclusions

- 2.12. Therefore, no significant impacts have been identified but a small amount of mainly precautionary mitigation measures have been recommended, and I would advise that these should be implemented. I recommend that these should be secured via a Construction and Environmental Management Plan (CEMP).
- 2.13. An outline CEMP has been submitted as part of the application but this does not fully capture the ecology requirements. For example, there is nothing about precautionary working methods if vegetation must be cleared during the bird nesting season. However, a final approved version could be secured via an appropriate planning condition. I would strongly recommend that the applicant's ecologist should assist with future amendments of the CEMP to ensure that the ecology elements are fully captured.

Biodiversity Enhancement

- 2.14. The Ecological Appraisal recommends a series of enhancements which are summarised below.

Species

- The inclusion of a bat box scheme within the proposed development; and
- The inclusion of a bird nest box scheme within the proposed development.

Habitats

- 2.15. Because the application was made prior to the commencement of mandatory biodiversity net gain (BNG), if the proposal were granted planning permission the general Biodiversity Gain Condition (as set out in Paragraph 13 of Schedule 7A of the Town and Country Planning Act 1990 (as amended)) would not apply. However, the application is supported by a voluntary biodiversity net gain assessment.
- 2.16. The completed metric has not been submitted, only sections of the metric calculation. However, from these I have been able to input the information into a copy of the Statutory Biodiversity Metric to work out the habitat condition and other input variables, cross reference these with the Ecological Appraisal report and conclude that the calculation is acceptable in that the existing and proposed habitat types are appropriate and the target habitat conditions are realistic.
- 2.17. The resulting calculation is showing a gain of 90.88 habitat units (61.04%) and 7.38 hedgerow units (16.14%). This large gain is typical of a solar installation on arable land because grassland sown under the panels has a higher value than the cropland on which the solar array will be constructed.
- 2.18. The proposal is to sow the commercial Emorsgate Seeds EG10 Tussock Grass mixture beneath the solar array and then a EM2 General Purpose Meadow Mixture adjacent to the application site parcel boundaries. EG10 is a grass species only mixture with a composition of 6 species. Therefore, there will be a large expanse of species-poor grassland beneath the panels. If this was changed to the EM10 mix this would be 80% grasses (formed by the EG10 mix) and 20% wildflowers formed by a mix of 20 species. Even acknowledging that the grassland within the array will need to be managed differently to that around the peripheries, use of such a mix would result in a much more diverse grassland over a significant part of the application site, and make the area of greater value for invertebrates.
- 2.1. Perhaps somewhat perversely, this change would not alter the biodiversity net gain calculation, but I consider that for an application that is not subject to mandatory BNG, the use of a BNG calculation helps to provide confidence that the proposal will result in a net gain, but shouldn't be a reason to not maximise biodiversity benefits. I would therefore recommend that this amendment is made, which if accepted by the applicant would need an amendment to the current version of the Landscape Mitigation Plan.

3.0 Policy Compliance.

National Planning Policy Framework

- 3.1. Relevant sections of the National Planning Policy Framework (NPPF)¹ are:

¹ Department for Levelling Up, Housing & Communities. (2023). *National Planning Policy Framework* – December 2023. [National Planning Policy Framework \(publishing.service.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/1212512/nppf-2023.pdf)

“Planning policies and decisions should contribute to and enhance the natural and local environment by:...

...a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan); [Para. 180 a)]

...d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures” [Para. 180 d)]

“When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;” [Para. 186 a)].

3.2. Para 186a is based on the ‘mitigation hierarchy’ which is a sequential process to avoid, mitigate and compensate for negative ecological impacts². Government guidance is that *“Where a development cannot satisfy the requirements of the ‘mitigation hierarchy’ planning permission should be refused as indicated in paragraph 186 of the National Planning Policy Framework”³.*

3.3. I would advise that the mitigation hierarchy has been followed and with the proposed mitigation, compensation and enhancement measures implemented, there would not be significant harm to biodiversity. The voluntary biodiversity net gain assessment has identified that the proposal would result in a measurable net gain for biodiversity.

3.4. Securing the proposed mitigation, compensation and enhancement measures are therefore important to ensure compliance with the biodiversity aspects of the NPPF. I would advise that this would be best achieved via appropriate pre-commencement planning conditions for the following:

- A Construction and Environmental Management Plan (CEMP); and
- A Biodiversity Management Plan (BMP).

**Allocations and Development Management Development Plan Document (ADMDPD)
Policy DM5 Design**

3.5. Relevant sections of Policy DM5 are:

² CIEEM. (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.2*. Chartered Institute of Ecology and Environmental Management, Winchester. <https://cieem.net/wp-content/uploads/2018/08/ECIA-Guidelines-2018-Terrestrial-Freshwater-Coastal-and-Marine-V1.2-April-22-Compressed.pdf>

³ Department for Levelling Up, Housing and Communities. (2024). *Guidance – Natural Environment – Implementing policy to protect and enhance the natural environment, including local requirements*. (Paragraph: 019 Reference ID: 8-019-20240214). <https://www.gov.uk/guidance/natural-environment>

"...in accordance with the requirements of Core Policy 9, all proposals for new development shall be assessed against the following criteria:...

...5. Trees, Woodlands, Biodiversity & Green Infrastructure

In accordance with Core Policy 12, natural features of importance within or adjacent to development sites should, wherever possible, be protected and enhanced. Wherever possible, this should be through integration and connectivity of the Green Infrastructure to deliver multi-functional benefits...

7. Ecology

Where it is apparent that a site may provide a habitat for protected species, development proposals should be supported by an up-to date ecological assessment, including a habitat survey and a survey for species listed in the Nottinghamshire Biodiversity Action Plan. Significantly harmful ecological impacts should be avoided through the design, layout and detailing of the development, with mitigation, and as a last resort, compensation (including off-site measures), provided where significant impacts cannot be avoided.

- 3.6. As outlined above, I consider that with the proposed mitigation and compensation measures implemented, the development would protect the key habitats within and adjacent to the site.
- 3.7. The proposal has been supported by an appropriate ecological assessment covering habitats and species and significant harmful impacts would be avoided.
- 3.8. Therefore, I would consider the proposal complies with the requirements of Policy DM5 in relation to ecology matters.

NSDC Amended Core Strategy Core Policy 12 Biodiversity and Green Infrastructure⁴

- 3.9. Relevant sections of Policy 12 are:

"...The District Council will therefore:

"Expect proposals to take into account the need for continued protection of the District's ecological, biological and geological assets. With particular regard to sites of international, national and local significance, Ancient Woodlands and species and habitats of principal importance identified in Section 41 of the Natural Environment and Rural Communities Act 2006 and in the Nottinghamshire Local Biodiversity Action Plan;

Seek to secure development that maximises the opportunities to conserve, enhance and restore biodiversity and geological diversity and to increase provision of, and access to, green infrastructure within the District;..."

- 3.10. With the proposed mitigation, compensation and enhancement measures in place the proposal would not have an adverse impact on any designated site.
- 3.11. Whilst there would be some small loss of Hedgerow 'Habitat of Principle Importance' this loss would not be significant and the voluntary biodiversity net gain calculation is

⁴ Newark and Sherwood District Council. (2019). Amended Core Strategy – Adopted March 2019. [amended-core-strategy-DPD.pdf \(newark-sherwooddc.gov.uk\)](https://www.newark-sherwooddc.gov.uk/amended-core-strategy-DPD.pdf)

showing a +16% net gain for hedgerow habitat following compensatory new planting. The supporting ecology surveys and subsequent recommended precautionary working measures in respect of species, have demonstrated that the proposal has appropriately considered the need to protect species of principal importance.

- 3.12. Whilst the voluntary biodiversity net gain calculation has demonstrated a measurable biodiversity gain, as discussed above, I do not think that the proposal has maximised the opportunity to restore biodiversity in respect of the proposed grassland beneath the solar array. I consider that the biodiversity value for this area could be enhanced greatly by a simple change to the proposed sowing mix containing just a limited number of grass species to one formed by grass and wildflower seed mix. I consider this is important and not unreasonable for this to be required. With this small but important change to the submitted proposals, I would advise that the proposal would then comply with this aspect of the policy. This would require a minor amendment to the submitted soft landscaping plan with the detail captured in the Biodiversity Management Plan.

ADMDPD Policy DM7 Biodiversity and Green Infrastructure⁵

- 3.13. Policy DM7 mostly relates to the need for development to avoid adverse impacts on sites afforded a statutory or non-statutory nature conservation designation. In that respect the supporting ecological appraisal has concluded there would be no adverse impacts on such sites; a conclusion that I would concur with.

4.0 Conclusions and Recommendations

- 4.1. The proposed mitigation and compensation measures, subject to the discussed change to the species mix to be sown under the panels, are all appropriate and proportionate and are required to make the proposed development acceptable in terms of compliance with the biodiversity elements of the NPPF, Amended Core Strategy Policy 12 and Policies DM5 and DM7 of the Allocations & Development Management Development Plan Document. As such, I would advise that these measures should be secured by appropriate conditions of any planning approval. This would be via:

- A Construction and Environmental Management Plan; and
- Biodiversity Management Plan.

- 4.2. A suggested draft text for the CEMP is that taken from BS 42020:2013⁶, with the strong recommendation that the applicant's ecologist should have input into this document:

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.

⁵ Newark & Sherwood District Council. (2013). *Newark & Sherwood Local Development Framework Allocations & Development Management Development Plan Document – Adopted July 2013*. <https://www.newark-sherwooddc.gov.uk/media/nsdc-redesign/documents-and-images/your-council/planning-policy/supplementary-planning-information/allocations-and-development-management-dpd/Allocations-and-Development-Management-Development-Plan-Document.pdf>

⁶ The British Standards Institute. (2013). *Biodiversity – Code of practice for planning and development – BS 42020-2013*.

- 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.

4.3. A suggested draft text for the Biodiversity Management Plan condition is:

Prior to the commencement of the development, a Biodiversity Management Plan (BMP) shall be submitted to and be approved in writing by the Local Planning Authority.

The content of the BMP shall include the following:

- a. The location and summary description of the features to be maintained and/or enhanced, or created;*
- b. The proposed actions to maintain and/or enhance or create the features, and the timing of those actions;*
- c. The proposed management prescriptions for those actions;*
- d. An annotated plan providing a summary of the elements covered by items a, b, and c;*
- e. An annual work schedule covering a 5-year period (with the view that the management proposals would be reviewed every 5 years over the operational lifetime of the solar array);*
- f. Identification of who will be responsible for implementing the BMP; and*
- g. A schedule for monitoring the implementation and success of the BMP, this to include monitoring reports to be submitted to Newark and Sherwood District Council at appropriate intervals. The provision of the monitoring reports shall then form part of the planning condition.*

Nick Law

Biodiversity and Ecology Lead Officer

Planning Development

Newark and Sherwood District Council

(L) 01636 655333 Nick.Law@newark-sherwooddc.gov.uk

www.newark-sherwooddc.gov.uk