Biodiversity Mitigation Enhancement Plan (BMEP)

1. Background/Purpose

Planning consent has been obtained from South Downs National Park Local Planning Authority to install 30 ground mounted solar panels in the grounds of Grey Farm House (SDNP/23/04162/FUL). Condition 3 of the consent states that:

"A Biodiversity Mitigation Enhancement Plan (BMEP) shall be submitted to, and approved in writing by the Local Planning Authority prior to the commencement of the development. This shall include appropriate establishment planting (as indicated on 'BNG Report and Calculation received 24/11/2023). These features shall be sited prior to the development coming into its intended use and retained thereafter".

This biodiversity enhancement plan has been prepared by Dr Alice Jones to satisfy this condition.

2. Site description

Location: Grey Farm House , Kilmeston Road, Kilmeston, Hampshire, SO24 0NJ

3. Baseline features

Mown lawn / improved grassland.

4. Impact of ground mounted solar panel array on biodiversity

After installation, the vast majority of the habitat will remain grassland as a result of the type of mounting equipment chosen. This utilises aluminium ground anchors rather than concrete footings which limits the amount of ground in contact with equipment and ensures easy and complete removal of the array at the end of its life. However, there may be a minor impact to the biodiversity of the area below the panels as the grassland here will be more shaded than it would have been prior to installation.

5. Biodiversity enhancements

As indicated in the Biodiversity Net Gain (BNG) Report and Calculation (submitted 24/11/2023) the applicants have committed to restoring an area of 52m² immediately in front of the solar array into a wildflower meadow. This area is shown in Figure 1 which was also referenced in the BNG Report and Calculation document.

Figure1.



5.1. Meadow restoration

The ecological value of the site will be improved by allowing the restoration of the wildflower meadow in an area of $52m^2$ of land in front of the land on which the solar panels are installed. This equivalent area will not be mown during the summer months for the duration of the period that the solar panels are located on this site.

As a test, this land was not mown during the previous summer (May to October 2023). A number of wildflowers including scabious, cowslip, yarrow, vetch and buttercups were noted to have flowered when not disturbed. Therefore, not mowing this area of land will result in a relative increase in biodiversity through an increase in the flowering of grassland species which in turn will encourage and support increased insect life. To further enhance the biodiversity of this area, we have sown yellow rattle seeds over the improved grassland to see if we can reduce the proportion of established grass and to enable a higher percentage of wild flowers to establish themselves.

5.2. Tree and shrub planting

As outlined in the planning application, an area of trees and shrubs have now been planted on the land to the west of the panels (shown below, Figure 2 in green numbered 3) to screen the panels from the view from the west of the land below. These shrubs and trees are all native hedging provided by a supplier approved by Hampshire County Council (Mill Farm Trees). These have aesthetic and conservation qualities and include: Rowan (Sorbus aucuparia), beech (Fagus sylvatica), cherry plum (Prunus cerasifera), spindle (Euonymus europaeus) and dog rose (Rosa canina) and are also shown in Photo 1. Over time these will form a native "copse."





Photo 1.



6. Species enhancements

It is expected that the restoration of the wild flower meadow and the addition of the trees/shrubs will both attract additional insects which will provide good foraging opportunities for wildlife (e.g. bats and birds).

7. Conclusion

The site where the solar panels are being installed has relatively low ecological value at the moment due to it being mown regularly over the last 6-7 years and maintained as short grassland. It is anticipated - post installation of the solar panels - that property's value to wildlife will increase with the restoration of 52m² of wildflower meadow and the planting of native trees and shrubs. These measures will increase the number of insects in this area which, in turn, will provide attritional foraging opportunities for wildlife (bats, birds and invertebrates).

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