

File Note



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Site name	Solar Farm on Land West of Berrington, Shrewsbury
Location	Berrington
Date	04/11/2022
OS grid ref.	SJ 52741 07125
Project Code / ADAS Reference:	MPT69105-501(00)

Revision	Date	Amendment
First Issue	04/11/2022	First Issue

Following comments made by Shropshire Council Planning Ecologist in relation to the proposed development of a 30MW Solar PV Array on land west of Berrington, Shrewsbury, Shropshire; please see our below responses to said comments.

Great Crested Newts

Comment: *'RSK ADAS recommend a non-licensed method statement. Given the scale of works and the distances of the ponds from the site, SC Ecology disagrees with this approach and recommends that the District Level Licensing (DLL) scheme should be used for the development'*

Response: The Great Crested Newt report (ADAS, 2021) concluded that the eDNA survey results indicated the presence of a transient population of Great Crested Newt on the edge of its range in Ponds 13 and 15, to the northwest of the site. Contributing to this hypothesis; Pond 1 (on site) was deemed unsuitable for GCN, and Pond 2 returned a negative eDNA result; whilst other ponds west and south of the site (17 – 21) were separated from the site and ponds with confirmed Great Crested



Newt presence by Cound Brook which is considered a barrier to Great Crested Newt movement. The absence of Great Crested Newt presence in ponds on site and separation of ponds southwest of the site meant that there would likely be no movement of Great Crested Newt between Ponds 13 and 15 and these ponds on and southwest of the site.

This hypothesis is supported by the fact that Great Crested Newt (a small population) and evidence of breeding were only recorded in one of the ponds during population estimate surveys and no Great Crested Newt were recorded in the other ponds which returned positive eDNA (Ponds 3 and 15).

Given that the site is separated from these ponds by arable farmland and a road (albeit it one not significant enough to form a barrier to Great Crested Newt movement in itself) and the fact the site itself is dominated by arable farmland which is of sub-optimal suitability for Great Crested Newt, it was considered unlikely that Great Crested Newt would be present on site and highly unlikely they would be encountered during works.

The proposed works will include minimal/no vegetation clearance apart from to create access to the land parcels and vegetation clearance required as part of precautionary working methods to dissuade herpetofauna from the area of works. Topsoil scrapes will be minimised to proposed hardstanding surfaces (inverters, transformers, customer substation and tracks) and will be subject to vegetation clearance carried out under precautionary measures to dissuade herpetofauna prior to scraping. Trenching/excavation works will be limited to the installation of cabling which would again be subject to vegetation clearance carried out under precautionary measures to dissuade herpetofauna prior to excavation works commencing. Precautionary working methods for excavations will also be provided. Site access and vehicle movements are described in the Transport Statement. The panels will be installed in tables of roughly 32, singularly in landscape across the frame. Two person, on foot install using torque set driver, stocked by a pallet from a 'bobcat'.

Therefore, given the baseline Great Crested Newt survey data and the anticipated limited impact of the construction works, it was deemed that carrying out the proposed works under a non-licensed method statement with appropriate control measures to ensure the risk of encountering/disturbing Great Crested Newt is minimised/disturbed was sufficient, and that licensing (conventional or DLL) would be disproportionate. In the unlikely event Great Crested Newt were encountered during works, the works would be stopped and a licence would be required.

Comment: *'In addition, the Great Crested Newt Survey calculated Pond 11 (approximately 245m to the north-east) as having Good suitability to support great crested newts but an eDNA sample wasn't take.*

I believe this is because the site boundary of the planning application is a little different to that in the report. There is a 2013 record of great crested newts in Pond 11.'

Response: The original site boundary was smaller than the latest up to date boundary, and the decision was taken not to resurvey ponds as Great Crested Newt had already been recorded in ponds closer to the site and that the presence of Great Crested Newt in Pond 11 would not impact the conclusions of the report. Positive eDNA results were returned from Ponds 13 and 15, with a small population of newts and evidence of breeding recorded in Pond 13. The report hypothesised that the presence of a small population and evidence of breeding newts in Pond 13 and the positive eDNA but lack of newts in conventional surveying in Pond 15, was indicative of a transient population of Great Crested Newt on the edge of its range, northeast of the site. It is possible that should Great Crested Newt be present in Pond 11 that they form part of the same transient population, but this would not affect the validity of the 2021 survey results. The conclusions of the report remain valid, and it is deemed highly unlikely that any Great Crested Newt population on the edge of its range would cross arable farmland, even if by hedges; a road (albeit not a road that would pose a significant barrier to Great Crested Newt movement), to enter the site where the majority of habitats are comprised of arable farmland and of sub-optimal suitability for Great Crested Newt. Particularly when ponds 9-12 are surrounded by more suitable habitat, which is isolated from the wider landscape by arable farmland.

Comment: *'There are 2005 and 2006 records of great crested newts in Pond 4 (170m to the north) although this pond was calculated as having Poor suitability in 2021 and so not surveyed.'*

Response: The aforementioned records were at the time of survey, over 15 years old. Regardless, scoping ponds out from further survey based upon a 'poor' HSI score is deemed reasonable survey effort. Although Pond 3 which lies within 165 m of Pond 4 and lies on a potential commuting route from Pond 4 to the site, returned a positive score for Great Crested Newt eDNA, no Great Crested Newt or evidence of egg laying was recorded during the surveys using conventional methods. The report originally hypothesised that this result was a false positive but it is also possible the positive score for Pond 3 was indicative of a population of Great Crested Newt on the edge of its range and unlikely to be present/commute to site where the vast majority of habitats were arable farmland and of sub optimal suitability for GCN. Pond 4 is further from the site than Pond 3 and in the event GCN are present, they are likely to be part of the same metapopulation present in Pond 3 and therefore, also on the edge of their range and unlikely to be present on site.

Comment: *'There is a 2013 record of great crested newts in Pond 10 (320m to the north-east) although this was found to be dry in 2021.'*

Response: The surveys were conducted at the appropriate time of year and scoping ponds out due to being dry is considered appropriate survey effort as it did not provide suitable breeding habitat for GCN.

Skylarks

Comment: *'The loss of skylark habitat on the site is not acceptable. Replacement nesting habitat needs to be provided on the site as part of the site design.'*

Response: Information upon the impacts of solar farms upon Skylarks is sparse; one interim study from the RSPB, yet to be published ([Bird use of solar farms](#)), suggests that solar farm developments has no impact on the species (and may perhaps even be beneficial with additional mitigation measure such as planting strategies). Similar conclusions were drawn in a non-peer comparative review by Clarkson and Woods Ecological Consultants ([Clarkson and Woods](#)).

A study by Eraud and Boutin ([Eraud and Boutin](#)) on the relation between crop types and density of breeding Skylarks indicated that smaller field sizes with increased set-aside correlated with an increase in Skylark territory density. Although this study did not look at solar farms, it could be hypothesised that the effect of smaller field size and increased set aside would be mirrored by solar farms through the fragmentation of fields by solar arrays, therefore meaning that there could be an increase in Skylark territory density.

As highlighted by the [BTO](#), there is a lack of evidence to back up any definitive conclusions on the effects of solar farms on Skylark populations (either positive or negative).

The surveys identified 9 out of 11 of the Skylark territories on site were present in arable farmland and it is anticipated that these territories will be absorbed into the surrounding landscape given its similar land use. The conclusion of a 'net loss of territories on site' is a worst-case scenario. As indicated in the studies above, any net loss of arable farmland would not necessarily correlate with a loss of Skylark territory or decrease in numbers of Skylarks on site.

As indicated by the RSPB and Clarkson and Wood studies, the site is likely to retain viability for breeding Skylarks despite to loss of arable land.

- Access tracks around the site and between solar arrays creating areas of [bare earth/"tramlines" which are suitable for foraging](#). This is also backed up by a study on [microscale \(i.e. individual fields\) habitat influences on Skylark](#)
- Extending the existing buffer around the reservoir and creating a matrix of cover vegetation, bare earth and perhaps even the inclusion of an access/egress track within this area will compensate for the loss (if any) from other areas.

Provided that the above measure of extending the buffer around the reservoir beyond its current extent, no additional replacement of arable land to be lost is required.

Local Wildlife Sites

Comment: *'According to the Site Layout Plan, tree and grassland planting is proposed adjacent to, or in close proximity to, these habitats.'*

Response: Landscaping will be amended to be more sympathetic to the presence of the adjacent 'Big Bog': Tree species should use appropriate species (willows, alder, birch etc). Grassland seed mix species should be changed to Emorsgate meadow mix for wetlands EM8.

Comment: *'The ecological documents state that Cound Brook lies 'approximately 200m from the boundary of the site.' This is incorrect; the brook lies 20m from the site boundary at its nearest point.'*

Response: The figure of 200 m is a typo and will be amended. Regardless, given the extent of the proposed works there is no anticipated path for effects from the proposed development to the brook.

Comment: *'The potential impacts of the development (including landscaping) on the Local Wildlife Sites need to be considered.'*

Response: Given the nature of the proposed development and the extent of the proposed works as described above, the proposed development is not anticipated to result upon any impacts to the nearby designated sites. Landscaping of the areas of the site adjacent to the Big Bog will be revised to be sympathetic to this site as described above.

White-clawed Crayfish

Comment: *'The lagoon needs to be assessed for its potential to support white-clawed crayfish.'*

Response: Although no formal assessment of the lagoon was carried out, the waterbody lacked features that would support White-clawed Crayfish including: appropriate substrate, good water quality and refuges from predators (waterfowl were recorded as present and fish as potentially present during the HSI assessment of the waterbody). The waterbody was also isolated from potential surrounding source populations of crayfish, being both not connected to surrounding watercourses and surrounded by a 2.5 m high embankment. Given this and the fact the lagoon will not be affected by the proposed development and will be set back from the working area, no further assessment/survey of the waterbody relating to White-clawed Crayfish was deemed necessary.

Bats

Comment: *'Only TN1 is shown on the Phase 1 plan. The locations of the other four trees with bat roosting potential should be shown on the plan.'*

Response: Plans will be amended to show these trees

Otters

Comment: *'The Preliminary Ecological Appraisal states that there is a 'shallow moving stream ... located 2m outside the site on the eastern boundary'. This should be shown on the Phase 1 plan.'*

Response: Plans will be amended to show the watercourse.

References

ADAS, (2021a). *Berrington Solar Farm: Preliminary Ecological Appraisal*

ADAS, (2021b). *Berrington Solar Farm: Great Crested Newt Surveys*

ADAS, (2022). *Berrington Solar Farm: Ecological Impact Assessment*

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