My name is Prof Mike Alder and one of my academic specialisms is ecology and environment particularly in a rural context.

I have submitted two additional papers which cover in greater depth my concerns on the effects of the proposed Longfield Solar Farm on Biodiversity.

The paper "Biodiversity and Solar Farms" outlines planning policies that aim to protect biodiversity. There follows a review of literature that considers published refereed research on the impact of solar farms on biodiversity. One overall conclusion is that there is little empirical data on the subject. The research such as it is indicates a possible negative impact on biodiversity from solar farms.

Current advice remains to site solar farms away from areas of value. The Longfield site is near an SSSI, has the River Ter on its northern boundary. There are valuable woodland areas on the site, species rich hedgerows and water areas.

The conclusion must be that changing land use to solar farm could have an adverse impact on biodiversity and should not be permitted.

It is noted that mitigation measures will achieve Biodiversity Net Gain. The author of this representation would point out that such measures could also be applied in an agricultural context with a probable greater benefit.

The developer suggests a a 79% BNG however the metric used in this prediction is not accepted by many leading ecologists (a paper on Biodiversity Net Gain has been submitted to explain further this point).

One very relevant piece of research was published in the Society of Conservation Biology (June 2021). This research considered 55 BNG assessments and found that a promise of 25% increase in BNG delivered a 34% loss. The author of the paper concludes that to reduce the impact of infrastructure on biodiversity development should be redirected to previously degraded sites wherever possible.

The conclusion from the submitted papers must be that the Longfield site is not suitable for a change of land use as there could be impacts on biodiversity.