

Greatford Parish Council response to Grassland Establishment Management Plant (GEMP) Appendix 3 pages 61 to 70 of oLEMP, document ref: EN010127/APP/7.9.5 (Tracked) at Deadline 8.

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In section 1.1.3 the applicant undertakes to sow grassland in advance of construction as far as possible but recognises that this approach might not always be the appropriate or most suitable approach.

- The applicant does not set out how far in advance sowing should take place.

In order to establish a good quality grass ley that will provide the ecosystem services of anchoring soil, enhancing resilience to trafficking, alleviating compaction, enhancing water infiltration rates, and preventing overland flows of water it is vital that any ley is established well in advance of construction. In our view the grass should be drilled in the autumn 18 months prior to construction, and allowed to establish and be managed into a good established ley through the next spring, summer & autumn via light grazing or mowing to encourage tillering (the spread of the grass plants) prior to construction commencing in the spring following the establishment year.

- The applicant also does not specify when advance sowing and establishment is not the most suitable approach.

Advance sowing as described above will always be the best approach as the ley should be in good condition and able to withstand the rigours of construction if established well beforehand. In addition there is a second opportunity to establish any failed areas of ley in the spring should autumn sowing not provide an adequate ley.

In section 1.1.4. the applicant states that "Grass seeds are very fine and small. They are best sown in the spring or autumn, as this allows the seeds to establish roots before either dry weather or cold weather".

- This is broadly correct, however this statement fails to mention that fine / small seeds should be sown in to a well prepared, fine seed bed. Cotswold seeds recommend:-
"Good preparation of the seed bed before sowing is vital to achieve a fine tilth. Grass and clover seeds are small and so need to be in close contact with the soil before they can germinate. A cloddy (or lumpy) seed bed will hamper germination".
Cotswold seeds also recommend "rolling three times: once before sowing or drilling then in both directions afterwards. A ring or Cambridge roller is best, but a flat roller is good to finish".
It will not be possible to produce an adequate seed bed unless it is done in good conditions at the correct time of year, and certainly before construction.

Sections 1.16 to 1.19 give some detail as to the machinery and techniques that the applicant may use to establish the grass ley.

- Drilling and /or broadcasting will only be suitable if a good fine seed bed is prepared in advance, and if the seedbed is rolled to ensure soil / seed contact to provide soil moisture

which will enable the germination and establishment of the seeds. Broadcasting grass seed onto unprepared ground and underneath solar arrays is a folly as the seed will not be able to germinate as it will not have enough soil contact, or moisture to facilitate germination.

In Section 1.1.11 the GEMP recommends use of a broad spectrum herbicide to remove volunteers and unwanted weed species.

- The creation a clean seed bed is good agricultural practice, however it should be followed up by producing a good fine seed bed.

Sections 1.1.12 to 1.1.14 detail ley establishment in the autumns and the commencing construction in the same autumn or following spring.

- In both of these situations the grass establishment will be compromised (or severely compromised) as there is not enough time for the plants to establish, and commence tillering in order to spread and fill the soil with roots that will provide the ecosystem services described earlier, and that are “fundamental” to preventing erosion, surface water runoff and flooding.

Sections 1.1.15 to 1.1.19 detail how grass might be established after construction of the solar panels.

- This approach is extremely concerning as applying herbicides using hand held applicators underneath solar arrays would be extremely onerous on a large scale and is quite impractical.
- In addition broadcasting seeds underneath solar arrays onto an unprepared seed bed and expecting germination and growth in the absence of rainfall and in lower light levels will not lead to strong sward establishment, or in dry periods any establishment at all.

Sections 1.1.22 and 1.1.23 have 2 sets of 3 images of the same solar arrays.

- The first images are of badly trafficked and severely damaged soils underneath partially and newly completed solar arrays, These are exactly the situations that should be avoided at all costs by not trafficking soils when they are wet. This appalling damage to the soils could have been avoided if trafficking was limited to dry periods, and the grass was adequately established before construction.



- The second images in each set show fairly thin grass swards at an undisclosed time after construction. A thin grass sward in this situation would be suboptimal in preventing surface water runoff on a sloping site (as much of the Mallard Pass order limits are).



- The third set of images show a well established grass ley, however this level of establishment has taken 7 years in both situations (although the second image has significant, unexplained areas of bare soil). The soils, watercourses and downstream sites of the Mallard Pass order limits would be at significant risk for a number of years if a situation similar to that depicted in sections 1.1.22 and 1.1.23 is allowed to develop. For this reason we recommend establishment of a good ley prior to construction, and construction to be limited to periods when the soil is dry.



Sections 1.1.26 to 1.1.13 detail the early and subsequent years grass land management.

- The details of how the grassland will be managed in its first year are to be welcomed, but only if the procedures and processes are undertaken prior to construction, not during or after construction, as the establishing sward will be severely compromised and will take several years to recover before it is able to provide the fundamental functions it will be required to undertake as detailed earlier.