



Mallard Pass

Solar Farm

Mallard Pass Solar Farm

**Applicant's Response to
Interested Parties' Deadline 2
Submissions - Water
Environment**

Deadline 3 - June 2023

EN010127

EN010127/APP/9.27

Applicant's Response to Interested Parties' Deadline 2 Submissions on Water Environment

Parties Raised	Sub-Theme	Issues Raised	Applicant's Response
<p>REP2-047. REP2-048, REP2-182, REP2-159, REP2-138 REP2-100, REP2-060, REP2-096, REP2-163 REP2-220, REP2-181, REP2-061, REP2-230, REP2-166, REP2-113, REP2-054, REP2-208, REP2-090</p>	<p>Impact on the surface water drainage within the site</p>	<p>Consider that the application does not adequately address the matter of soil compaction or the insertion of a concrete base to secure the installation of the panels and the combined impact this would have on the surface water drainage within the Site.</p> <p>Potential for increased surface water runoff from the development and subsequent impact of rising river levels in the West Glen which in turn potentially increases flood risk to Greatford.</p>	<p>The Applicant submitted an Outline Soil Management Plan (oSMP) [APP-213] as part of the DCO Application and updated for Deadline 3. Prior to construction commencing, a Soil Management Plan will be produced as required by the Development Consent Order and in accordance with the oSMP. Paragraph 4.12 of the oSMP outlines the procedures for the appointed contractor to follow to avoid soil compaction during the construction phase. Should localised soil compaction occur during the construction phase, paragraphs 4.13 to 4.18 outline the mechanisms by which these areas should be ameliorated by the contractor.</p> <p>Concrete blocks or 'shoes' may potentially be used to secure PV racking array where it is deemed necessary for the preservation or protection of below ground archaeology (refer to the Applicant's response to Q6.0.7 in Applicant's Responses to ExA's First Written Questions [REP2-037]). Where concrete footings are installed these will be Should concrete feet be required in areas of archaeological potential i.e. the racking system is not driven into the ground, then these areas will be localised and highly unlikely to have a measurable impact on the infiltration potential of the Order limits.</p> <p>Any areas around the concrete blocks which may require remedial action to facilitate drainage will be undertaken by the Environmental Manager for the site, who will have responsibility for the overall management of environmental aspects onsite, ensuring environmental legislation and best practices are complied with, and environmental mitigation and monitoring measures identified are implemented. This is secured through the Outline Operational Environmental Management Plan [APP-208].</p> <p>The Applicant has explained how the Proposed Development is likely to lead to reduced surface water run-off rates compared to the baseline agricultural scenario in its answer to Q12.0.6 a) in the</p>

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			Applicant's Responses to ExA's First Written Questions [REP2-037].
REP2-047, REP2-048 REP2-138	Flood prevention measures	Consider that the information submitted alongside the application does not make provision for flood prevention measures throughout the construction period when works to implement any consent would also affect surface water drainage in ways that differ from those predicted once the development is complete.	<p>Table 1-1 Summary of Mitigation Measures of the Outline Water Management Plan (oWMP) [APP-214] specifically refers to drainage features (cut-off ditches, swales and retention ponds) to be employed for the construction phase for the dual function of reducing run-off rates and sediment control. These features need to be designed and located by the appointed construction contractor and these will be secured through the oWMP and outline Construction Environmental Management Plan (oCEMP) [APP-207].</p> <p>Section 2.3 of oWMP also outlines Sustainable Drainage Systems (SuDS) measures which will serve dual function of pollution control and attenuation of surface water run-off during the construction phase.</p> <p>Therefore, the DCO Application does make provision for flood prevention measures throughout the Proposed Development's construction period.</p>
REP2-047, REP2-048 REP2-138	Impact on existing water apparatus	Consider that the proposed development will break the existing land drains across the site, which, if not reinstated as part of any decommissioning of the project at the end of its life, would result in a negative impact.	<p>Paragraph 11.4.53 of ES Chapter 11: Water Resources and Ground Conditions [APP-041] states that a site walkover indicated the presence of a subsurface drainage network and that the installation of the Mounting Structures has the potential to damage this network by piercing the pipework and impairing its functionality through blockage.</p> <p>It also states: "<i>In the absence of good construction practice, such as a watching brief and pipe reinstatement, the artificial drainage network is likely to still be able to function, as water would gravitate around racking system and drain to the existing outfalls.</i>"</p> <p>Table 3-7 Water Resources and Ground Conditions of the Outline Construction Environmental Management Plan (rev.2) [REP2-020] also states "<i>if during the construction of any of the infrastructure,</i></p>

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			<p><i>there is any interruption to existing land drainage, then new sections of drainage will be constructed".</i></p> <p>Consequently, there is not expected to be a adverse effect on the existing drainage network which is expected to remain functional for all phases of the Proposed Development</p>
REP2-044, REP2-046	DCO Requirements	<p>The development must be carried out as proposed within the DCO application documents, further details being agreed upon as part of subsequent DCO Requirements, LCC, as Lead Local Flood Authority for Lincolnshire.</p> <p>The view is that the impacts of this proposal would be neutral in so far as they affect Lincolnshire.</p>	Noted.
REP2-047, REP2-048 REP2-138	Further Information Request	<p>More information required considering the lie of the land, existing ground conditions and areas of infiltration and if areas of the land can be used for natural flood management (NFM).</p>	<p>Regarding the lie of the land, Section 3.1 of the Outline Surface Water Drainage Strategy (oSWDS) in Appendix 11.6 of the ES [APP-087] states that localized flat topography within the parcels of the Proposed Development is generally flat meaning rainfall will not drain quickly down slope and will preferentially infiltrate where it lands under the drip line. As such, topography has been given due consideration in the management of surface water runoff.</p> <p>The potential effects of the Proposed Development on water resources and ground conditions are assessed in Chapter 11 of the ES [APP-041] and at paragraph 11.4.60 it assessed the effect of the compaction of soil during construction and decommission phases to be negligible.</p> <p>The oSWDS describes how surface water run-off from all aspects of the Proposed Development will be managed, including the avoidance of unnecessary soil disturbance on saturated soils in order to minimise soil compaction.</p> <p>Table 1-1 Summary of Mitigation Measures within the Outline Water Management Plan [APP-214] details that measures to</p>

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			<p>prevent compaction of soil during construction, such as avoiding tracking over soils when too wet, are detailed in and secured by the Outline Soil Management Plan [APP-213].</p> <p>Regarding NFM, the introduction of planting within the Mitigation and Enhancement Areas will increase the interception potential of surface water within the Solar PV Site relative to the existing land use. This is in line with the Environment Agency's Rural Sustainable Drainage Systems (RSuDS) document.</p>
REP2-159, REP2-057 REP2-163, REP2-220, REP2-218 REP2-203 REP2-223 REP2-138, REP2-117, REP2-061 REP2-190, REP2-209 REP2-217, REP2-170, REP2-156 REP2-154, REP2-166, REP2-113, REP2-211, REP2-169, REP2-231, REP2-126, REP2-066	Impact of flooding	<p>Concerned that there is already periodic flooding within and around the Site, which will worsen if the development comes forward.</p> <p>There has been relatively little written information seen from the EA or the Rutland and Lincolnshire LLFAs about the flood risk associated with the Mallard Pass proposal other than an acceptance of the Mallard Pass Flood Risk Assessment (FRA).</p> <p>Compacted soils will result in increased surface water flooding flowing into rivers and would increase the flood risk from the West Glen and other local rivers.</p> <p>The West Glen is already prone to serious flooding.</p> <p>Concern about the extent of flooding already present in Greatford, Shillingthorpe and Wilsthorpe and the worsening effect of the development.</p>	<p>The Applicant acknowledges the issues that have been raised by these representations.</p> <p>The potential effects of the Proposed Development on water resources and ground conditions have been assessed in Chapter 11 of the Environmental Statement [APP-041]. Paragraphs 11.4.67 to 11.4.77 of this assessment state that the impact of surface water runoff and floods on the receiving watercourses as a result of the Proposed Development are considered to have a negligible significance of effect i.e. will not have an effect on downstream receptors.</p> <p>A Flood Risk Assessment (FRA) has been undertaken and can be found in Appendix 11.5 of the Environmental Statement [APP-086]. In Section 1.8 <i>Historical Flooding</i> and Section 2.1 consideration is given to existing flood risks and the flooding history of the local area. The Order limits of the Proposed Development is not located in areas with a recorded previous flooding history.</p> <p>In Section 3 of the FRA, the assessment also found that the implementation of measures from the Outline Surface Water Drainage Strategy (Appendix 11.6 of the ES [APP-087]) will prevent an increase in flood risk elsewhere in the area.</p>

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REP2-090			<p>The Drainage Strategy also includes information about the proposed management of surface water run-off rates from the Proposed Development including from panels and access tracks.</p> <p>Table 1-1 Summary of Mitigation Measures within the Outline Water Management Plan [APP-214] details that measures to prevent compaction of soil during construction, such as avoiding tracking over soils when too wet, are detailed in and secured by the Outline Soil Management Plan (oSMP) [APP-213]. Measures to avoid and ameliorate compaction are set out in Section 4 of the oSMP.</p> <p>As such, surface water run-off rates will be maintained at baseline level, therefore not worsening the current or future flooding events.</p> <p>LCC has also reviewed the information and concluded that the impact of the Proposed Development on surface water run-off rates will be neutral.</p>
REP2-159	Flood Risk Assessment	<p>Concerned that the Flood Risk Assessment (FRA) carried out during 2022 for Mallard Pass by Arcus Environmental was compiled by an individual who is also the Flood Risk Manager for Mallard Pass. Believes this is inappropriate, and something which should be of concern to the EA and LLFAs within LCC and RCC.</p>	<p>The FRA was authored by Hydrologists from Arcus Consultancy Services Ltd who are wholly independent of Mallard Pass Solar Ltd. The FRA was reviewed and approved by a Chartered Water and Environmental Manager with over 16 years' experience working on renewable energy developments.</p>
REP2-061, REP2-113 REP2-090		<p>It appears that no specific FRA to assess the increased flood risk to Greatford was carried out.</p> <p>Concerns that the proposed development will increase flooding, surface flooding and existing drainage issues –</p> <ul style="list-style-type: none"> - Runoff water from solar panels creates surface flooding 	<p>An assessment of Flood Risk, including the management of surface water run-off rates, can be found within Appendix 11.5 of the Environmental Statement [APP-086] and Appendix 11.6: Outline Surface Water Drainage Strategy of the Environmental Statement [APP-087], which includes allowances for climate change.</p> <p>The Flood Risk Assessment states in Section 3 that the implementation of measures in the Outline Surface Water</p>

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		<ul style="list-style-type: none"> - Soil infiltration rates not correctly assessed - Increased flood risk in the area - Establishing vegetative cover pre-construction and preparing the soil for trafficking through sowing grass - The potential damaging impacts of construction on soil function and quality - The soil resilience to damage and damage to soils at depth, plus the perpetration of soil damage - Controlling construction activities in particular conditions - Repairing compacted damaged soil 	<p>Drainage Strategy will prevent an increase in flood risk elsewhere in the area i.e. including Greatford.</p> <p>Table 2 of Appendix 11.5 of the ES [APP-086] concludes that the residual risk of the Proposed Development flooding from all sources is negligible.</p> <p>Section 4 of the Outline Soil Management Plan (oSMP) [APP-213] sets out the key principles to avoid damage to soils including paragraph 4.12 which outlines the procedures to avoid soil compaction during the construction phase. Should localised soil compaction occur during the construction phase, paragraphs 4.13 to 4.18 outline the mechanisms by which these areas should be ameliorated. Paragraphs 4.4 to 4.9 also sets out timing for construction activities to avoid adverse effects on soils.</p> <p>It should be noted that point 1i) <i>Damage to soils at depth</i> of the Greatford Parish Council Written Representation [REP2-061] incorrectly states that groundwater was observed within two of the test pits dug for infiltration testing, citing photographs which actually show water introduced by the Geotechnical Contractor into the test pits for the purposes of infiltration testing. Table 2: <i>Generalised Strata Profile</i> in Appendix C of the outline Surface Water Drainage Strategy (oSWS) [APP-087] clearly shows no groundwater strikes were encountered in any of the test pits. This is further evidenced by the trial pit logs in the same document. As such, the assessment that the PV racking system will have a negligible effect on groundwater remains unchanged.</p>
REP2-102	Comment on awareness of boundaries	The proposed development is located within the extended area of Upper Witham Internal Drainage Board. Therefore, consent for alterations to water courses is required from Upper Witham Internal Drainage Board.	<p>The Applicant notes Upper Witham Internal Drainage Boards comments.</p> <p>Where crossing an IDB drain, the Applicant is seeking to remove the requirement to obtain a separate consent pursuant to section 23 of the Land Drainage Act 1991. The rationale behind this approach is included in the Explanatory Memorandum [APP-018] at paragraphs 4.2.14 to 4.2.16.</p>

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			<p>In summary, the Applicant considers that there is no justification to impose an additional administrative burden of seeking Ordinary Watercourse consent during the construction process as the acceptability of the proposals will be approved through other mechanisms within the DCO. The ability to disapply the requirements of Section 23 of the Land Drainage Act 1991 is included in Article 6 of the Draft Development Consent Order (Rev. 3). The IDB is required to consent to this provision in respect of drains in this area and the Applicant will be in touch with the IDB to discuss this further and to clarify whether it will consent on the LLFA's behalf to LLFA responsible watercourses.</p>
<p>REP2-061 REP2-090</p>	<p>Soil Infiltration rates</p>	<p>Vegetative cover must be in place before any construction commences, if the vegetative cover is not present, and a significant rain-fall event occurs, the impact on the soil and the local hydrology could be severe. We consider the establishment of suitable vegetative cover essential and cover this aspect later in this document.</p>	<p>Section 4.7 of the updated oSMP [PDA-007] has been updated to include the advanced sowing of grass, where appropriate. The measures set out in the SMP should include additional mitigation in the event that establishment of a grass sward is not appropriate or is unsuccessful. For example, the use of track matting to minimise compaction and the provision of an appropriately experienced soil specialist to advise on and supervise soil handling, including identifying when soils are dry enough to be trafficked.</p>
<p>REP2-061</p>	<p>Outline surface water drainage strategy</p>	<p>Concern with the approach to the outline Surface water Drainage Strategy, the modelling tools, and the assessment of the soil infiltration capacities across the site.</p>	<p>Section 3.1 of the Appendix 11.6: Outline Surface Water Drainage Strategy [APP-087] uses 2D modelling to demonstrate the beneficial effect of planting and vegetation management on surface water run-off rates. This approach has been utilised on other solar developments of similar scale and the methodology has been reviewed by the relevant regulatory bodies.</p> <p>Lincolnshire County Council, acting as the Lead Local Flood Authority note in their response to The Examining Authority's written questions and requests for information (ExQ1) that the Outline Water Management Plan [APP-214] is "acceptable at this stage and note final schemes/details will be secured as DCO Requirements".</p>

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REP2-236	Increased flood risk due to concentrated run-off from panels	Concerned with the increased flooding risk for the area as a result of rainwater run off from the proposed development.	<p>The Applicant has explained how the Proposed Development is likely to lead to reduced surface water run-off rates compared to the baseline agricultural scenario in its answer to Q12.0.6 a) in the Applicant's Responses to ExA's First Written Questions [REP2-037].</p> <p>Also, Section 3.1 of Appendix 11.6: Outline Surface Water Drainage Strategy [APP-087] concludes that the introduction of planting within the Mitigation and Enhancement Areas will increase the interception potential of surface water within the Solar PV area. This is evidenced by the 2D surface water model which shows increasing the roughness of the surface cover within the Order limits, specifically under the PV Array drip lines, retains water onsite for longer <i>i.e.</i> reducing the surface water run-off rate compared to the baseline agricultural scenario and therefore having a beneficial impact on surface water flooding.</p>
REP2-070	Boreholes	<p>The Environment Agency has been considering its land interests in more detail and this has revealed the presence of a borehole (or boreholes) at grid reference TF 05070 11630 – we are not able to confirm if these are adjacent boreholes or a single dual purpose borehole.</p> <p>The Boreholes are not recorded on the British Geological Survey records and they are, therefore, not included in Appendix 11.4, Water Resources and Ground Conditions – Baseline Data [APP-085]. It may be that these boreholes are not immediately visible due to overgrowth. However, it is extremely important that they are given appropriate consideration as the proposed cable laying works have the potential to impact the structures, which could create a direct pathway to groundwater and cause pollution.</p> <p>We are satisfied that the wording of Requirement 15 provides an appropriate mechanism to protect</p>	<p>The Applicant has noted the additional information provided by the Environment Agency in respect of the presence of a borehole (or boreholes). Information relating to groundwater abstractions was requested from the EA during the PEIR. The information regarding the two boreholes was not provided within the EA's response and has therefore not been included within the assessment of effects on these receptors.</p> <p>The Applicant will discuss this issue further with the EA with a view to agreeing a position with the EA in the Statement of Common Ground.</p>

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		groundwater, providing their presence is acknowledged in appropriate application documents.	
REP2-208	Flood Management	Concern that downstream of the Order Limits, Parts of Greatford have long suffered periods of flooding from the West Glen River during times of peak flow, so it is suggested that there is a case for adopting a precautionary approach in relation to the risk of increased surface run-off. There are well established techniques for slowing the flow of previously canalized rivers such as the West Glen whilst also benefitting biodiversity. These include channel diversification and the creation of washlands. Using these techniques to increase flood storage upstream of Greatford should be a requirement of the consent for this development.	<p>The Applicant is aware of and has engaged with Anglian Water regarding proposals to meander the canalised section of the West Glen River which drains the central section of the Order limits. The Applicant has committed to contribute positively where possible to these conservation works (Design Guidance PL3.2 as set out in the Design and Access Statement (REP2-016)).</p> <p>The oSWDS [APP-087] uses a 2D direct rainfall model to quantitatively demonstrate the effect of the proposed vegetation and planting measures on surface water run-off rates. Incorporating the increases friction from planting within the Mitigation and Enhancement Areas is shown to increase the levels of surface water within the Model Study Area and increase the concentration of flows within the vegetation along existing flow routes as shown in Plate 13 of the oSWDS.</p> <p>The introduction of planting within the Mitigation and Enhancement Areas will increase the interception potential of surface water within the Solar PV Site relative to the existing land use.</p>
REP2-069	ExQ1 Q12.0.2 - outline Surface Water Drainage Strategy	We understand that Section 2 of the Strategy relates to the substation only, where there will be hardstanding. It is not clear what activity is being referred to as requiring an Environmental Permit. As the surface water will be discharged via existing surface water outfalls, there may be no works classified as a 'flood risk activity' in respect of this within 8 metres of the River West Glen.	A precautionary approach to discharge to the West Glen River was taken within the assessment and assumed that an Environmental Permit would be required should excavations works be required to connect the substation drainage network to the existing surface water drainage infrastructure. This could require locating the existing pipes and outlet which could be within 8 m of a main watercourse.

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		<p>It is the responsibility of the lead local flood authority to determine if the proposed rate of discharge of surface water would be appropriate. It is possible that an Environmental Permit would be needed to discharge contaminated surface water, usually during the construction phase. This would not be classified as a flood risk activity (and therefore would not fall under the part of the Environmental Permitting Regulations that the applicant wants to disapply), so a specific water discharge permit application would be needed.</p> <p>We ask that the applicant confirm what is being referred to here.</p> <p>On the basis of the information contained in the Environmental Statement and without prejudice to any decision it may take on the Environmental Permit application once it is made, the Environment Agency is not currently aware of anything that would preclude the grant of a permit; however, we would also point out that this view could change depending on the content of the permit application when this is received.</p>	
REP2-069	ExQ1 Q12.0.7 - outline Surface Water Drainage Strategy	<p>Temporary use of a portaloos is of low concern (providing sensible pollution prevention measures are followed). Any sewage discharges will need to be compliant with the General Binding Rules, otherwise a permit may be required</p>	Noted.
REP2-050	ExQ1 - Q12.0.2 - outline Surface Water Drainage Strategy (oSWDS)	<p>The LLFA cannot foresee any potential impediments for connections into ordinary watercourse. The EA would look at/grant approval of connections into a Main River.</p>	Noted.

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		<p>Provided there is sufficient capacity within the site and into the connecting watercourse, and a restricted outfall at greenfield rate or below greenfield rate, the LLFA could not object.</p>	
REP2-045		<p>As a Main River it will be for Environment Agency to advise and comment whether the disapplication of Environmental Permitting is appropriate however LCC's view is that it should remain.</p>	Noted.
REP2-090	Groundwater levels	<p>There is also evidence from the soil infiltration test pits that the legs of the mounting structures will encounter ground water as it was present in 2 of the 6 infiltration test pits. This is contrary to information in Appendix 11.3 Water Resources and Ground Conditions – Consultation Summary Consultation (APP-084) responses, where, in a response to PINS (Scoping opinion) regarding steel mounting posts being driven into the ground and having an effect upon ground water, MPSF addressed the matter by referring to an absence of ground water within the trial pits dug for infiltration testing.</p>	<p>It should be noted that point made in 14.31 of this Written Representation and in 1i) <i>Damage to soils at depth</i> of the Greatford Parish Council Written Representation [REP2-061] incorrectly states that groundwater was observed within two of the test pits excavated for infiltration testing, citing photographs which actually show water introduced by the Geotechnical Contractor into the test pits for the purposes of infiltration testing. Table 2: <i>Generalised Strata Profile</i> in Appendix C of the outline Surface Water Drainage Strategy (oSWDS) [APP-087] clearly shows no groundwater strikes were encountered in any of the test pits. This is further evidenced by the trial pit logs in the same document. As such, the assessment that the PV racking system will have a negligible effect on groundwater remains unchanged.</p>
REP2-090	Infiltration testing	<p>No soil infiltration testing has been conducted other than at the site of the new substation. Therefore MPSF do not know what the limits are. In order to provide an accurate assessment of how the soil would react to the increased runoff from the panels MPSF should have deployed modelling tools applicable to this scenario and type of run-off, especially in the event that the soil is compacted. Modelling tools that could have been applied include Hydrology of Soil Types (HOST), and another is Winter Rain Acceptance Potential (WRAP), there is no evidence that any modelling for the water running</p>	<p>Section 3.1 of the Outline Surface Water Drainage Strategy (oSWDS) [APP-087] assesses the baseline superficial geology cover as predominately clay soils overlain by a mix of superficial soils which are tilled or left as stubble for large parts of the year which is likely to limit infiltration and promote surface water runoff leading to concentrations of surface water entering the surrounding hydrological network. The proposed grass and vegetation cover during the operational period of the Proposed Development is likely to generate lesser surface water runoff rates.</p> <p>The oSWDS [APP-087] uses a 2D direct rainfall model to quantitatively demonstrate the effect of the proposed vegetation</p>

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		<p>off the panels has been undertaken and this is considered a major omission.</p>	<p>and planting measures on surface water run-off rates. Incorporating the increases friction from planting within the Mitigation and Enhancement Areas is shown to increase the levels of surface water within the Model Study Area and increase the concentration of flows within the vegetation along existing flow routes as shown in Plate 13 of the oSWDS.</p> <p>The introduction of planting within the Mitigation and Enhancement Areas will increase the interception potential of surface water within the Solar PV Site relative to the existing land use.</p> <p>Table 7 of the oSWDS uses the SOIL index value to calculate the potential run-off volume from the existing land use and from the proposed PV array area. SOIL is an index of the water holding capacity of the soil. The soil index (SOIL) is based on the winter rain acceptance parameter (WRAP) included in the Flood Studies Report.</p>
REP2-090	Calculations, assumptions and modelling methodology	<p>Challenge of the calculations and assumptions on soil type and associated infiltration rate. There appears to be no evidence that any modeling for the water running off the panels has been undertaken. In order to provide an accurate assessment of how the soil would react to the increased run-off from the panels, modeling tools should have been deployed applicable to this scenario and type of run-off, especially in the event that the soil is or becomes compacted in places. Those tools include Hydrology of Soil Types (HOST), and Winter Rain Acceptance Potential (WRAP).</p>	<p>Refer to answer above for an explanation of the modelling that has been undertaken.</p>
REP2-090	Establishment of grass	<p>A key mitigation measure to minimise the potential detrimental impact of construction activities on the soil resource is to ensure that the</p>	<p>Section 4.7 of the updated oSMP [PDA-007] has been updated to include the advanced sowing of grass, where appropriate. The measures set out in the SMP should include additional mitigation</p>

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		<p>grass sward is fully established (i.e. no bare ground), prior to the installation of the panels and associated infrastructure. This should be specified in the Outline Soil Management Plan. It is clear that Natural England are in agreement with MPAG's view that in order to preserve soil functions such as infiltrating soil water adequately to prevent overland flow, and flood risks downstream off the site, the soil should be respected and prepared properly if the DCO is granted.</p> <p>- What type of seed mix is to be used and when. MPSF just suggest using a 'suitable' grass seed mix but nothing more. MPAG believe for this type of operation it should be made up of hard wearing, shade & drought tolerant species such as creeping red fescue, meadow fescue, tall fescue, late perennial ryegrass (diploid) and white clover. These are generally slow growing species and should be established two years before construction commences. - a clear strategy on how it will be maintained - How long will the grass be allowed to establish, ensuring any prior compaction has been recognised and addressed.</p>	<p>in the event that establishment of a grass sward is not appropriate or is unsuccessful. For example, the use of track matting to minimise compaction and the provision of an appropriately experienced soil specialist to advise on and supervise soil handling, including identifying when soils are dry enough to be trafficked.</p>