

**WEST SUSSEX COUNTY COUNCIL
FLOOD RISK MANAGEMENT CONSULTATION**

DATE: 26/08/15

FROM: Glen Westmore

**TO: Arun District Council
FAO: Richard Temple**

PLANNING REFERENCE: BN/29/15/PL

Location: Land at Barnhan Court Barnham

Proposal; Solar park including the erection of solar arrays, inverters, transformers, equipment housing, security fencing, internal tracks, ancillary equipment & ecological mitigation.

RECOMMENDATION:

Advice	☒	Modification	☐	More Information	☐
Objection	☐	No Objection	☒	Refusal	☐

West Sussex County Council (WSCC), in its capacity as the Lead Local Flood Authority (LLFA), has been consulted on the above proposed development in respect of surface water drainage.

The following is the detailed comments of the LLFA relating to surface water drainage and flood risk for the proposed development and any associated observations, advice and conditions.

Flood Risk Summary

Modelled surface water flood risk	Low risk.
Comments: Current uFMfSW mapping shows that the proposed site, is at 'Low' risk from surface water flooding. This risk is based on modelled data only and should not be taken as meaning that the site will definitely not flood in heavy rainfall events. However the surface water management strategy should consider this risk and any suitable mitigation measures if appropriate. Any existing surface water flow paths across the site should be maintained or appropriate mitigation strategies proposed.	

Modelled ground water flood risk susceptibility	High to Moderate risk
Comments: The area of the proposed development is shown to be at 'High/ Moderate risk' from ground water flooding based on the current mapping. This means the general geology in the area may be suitable for infiltration / soakaways. Where the intention is to dispose of surface water via infiltration/soakaway, these should be shown to work through an appropriate assessment carried out under the methodology set out in BRE Digest 365 or equivalent. Ground water contamination and Source Protection Zones. The potential for ground water contamination within a source protection zone has not been considered by the LLFA. The LPA should consult with the EA if this is considered as risk.	

Records of any historic local flooding?	Yes
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Comments:

We have records of historic local flooding on this site. The source of this flooding is likely to be fluvial. This does not mean that the site will definitely flood again although we recommend developers investigate and apply appropriate mitigation measures if necessary.

Ordinary watercourses nearby?

Yes

Comments:

Current Ordnance Survey mapping shows ordinary watercourses within or in close vicinity to the proposed development area.

Future maintenance and land ownership of the watercourses on site could be an issue in the future. The LPA should consider conditions to ensure that future maintenance can easily be carried out and land ownership and maintenance responsibilities are clearly marked on any future plans.

No development should take place within 5m of any ordinary watercourse. If works are undertaken within, under, over or up to an Ordinary Watercourse, even if this is temporary, an Ordinary Watercourse Consent (OWC) may need to be applied for from the District or Borough Council.

Local or field boundary ditches, not shown on Ordnance Survey mapping, may exist around the site. If present these should be maintained and highlighted on future plans.

Is development within Flood Zone 2 or 3?

Yes

Comments:

Environment Agency mapping shows that this site is within Flood Zone 3.

The site is recognised to be at significant risk from fluvial flooding and mitigation measures are proposed in application. We recommend the developer / designer should consult and liaise with Environment Agency regarding development on this site. Ensure that mitigation measures outlined within the Flood Risk Assessment are implemented; specifically ensuring cut-off systems (both automated and back-up) are in place for times of flood.

Future development - Sustainable Drainage Systems (SuDs)

As no detailed designs have been submitted, if approved at outline stage, the proposal should be subject to the following condition:

Development should not commence until finalised detailed surface water drainage designs for the site, based on sustainable drainage principles and an assessment of hydrological and hydro geological context of the development have been submitted to and approved in writing by the Local Planning Authority. The drainage designs should demonstrate that the surface water runoff generated up to and including the 100 year, plus 30% for climate change, critical storm will not exceed the greenfield run-off from the current site following the corresponding rainfall event.

If the intention is to dispose any surface water via infiltration (e.g. soakaways or porous surfaces), this should be shown to be suitable through an appropriate assessment carried out under BRE Digest 365 (or equivalent) before any conditions are discharged.

In particular the designs should detail how the fluvial flood risk is proposed to be dealt with to ensure that flood risk on site is mitigated and that no increased risk is posed off site.

Development shall not commence until full details of the maintenance and management of the SUDs system is set out in a site-specific maintenance manual and submitted to, and approved in writing, by the Local Planning Authority. The scheme shall subsequently be implemented in accordance with the approved details before the development is completed.

Reason: to meet the requirements of the NPPF and ensure Surface Water Drainage is adequately managed.

Please note that Schedule 3 of the Flood and Water Management Act 2010 has not yet been implemented and WSCC does not currently expect to act as the SuDS Approval Body (SAB) in this matter.

**Glen Westmore
Flood Risk Management Team**