

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

DATE: 21 September 2017

FROM: Kevin Macknay

TO: Arun District Council
FAO: Simon Davis (simon.davis@arun.gov.uk)

SUBJECT: BR/229/17/PL

Erection of 4 No. dwellings, 1 No. detached garage, parking & alterations to existing access & driveway (resubmission following BR/200/16/PL).

Land to rear of 41 - 47 Pevensey Road, Bognor Regis, PO21 5NY.

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.

Current surface water flood risk based on uFMfSW for 30year and 100year events:	High risk.
Comments: Current uFMfSW mapping shows the proposed site to be at ‘High’ risk from surface water flooding. It should be noted that the proposed site and adjacent road (Pevensey Road) was badly affected by surface water flooding during June 2012. It is noted that the current proposal is that the ground floor level of the houses is constructed between 600-800mm above the existing ground level. Current mapping shows a possible flood depth of 600mm. Therefore, house construction should be flood resilient not flood resistant so as not to reduce the current flood storage area within the site, any reduction will need to be off-set with compensation for the loss of storage. Any existing surface water flow paths across the site must be maintained. Reason: NPPF paragraph 103 states – ‘When determining planning applications, local planning authorities should ensure flood risk is not increased elsewhere..’ Therefore, a wholesale site level rise via the spreading of excavated material should not be allowed. The site is currently low lying and should remain so after construction so as not to increase flood risk to adjacent properties. Therefore, we would advise that any excavated material should be removed off site.	

Current ground water flood risk based on JBA Ground Water mapping:	High Risk.
Comments: The area of the proposed development is shown to be at ‘High risk’ from ground water flooding based on the current JBA maps. The same mapping shows that the ground water levels could be between 0.025m and 0.5m	

below the surface. This means the general geology in the area may not 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 BRE Digest 365.

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.

Is the proposed development is within or close to an existing Flood Zone, as defined by the National Planning Policy Framework (NPPF):	No.
Comments:	

Records of any ordinary watercourses or culverted watercourses within or in close vicinity to the site:	Yes.
Comments: Current Ordnance Survey mapping shows a short section of ordinary watercourse within the boundary of the proposed site. Currently this short section of watercourse is not shown to remain. Therefore, special consideration needs to be given to its future treatment, i.e. it should not just be filled in, as this clearly currently reduces flood risk to the adjacent properties by storing surface water during heavy rainfall events. Local or field boundary ditches, not shown on Ordnance Survey mapping, may exist around and across the site. If present these should be maintained and highlighted on future development plans. No development should take place within 5m of any watercourse. Future maintenance and access of local field boundary ditches must be considered during the design and planning process.	

Records of any historic ordinary watercourses shown to have once crossed or been in close vicinity to the site:	Yes.
Comments: Historic Ordnance Survey mapping does show that an historic ordinary watercourse once ran along the southern boundary of the site. We understand that this historic watercourse has now been culverted.	

Records of any historic flooding within the confines of the proposed site:	Yes.
Comments: We have a record of the site flooding during June 2012.	

Records of any historic flooding in close vicinity to the site and/or on the adjacent public highway:	Yes.
Comments: We do have a record of the adjacent properties and Pevensey Road flooding in June 2102. This should not be taken as the only incident, but it has been the only one report to us as LLFA.	

Existing highway drainage in the vicinity to the site:	Yes.
Comments: The adjacent road, Pevensey Road, has a positive highway drainage system.	

Future development - Sustainable Drainage Systems (SuDs)

SuDs seek to mimic natural drainage systems and retain water on or near to the site, when rain falls, in contrast to traditional drainage approaches, which tend to pipe water off site as quickly as possible.

SuDs offer significant advantages over conventional piped drainage systems in reducing flood risk by reducing the quantity of surface water run-off from a site and the speed at which it reaches water courses, promoting groundwater recharge, and improving water quality and amenity. The range of SuDs techniques available means that a SuDs approach in some form will be applicable to almost any development.

Government policy set out in paragraph 103 of the NPPF expects LPAs to give priority to the use of SuDs in determining planning applications. Further support for SuDs is set out in chapter 5 of the flood risk Practice Guide.

Approved Document Part H of the Building Regulations 2000 establishes a hierarchy for surface water disposal, which encourages a SuDs approach beginning with infiltration where possible e.g. soakaways or infiltration trenches.

Where SuDs are used, it must be established that these options are feasible, can be adopted and properly maintained and would not lead to any other environmental problems. For example, using soakaways or other infiltration methods on contaminated land carries groundwater pollution risks and may not work in areas with a high water table. Where the intention is to dispose to soakaway, these should be shown to work through an appropriate assessment carried out under BRE Digest 365.

Provision for long-term maintenance should be provided as part of any SuDs scheme submitted to the LPA.

Kevin Macknay
Flood Risk Management Team