

Our Ref: CSB/NM/E/17066/B5

Your Ref: Y/59/14/DOC

21 July 2015

F.A.O. Simon Davis
Arun District Council
Arun Civic Centre
Maltravers Road
Little Hampton
West Sussex
BN17 5LF

Dear Sirs

RE: BILSHAM ROAD, YAPTON

With apologies for the delay in responding, we wanted to reply to your letter dated the 28th August 2014 regarding your refusal of the application to discharge Condition 13 from planning consent Y/48/11/Lamb Inn, Bilsham Road, Yapton, Arundel.

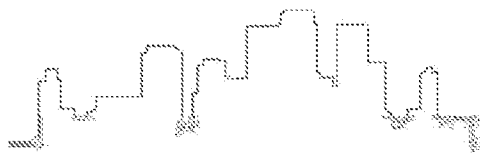
For your information we have attached a Drainage Statement which clarifies the approach which has been adopted in the design of the drainage facilities and these are directly in accordance with the expectations of the approved Flood Risk Assessment which was previously prepared by Opus International Ltd.

It is our belief that this information together with the accompanying plans and calculations should address your requirements and resolve any outstanding concerns but for the avoidance of doubt we would specifically respond to the bullet point queries in your letter as follows.

1. The ground water on this site has not been encountered at any point through investigation works and we would suggest that this is not surprising bearing in mind the nature of the underlying soils with river terrace gravel deposits lying above chalk. In any event, the proposed drainage facilities which will serve this development will be shallow in nature relying on permeable paving and open voided sub-base material for storage.
2. The calculations which were enclosed have been prepared using microdrainage with a model being set up to incorporate the pipe network and the permeable paving facilities. The discharge for the site is ultimately controlled by way of a hydrobrake and as National Guidance suggests that it is really only practicable to limit outflow to around 5 l/s, you will hopefully be pleased to note that with the low operating head behind the hydrobrake we are actually only looking at a peak discharge of less than 3 l/s for even the 100 year plus climate change rainfall event.

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3. Infiltration testing was undertaken and whilst some soakage did occur, it was clear that this would not provide a reliable solution as was advised in the original approved Flood Risk Assessment. Certain concerns on infiltration were raised by your authority and rather than relying on it as a means of disposal we determined that it was more appropriate to have the positive outfall described in the FRA.
4. The permeable paving will be lined with an impermeable membrane meaning that the underlain permeable subbase will simply act as storage to mitigate the impact of flows downstream.
5. The construction drawings which you have requested are attached for your review.
6. We note that Southern Water will not adopt suds or any drainage system which relies on the use of suds for providing attenuation. Accordingly therefore, our Clients propose to keep the drainage system private with the pipe work and the permeable paving being under the control of a management company.

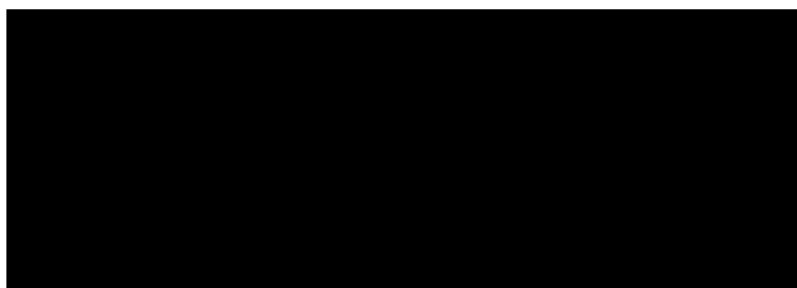
Turning now to the email which our Clients, Matthew Homes, have received from your Mr Tom Callaway dated the 30th June 2015, we would confirm that the underlying open voided sub-base material beneath the porous block paving will have a depth of 600mm. The construction drawing confirming the form of liner and the sub-base specification is attached for your review.

With regard to the query about the connection from the site into the piped watercourse, this was of course originally envisaged in the approved Flood Risk Assessment. Our Clients have located this piped system and have confirmed its invert level and this is reflected in the design drawings.

We do hope that you will now be in a position to confirm that the discharge of the planning condition has been achieved but if you have any further queries then please do not hesitate to contact us.

Yours faithfully

for and on behalf of WOODS HARDWICK INFRASTRUCTURE LLP



C S BRACKLEY
CONSULTANT

Encl: