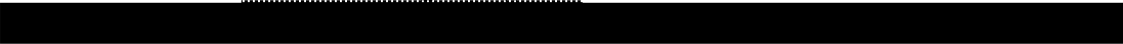




From: Sarah Burrow <Sarah.Burrow@arun.gov.uk>

Sent: 25 October 2019 10:28

To: Andrew Wood <Andrew.Wood@arun.gov.uk>


Subject: RE: White Cottage (WA/22/19/PL)

Hi Andrew,

I am aware that you on leave so have cc-ed the architects in to this e-mail given that I have been led to believe that time is pressing. I am hopeful that in doing so they can update the calculations before you return.

I have had a look through this this morning and I am not sure that the agent/engineer has understood Laura's comments. The sizing of the soakaways have reduced rather than increased, they have instead proposed to infiltrate through the base of the soakaways which we discourage. They have at least proposed silt traps. The calculation used to estimate outflow appears to be a manipulation of BRE365/DG265 to account for the base. This is not appropriate, if the base is to be used then CIRIA 156 calculations will need to be applied. (See the recommended DG265 calculation for outflow below as compared with what has been submitted.)

Guidance:

3.3.2 Outflow from the soakaway

$$Q = a_{50} \times f \times D$$

where:

a_{50} = the internal surface area of the soakaway to 50% effective storage depth: this excludes the base area which is assumed to clog with fine particles and become ineffective in the long term

f = the soil infiltration rate determined in a soakage trial pit at the site of the soakaway

D = the storm duration.

Submitted:

OUTFLOW	(including discharge through base)			
	Soil infiltration rate , f =	2.05E-03	m/sec	
	effective storage depth, $a(50) = H \times .5 =$	0.75	m	(ring)
	Outflow /sec = $\pi \times Dia \times a(50) \times \pi \times D^{2/4} \times f =$	1.28E-02	m3/sec	(ring)
	effective storage depth, $a(50) = H \times .5 =$	0.6	m	(pit)
	Outflow /sec = $2(L + W) \times a(50) \times L \times W \times f =$	9.23E-03	m3/sec	(pit)

NB: Silt traps to be provided

As a result of their calculations the required storage capacity of the soakaways has decreased rather than increased. Using our own models the proposed solution fails on a number of storm durations.

On the basis of Laura's comments I am not going to scrutinise the plans any further. I am happy that the inspection chambers have been included and that the plans now include pipe diameters and falls.

Once the calculations have been rectified I am confident we will be able to remove Laura's condition, however we are not quite there yet.

Kind Regards

Sarah

From: Andrew Wood <Andrew.Wood@arun.gov.uk>

Sent: 24 October 2019 15:16

To: Sarah Burrow <Sarah.Burrow@arun.gov.uk>

Subject: FW: White Cottage (WA/22/19/PL)

Sarah,

Here is the final information required for this application. If you can confirm that the proposal for surface water drainage is now acceptable that would be appreciated.

Thank you,

Andrew Wood

Andrew Wood MRTPI | Senior Planning Officer, Planning Department, Arun District Council |
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Save the environment - think before you print.

From: Julia Davies [REDACTED]

Sent: 24 October 2019 10:41

To: Andrew Wood <Andrew.Wood@arun.gov.uk>; Planning <Planning@arun.gov.uk>

Cc: Sarah Burrow <Sarah.Burrow@arun.gov.uk>

Subject: White Cottage (WA/22/19/PL)

Dear Mr Wood

Please find attached a revised soakaway calculation and site plan for White Cottage.

Following the recent comments from Laura Gibbons, a safety factor of 3 has been allowed; this is achieved by the use of silt traps and considering discharge through the base of the soakaways. In addition, easy bend have been replace with inspection chambers and pipe diameters and falls added.

I have also sent the arboriculturists report in a separate email, I would be grateful if you could confirm receipt of this as it is a large file.

If you have any queries, please do not hesitate to get in touch.

With kind regards

Julia
Architectura Design

Julia Davies
Architectura Design