

From: Simon Davis
Sent: 11 March 2021 18:13

Subject: FW: Planning Consultation on: Y/15/21/DOC Land North of Yapton Primary School

Dear Sam,

Please see comments in the below email from our Drainage Engineers requesting further details/clarification/changes. We would not be willing to extend the determination period on this DOC application past the 12th of April and we will aim to determine this in the week before as there is no access to Council planning system between 12/04 & 16/04 (see my email signature). Therefore, please provide me with any response to the comments by the 26th March so that I have chance to reconsult our engineer and give her sufficient time to respond to me.

Kind Regards

Simon J Davis MRTPI
Principal Planning Officer
Directorate of Place

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Please note that essential maintenance is being carried out to the planning, building control and local land charges database during the week commencing 12 April 2021.

During this time there will be no public or staff access to any records held within this database, and it will not be possible to carry out any of the following tasks via the Arun website:

- Research planning and building control history
- View any planning applications, plans, agreements, tree preservation orders or competent persons data
- Submit building control applications
- Submit planning application comments
- Report any planning compliance issues

The publicity and consultation period for all planning applications that fall over this week will be extended by a further week to ensure no one is disadvantaged.

All other aspects of planning, building control and local land charges will be limited during this week and you are strongly advised to contact the individual departments before 12 April 2021 for specific restrictions during this time.

From: Laura Gibbons <Laura.Gibbons@arun.gov.uk>
Sent: 09 March 2021 11:58
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Simon Davis <Simon.Davis@arun.gov.uk>
Subject: RE: Planning Consultation on: Y/15/21/DOC

Dear Simon,

Thank you for consulting us on this discharge of conditions application. We have the following comments.

Condition 9- surface water drainage strategy

Key

ADC comments 02/03/21

Odyssey response 05/03/21

ADC Comments 09/03/21

1. Please confirm the distance from the soakaway serving plots 3 and 4 to the highway. 5m easement should be provided. 5m distance noted on the YAP-130-081C2 drawing and it is 5m away from the carriageway.
Okay, point closed.
2. An infiltration rate of $1.8 \times 10^{-6} \text{m/s}$ has been applied to the design of the soakaways to plots 24, 18-19 and 15-17 and 5-8, the nearest infiltration test rate is $1.7 \times 10^{-6} \text{m/s}$. Please ensure the correct rates are applied in calculations. Calculations amended as requested. *Okay, point closed.*
3. Please provide cover levels at crates to demonstrate that adequate cover depth is being provided. Proposed finished ground levels are indicated on drawings YAP-130-081C2 and YAP-130-082C2 and designed to provide minimum 300mm of cover -- which is the cover suggested by the geocellular units manufacturer (i.e. Wavin and its Aquacell product). *Wavin state that 0.3m cover is required in landscaped areas, but 0.5m is required where ride on mowers may be used. In the public open space areas it is evident that ride on mowers are highly likely to be used, therefore the cover depth currently provided is insufficient for these crates. Additionally they state that additional protection will be required where construction plant is to be used, please detail how crates will be protected during construction.*
4. Where crates are designed to spread across more than one back garden please confirm if fence lines/ fenceposts have been considered with the relatively shallow crate depths. Where crates have been designed to spread across more than one back garden, the fence line and associated fenceposts have been considered alongside the relatively shallow crate depths, with a bespoke fence being proposed in those areas using a small angle steel at the base of the panel to span over the crates. *Please provide a construction detail drawing of this, and add notes to layout drawings.*
5. I note that in some areas it is proposed to discharge water from down pipes onto the drainage channels. This is not standard, and we would request that this proposal is re-evaluated. It is typical for channel drains to become blocked very easily. Furthermore, driveways in these areas slope towards garages, should the drainage channels fail, which is quite likely it will not take large events for water to enter garages. The ACO channel serves as a shallow water conduit for RWP and do not serve driveways as these will be porous with no surface run-off. This design is fit for purpose and ACO company offers also a proprietary RWP adapter for such specific situations. *Thank you for providing a construction detail of this and further clarification. We*

would like to see the requirements for maintenance of these elements carefully picked up in the maintenance manual.

6. Please specify sand bedding and surround to infiltration blankets. Bedding layer specification provided on drawing YAP-180-031C2. *Okay, point closed.*
7. Please identify on construction details of infiltration blankets that invert level is to be as per drainage layout drawings. Currently you are showing incoming pipes at the base of crates. Infiltration blanket detail adjusted as requested. Please see drawing YAP-180-031C2. *Okay, point closed.*
8. Please remove irrelevant construction detail drawings, e.g. hybrid infiltration blankets, infiltration blankets with overlying infiltration basins, and gully grating within infiltration basin. Construction detail drawing updated - please see drawing YAP-180-031C2. *Okay, point closed.*
9. The construction detail drawings for the permeable paving and highways show a capping layer below the sub-base. The capping layer specified is not appropriate as it contains a high degree of fines and will not be permeable. Please remove this capping layer or replace it with a suitable permeable material. Capping layer specification adjusted to match sub-base – please see drawing YAP-180-035C2. *Okay, point closed.*
10. Please specify the material for the bedding layer underneath and around the permavoid crates on the permeable paving construction details. Construction detail drawing updated - please see drawing YAP-180-035C2. *Okay, point closed.*
11. Road type 2 which drains plots 23, 25-27 appears to have incoming invert levels at the base of the structure, rather than above the 1 in 10 year plus cc water level. Please revise. Drainage design updated. Please see drawings YAP-130-082C2 and YAP-180-031C2. The actual connection into the Permavoid must be constructed at the base due to the proprietary saddle connection fitting part, however the surface water (SW) system is designed so the last SW chamber (silt trap) is above the 1 in 10 years plus cc water level within permeable paving system, i.e. SW system is not lower than 5.995m AOD, which is a water depth of 0.16m (please see Road 2 with plots 23,25-28_1 in 10 yrs with CC_Rev_B calculations) for the storm design event added to the permeable paving base level of 5.835m AOD.

The same will apply to Road 3, where final connection into Permavoid must be constructed at the base due to the proprietary saddle connection fitting part. In this instance the water depth for the 1 in 10 yrs plus cc event is 0.288m (please see Road 3 plus plots 29-32_1 in 10 yrs with CC_Rev_C calculations) and with permeable paving sub-base level of 5.430m AOD (measured at the downstream end of Road 3, please see drawing YAP-130-028C1) results in the design water level of 5.718m AOD. We have designed last SW chamber (silt trap) prior to Permavoid connection to be not lower than this level and downstream pipe do not have any additional connection thus serves as connection conduit only with the actual SW system not being subjected to surcharge during the 1 in 10 yrs plus cc event. *Unclear on where any alterations to design have been made, incoming invert levels and formation levels appear the same.*

12. Road type 2 which drains plots 23, 25-27 appears to have an insufficient total depth in areas. Formation level appears to be flat at 5.835m, with a total minimum construction depth of 625mm (according to your construction detail drawings) gives a minimum finish level of 6.46m. Yet you have areas which are proposed to have a finish level of 6.45m. Please review all permeable paving areas to ensure that minimum construction depths can be achieved. Levels reviewed with minimum construction depths achieved. Please see YAP-130-081C2, YAP-130-082C2 and YAP-130-028C1. *Okay, point closed.*
13. Please provide a construction detail which shows connections into permavoid crates. Construction detail drawing updated - please see drawing YAP-180-031C2. *Okay, point closed.*
14. Please confirm if service corridors are required in the permeable paving, if so please provide construction details. Service corridors are not required, as services are located within the footway/margins where there is no porous construction or crates. *You have foul sewers proposed underneath or within the permeable paving sub-base. Please confirm that the sewerage undertaker is happy with your proposals.*
15. The calculations for road 3 are somewhat confusing. You have two areas at the base of the structure, one which is permeable paving sub-base and then one which is crates. The total of these two base areas is greater than the area of permeable paving stated. And it is not clear on the drawings submitted where the crate area is, yet in calculations this appears to be far less than the standard sub-base construction.
16. Cover levels of MH1 (S61), MH3 (S63), MH5 (S65) MH8 (S68), MH 9 (S69) are inconsistent between calculations and layouts. Please correct to ensure consistency.

17. Please clearly show catchpits upstream of all connections into infiltration devices. SWMHs which are catchpits should be clearly identified on both layout plans and manhole schedules.

Condition 10- SuDS Maintenance and Management

1. Please indicate an approximation of when surface reconstruction/ remediation of permeable paving will be required.
2. Please include details of maintenance of ACO channels.
3. Further detail on the maintenance requirements of soakaways is required. Please as a minimum ensure requirements are as per C753 SuDS Manual.

Please re-consult us once further information has been provided.

Kind regards,

Laura Gibbons

Drainage Engineer

Engineering Services

Please note that I work Tuesdays 08:00-16:00 for Arun only.



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