

Arun District Council, Civic Centre, Maltravers Rd, Littlehampton, West Sussex, BN17 5LF

To register to receive notification of planning applications in your area please go to
<https://www1.arun.gov.uk/planning-application-finder>

Sign up to our newsletter [here](#)



From: Paul Cann <Paul.Cann@arun.gov.uk>

Sent: 20 April 2022 13:48

To: Daniel Bott

Subject: RE: Saltbox Unit 9 site Planning Condition 12 response Surface water

Hi Daniel

I can now confirm that your proposals are acceptable.

I will provide a formal response to the planning officer via our internal system, with a view to recommending discharge of condition no.12.

Please ensure all the most up to date/relevant drawings and this correspondence are formally submitted to the planning department asap.

Regards

Paul Cann
Principal Drainage Engineer
Engineering Services

T: 01903 737819

E: paul.cann@arun.gov.uk



Arun District Council, Civic Centre, Maltravers Rd, Littlehampton, West Sussex, BN17 5LF
www.arun.gov.uk



Sign up to our newsletter [here](#)

From: Daniel Bott [REDACTED]
Sent: 19 April 2022 15:31
To: Paul Cann <Paul.Cann@arun.gov.uk>

[REDACTED]

Subject: RE: Saltbox Unit 9 site Planning Condition 12 response Surface water

CAUTION: This email originated from outside of the organisation. You should take extra care when clicking links or opening attachments - if you are unsure the content is safe contact the IT Helpdesk before clicking or opening.

Hi Paul,

Please see attached amended manhole schedule drawing and Tubosider detail drawing to address comments 6 and 8 as requested.

Kind Regards

Daniel Bott BSc (Hons) IEng MICE
Senior Civil Engineer

Calcinotto

[REDACTED]

This email and its contents are intended for the use of the above named addressee(s) only. If it has been received in error please call us and destroy any copies. Unauthorised use, disclosure, or copying is strictly prohibited and may be unlawful.

*In line with the GDPR 2018 this message may be used for your dealings with and for Calcinotto Ltd purposes only.
Only reply to this message if you are in agreement for Calcinotto Ltd to retain the message and details contained, in line with our own data protection policy and that it may be shared with clients, customers and suppliers in conjunction with our business purposes.*

From: Paul Cann <Paul.Cann@arun.gov.uk>
Sent: 19 April 2022 13:52
To: Daniel Bott [REDACTED]

[REDACTED]

Subject: RE: Saltbox Unit 9 site Planning Condition 12 response Surface water

Hi Daniel

Comments in blue below.

Just a couple of minor adjustments required ie. items 6 and 8.

Regards

Paul Cann
Principal Drainage Engineer
Engineering Services

T: 01903 737819

E: paul.cann@arun.gov.uk



Arun District Council, Civic Centre, Maltravers Rd, Littlehampton, West Sussex, BN17 5LF
www.arun.gov.uk

Sign up to our newsletter [here](#)



From: Daniel Bott [REDACTED]
Sent: 05 April 2022 10:59
To: Paul Cann <Paul.Cann@arun.gov.uk>

Subject: RE: Saltbox Unit 9 site Planning Condition 12 response Surface water

CAUTION: This email originated from outside of the organisation. You should take extra care when clicking links or opening attachments - if you are unsure the content is safe contact the IT Helpdesk before clicking or opening.

Hi Paul,

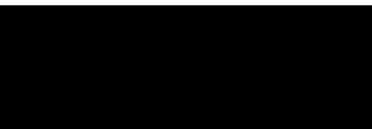
Please see attached revised drawings, calculations and further comments below in red.

I have removed previous comments from the list that were resolved in the last issue, for ease of reference.

Kind Regards

Daniel Bott BSc (Hons) IEng MICE
Senior Civil Engineer

Calcinotto



This email and its contents are intended for the use of the above named addressee(s) only. If it has been received in error please call us and destroy any copies. Unauthorised use, disclosure, or copying is strictly prohibited and may be unlawful.

*In line with the GDPR 2018 this message may be used for your dealings with and for Calcinotto Ltd purposes only.
Only reply to this message if you are in agreement for Calcinotto Ltd to retain the message and details contained, in line with our own data protection policy and that it may be shared with clients, customers and suppliers in conjunction with our business purposes.*

Advance Annual Leave notification (Monday 11th– 18th April 2022)

From: Paul Cann <Paul.Cann@arun.gov.uk>

Sent: 01 April 2022 12:36

To: Daniel Bott [REDACTED]

Subject: RE: Saltbox Unit 9 site Planning Condition 12 response Surface water

Hi Daniel

Comments in green below;

Regards

Paul Cann
Principal Drainage Engineer
Engineering Services

T: 01903 737819

E: paul.cann@arun.gov.uk

Arun District Council, Civic Centre, Maltravers Rd, Littlehampton, West Sussex, BN17 5LF

www.arun.gov.uk



Sign up to our newsletter [here](#)



From: Daniel Bott [REDACTED]

Sent: 17 March 2022 10:20

To: Paul Cann <Paul.Cann@arun.gov.uk>

Subject: RE: Saltbox Unit 9 site Planning Condition 12 response Surface water

CAUTION: This email originated from outside of the organisation. You should take extra care when clicking links or opening attachments - if you are unsure the content is safe contact the IT Helpdesk before clicking or opening.

Hi Paul,

Further to my previous email, please see attached updated detail from Tubosider which shows the revised drainage layout on the plan.

Kind Regards

Daniel Bott BSc (Hons) IEng MICE
Senior Civil Engineer

Calcinotto

This email and its contents are intended for the use of the above named addressee(s) only. If it has been received in error please call us and destroy any copies. Unauthorised use, disclosure, or copying is strictly prohibited and may be unlawful.

In line with the GDPR 2018 this message may be used for your dealings with and for Calcinotto Ltd purposes only. Only reply to this message if you are in agreement for Calcinotto Ltd to retain the message and details contained, in line with our own data protection policy and that it may be shared with clients, customers and suppliers in conjunction with our business purposes.

Advance Annual Leave notification (Monday 11th– 18th April 2022)

From: Daniel Bott
Sent: 15 March 2022 17:11
To: Paul.Cann@arun.gov.uk

Subject: FW: Saltbox Unit 9 site Planning Condition 12 response Surface water [Filed 15 Mar 2022 17:11]

Hi Paul,

Please see attached amended/new information which accommodate your comments below, in addition to some commentary in red I have also added for context.

1. **Specify all inlet invert levels to attenuation tank.** Invert levels to all attenuation tank inlets shown. Include connection at S22 and 375mm pipe inlet levels. Slacken gradients on pipelines 8.000 to 8.003 to avoid an invert to invert connection into the tank. i.e. lay 150mm at 1/150, 225mm at 1/225, 300mm at 1/300, if possible. Connection at S22 and 375 inlet levels added. Gradients slackened on 8.000 to 8.003 to the gradients suggested above. ok
2. **Pipeline 4.000 (now 7.000) – increase pipe diameter to 150mm and lay at 1/150 gradient. This will raise connection level to manhole S11.** Permeable paving connections are to remain as 100mm diameter at 1:100 gradient to contain short term extreme rainfall. If the hydraulic model is relying on flows from the permeable pavement being restricted then fine, however, I am concerned that pipeline 7.000 will be discharging approx. 100mm above the invert of the 375mm pipe so not ideal. You could consider laying the 100mm pipe at 1 in 150 as siltation will not be an issue due to flows passing through a permeable pavement and assuming the model will still work ok. Or you consider a fin drain outlet from the permeable paving which would allow a higher outlet level which will also allow a higher connection. Pipeline 7.000 amended to 100mm dia. 1/150 grad to lift inlet into S11. ok
3. **Pipelines 3.000, 3.001, 3.002 – increase to 150mm diameter with 1/150 gradient to raise connection level to manhole S8.** Permeable paving connections are to remain as 100mm diameter at 1:100 gradient to contain short term extreme rainfall. This is not draining a permeable pavement so I can't see a reason why it cannot be adjusted. Pipelines 3.000 to 3.002 amended to 150mm dia. 1/150 as requested. ok
4. **Manhole S7 – two incoming connections with no obvious purpose?** This is a small section of perforated pipe within a narrow gravel margin around the building line. It is anticipated that barely any flow will enter these pipes. Ok but please adjust note on plan to refer to manhole S7 as opposed to S2. Note amended to refer to S7. ok
5. **Road gullies in southwest corner – specify diameters and gradients and ensure all connect to chambers on the attenuation tank.** These are rainwater pipes from the vehicle washdown area. I have added diameters and gradients to the plan as requested. Ok but slacken all RWP + channel outlet gradients (i.e. 1/100) so connections into the tank are as high as possible. RWPs from washdown area have been slackened to 1/100 as requested. ok
6. **Gully connection into manhole S22 – reconfigure to improve angle of connection into manhole.** We have added a 45-degree bend for straight connection into the attenuation tank. Layout plan not amended +

Tubosider plan to be adjusted. Plans adjusted to reflect original response. Ok The Tubosider drg has been partially updated. Please adjust the plan view (scale 1:75)

7. **Pipeline 1.004 – perhaps upgrade to 300mm diameter laid at say 1/300 in order to provide some resilience with this important pipe and its invert-to-invert connection with the 450mm pipe.** The flow control for this pipe is situated upstream and therefore only a max flow of 2.3l/s will be flowing through. The capacity of the pipe currently specified will easily facilitate this flow rate as the modelling output provided demonstrates. My comment does not relate to pipe flow capacity but the fact that you are connecting a 150mm pipe at invert to invert with a 450mm pipe and therefore more risk of the pipe being obstructed in the future due to any potential issues downstream. It is also a compromise of allowing an invert to invert connection. It would also help facilitate flows from an emergency overflow for exceedance, if one were required/permitted in the future. Pipe downstream of Hydrobrake amended to 300mm diameter at 1/300 as requested. ok
8. **Provide fully detailed construction details for Tubosider attenuation tank including integral chambers/flow control chamber.** Tubosider details attached. Your layout plan indicates 4 no. access chambers whilst theirs has 3 no. Clearly indicate 300mm diameter link pipe locations on layout plan. Fully detail make up above the prefabricated access chambers ie. class D400 covers, engineering brickwork, concrete slab spec & dims, etc. Include ladder access as a requirement rather than an option. Not sure why the hydrobrake sump is perforated, please advise/provide more detail. Please adjust detail to suit the 300mm outfall pipe discussed in item 17. Access chambers revised to 3 as per Tubosider detail and link pipes indicated on plan. Drawing 0500 now contains a detail of the makeup to ground level above the Tubosider shafts and ladder requirement added. Tubosider have advised us that the perforated sump is required to ensure the bottom layer of granular surround is drained through the sump. Ok but please adjust the manhole type on the manhole schedule drawing.
9. **Bypass separator – specify class D400 cover/frame. Please confirm that the separator can accommodate 375mm diameter outgoing and incoming pipes.** D400 load rating added to drawings. The separator can accommodate up to 300mm diameter so will require a reducer from the 375mm. We have modelled this pipe as a 300mm diameter in the hydraulic calculations to account for this. Very important that the reducers achieve level inverts between the 300mm and 375mm pipes. Please detail this on a drg 0500 so the contractor is very clear on the requirement. Reducers with level inverts shown on detail drawing sheet 1 (0500) as requested. ok
10. **Permeable paving/collection pipe detail – formation level geomembrane to be permeable as opposed impermeable to make use of any possible infiltration, no matter how minimal.** As per Pauls previous comments, we would have concerns regarding the entry of groundwater into the surface water drainage system. Our design does not have the spare capacity to accommodate any potential groundwater entry. I certainly wouldn't want groundwater entering the system either. On previous phases, permeable paving formation levels were set above peak recorded groundwater levels. Please confirm the recorded groundwater levels at these locations so it can be discussed further. Please see email from Paul regarding groundwater levels and further reasoning for tanking of permeable paving. ok
11. **Please adjust the hydraulic calculations as necessary to take account of the above comments.** Amended calculations attached to reflect the above. There are very small amounts of flooding (less than 0.5cu.m) for the 15-minute duration storms at S1 and S13, however there is available capacity at the adjacent permeable paving at S20 to accommodate the exceedance flows without ponding occurring. Ok but please adjust calcs to suit above comments. Pipeline 1.003 is shown as 450mm diameter? Will be interesting to see the effect of item 7 on the above ground flooding - may require some pipes to be upsized despite the higher connection level? – hard to say until the model is run. Calculations adjusted – a few spots of localised flooding for the 100 YR + 40% 15-min duration, however these are all less than 0.5cu.m. Pipeline 1.003 is a dummy pipe representing the tank and was set at 450mm to ensure that it caused no throttling in the model, given that the tank itself is several rows of 900mm diameter pipe rather than the single 450mm dummy pipe modelled. ok

We are aware that the Tubosider detail attached contains a plan with the previous layout as a background – we are in the process of getting this drawing updated by Tubosider with the new attached layout and will forward on as soon as we receive.

Kind Regards

Calcinotto

This email and its contents are intended for the use of the above named addressee(s) only. If it has been received in error please call us and destroy any copies. Unauthorised use, disclosure, or copying is strictly prohibited and may be unlawful.

In line with the GDPR 2018 this message may be used for your dealings with and for Calcinotto Ltd purposes only. Only reply to this message if you are in agreement for Calcinotto Ltd to retain the message and details contained, in line with our own data protection policy and that it may be shared with clients, customers and suppliers in conjunction with our business purposes.

Advance Annual Leave notification (Monday 11th– 18th April 2022)

From: Paul Cann <Paul.Cann@arun.gov.uk>

Sent: 10 March 2022 14:41

To: Daniel Bott

Subject: RE: Saltbox Unit 9 site Planning Condition 12 response Surface water

Hi Daniel

Comments below;

1. Adjust any pipe gradients as necessary where pipelines involve catchpits ie. no need to allow for gradient through the chamber (inlet and outlet levels can be the same level). This will provide some slight help with in trying to achieve soffit to soffit connections where possible.
2. Specify gully lateral gradients/outlet & inlet levels. ie. those that connect to manholes S1 and S3. Laterals to be 150mm diameter laid at 1/150 to keep connection levels as high as possible.
3. Manhole S3 – error in invert level on layout plan ie. 1.722/1.772.
4. Manhole S8 is missing connections on manhole level schedule.
5. Incoming connection into manhole S8 from permeable paving (no pipe number specified) – to be 150mm diameter at 1/150 gradient to keep connection as high as possible. Incorporate manhole at end of perforated pipe to accommodate the necessary bend.
6. Pipeline 1.002 – correct gradient to allow for bypass separator levels. Adjust levels of separator ie. outlet is lower than invert of manhole S11 downstream.
7. Specify all inlet invert levels to attenuation tank.
8. Manholes S6 and S9 – ensure no bends outside of manholes.
9. Pipeline 4.000 – increase pipe diameter to 150mm and lay at 1/150 gradient. This will raise connection level to manhole S11.
10. Pipelines 3.000, 3.001, 3.002 – increase to 150mm diameter with 1/150 gradient to raise connection level to manhole S8.
11. Manhole S7 – two incoming connections with no obvious purpose?
12. Manhole S14 – one incoming connection with no obvious purpose?
13. Manhole S14 – cant see why the system can't be altered to achieve a soffit to soffit connection.
14. Pipelines 2.000 & 5.000 – increase to 150mm diameter assuming upstream perforated pipe is also 150mm.

15. Road gullies in south west corner – specify diameters and gradients and ensure all connect to chambers on the attenuation tank.
16. Gully connection into manhole S22 – reconfigure to improve angle of connection into manhole.
17. Pipeline 1.004 – perhaps upgrade to 300mm diameter laid at say 1/300 in order to provide some resilience with this important pipe and its invert to invert connection with the 450mm pipe.
18. Pipelines 7.000 & 8.000 – upgrade to 150mm diameter. Provide detail of how the connections will be made to the attenuation tank.
19. Add note – all pipes to be laid soffit to soffit unless otherwise specified.
20. Upstream ends of perforated pipes beneath permeable paving to be capped – add note to construction detail.
21. Specify invert levels of head of all perforated pipes (and gradients) on layout plan.
22. Please confirm that the external levels layout drawing remains unchanged.
23. Washdown area – has surface water run off into this area been minimised ie. levels indicate that some of the car park falls towards this area.
24. Remove pumping station notes from drainage layout sheets 1 & 2.
25. All connections not made to manholes to be made using oblique 45 degree junctions (add note).
26. Provide fully detailed road gully construction details including pipe diameter.
27. Provide hydrobrake technical details data sheet from the manufacturer.
28. Remove wavin aquacell attenuation tank construction details as no longer relevant, including note 24 on construction detail drawings.
29. Provide fully detailed construction details for Tubosider attenuation tank including integral chambers/flow control chamber.
30. Bypass separator – specify class D400 cover/frame. Please confirm that the separator can accommodate 375mm diameter outgoing and incoming pipes.
31. Provide construction detail for rodding eyes.
32. PCC ring catchpits; Specify min; 450mm sump.
33. Permeable paving/collection pipe detail – formation level geomembrane to be permeable as opposed impermeable to make use of any possible infiltration, no matter how minimal.
34. Pipeline 1.003 shown as 450mm diameter on calculations. Indicate diameter/gradient on layout plan.
35. Please adjust the hydraulic calculations as necessary to take account of the above comments.

Look forward to receiving your revised details.

Regards

Paul Cann
Principal Drainage Engineer
Engineering Services

T: 01903 737819

E: paul.cann@arun.gov.uk

Arun District Council, Civic Centre, Maltravers Rd, Littlehampton, West Sussex, BN17 5LF
www.arun.gov.uk



Sign up to our newsletter [here](#)



From: Daniel Bott [REDACTED]
Sent: 03 March 2022 16:57
To: Paul Cann <Paul.Cann@arun.gov.uk>

[REDACTED]

Subject: RE: Saltbox Unit 9 site Planning Condition 12 response Surface water

Importance: High

CAUTION: This email originated from outside of the organisation. You should take extra care when clicking links or opening attachments - if you are unsure the content is safe contact the IT Helpdesk before clicking or opening.

Hi Paul,

Please see attached revised drainage proposals for the Saltbox Unit 9 project for the release of planning condition 12. The proposals have been amended to lift the drainage system up to achieve a gravity discharge as per the original strategy. We have included on the drainage plan drawing pipe sizes, gradients, cover and invert levels also added to the drawing as requested.

In order to make the gravity system work, the new proposals include laying pipes invert-to-invert on the surface water system and also having a minimum 480mm-670mm cover on the attenuation tank, which reflects the profiling of the external works in this area.

Fortunately, as part of an earlier Value Engineering exercise, the crate attenuation tank was changed to a Tubosider corrugated steel pipe tank with granular surround, and this has therefore allowed us to reduce the cover as required following confirmation from the manufacturer. Please see attached confirmation from Tubosider with regards to loading conditions and storage provided within their system. We are advised the total storage volume is provided by the pipes and the porous nature of the granular surround to the pipes.

We have also attached the surface water model results which were ran for a 5-year, 30 year + 20% and 100 year + 40% return periods and show no flooding in all scenarios. The modelling was undertaken using Causeway Flow software and was run with a MADD factor of 0 and simulated using FEH 2013 rainfall data. We have added the surface water pipe numbers to the drawing so it can be easily referred to the model results.

We trust all of the above enclosures now provide you with sufficient information to confirm to your planners that planning condition 12 has been satisfied.

Kind Regards

Danny

Daniel Bott BSc (Hons) IEng MICE
Senior Civil Engineer

Calcinotto

This email and its contents are intended for the use of the above named addressee(s) only. If it has been received in error please call us and destroy any copies. Unauthorised use, disclosure, or copying is strictly prohibited and may be unlawful.

In line with the GDPR 2018 this message may be used for your dealings with and for Calcinotto Ltd purposes only. Only reply to this message if you are in agreement for Calcinotto Ltd to retain the message and details contained, in line with our own data protection policy and that it may be shared with clients, customers and suppliers in conjunction with our business purposes.

Advance Annual Leave notification (7th– 11th March 2022)

From: Paul Cann <Paul.Cann@arun.gov.uk>

Sent: 28 February 2022 13:08

To: Paul Westcott

Subject: RE: Saltbox Unit 9 site Planning Condition 12 response Surface water

Paul

Just to confirm that I will not be reconsidering my response.

There is one thing I would like to verify at this stage; Have you checked the invert level of the 450mm pipe at existing manhole SW900? I note you have it as 1.280, I think the proposed level was 1.250?, but from 'as constructed' drawings I have seen it may be 1.657! (See enclosed).

I would suggest that these levels are double checked as are critical to any scheme. If it is necessary to relay offsite pipes to shallower gradients to help achieve the desired solution, then clearly that is a discussion to be had between the relevant parties.

Regards

Paul Cann
Principal Drainage Engineer
Engineering Services

T: 01903 737819
E: paul.cann@arun.gov.uk

Arun District Council, Civic Centre, Maltravers Rd, Littlehampton, West Sussex, BN17 5LF
www.arun.gov.uk



Sign up to our newsletter [here](#)



From: Paul Westcott
Sent: 25 February 2022 17:00
To: Paul Cann <Paul.Cann@arun.gov.uk>

Subject: RE: Saltbox Unit 9 site Planning Condition 12 response Surface water

CAUTION: This email originated from outside of the organisation. You should take extra care when clicking links or opening attachments - if you are unsure the content is safe contact the IT Helpdesk before clicking or opening.

Paul,

Thank you for your further comments but just for your information we have no direct connection with Hydrock as they were working for and producing supporting information for the site wide developers who again we have no working relationship with. We are part of a team who are working for a client who has purchased one of the plots put up for sale.

We are still of the opinion the original strategy was flawed and contained insufficient detail to prove to the LPA that a gravity solution was deliverable and this should have been identified during the consultation process and further detail and supporting information requested by the LPA before any approval was given.

This is the situation we are encountering with LLFA's in other areas where the Hydrock strategy as presented would have been deemed insufficient in its content and detail to prove the solution was deliverable. In fact in some cases we are finding the designs need to be up to almost a construction issue and fully detailed before they are accepted and are way past a strategy proposal.

We are sure amending the FFL is not an option as the LPA are the ones who approved the current value.

We therefore ask again in this instance you reconsider your comment to your Planners.

Thanks.

Regards
Paul

Paul Westcott
Associate Director

Calcinotto

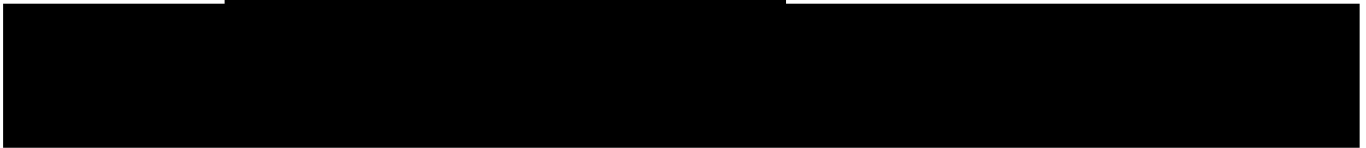


This email and its contents are intended for the use of the above named addressee(s) only. If it has been received in error please call us and destroy any copies. Unauthorised use, disclosure, or copying is strictly prohibited and may be unlawful.

From: Paul Cann <Paul.Cann@arun.gov.uk>

Sent: 25 February 2022 15:42

To: Paul Westcott



Subject: RE: Saltbox Unit 9 site Planning Condition 12 response Surface water

Paul

Whilst I appreciate you have lost 150mm in floor levels (maybe there is scope to talk further with the planners about this to reinstate 2.900?), at present, I am not convinced that a gravity solution is not possible on this site. I would strongly suggest that you liaise with Hydrock, if you are querying their design. Planning approval was based on a gravity system and that is what needs to be achieved one way or another.

From what I recall they were also proposing more storage than the 570m3 you quote, which may have been an overestimate, so the calculations will need to be verified.

Obviously crates can also be spread over a larger area to reduce depth. Cover to crates can also be reduced depending on wheel loadings, CBR, protective capping, rating of crate, etc. See enclosed Permavoid manual (pages 46-49). Locating crates in areas less likely to be subject to HGV loadings also helps where possible. As mentioned utilising the storage in as much permeable paving as possible also will assist.

Regards

Paul Cann
Principal Drainage Engineer
Engineering Services

T: 01903 737819

E: paul.cann@arun.gov.uk



Sign up to our newsletter [here](#)



From: Paul Westcott [REDACTED]
Sent: 25 February 2022 14:44
To: Paul Cann <Paul.Cann@arun.gov.uk>

Subject: RE: Saltbox Unit 9 site Planning Condition 12 response Surface water
Importance: High

CAUTION: This email originated from outside of the organisation. You should take extra care when clicking links or opening attachments - if you are unsure the content is safe contact the IT Helpdesk before clicking or opening.

Paul,

The issue we have is the building is set at 2.75 and the invert level of the outgoing off site connection is at 1.28. That leave little or no room to design a system that has based on our calculations approximately 570m³ of storage.

The Hydrock strategy solution you refer too does not work as they have a tank which has barely 450mm of cover over crates which is not acceptable to the manufacturers. In addition on the Hydrock strategy we have been supplied with, it has no permeable paving proposed it only showed bare bones pipelines which clearly would have little or no cover. We have included large areas of permeable paving so already we are bettering their design.

The issue of cover has also been exacerbated by the fact that on the Hydrock drawing the FFL was noted as 2.90 but we were informed we had to use the Planners' approved FFL of 2.75.

The site topography itself does not lend it self to extending further the permeable paving to make best use of the storage in the porous sub base. Believe you me we don't include pump stations unless it is necessary and in this instance there is clearly a shortage of level difference to play with and would include too much risk on the drainage to have everything designed to be below standard and at best in small part only at the absolute minimum.

In some respects you could say the initial Hydrock strategy which was submitted and consulted on at Planning stage was flawed based on what you are saying now in that it showed traditional pipework system, gullies and a below ground tank and little or no detail on levels etc to prove that it was deliverable and therefore you could say should have been challenged more at that stage. We have actually taken that strategy and bettered it to work around the site constraints we have, so I am a little confused why we should now be told its not acceptable. Just to stress again we will only include a pump system when it is absolutely necessary. The allowable flow rate is so low and therefore the attenuation requirement is very high.

Based on the forgoing explanation on how we have arrived at our proposals we trust you will be able to review your response to your planners that the proposals put forward are acceptable in this instance based on the site constraints for this particular plot.

Thanks.

Regards
Paul

Paul Westcott
Associate Director

Calcinotto

[REDACTED]

This email and its contents are intended for the use of the above named addressee(s) only. If it has been received in error please call us and destroy any copies. Unauthorised use, disclosure, or copying is strictly prohibited and may be unlawful.

From: Paul Cann <Paul.Cann@arun.gov.uk>

Sent: 25 February 2022 14:14

To: Paul Westcott [REDACTED]

[REDACTED]

Subject: RE: Saltbox Unit 9 site Planning Condition 12 response Surface water

Hi Paul

Just sending a quick message as I am out on site visits. Just want to be clear, that you must come up with a gravity solution, as was envisaged for every phase of this development. A pumped solution will never be acceptable.

Designing a system as shallow as possible is obviously key to the solution. Utilising as much permeable paving as needed (perhaps some with controlled outflows) and avoiding the use of conventional road gullies will help. Reducing the use of pipes to convey water across the site will also assist, where conveyance can be achieved through linked permeable paving, etc.

In the meantime, you may wish to speak to Hydrock who undertook the strategy and preliminary design for unit 9.

Regards

Paul Cann
Principal Drainage Engineer
Engineering Services

T: 01903 737819

E: paul.cann@arun.gov.uk

Arun District Council, Civic Centre, Maltrovers Rd, Littlehampton, West Sussex, BN17 5LF

www.arun.gov.uk



Sign up to our newsletter [here](#)



From: Paul Westcott [REDACTED]

Sent: 25 February 2022 13:22

To: Paul Cann <Paul.Cann@arun.gov.uk>

[REDACTED]

Subject: Saltbox Unit 9 site Planning Condition 12 response Surface water

CAUTION: This email originated from outside of the organisation. You should take extra care when clicking links or opening attachments - if you are unsure the content is safe contact the IT Helpdesk before clicking or opening.

Paul

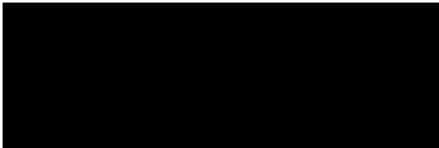
Just left a message on your answer phone regarding the above. I would appreciate if you could give me a call as soon as possible so we can explain to you where and how we have arrived at the proposals put in to support the submission

Thanks very much.

Regards
Paul

Paul Westcott
Associate Director

Calcinotto



This email and its contents are intended for the use of the above named addressee(s) only. If it has been received in error please call us and destroy any copies. Unauthorised use, disclosure, or copying is strictly prohibited and may be unlawful.

<http://www.arun.gov.uk>

DX 57406 Littlehampton

You can view Arun District Council's Privacy Policy from <https://www.arun.gov.uk/privacy-policy>

Important Notice This e-mail is intended exclusively for the addressee and may contain information that is confidential and/or privileged. If you are not the intended recipient (or authorised to receive it for the addressee), please notify the sender and delete the e-mail immediately; using, copying, or disclosing it to anyone else, is strictly prohibited and may be unlawful. Any views, opinions or options presented are solely those of the author and do not necessarily represent those of Arun District Council. The information in this e-mail may be subject to public disclosure under the Freedom of Information Act 2000, therefore we cannot guarantee that we will not provide the whole or part of this e-mail to a third party. The Council reserves the right to monitor e-mails in accordance with relevant legislation. Whilst outgoing e-mails are checked for viruses, we cannot guarantee this e-mail is virus-free or has not been intercepted or changed and we do not accept liability for any damage caused. Any reference to "e-mail" in this disclaimer includes any attachments.

<http://www.arun.gov.uk>

DX 57406 Littlehampton

You can view Arun District Council's Privacy Policy from <https://www.arun.gov.uk/privacy-policy>

Important Notice This e-mail is intended exclusively for the addressee and may contain information that is confidential and/or privileged. If you are not the intended recipient (or authorised to receive it for the addressee), please notify the sender and delete the e-mail immediately; using, copying, or disclosing it to anyone else, is strictly prohibited and may be unlawful. Any views, opinions or options presented are solely those of the author and do not necessarily represent those of Arun District Council. The information in this e-mail may be subject to public disclosure under the Freedom of Information Act 2000, therefore we cannot guarantee that we will not provide the whole or part of this e-mail to a third party. The Council reserves the right to monitor e-mails in accordance with relevant legislation. Whilst outgoing e-mails are checked for viruses, we cannot guarantee this e-mail is virus-free or has not been intercepted or changed and we do not accept liability for any damage caused. Any reference to "e-mail" in this disclaimer includes any attachments.

<http://www.arun.gov.uk>

DX 57406 Littlehampton

You can view Arun District Council's Privacy Policy from <https://www.arun.gov.uk/privacy-policy>

Important Notice This e-mail is intended exclusively for the addressee and may contain information that is confidential and/or privileged. If you are not the intended recipient (or authorised to receive it for the addressee), please notify the sender and delete the e-mail immediately; using, copying, or disclosing it to anyone else, is strictly prohibited and may be unlawful. Any views, opinions or options presented are solely those of the author and do not necessarily represent those of Arun District Council. The information in this e-mail may be subject to public disclosure under the Freedom of Information Act 2000, therefore we cannot guarantee that we will not provide the whole or part of this e-mail to a third party. The Council reserves the right to monitor e-mails in accordance with relevant legislation. Whilst outgoing e-mails are checked for viruses, we cannot guarantee this e-mail is virus-free or has not been intercepted or changed and we do not accept liability for any damage caused. Any reference to "e-mail" in this disclaimer includes any attachments.

<http://www.arun.gov.uk>

DX 57406 Littlehampton

You can view Arun District Council's Privacy Policy from <https://www.arun.gov.uk/privacy-policy>

Important Notice This e-mail is intended exclusively for the addressee and may contain information that is confidential and/or privileged. If you are not the intended recipient (or authorised to receive it for the addressee), please notify the sender and delete the e-mail immediately; using, copying, or disclosing it to anyone else, is strictly prohibited and may be unlawful. Any views, opinions or options presented are solely those of the author and do not necessarily represent those of Arun District Council. The information in this e-mail may be subject to public disclosure under the Freedom of Information Act 2000, therefore we cannot guarantee that we will not provide the whole or part of this e-mail to a third party. The Council reserves the right to monitor e-mails in accordance with relevant legislation. Whilst outgoing e-mails are checked for viruses, we cannot guarantee this e-mail is virus-free or has not been intercepted or changed and we do not accept liability for any damage caused. Any reference to "e-mail" in this disclaimer includes any attachments.

<http://www.arun.gov.uk>

DX 57406 Littlehampton

You can view Arun District Council's Privacy Policy from <https://www.arun.gov.uk/privacy-policy>

Important Notice This e-mail is intended exclusively for the addressee and may contain information that is confidential and/or privileged. If you are not the intended recipient (or authorised to receive it for the addressee), please notify the sender and delete the e-mail immediately; using, copying, or disclosing it to anyone else, is strictly prohibited and may be unlawful. Any views, opinions or options presented are solely those of the author and do not necessarily represent those of Arun District Council. The information in this e-mail may be subject to public disclosure under the Freedom of Information Act 2000, therefore we cannot guarantee that we will not provide the whole or part of this e-mail to a third party. The Council reserves the right to monitor e-mails in accordance with relevant legislation. Whilst outgoing e-mails are checked for viruses, we cannot guarantee this e-mail is virus-free or has not been intercepted or changed and we do not accept liability for any damage caused. Any reference to "e-mail" in this disclaimer includes any attachments.

<http://www.arun.gov.uk>

DX 57406 Littlehampton

You can view Arun District Council's Privacy Policy from <https://www.arun.gov.uk/privacy-policy>

Important Notice This e-mail is intended exclusively for the addressee and may contain information that is confidential and/or privileged. If you are not the intended recipient (or authorised to receive it for the addressee), please notify the sender and delete the e-mail immediately; using, copying, or disclosing it to anyone else, is strictly prohibited and may be unlawful. Any views, opinions or options presented are solely those of the author and do not necessarily represent those of Arun District Council. The information in this e-mail may be subject to public disclosure under the Freedom of Information Act 2000, therefore we cannot guarantee that we will not provide the whole or part of this e-mail to a third party. The Council reserves the right to monitor e-mails in accordance with relevant legislation. Whilst outgoing e-mails are checked for viruses, we cannot guarantee this e-mail is virus-free or has not been intercepted or changed and we do not accept liability for any damage caused. Any reference to "e-mail" in this disclaimer includes any attachments.
