

From: Kantziari, Stamatia [REDACTED]
Sent: 13 February 2019 14:32
To: Laura Gibbons
Cc: Mulligan, Niall; Prayag, Roddy; Jonathan Pritchard
Subject: RE: Chichester University App BR/311/18/PL

Laura,

Following our meeting on the 22nd of January and the actions that were agreed, we have addressed some of your comments as detailed below:

Point 1: The discharge rate from the development has been reduced to 2 l/s. Please find attached the updated drawing showing the Hydrobrake chamber with the limit out flow to 2 l/s based on 0.9m head. We also attach the Micro-drainage results to demonstrate that the model operates satisfactory.

Point 2: There is adequate capacity within the attenuation pond to contain both displaced flood water and the surface water from the proposed development. The total volume of the pond is 371.3 m³. The water level of the tank for the 100 year storm 2880 minutes is 0.889m. At this level the attenuation uses 247.4 m³ of the pond total capacity. The volume for flood compensation is 69.68 m³. Therefore, the total amount of water is 317.08 m³ and the remaining unused volume is 54.22 m³.

Point 4: Drawing UOCC-ACM-ZZ-05-DR-DR-30003 shows the information we found for the existing potable water pipe with easement, the existing foul water pipe with easement and the existing culverted watercourse. The location of the culverted watercourse is outside the development boundary. The potable water pipe and the existing foul water diverted pipe are within the site boundary but not under the building footprint. Therefore, the works will not be affected.

Point 5: The updated drainage layout shows a 3m buffer strip to the ordinary watercourse (area highlighted yellow) as requested. The existing foul water chamber (S106 –CL=1.380 , IL=0.180) which was constructed by others is within the 3m buffer zone and will be broken into to provide a connection point for the foul discharge for the proposed development. The works associated with this connection chamber S106 are the only works that will fall within.

We have updated the hydraulic model for outlet to the ordinary watercourse and added a permanent surcharged depth of 1.2m at this location as requested. Please find attached the Micro-drainage model.

We have not yet addressed Point 3. We are working on these and we aim to issue a package of report and drawings in the near future.

Should you require any further information, please do not hesitate to contact us.

Regards,

Stamatia Kantziari , MEng (Hons) ,GMICE
Graduate Engineer, Infrastructure, Buildings and Places
[REDACTED]

AECOM
Midpoint
Alençon Link
Basingstoke, RG21 7PP

From: Laura Gibbons [REDACTED]
Sent: 22 January 2019 15:52
To: Kantziari, Stamatia [REDACTED] Prayag, Roddy [REDACTED]
Cc: Mulligan, Niall [REDACTED]
Subject: RE: Chichester University App BR/311/18/PL

Hi Stamatia and Roddy,

Thank you for the meeting earlier. I have summarised the key points of discussion and actions from the meeting below. Please let me know if you believe any of the below points are an inaccurate representation of what was discussed.

1. You confirmed that QBar is less than 2l/s and that therefore you will be using 2l/s as the discharge rate from the development.
2. You confirmed that there is adequate capacity within the attenuation pond to contain both displaced flood water and the surface water from the proposed development.
3. Amendments to the surface water drainage strategy or a technical note will be provided to detail points 1 and 2 above.
4. I have attached three plans showing the private sewer, potable water supply and culvert. After discussions with my colleague I understand that the private sewer was previously investigated, I would encourage that you speak to your client and try to get hold of the CCTV report and location drawings. We do have this information on our system, therefore if express permission is provided by the client we can share this with you. Following receipt of information/ investigations please provide a plan showing the location of all of these features relative to the proposed development.
5. You will provide a drawing showing a 3m buffer strip to the ordinary watercourse.
6. I can confirm that no ordinary watercourse land drainage consent will be required as you are not discharging directly into the ordinary watercourse. Discharge rates will just be agreed with us through the planning process.
7. Groundwater monitoring will be completed at the proposed location of the pond. This monitoring should be completed at least until the end of March. Our normal monitoring requirement is October to March inclusive, however if peak groundwater levels throughout the district are recorded within your monitoring time frame we will accept monitoring from February to the end of March. The design of the pond will be refined based on these results, i.e. lined or unlined.
8. I will discuss with the planning officer if we believe it is suitable to adjust condition ENGD2B from pre-commencement to prior to occupation.

It has been brought to my attention that the outfall of the system that you propose to connect into is set very low within the ditch. It was a requirement on the previous drainage submissions that this outfall was therefore modelled as surcharged. Please can you extend your model down to the outlet to the ordinary watercourse and model a surcharged depth of 1.2m at this location.

Kind Regards,

Laura Gibbons, MEng, GMICE
Engineer (Drainage & Coastal)



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From: Kantziari, Stamatia [REDACTED]
Sent: 21 January 2019 09:45
To: Laura Gibbons; Prayag, Roddy
Cc: Mulligan, Niall; [REDACTED]
Subject: RE: Chichester University App BR/311/18/PL

Hello Laura,

Thank you for your email.

Shall we arrange the meeting for tomorrow 22nd of January after 14:00? Please confirm your availability before 10:00 tomorrow morning in order to organise our visit.

Looking forward to hearing from you.

Kind Regards,

Stamatia Kantziari , MEng (Hons) ,GMICE
Graduate Engineer, Infrastructure, Buildings and Places
[REDACTED]

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From: Laura Gibbons [REDACTED]
Sent: 18 January 2019 13:35
To: Prayag, Roddy [REDACTED]
Cc: Kantziari, Stamatia [REDACTED] Mulligan, Niall [REDACTED]
[REDACTED]
Subject: RE: Chichester University App BR/311/18/PL

Hi Roddy,

I am available on the 22nd Jan, 25th Jan, or the majority of February.

Kind Regards,

Laura Gibbons, MEng, GMICE
Engineer (Drainage & Coastal)



From: Prayag, Roddy [REDACTED]
Sent: 15 January 2019 15:59
To: Laura Gibbons
Cc: Kantziari, Stamatia; Mulligan, Niall [REDACTED]
Subject: RE: Chichester University App BR/311/18/PL

Laura,

Thank you for the information below. Stamatia and I have received your email dated 2nd January 2019 in reference to the Chichester University Development on Felphen Way (B2259) in Bognor Regis.

We are in the process of addressing all the comments and would welcome the opportunity to meet with you at your earliest convenience to discuss the matters raised in the email and subsequently provide written response to meet your requirements.

The items listed within the email are:

1. Use of a 2l/s discharge rate instead of 5 l/s. We confirm that the QBar rate is only 1.4 l/s and therefore will not be used. We will complete calculations ahead of the meeting to confirm the suitability of the 2l/s rate within the development constraints.
2. Flood Water Compensation volume for the construction of a building within Flood Zone 3 area: This has been addressed by the Water team and will be presented at the meeting.
3. Protection/ repair of a private sewer running through the Site: we are attempting to contact the previous designers on the scheme to obtain details of the culvert so that we can address your concerns prior to the meeting.
4. Standard conditions ENGD**: Thank you for this information on your email below. We will review and address prior to the meeting.
5. Inclusion of soakaways within the development: Ground investigation information and topographical survey details are available for the site. We will review and provide you with details of our findings at the meeting in order to progress the discussions on the matter.

Please indicate when you are likely to be available for a meeting and we will endeavour to present information to close out your queries at the earliest opportunity.

We look forward to your response.

Regards,

Roddy Prayag
Principal Engineer, Infrastructure
Buildings + Places
[REDACTED]

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From: Laura Gibbons [REDACTED]
Sent: 15 January 2019 15:37
To: Kantziari, Stamatia [REDACTED]
Subject: Chichester University App BR/311/18/PL

Hi Stamatia,

Thanks for the phone call earlier, sorry I hadn't been able to get back to your colleague earlier today I have been in and out of meetings.

As discussed, below is the wording of the conditions I have requested for this application.

ENG2B

Development shall not commence, other than works of site survey and investigation, until full details of the proposed surface water drainage scheme have been submitted to and approved in writing by the Local Planning Authority. The design should follow the hierarchy of preference for different types of surface water drainage disposal systems as set out in Approved Document H of the Building Regulations, and the recommendations of the SuDS Manual produced by CIRIA. Winter groundwater monitoring to establish highest annual ground water levels and Percolation testing to BRE 365, or similar approved, will be required to support the design of any Infiltration drainage. No building / No part of the extended building shall be occupied until the complete surface water drainage system serving the property has been implemented in accordance with the agreed details and the details so agreed shall be maintained in good working order in perpetuity.

ENG4A

The development shall not proceed until formal consent has been approved in writing from the Lead Local Flood Authority (WSCC) or its agent (ADC) for the discharge of any flows to watercourses, or the culverting, diversion, infilling or obstruction of any watercourse on the site. Any discharge to a watercourse must be at a rate no greater than the pre-development run-off values.

ENG5A

Development shall not commence until full details of the maintenance and management of the surface water drainage system is set out in a site-specific maintenance manual and submitted to, and approved in writing, by the Local Planning Authority. The manual is to include details of financial management and arrangements for the replacement of major components at the end of the manufacturer's recommended design life. Upon completed

construction of the surface water drainage system, the owner or management company shall strictly adhere to and implement the recommendations contained within the manual.

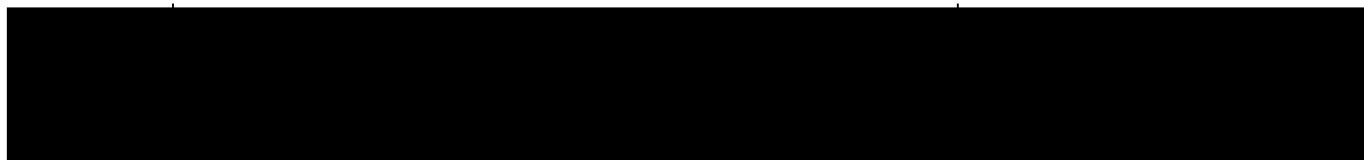
ENGD6A

The development layout shall not be agreed until such time that arrangements for the future access and maintenance of any watercourse or culvert (piped watercourse) crossing or abutting the site has been submitted and approved in writing by the Local Planning Authority. No construction is permitted, which will restrict current and future land owners from undertaking their riparian maintenance responsibilities of any watercourse on or adjacent to the site.

Any questions, let me know.

Kind Regards,

Laura Gibbons, MEng, GMICE
Engineer (Drainage & Coastal)



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