

Engineers Comments Regarding Surface Water Drainage

Application Reference:	M/16/22/PL	Reviewer Reference:	ADC/EXT1a
Planning Officer:	Sue Field	Date of Review:	5/10/2023
Site Name:	Land South of Grevatts Lane/A259 Climping		
Application Description:	Laying out of an 18 hole 72 par golf course, a 9 hole golf course, practice greens and a driving range including a buggy compound; the formation of a new access onto the A259; construction of a club house with associated golf club facilities; the construction of a maintenance building and external area of hardstanding; the laying of parking, new roads and paths; new landscape planting; surface water drainage basins and water storage reservoirs; and other earth works and infrastructure		
Assessment Number:	1 of 1		

Policy and Guidance Information

Arun District Council Surface Water Drainage Guidance - <https://www.arun.gov.uk/surfacewater>

WSCC Policy for the Management of Surface Water-

https://www.westsussex.gov.uk/media/12230/ws_ifa_policy_for_management_of_surface_water.pdf

Land Drainage Consent - <https://www.arun.gov.uk/land-drainage-consent/>

Arun District Council surface water pre-commencement conditions -

<https://www.arun.gov.uk/planning-pre-commencement-conditions>

Response

At this stage we would recommend maintaining a holding objection until the following is provided:

Comments

The updated Drainage Technical Note (dated 30th May 2023) has been reviewed in reference to the previous drainage comments provided in May 2022 and May 2023 respectively.

Currently the surface water drainage strategy provided within this technical note to support the full planning application is lacking detail to sufficiently address our previous comments.

In summary the level of detail provided in this technical note is very schematic and outline and does not clearly provide details of the proposed attenuation basins and associated drainage. It is important to ensure that a detailed drainage strategy is provided at this stage of the application, this is to ensure that the surface water drainage proposed to support the development can be delivered and accommodated within the development area. In addition to this there are no supporting hydraulic calculations, and as such no evidence that the proposals provided within the strategy are of sufficient size and will not cause flooding. Without this supporting information it is not clear whether the proposals will properly address the risk of surface water flooding both on site as well as to ensure there is no risk of flooding downstream.

Further to this there has been no results or infiltration testing carried out, meaning that the opportunities to drain some or all the surface water by infiltration has not been fully explored. The applicant should explore these opportunities and returning water to ground would have a benefit in reducing flood risk downstream.

The applicant should refer to the guidance documents provided By Arun District Council (ADC) on the requirements for surface water drainage strategies to support developments and more over should refer to the ADC surface water drainage proposal checklist which sets out specific design criteria.

A separate comments tracker is provided for the Applicant's Designer which details further our specifics relating to the surface water drainage strategy.

Application Reference: M/16/22/PL129/22 Site Name: Land South of Grevatts Lane/A259 Climping			Initial Issue Date: 5/10/2023 Issue Date: 5/10/2023 Reviewer Reference: ADC/EXT1a		
Summary and Recommendation: At this stage we would recommend maintaining a holding objection until the following is provided					
	ADC Drainage Comments	Designer Response			
1.	To reiterate the applicant and designer should refer to the ADC guidance documents and information required in support of a full planning application. Currently the level of detail provided is insufficient to address the surface water drainage strategy to support a full application. We would recommend that the Designers refer to ADC's Surface Water Drainage Proposal Checklist which sets out design criteria to be applied in the calculations as well as the minimum level of detail required in the drawings and supporting calculations				
2	The Designers response (section 3.2 of WSP Drainage Technical Note Site B) of investigating infiltration potential of the site is insufficient. Intrusive investigations are required to explore the opportunities for infiltration including shallow infiltration techniques. "We refer the Designers to ADC's policy on infiltration drainage which states the following: <i>Freeboard is to be provided between the base of the infiltration structure and the highest recorded groundwater level identified in that location. Ideally this should be 1 metre where possible, as stated in the CIRIA Suds Manual guidance. However, on the coastal plain in particular, where geology dictates and where shallow perched/tidally influenced water tables are often present, this is unlikely to be achievable</i> Irrespective of this, infiltration must still be fully considered. Therefore, to maximise this potential and avoid utilising other less favourable methods of surface water disposal, the bases of infiltration structures are permitted to be immediately above the peak recorded groundwater levels where it is deemed necessary. "				
3	Greenfield rate calculations for the northern part of the site do not appear to have been correctly calculated based on the assessed Greenfield rate per hectare. For example, car parking (0.51ha) has a peak proposed Qbar of 12.75l/s in Table 9, this doesn't correlate either with the figure noted in section 4.2. These need to be reviewed and ensure that the peak flow				

	Qbar is calculated based on the proposed contributing impermeable area				
4	The level of detail provided to support a full planning application is insufficient. A detailed drainage strategy layout should be provided providing information on cover and invert levels as well as pipe sizes etc.. Basin details need to be provided, in the very least sections for each basin should be provided to demonstrate that the required volume of attenuation can be provided within the extent shown and that they can be incorporated within the surrounding proposed earthworks.				
5	Proposed surface water modelling calculations are missing for each catchment. Provide hydraulic calculations for each catchment demonstrating that the proposed networks and associated attenuation features.				
6.	Whilst the details of the diversion of the culvert will need to be addressed as part of the Ordinary Watercourse Consent application stage, outline details on the proposed invert levels, longitudinal falls etc.. are required at this stage to ensure the proposals outlined in Section 4.3 are deliverable within the current scheme layout.				

From: Nicola Oktay on behalf of Planning.Responses
Sent: 31 October 2023 10:07
To: Planning Scanning
Subject: FW: Planning Consultation on: M/16/22/PL
Attachments: M-16-22-PL - Comment Tracker Template.docx; M-16-22-PL - Consultation Template.docx

Engineers Drainage response

Nikki Oktay
Planning Receptionist, Planning Department

T: 01903 737965
E: Nicola.Oktay@arun.gov.uk

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

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<https://www1.arun.gov.uk/planning-application-finder>



From: Paul Cann <Paul.Cann@arun.gov.uk>
Sent: Monday, October 30, 2023 2:28 PM
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Karl McLaughlin <Karl.McLaughlin@arun.gov.uk>; Sarah Burrow <Sarah.Burrow@arun.gov.uk>
Subject: RE: Planning Consultation on: M/16/22/PL

Please find enclosed our external engineers response, requesting a holding objection.

Regards

Paul Cann
Principal Drainage Engineer, Coastal Engineers and Flood Prevention

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



From: Planning.Responses <Planning.Responses@arun.gov.uk>

Sent: Wednesday, June 14, 2023 1:03:57 PM (UTC+00:00) Monrovia, Reykjavik

To: Land Drainage <Land.Drainage@arun.gov.uk>

Subject: Planning Consultation on: M/16/22/PL

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990

Application No: M/16/22/PL

Registered: 11th February 2022

Site Address: Land South of Grevatts Lane/A259 Climping

Grid Reference: 498885 101503

Category: Plan App with EIA

Description of Works: Laying out of an 18 hole 72 par golf course, a 9 hole golf course, practice greens and a driving range including a buggy compound; the formation of a new access onto the A259; construction of a club house with associated golf club facilities; the construction of a maintenance building and external area of hardstanding; the laying of parking, new roads and paths; new landscape planting; surface water drainage basins and water storage reservoirs; and other earth works and infrastructure. This application also lies within the parishes of Climping and Yapton, is a Departure from the Development Plan and affects a Public Right of Way. This application is subject to an Environmental Statement.

I am able to inform you that I have received an amendment to the above application dated 14th June 2023 relating to:- Supplementary drainage strategy.

[Click here to view the plans and documents](#)

If you should wish to make further representations as a result of this amendment you should click the link below and then click on 'Enter comment'.

[Click here to make further comments](#)

Please make any further comment by **6th July 2023**.

Please be aware that Planning Services operate an 'open file' policy and will publish your comments including your name and address on the website. We will aim to redact signatures, telephone numbers and email addresses but please help us by not incorporating them in the body of your text. Please make sure that you only include information that you are happy will be published in this way. If you supply information belonging to a third party, you must make sure you have their permission to do so.

Yours sincerely

Mr D Easton

Planning Case Officer- Arun District Council

Telephone: 01903 737500 ex37361

Email: david.easton@arun.gov.uk

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