21/0586/FUL - 29 -31 High Street and land rear of High Street, Hampton Wick

Alison Cadge <ACadge@rsk.co.uk>

Thu 19/08/2021 16:23

To: Bunker, Elizabeth <Elizabeth.Bunker@richmondandwandsworth.gov.uk>
Cc: Tysterman, William <William.Tysterman@richmondandwandsworth.gov.uk>; Morris, Lucy <lucy.morris@wsp.com>

Dear Elizabeth,

We are the flood risk consultants for the above application. Further to your comments regarding the drainage strategy, which we received on 12th August, we would like to provide some additional information which we hope will allay any outstanding concerns.

To summarise the position to date, the FRA demonstrated that a discharge rate of 2l/s can be achieved through the use of green roofs, permeable paving and an attenuation tank. This represents a 50% reduction on the pre-development Qbar rate. The use of SuDS is limited on this site by the size of the site and absence of significant open areas, the likely presence of shallow groundwater, the requirement for an easement to run services into the site, and access requirements for a heavy refuse truck. Following your initial objection we also included three water butts and a landscaped strip of land next to the car park.

We note that your most recent comments suggest the use of the 0.5m wide landscaped strip adjacent to the car park for above ground storage and we would be happy to utilise this area for rain gardens. An area of approximately $10m^2$ is available, so rain gardens with a depth of up to 0.15m could provide an additional circa $1.5m^3$ of storage. This small additional storage volume is unlikely to reduce the proposed discharge rate significantly below the currently proposed 2l/s. However, we would note that the benefits provided by the green roofs, any infiltration that may be demonstrated at detailed design stage, the water butts and the rain gardens that are now proposed have not been taken into account in the modelling undertaken to date. It is therefore likely that further reductions will be demonstrated when these elements are taken into account within the detailed hydraulic calculations at the detailed design stage.

Although we note the aspiration to achieve 3x the greenfield rate (0.3l/s), we feel that we have now taken every possible opportunity to include SuDS within the scheme. Despite the small scale of the scheme and significant constraints, we have demonstrated a significant reduction in discharge rate compared to the existing situation, thereby contributing to a reduction in flood risk within the wider area.

We would be grateful if you could confirm whether the drainage strategy can now be considered acceptable? If you have any further requirements, perhaps we could arrange a call to discuss as we feel we have achieved as much as is reasonably possible within the constraints of the site.

Please could you also confirm whether those aspects noted in your comments as required at detailed design stage (i.e. infiltration testing and detailed hydraulic calculations) can be secured via a planning condition at the post-planning stage?

If you have any queries on the above or require any additional information, please don't hesitate to contact me,

Many thanks,

Alison

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