

Altman, Rebecca

Subject: FW: Parkside RMAs - LLFA response
Attachments: LLFA Response - RM-25-100614.pdf; LLFA Response - RM-25-100615.pdf

Sent: 10 April 2026 16:54

Subject: Parkside RMAs - LLFA response

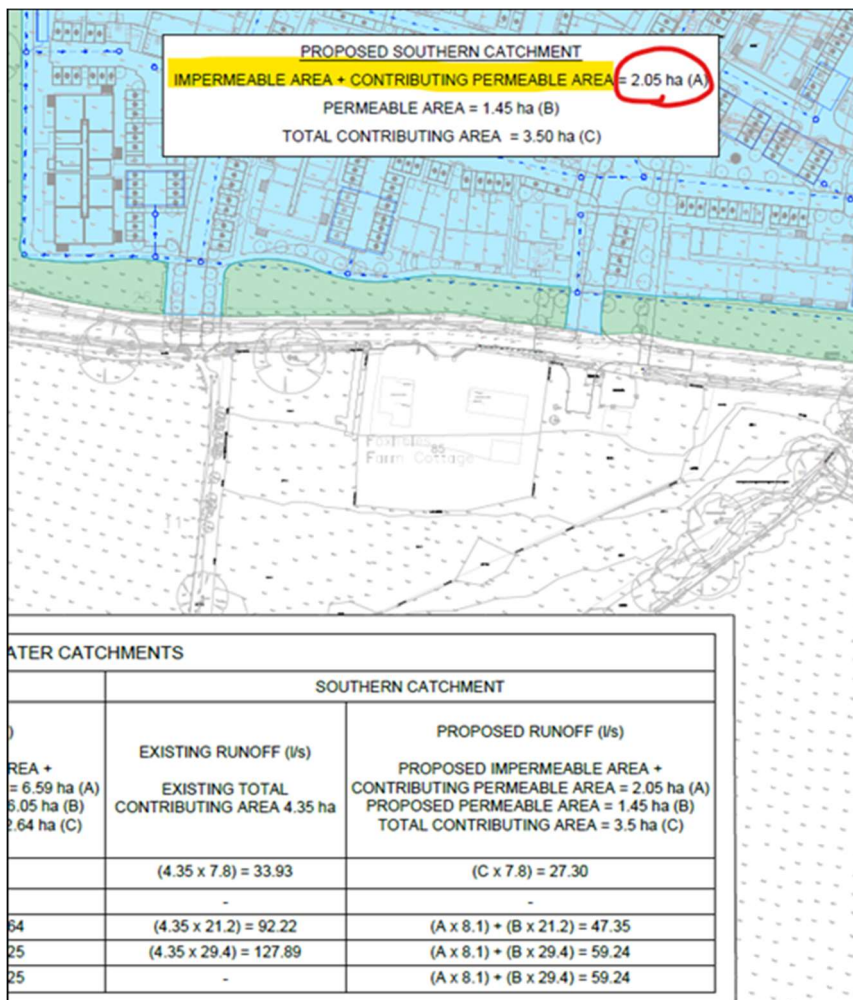
Hi Rebecca

Further to the below/attached, our consultants have reviewed and responded below.

Are you able to please forward this over to the LLFA for review and confirmation matters have now been adequately addressed? Appreciate we don't have masses of time to finalise this pre-committee, if needed and helpful our consultants would be happy to discuss with the LLFA on a call to bottom out any final bits.

Response to the LLFA concern that increased run-off will leave the site:

The catchment area drawing within Appendix B of the FRA and surface water drainage strategy report (ref: 332612639-STN-HDG-17-RP-C-0500 P04) 'generally' shades the development area, and the residual area of the original site catchment which remains undeveloped and hence permeable. However, the developed area is also textually split into contributing permeable and impermeable areas, and non-contributing permeable area. The drawing and associated table (shown below) demonstrates that by limiting the discharge from contributing areas to QMED, in all storm events up to 1 in 100, there will be an overall reduction in the run-off / discharge from the site compared to the greenfield situation. Noting that overall run-off / discharge will comprise surface water discharge from the drainage system and greenfield run-off from the permeable / undeveloped areas.



The modelled allowable discharge rate from the drainage system (for MicroDrainage modelling) has been calculated by applying the QMED rate per hectare to the same total contributing impermeable and contributing permeable areas identified on the plan in Appendix B, as discussed in section 5.3.4, 5.3.5 and shown in table 5.1 of the drainage strategy report, see highlighted extract below. These areas are fully defined on the plans within Appendix C. The permeable areas which have been modelled as directly contributing to the drainage system are modelled as 100% contribution (as though it were impermeable) which is conservative and provides a robust design.

- 5.3.4 The Q_{MED} discharge rate has been applied to contributing open space areas as well as all impermeable areas, to determine the allowable discharge rate.
- 5.3.5 Contributing permeable areas such as verges, bioretention areas and permeable paving have been conservatively included in the modelling at a runoff rate of 100%. Each individual combined catchment area has then been increased by an additional 10% to provide for the potential for urban creep. This robust allocation of additional runoff area provides the surface water strategy with additional capacity for the future.
- 5.3.6 The proposed catchment areas drawings (Ref: 332612639-STN-17-XX-DR-C-0507 to 0512) are contained in **Appendix C**.
- 5.3.7 Table 5.1 provides a summary of the greenfield and proposed discharge rates for the northern and southern catchments.

Return Period	Greenfield rate (l/s/ha)	Northern Catchment		Southern Catchment	
		Greenfield l/s (6.59 ha imp area)	Proposed Discharge (l/s)	Greenfield l/s (2.05 ha imp area)	Proposed Discharge (l/s)
1 year	7.8 l/s/ha	51.64 l/s	51.60 l/s	15.99 l/s	15.70 l/s
Q _{MED}	8.1 l/s/ha	53.62 l/s	-	16.61 l/s	-
30 year	21.2 l/s/ha	140.34 l/s	52.50 l/s	43.46 l/s	15.90 l/s
100 year	29.4 l/s/ha	194.63 l/s	52.50 l/s	60.27 l/s	15.90 l/s
100 year + 40% CC	-	-	52.50 l/s	-	15.90 l/s

Table 5.1: Proposed Discharge Rates

Not all the garden areas will effectively contribute directly to the drainage system, and so these areas are not considered in the allowable discharge assessment. The rainfall on these permeable areas will continue to respond at the greenfield rate as it currently does.

This assessment methodology has also been used to determine the proposed discharge rates for the Holme and Homestal and is explained within section 5.3.4, 5.3.5 and table 5.1 of the FRA and Surface Water Drainage Strategy report (ref: 332612639-STN-HDG-14-RP-C-0500 P03).

Response to the LLFA concern over pipes running through multiple gardens:

Where terrace units are provided it is often not practical or viable to try and achieve independent drainage connections from each unit without crossing multiple property curtilages, but this is not an uncommon situation. However, on both the Folds and the Holme and Homestal proposed drainage layout drawings we do identify that the final private drainage connections will be prepared at the detail design stage when the RWP / SVP connections are confirmed by the MEP Engineer, refer to the extract of note No. 10 below. At this point in the design, the aim will be to reduce the occurrences of pipes crossing gardens.

10. RWP AND SVP POSITIONS ARE SHOWN INDICATIVELY TO DEMONSTRATE HOW THE UNIT CAN CONNECT TO THE MAIN DRAINAGE SYSTEM. FINAL DETAILS WILL BE CONFIRMED AT THE DETAILED DESIGN STAGE.

Regards
Pete