

Title: **2150434 – 59 Maresfield Gardens, Hampstead, London, NW3 5TE - Planning Condition 7** Date Approved: **18.10.2018**
 Discipline: **Civils** Author: **Julson Delishaj**
 Note Ref: **EWR001**

			Issued for information				
revision:	P1	prepared by:	Julson Delishaj	checked by:	Paul Chance	approved by:	Paul Chance
date:	18.10.18	signature:	JDe	signature:	PCh	signature:	PCh

Aim

The purpose of this Technical Note is to address Condition 7 listed within the Planning Conditions associated with the proposed works at 59 Maresfield Gardens, London, NW3 5TE (Application Ref: 215/3506/P).

Condition 7 - Point 1:

- 1) *Prior to commencement of development details of a sustainable urban site drainage system (SUDs) shall be submitted to and approved in writing by the local planning authority. Such system shall be based on a 1:100 year event with 30% provision for climate change demonstrating 50% attenuation of all runoff demonstrating greenfield levels of runoff.*

EW Response: The point above set out within the planning condition is not clear in terms of what is required. It is stated that the system should demonstrate “50% attenuation of all run off demonstrating greenfield levels of runoff”. It is assumed that this is a typo and the condition is requesting that the surface water run-off rates from the development shall either be restricted to 50% of the existing rate or to the existing 1yr Greenfield rate.

The Greenfield run-off rates for the existing site are shown in **Figure 1** below, these have been calculated using ICP SuDS within MicroDrainage Source Control Module using an overall site area of 253m².

	Return Period Flood					
	Region	QBAR (l/s)	Q (2yrs) (l/s)	Q (1 yrs) (l/s)	Q (30 yrs) (l/s)	Q (100 yrs) (l/s)
IH 124						
ICP SUDS	Region 1	0.1	0.1	0.1	0.2	0.2
	Region 2	0.1	0.1	0.1	0.2	0.3
ADAS 345	Region 3	0.1	0.1	0.1	0.2	0.2
FEH	Region 4	0.1	0.1	0.1	0.2	0.2
	Region 5	0.1	0.1	0.1	0.2	0.3
ReFH2	Region 6/Region 7	0.1	0.1	0.1	0.2	0.3
	Region 8	0.1	0.1	0.1	0.2	0.2
Greenfield Volume	Region 9	0.1	0.1	0.1	0.2	0.2
Greenfield Volume (ReFH2)	Region 10	0.1	0.1	0.1	0.2	0.2

Figure 1, Greenfield runoff rates for existing site.

The greenfield run-off rate for the 1yr return has been calculated as 0.1 l/s.

The existing surface water runoff rate for the predevelopment site has been calculated using equation 24.5 from CIRIA SuDS Manual C753 (Modified Rational Method) using a 50mm/hr intensity:

$$2.78 \times i \times A \times CvCr$$

Where $i = 50\text{mm/hr}$ (rainfall intensity), $A = 0.0142\text{Ha}$ (hard-standing area), $CvCr = 1$

$\therefore 2.78 \times 50 \times 0.0142 \times 1 = 2 \text{ l/s}$, a reduction of 50% provides a discharge rate of 1l/s.

In both scenarios, the calculated discharge rates are very low to a point that it is considered impractical to restrict to as it would lead to a high risk of blockages, instead a discharge rate of 2.5l/s has been adopted.

Condition 7 - Point 2:

- 2) *The drainage details shall include a method statement, prepared in consultation with Thames Water, which demonstrates how the swimming pool shall be drained without harm to the local sewer system.*

EW Response: The swimming pool backwash will ultimately drain to a combined water public sewer within Masefield Gardens at 6.6 l/s for 3 minutes, this regime will be carried out between the hours of 10pm – 4am to avoid peak hours and thus draining the pool at a period where flows within the public sewer are assumed to be low. The approach above has been agreed with Thames Water, please see full correspondence attached (See Appendix A).

Condition 7 - Point 3:

- 3) *The SUDs shall be implemented as part of the development and thereafter retained and maintained. The swimming pool shall not be drained other than in accordance with the method statement as approved.*

Reason: To reduce the impact of surface water run-off from the buildings and limit the impact on the storm-water and drainage system from the site in accordance with policies CS13 and CS16 of the London Borough of Camden Local Development Framework Core Strategy and policies DP22, DP23 and DP32 of the London Borough of Camden Local Development Framework Development Policies.

EW Response: Client advised.

APPENDIX A – THAMES WATER SWIMMING POOL DRAINAGE CORRESPONDENCE

Julson Delishaj

From: Julson Delishaj
Sent: 17 October 2018 10:40
To: connor.froud@thameswater.co.uk
Subject: FW: ALAN DOVEY: 2150825 - 59 Maresfield Gardens, Swimming Pool Drainage Enquiry
Attachments: 121025-aeb-maresfield waterflow.pdf; 2150434-EW-00-X00-D-5000 T1.pdf; 2150434-EW-00-X01-D-5001 T1.pdf; 2150434-EW-00-X02-D-5002 T1.pdf
Importance: High

Dear Alan,

Hope you're well,

We are working on a single house development, which will include a swimming pool. We're currently in the process of going through the Planning Condition 7 for 59 Maresfield Gardens and part of Condition 7 states;

"The pool drainage details shall include a method statement, prepared in consultation with Thames Water, which demonstrates how the swimming pool shall be drained without harm to the local sewer."

I have liaised with Siva this morning on the above and agreed in principal that the swimming pool backwash will ultimately drain to a combined water public sewer within Masefield Gardens at 6.6 l/s for 3 minutes, this regime will be carried out between the hours of 10pm – 4am to avoid peak hours and thus draining the pool at a period where flows within the public sewer are assumed to be low. I would also note that the existing property currently drains (indirectly) to this combined water public sewer, please see attached CCTV survey with a mark-up of the existing drainage. I have also attached the proposed drainage strategy drawing to further assist with the above.

Could you please confirm that the above is acceptable?

Please let me know if you have any questions.

Kind Regards,

Julson Delishaj
BEng (Hons)
| Senior Civil Engineer



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Julson Delishaj

From: DEVELOPER.SERVICES@THAMESWATER.CO.U
<DEVELOPER.SERVICES@THAMESWATER.CO.UK>
Sent: 18 October 2018 11:14
To: Julson Delishaj
Subject: 59 Mansfield Gardens-Swimming Pool Drainage Enquiry [Filed 18 Oct 2018 11:31]

Follow Up Flag: Follow up
Flag Status: Completed

Hi Julson,

I can confirm that as per the details in your email of the 17 October 2018, the swimming pool back wash is acceptable to Thames Water.

Kind regards

Alan Dovey

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