LONDON BOROUGH OF RICHMOND UPON THAMES

LoDEG

1. Project & Site Details

Project / Site Name (including sub-catchment / stage / phase where appropriate)	Shurgard Hampton
Address & post code	74 Oldfield Road, Hampton, London, TW12 2HR
OS Grid ref. (Easting, Northing)	E 513140
	N 169763
LPA reference (if applicable)	
Brief description of proposed work	Demolition of exisitng buildings and the construction of a new self-storage facility (use class B8)
Total site Area	3120 m^2
Total existing impervious area	2795 m^2
Total proposed impervious area	2627 m^2
Is the site in a surface water flood risk catchment (ref. local Surface Water Management Plan)?	No. Refer to FRA (31569-HYD-XX-XX-RP-WENV-0001) section 3.2 for details.
Existing drainage connection type and location	Combined Thames Water sewer located beneath Oldfield Road
Designer Name	Vancho Karatanov
Designer Position	Principal Engineer
Designer Company	Hydrock Consultants Ltd

2. Proposed Discharge Arrangements

2a. Infiltration Feasibility

Superficial geology classification	Taplow Gravel Member
Bedrock geology classification	London Clay Formation
Site infiltration rate	Infiltration testing not completed
Depth to groundwater level	0.88 - 12.00 m below ground level
Is infiltration feasible?	Potentially - infiltration testing not completed

2b. Drainage Hierarchy

	Feasible (Y/N)	*Proposed (Y/N)*
1 store rainwater for later use	N	N
2 use infiltration techniques, such as porous surfaces in non-clay areas	N	N
3 attenuate rainwater in ponds or open water features for gradual release	N	N
4 attenuate rainwater by storing in tanks or sealed water features for gradual release	Y	Y
5 discharge rainwater direct to a watercourse	N	N
6 discharge rainwater to a surface water sewer/drain	N	N
7 discharge rainwater to the combined sewer.	Y	Y

2c. Proposed Discharge Details

Proposed discharge location	225mm Thames Water surface water sewer located beneath Oldfield Road
Has the owner/regulator of the discharge location been consulted?	Pre developement enquiry with Thames Water still to be undertaken.

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3. Drainage Strategy

3a. Discharge Rates & Required Storage

	Greenfield (GF) runoff rate (l/s)	*Existing discharge rate (l/s)*	*Required storage for GF rate (m^3)*	*Proposed discharge rate (l/s)*
Qbar	0.91			
1 in 1	0.78	36.9		2
1 in 30	2.1	48.6	61	2
1 in 100	2.91	48.9		2
1 in 100 + CC			129	2
Climate change allowance used		40%		
3b. Principal Method of Flow Control		Pump limited to 2l/s dicharge rate		

3c. Proposed SuDS Measures

	Catchment area (m^2)	*Plan area (m^2)*	*Storage vol. (m^3)*
Rainwater harvesting	0		0
Infiltration systems	0		0
Green roofs	0	0	0
Blue roofs	0	0	0
Filter strips	0	0	0
Filter drains	0	0	0
Bioretention / tree pits	0	0	0
Pervious pavements	0	0	0
Swales	0	0	0
Basins/ponds	0	0	0
Attenuation tanks	2882		194
Total	**2882**	**0**	**194**

4. Supporting Information

4a. Discharge & Drainage Strategy	*Page/section of drainage report*
Infiltration feasibility (2a) – geotechnical factual and interpretive reports, including infiltration results	Groundwater testing has not been carried out. Refer to report CO/M5478/12423 dated September 2023 by Brownfield Solutions LTD.
Drainage hierarchy (2b)	Section 4.4.1 (pg. 9)
Proposed discharge details (2c) – utility plans, correspondence / approval from owner/regulator of discharge location	Appendix B (pg. 23) & Appendix C (pg. 24)
Discharge rates & storage (3a) – detailed hydrologic and hydraulic calculations	Appendix I (pg. 30)
Proposed SuDS measures & specifications (3b)	Section 5.3 (pg. 11-14)
4b. Other Supporting Details	*Page/section of drainage report*
Detailed Development Layout	Appendix A (pg. 22)
Detailed drainage design drawings, including exceedance flow routes	Appendix G (pg. 28) & Appendix H (pg. 29)
Detailed landscaping plans	Appendix A (pg. 22)
Maintenance strategy	Section 7 (pg. 16-18)
Demonstration of how the proposed SuDS measures improve:	
a) water quality of the runoff?	Section 5.5 (pg. 13-14)
b) biodiversity?	N/A
c) amenity?	N/A