

**Information pursuant to Condition 11
of Planning Permission 50632/APP/2023/2313**

Disclaimer

I, the undersigned homeowner of 20A Frithwood Avenue, HA6 3LX, hereby record the following:

1. On 9 January 2025, my appointed structural engineer, Mr Marcus Marinos, provided written advice against the installation of a drainage tank at the above address. The basis of this advice was the proximity of the proposed tank to both my property and the adjoining properties at 20 and 22 Frithwood Avenue.
2. This advice is supported by Building Regulations 2010 Approved Document H, Section 3, paragraph 25, which states: 'infiltration devices should not be built a. within 5m of a building.' Given the restricted size of the site and the close proximity of neighbouring dwellings, compliance with the prescribed 5-metre separation distance is not possible.
3. The written advice of Mr Marinos (attached hereto as Appendix A) was first submitted to Hillingdon Council Planning Department on 10 January 2025 and was resubmitted on 6 August 2025. Despite these representations, the Council has maintained its requirement that a drainage tank be installed on the site.
4. For the avoidance of doubt, I wish to place on record that this requirement has been imposed by Hillingdon Council against the professional advice received, and despite the foreseeable risks of subsidence or other structural damage to neighbouring properties.
5. Accordingly, should such damage occur as a result of compliance with this imposed condition, liability shall rest exclusively with Hillingdon Council, and I disclaim any responsibility arising from consequences directly attributable to this enforced installation.


Dr Julia Hartley



- i. **Information about the design storm period and intensity, the method employed to delay and control the surface water discharged from the site and the measures taken to prevent pollution of the receiving groundwater and/or surface waters.**

On 6 August 2025, we were informed by Hillingdon Planning that the drainage system must be designed to accommodate the 1 in 100-year storm event with a 40% climate change allowance.


Calculations provided by Rainwater Harvesting Ltd on 29 November 2024 and copied below recommend a **minimum Attenuation Volume of 3000 Litres** with a controlled discharge rate of 2 litres per second. Based on this minimum requirement, we have submitted a design for a 3000-litre tank.


Rainwater Harvesting Ltd		Page 1
Unit A Harrier Park		2 of 9
Orton Southgate		
Peterborough PE2 6YQ		
Date 29/11/2024 16:13	Designed by RainWater	
File IMW HA6 3LX 20A	Checked by	
XP Solutions	Source Control 2016.1	


Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Overflow (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
15 min Summer	0.470	0.470	1.7	0.0	1.7	2.4	O K
30 min Summer	0.521	0.521	1.8	0.0	1.8	2.7	O K
60 min Summer	0.508	0.508	1.8	0.0	1.8	2.6	O K
120 min Summer	0.424	0.424	1.7	0.0	1.7	2.2	O K
180 min Summer	0.351	0.351	1.5	0.0	1.5	1.8	O K
240 min Summer	0.293	0.293	1.4	0.0	1.4	1.5	O K
360 min Summer	0.215	0.215	1.2	0.0	1.2	1.1	O K
480 min Summer	0.166	0.166	1.0	0.0	1.0	0.9	O K
600 min Summer	0.133	0.133	0.9	0.0	0.9	0.7	O K
720 min Summer	0.109	0.109	0.8	0.0	0.8	0.6	O K
960 min Summer	0.080	0.080	0.7	0.0	0.7	0.4	O K
1440 min Summer	0.051	0.051	0.5	0.0	0.5	0.3	O K
2160 min Summer	0.036	0.036	0.4	0.0	0.4	0.2	O K
2880 min Summer	0.031	0.031	0.3	0.0	0.3	0.2	O K
4320 min Summer	0.025	0.025	0.2	0.0	0.2	0.1	O K
5760 min Summer	0.022	0.022	0.2	0.0	0.2	0.1	O K
7200 min Summer	0.019	0.019	0.1	0.0	0.1	0.1	O K
8640 min Summer	0.017	0.017	0.1	0.0	0.1	0.1	O K
10080 min Summer	0.016	0.016	0.1	0.0	0.1	0.1	O K
15 min Winter	0.534	0.534	1.9	0.0	1.9	2.8	O K
30 min Winter	0.585	0.585	2.0	0.0	2.0	3.0	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Overflow Volume (m³)	Time-Peak (mins)
15 min Summer	140.352	0.0	3.4	0.0	14
30 min Summer	91.674	0.0	4.5	0.0	23
60 min Summer	57.005	0.0	5.6	0.0	40
120 min Summer	34.241	0.0	6.7	0.0	72
180 min Summer	25.078	0.0	7.3	0.0	104
240 min Summer	19.989	0.0	7.8	0.0	134
360 min Summer	14.479	0.0	8.5	0.0	196
480 min Summer	11.517	0.0	9.0	0.0	254
600 min Summer	9.637	0.0	9.4	0.0	314
720 min Summer	8.327	0.0	9.7	0.0	374
960 min Summer	6.608	0.0	10.3	0.0	492
1440 min Summer	4.764	0.0	11.1	0.0	734
2160 min Summer	3.429	0.0	12.0	0.0	1100
2880 min Summer	2.712	0.0	12.7	0.0	1436
4320 min Summer	1.947	0.0	13.7	0.0	2140
5760 min Summer	1.538	0.0	14.4	0.0	2888
7200 min Summer	1.280	0.0	15.0	0.0	3664
8640 min Summer	1.101	0.0	15.5	0.0	4256
10080 min Summer	0.969	0.0	15.9	0.0	4968
15 min Winter	140.352	0.0	3.8	0.0	15
30 min Winter	91.674	0.0	5.0	0.0	24

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Unit A Harrier Park Orton Southgate Peterborough PE2 6YQ							
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XP Solutions			Source Control 2016.1				
<u>Summary of Results for 100 year Return Period (+40%)</u>							
Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Overflow (l/s)	Max Outflow (l/s)	Max Volume (m³)	Status
60 min Winter	0.549	0.549	1.9	0.0	1.9	2.9	O K
120 min Winter	0.422	0.422	1.7	0.0	1.7	2.2	O K
180 min Winter	0.323	0.323	1.4	0.0	1.4	1.7	O K
240 min Winter	0.252	0.252	1.3	0.0	1.3	1.3	O K
360 min Winter	0.166	0.166	1.0	0.0	1.0	0.9	O K
480 min Winter	0.119	0.119	0.8	0.0	0.8	0.6	O K
600 min Winter	0.091	0.091	0.7	0.0	0.7	0.5	O K
720 min Winter	0.073	0.073	0.6	0.0	0.6	0.4	O K
960 min Winter	0.052	0.052	0.5	0.0	0.5	0.3	O K
1440 min Winter	0.036	0.036	0.4	0.0	0.4	0.2	O K
2160 min Winter	0.029	0.029	0.3	0.0	0.3	0.2	O K
2880 min Winter	0.025	0.025	0.2	0.0	0.2	0.1	O K
4320 min Winter	0.021	0.021	0.2	0.0	0.2	0.1	O K
5760 min Winter	0.018	0.018	0.1	0.0	0.1	0.1	O K
7200 min Winter	0.016	0.016	0.1	0.0	0.1	0.1	O K
8640 min Winter	0.015	0.015	0.1	0.0	0.1	0.1	O K
10080 min Winter	0.014	0.014	0.1	0.0	0.1	0.1	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Overflow Volume (m³)	Time-Peak (mins)		
60 min Winter	57.005	0.0	6.2	0.0	42		
120 min Winter	34.241	0.0	7.5	0.0	76		
180 min Winter	25.078	0.0	8.2	0.0	108		
240 min Winter	19.989	0.0	8.7	0.0	140		
360 min Winter	14.479	0.0	9.5	0.0	200		
480 min Winter	11.517	0.0	10.1	0.0	258		
600 min Winter	9.637	0.0	10.5	0.0	316		
720 min Winter	8.327	0.0	10.9	0.0	376		
960 min Winter	6.608	0.0	11.5	0.0	492		
1440 min Winter	4.764	0.0	12.5	0.0	736		
2160 min Winter	3.429	0.0	13.5	0.0	1068		
2880 min Winter	2.712	0.0	14.2	0.0	1400		
4320 min Winter	1.947	0.0	15.3	0.0	2224		
5760 min Winter	1.538	0.0	16.1	0.0	2920		
7200 min Winter	1.280	0.0	16.8	0.0	3552		
8640 min Winter	1.101	0.0	17.3	0.0	4328		
10080 min Winter	0.969	0.0	17.8	0.0	5240		
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<p style="text-align: center;"><u>Rainfall Details</u></p> <table> <tr> <td>Rainfall Model</td> <td>FSR</td> <td>Winter Storms</td> <td>Yes</td> </tr> <tr> <td>Return Period (years)</td> <td>100</td> <td>Cv (Summer)</td> <td>0.750</td> </tr> <tr> <td>Region</td> <td>England and Wales</td> <td>Cv (Winter)</td> <td>0.840</td> </tr> <tr> <td>M5-60 (mm)</td> <td>20.100</td> <td>Shortest Storm (mins)</td> <td>15</td> </tr> <tr> <td>Ratio R</td> <td>0.412</td> <td>Longest Storm (mins)</td> <td>10080</td> </tr> <tr> <td>Summer Storms</td> <td>Yes</td> <td>Climate Change %</td> <td>+40</td> </tr> </table> <p style="text-align: center;"><u>Time Area Diagram</u></p> <p>Total Area (ha) 0.013</p> <table> <tr> <td>Time (mins)</td> <td>Area</td> </tr> <tr> <td>From:</td> <td>To: (ha)</td> </tr> <tr> <td>0</td> <td>4 0.013</td> </tr> </table>			Rainfall Model	FSR	Winter Storms	Yes	Return Period (years)	100	Cv (Summer)	0.750	Region	England and Wales	Cv (Winter)	0.840	M5-60 (mm)	20.100	Shortest Storm (mins)	15	Ratio R	0.412	Longest Storm (mins)	10080	Summer Storms	Yes	Climate Change %	+40	Time (mins)	Area	From:	To: (ha)	0	4 0.013
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Model Details

Storage is Online Cover Level (m) 1.000

Tank or Pond Structure

Invert Level (m) 0.000

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	5.2	0.755	5.2	0.756	0.0

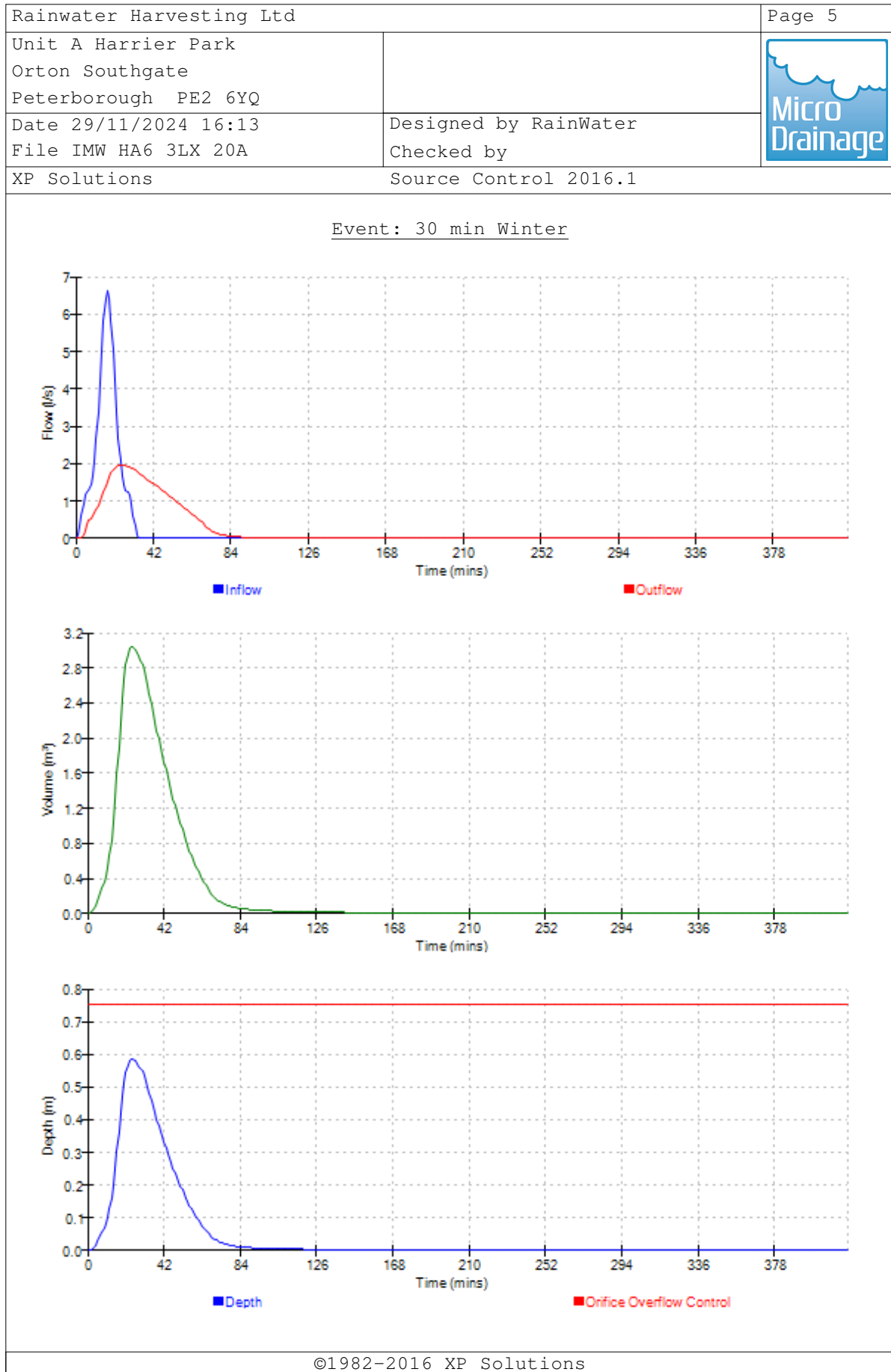
Orifice Outflow Control

Diameter (m) 0.028 Discharge Coefficient 0.950 Invert Level (m) 0.000

Orifice Overflow Control

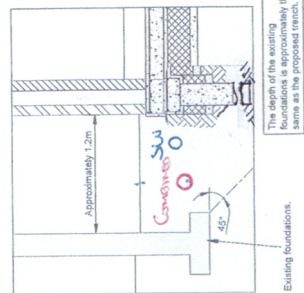
Diameter (m) 0.100 Discharge Coefficient 0.600 Invert Level (m) 0.754

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A → Existential Rwp

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Proposed Section C - C 1-50

- GREEN LINE OUTLINES BOUNDS OF 20A
ORANGE LINE OUTLINES EXISTING BOUNDS OF 20

HIGHWAY DESIGN CONSULTING LTD CONSULTING ENGINEERS	Job Title: 20A FARMWOOD AVENUE NORTHWOOD HA6 3LX	Job No: 1673 18 01 24 Drg No: 1673 18 01 24 010 Date: 26 November 2024 Scale: 1 - 100 1-50 Drawn: TG	Rev B C D	Date 10/11/24 21/11/25 13/11/25	DETAILS For Discussion CAPTION FOR 2 F 1500 TANKS LINED TUNNAGE ATTENUATION ONLY LAYOUT ADDED
	Drawing Title: BELOW GROUND DRAINAGE LAYOUT SUDS ATTENUATION				

ii. Timetable for implementation

Implementation will be complete prior to occupation.

iii. Management and maintenance

Responsibility will lie with the homeowner, which is acceptable to Hillingdon Planning.

iv. Rainwater collection

Pump connecting to tank to be used for watering the garden. Confirmed as met.

v. Greywater reuse

It is noted that greywater reuse was considered but discounted for structural and amenity reasons, supported by the advice of the appointed engineer and Building Control.

vi. Water efficiency

The proposed use of dual-flush WCs, low-flow fittings, and water-efficient appliances is sufficient to demonstrate compliance with the 110 litres per person per day standard.

Appendix A.

Gmail - 20A Frithwood Avenue, Northwood, HA6 3LX

06/08/2025, 14:39



Julia Hartley <juliacaterinahartley@gmail.com>

20A Frithwood Avenue, Northwood, HA6 3LX

marcus@mcmstructures.co.uk <marcus@mcmstructures.co.uk>
To: Julia Hartley <juliacaterinahartley@gmail.com>

Wed, Jan 8, 2025 at 6:03 PM

Dear Mrs Hartley,

We write this email further to your enquiry on the sites soil conditions in relation to installing a soakaway.

Geological maps for the area confirm that the property is based on Clay. Typically, soakaways are not recommended in such soils as Clay has a low permeability and low filtration rate.

There are several trees in the adjoining property that have high water demand.

While we propose to construct the new structure on piles, the soakaway may have an adverse affect to the adjoining property that is (in areas) 1m away from the proposed foundations.

According to Approved Document H 3.25 a), soakaways should not be installed "within 5m of a building...". This would mean that the soakaway cannot be positioned in the garden or the front driveway without adversely affecting the existing building.

We would thus not recommend the installation of a soakaway to mitigate the risk of subsidence to the existing adjoining property that you do not own. We would like to point out that you may be liable should subsidence occur to the property due to the installation of the soakaway.

Please let us know if you require any further information.

Regards,

Marcus Marinos

MCM Structures

Tel: 020 3576 3954

Mob: 07808665856