

**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.

Unit A Harrier Park

Orton Southgate

Peterborough PE2 6YQ

Date 29/11/2024 16:13

File IMW HA6 3LX 20A

Designed by RainWater

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 (1/s)	Max Overflow (1/s)	Max Σ (1/s)	Max Outflow (1/s)	Max Volume (m³)	Status
15 min Summer	0.470	0.470	1.7	0.0	1.7	2.4	0 K	
30 min Summer	0.521	0.521	1.8	0.0	1.8	2.7	0 K	
60 min Summer	0.508	0.508	1.8	0.0	1.8	2.6	0 K	
120 min Summer	0.424	0.424	1.7	0.0	1.7	2.2	0 K	
180 min Summer	0.351	0.351	1.5	0.0	1.5	1.8	0 K	
240 min Summer	0.293	0.293	1.4	0.0	1.4	1.5	0 K	
360 min Summer	0.215	0.215	1.2	0.0	1.2	1.1	0 K	
480 min Summer	0.166	0.166	1.0	0.0	1.0	0.9	0 K	
600 min Summer	0.133	0.133	0.9	0.0	0.9	0.7	0 K	
720 min Summer	0.109	0.109	0.8	0.0	0.8	0.6	0 K	
960 min Summer	0.080	0.080	0.7	0.0	0.7	0.4	0 K	
1440 min Summer	0.051	0.051	0.5	0.0	0.5	0.3	0 K	
2160 min Summer	0.036	0.036	0.4	0.0	0.4	0.2	0 K	
2880 min Summer	0.031	0.031	0.3	0.0	0.3	0.2	0 K	
4320 min Summer	0.025	0.025	0.2	0.0	0.2	0.1	0 K	
5760 min Summer	0.022	0.022	0.2	0.0	0.2	0.1	0 K	
7200 min Summer	0.019	0.019	0.1	0.0	0.1	0.1	0 K	
8640 min Summer	0.017	0.017	0.1	0.0	0.1	0.1	0 K	
10080 min Summer	0.016	0.016	0.1	0.0	0.1	0.1	0 K	
15 min Winter	0.534	0.534	1.9	0.0	1.9	2.8	0 K	
30 min Winter	0.585	0.585	2.0	0.0	2.0	3.0	0 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

Rainwater Harvesting Ltd								Page 2
Unit A Harrier Park 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 (1/s)	Max Overflow (1/s)	Max Σ (1/s)	Max Outflow (1/s)	Max Volume (m³)	Status
60 min Winter	0.549	0.549	1.9	0.0	1.9	2.9	0.1	OK
120 min Winter	0.422	0.422	1.7	0.0	1.7	2.2	0.1	OK
180 min Winter	0.323	0.323	1.4	0.0	1.4	1.7	0.1	OK
240 min Winter	0.252	0.252	1.3	0.0	1.3	1.3	0.1	OK
360 min Winter	0.166	0.166	1.0	0.0	1.0	0.9	0.1	OK
480 min Winter	0.119	0.119	0.8	0.0	0.8	0.6	0.1	OK
600 min Winter	0.091	0.091	0.7	0.0	0.7	0.5	0.1	OK
720 min Winter	0.073	0.073	0.6	0.0	0.6	0.4	0.1	OK
960 min Winter	0.052	0.052	0.5	0.0	0.5	0.3	0.1	OK
1440 min Winter	0.036	0.036	0.4	0.0	0.4	0.2	0.1	OK
2160 min Winter	0.029	0.029	0.3	0.0	0.3	0.2	0.1	OK
2880 min Winter	0.025	0.025	0.2	0.0	0.2	0.1	0.1	OK
4320 min Winter	0.021	0.021	0.2	0.0	0.2	0.1	0.1	OK
5760 min Winter	0.018	0.018	0.1	0.0	0.1	0.1	0.1	OK
7200 min Winter	0.016	0.016	0.1	0.0	0.1	0.1	0.1	OK
8640 min Winter	0.015	0.015	0.1	0.0	0.1	0.1	0.1	OK
10080 min Winter	0.014	0.014	0.1	0.0	0.1	0.1	0.1	OK

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Overflow Volume (m³)	Time-Peak (mins)
		(m³)	(m³)	(m³)	
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

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



Rainfall Details

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 Area Diagram

Total Area (ha) 0.013

Time (mins) Area
From: To: (ha)

0 4 0.013

Rainwater Harvesting Ltd		Page 4
Unit A Harrier Park Orton Southgate Peterborough PE2 6YQ		
Date 29/11/2024 16:13 File IMW HA6 3LX 20A	Designed by RainWater Checked by	
XP Solutions	Source Control 2016.1	

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

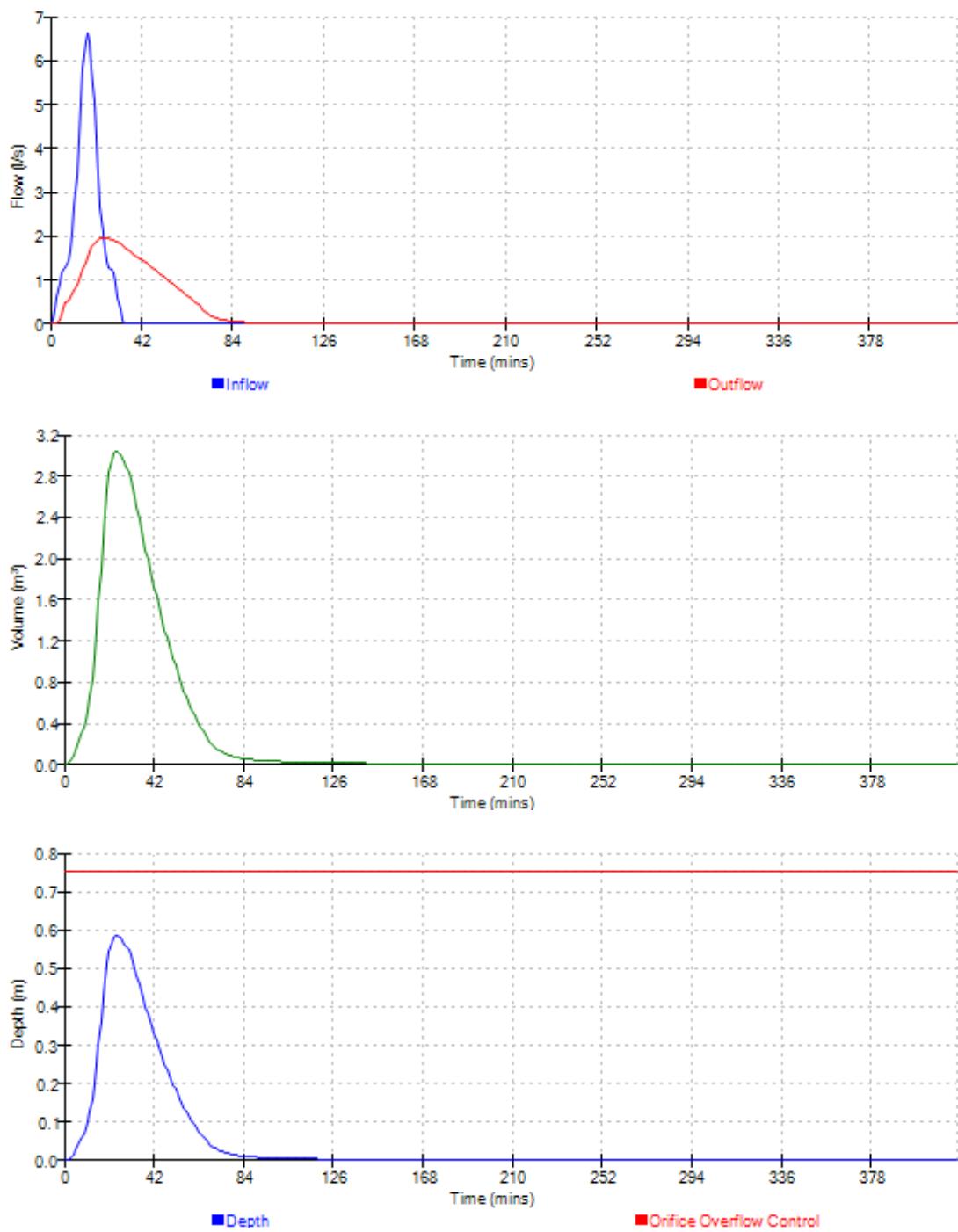
Orifice Overflow Control

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

Rainwater Harvesting Ltd		Page 5
Unit A Harrier Park Orton Southgate Peterborough PE2 6YQ		
Date 29/11/2024 16:13 File IMW HA6 3LX 20A	Designed by RainWater Checked by	
XP Solutions	Source Control 2016.1	



Event: 30 min Winter



Notes on Attenuation

(1) 3000 L/m of Surface Water Storage provided in Pour Rose Ridge Drain (HDPE) Twin Wall Corrugated Smooth Inner Wall Pipes and Couplers.

2 No 5.0m Long Ø 6m Dia Pipes plus 1.7m Baffles Space 330L

(2) Outfall to Existing MH on Controlled by Orifice Chamber (WASP) or Similar Approved Ø 6m Dia with 0.3m Surge Min 1.80 Falls into MH02 with 100mm Connection flow limited to 20L/s via Orifice Rate (3mm diameter)

Both in and out ends of the Ridge Rain Closed with Sealing Plates with Sealed 150mm connection in 100mm connection out attenuation

(3) Connection at open end of pipe connected with 90° 600mm junctions closing off pipe ends

If enclosure is too narrow to allow this use sealing plates with 300mm twin wall pipe going to proposed pipe No 22

No 20 GLV

Combined Drain 0.3 D

(To Be Levelled To Revert To Pipe Pipe Proposed Elevation)

Attenuation.

No 20 FRITHWOOD AVENUE

Site Boundary 20A

No 20 FRITHWOOD AVENUE

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