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Water Neutrality Strategy Rev0

Land adjacent to 26 South Street,
Partridge Green,
Horsham,
RH13 8EL

10 March 2025

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Prepared by	Checked by	Date
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This document has been prepared solely as a Water Neutrality Strategy for Mr & Mrs Kearle. Base Energy accepts no responsibility or liability for any use that is made of this document other than by the Client for the purposes for which it was originally commissioned and prepared.

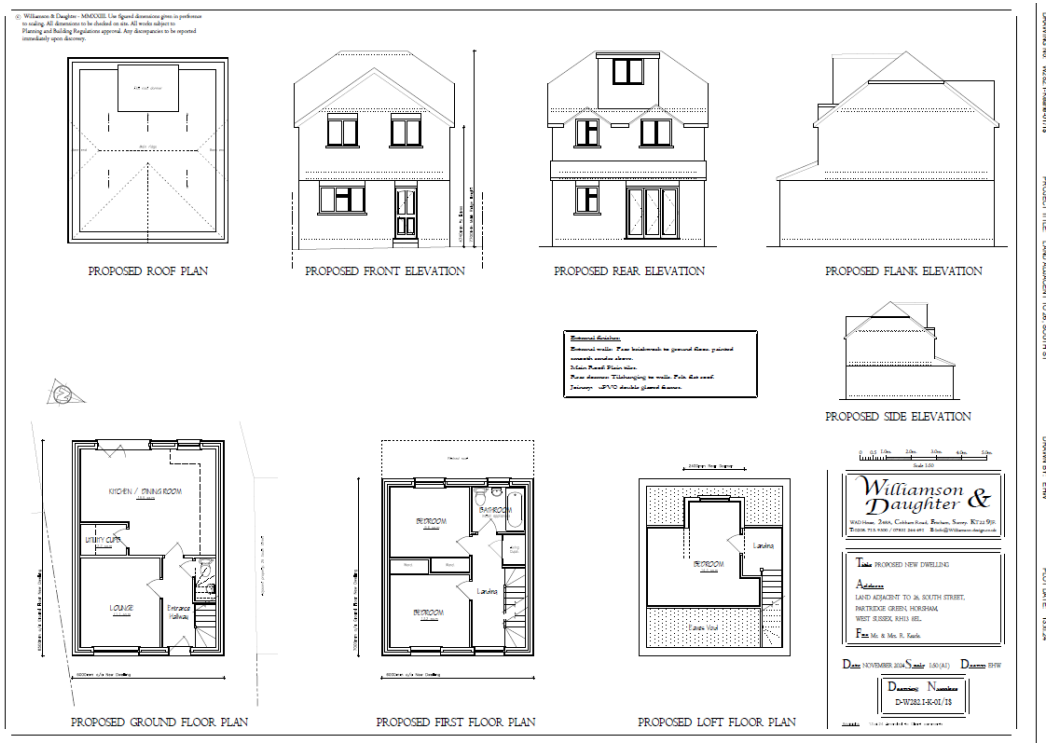
1. Introduction

This Water Neutrality Strategy (Rev0) has been prepared to support the planning application for the proposed residential dwelling on land adjacent to 26 South Street, Partridge Green, Horsham.

Site Background and Proposed Site Details

The site is a vacant portion of land adjacent to 26 South Street.

Proposals are for a 3-bedroom dwelling with associated hard and soft landscaped areas.



Water Neutrality Strategy Background

Natural England

In September 2021, Natural England issued a Position Statement to Horsham, Crawley and Chichester District Councils about the impact developments are having on water abstraction within the Sussex North water supply zone.

In short, these planning authorities have been told that applications within the zone cannot be determined until a water neutrality strategy is produced. Where a planning application is of critical importance, it can only be determined where it demonstrates water neutrality.

A copy of Natural England's Position Statement is provided in **Appendix A**.

Horsham Council

Horsham District is situated in an area of serious water stress, as identified by the Environment Agency Water Stressed Areas Classification.

Horsham District is supplied with water by Southern Water from its Sussex North Water Resource Zone. This supply is sourced from abstraction points in the Arun Valley, which includes locations such as Amberley Wild Brooks Site of Special Scientific Interest (SSSI), Pulborough Brooks SSSI and Arun Valley Special Protection Area/Special Area of Conservation and Ramsar site.

At the time of writing, Horsham District Councils (HDCs) website states:

> *All development proposals that consume mains water are potentially impacted by the Natural England Position Statement. Horsham District Council has though screened out all householder planning applications (with the exception of those proposals for annex accommodation and swimming pools), and all development granted under Schedule 2 Parts 1 and 2 of the General Permitted Development Order from having a likely significant impact on the Arun Valley, as there is no evidence that extensions or minor alterations to dwellings will directly result in an increase in water consumption.*

All other development proposals that consume mains water are now required to demonstrate water neutrality. This includes all development other than that mentioned above granted under the General Permitted Development Order- see below for further details on this. All applications for Reserved Matters must also now demonstrate water neutrality. Applications made under s.73 of the Town and Country Planning Act must consider water neutrality- this is discussed in more detail below.

Applications to discharge conditions and make amendments under s.96A of the Town and Country Planning Act are not impacted, unless the amendment would clearly increase likely water consumption. Such an amendment would be considered a material change.

As a general guide, we would expect a Water Neutrality Statement to cover the following elements:

Introduction

Explain the purpose of the statement and the reason for its submission.

Background

Outline the background to the statement. This includes details of the site, including its existing or most recent use, any extant permissions, and details of the current proposal.

Baseline Calculations

It is critical that the statement clearly establishes what the baseline water consumption rate is for the existing or most recent use. Where historic water bills for the site are not available, alternative data using the Building Regulations Part G or BREAM water calculators should be used, along with appropriate occupancy rates and consumption data for any industrial processes being undertake at the site. The data should be presented in litres per person per day. It is critical that existing baseline consumption is fully evidence to give certainty of the actual mains water being use at a site. Metered water bills are the best way to achieve this certainty.

Proposal Demand

This section will calculate what the water demands will be from the proposed development. The data should be presented in litres per person per day and reflect the average occupancy of the development. For business uses, the proposed consumption data must include consumption used for any proposed industrial processes

Water Reduction Measures

Where the proposed water consumption is higher than the baseline consumption, you must first consider reducing water consumption in the proposed development through installing more water efficient fixtures and appliances. Completion of the Part G or BREEAM water calculators will help demonstrate the savings to be made. Where highly efficient appliances are to be installed, details of an appliance that meets that high standard of water consumption should be submitted to demonstrate the efficiencies are achievable.

Once all efficiency opportunities have been exhausted, water re-use through rainwater harvesting and/or greywater/blackwater recycling should be then considered. Further details below.

Offsetting measures

The use of efficiencies and rain/grey water harvesting technologies alone will be unlikely to make some developments water neutral. In most such cases, such as new build on greenfield sites, offsetting measures to reduce water consumption on other land and property will be required in order to achieve water neutrality. Where offsetting on third party land, full details and evidence of the third party landowner's existing water consumption must be submitted, along with the full details of the efficiencies to be implemented and how the efficiencies will be maintained in future (this could be through a maintenance contribution to the landowner for instance). This can include existing water bills and evidence of the efficiency of the existing fixtures and appliances. Where offsetting is to be carried out on third party land, that landowner will be required to enter into a legal agreement to install and retain the measures in perpetuity.

Offsetting cannot be carried out on third party land that does not take its water from the same North West Sussex Supply Zone.

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Conclusion

It is important the conclusion summarises the water figures in a clear manner and sets out clearly the detail of any mitigation strategy necessary to achieve neutrality.

2. Water Neutrality Strategy

Baseline Calculations

As previously detailed, the site is a vacant portion of land. The current water demand is nil.

Proposal Demand

Residential Dwellings

Proposals are for a 3-bedroom dwelling.

Horsham Council has provided average occupancy data, as follows:

- One-bedroom dwellings: 1.32 occupants
- Two-bedroom dwellings: 1.88 occupants
- Three-bedroom dwellings: 2.47 occupants
- Four-bedroom dwellings: 2.86 occupants
- Five-bedroom dwellings: 3.09 occupants

Therefore, the average occupancy is 2.47.

In order to calculate the proposed water usage from the dwellings, Part G Water Efficiency Calculations have been carried out (**Appendix B**), which is based on the following rates to be achieved through highly efficient fixtures and fittings:

WC (Dual flush)	Flush volume (litres)	4.0 / 2.6
Taps (Other – i.e. not kitchen)	Flow Rate (litres/ min)	6.0
Taps (Kitchen)	Flow Rate (litres/ min)	6.0
Bath	Capacity to Overflow (litres)	180
Dishwasher	Flow Rate (litres /place setting)	1.0
Washing Machine	Flow Rate (litres/ Kg Dry Load)	6.2
Shower	Flow Rate (litres/ min)	8.0

On this basis, the proposed total internal water consumption has been calculated as 99.17 litres/person/day.

The dwelling will have an average occupancy of 2.47, and therefore the total daily water consumption is 244.94 litres/day/dwelling.

Water Reduction Measures – Rainwater Harvesting

The sanitaryware specifications proposed for the dwelling is based on highly efficient fixtures and fittings.

In order to reduce the total daily water consumption of 244.94 litres/day/dwelling, a rainwater harvesting system is to be installed.

Rainwater Harvesting Storage and 35 Day Drought Storage

Horsham Council and Natural England require the rainwater harvesting capacity to include 35-day drought storage - the storage capacity should be reflective of both the future development's water usage (that will be provided via rainwater harvesting) and the 35 day drought storage requirement.

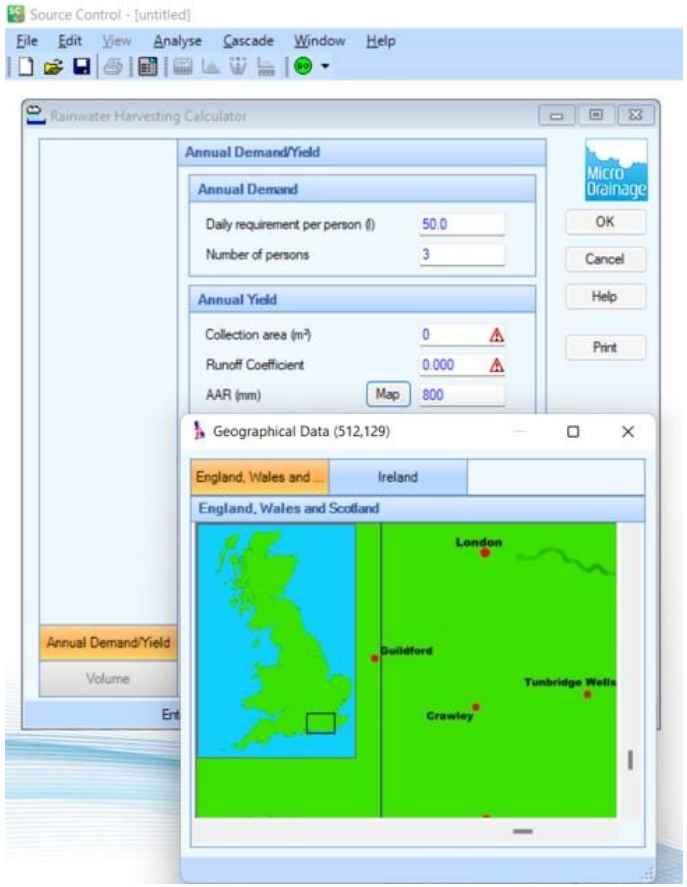
Following consultation with Natural England, Natural England has confirmed the calculations as follows:

3 Bed Dwelling
Proposed daily water usage of 244.94 litre/ person/day
35 (days of drought storage) x 244.94L = 8572.9 litres

Rainwater Harvesting Tank

On this basis, it is proposed that a rainwater harvesting tank of at least 8572.9 litres is installed.

An example of this is Harlequin PW9250VT Vertical Potable Water Tank which has a storage capacity of 9255 litres.



Harlequin potable above ground water tanks are suitable for drinking water intended for human consumption. Harlequin potable water tanks are manufactured from a WRAS approved polymer and therefore suitable for storing drinking water at Agricultural, Commercial, Domestic and Industrial premises.

Full details are provided in **Appendix C**.

Horsham Council Rainwater Harvesting Guidance

The most recent guidance issued by Horsham Council (dated 10 May 2023) states:

Rainwater (and greywater) harvesting schemes can be highly contaminated, therefore in all cases where such systems are to be used within dwellings, even for non-potable uses such as toilets and washing machines, we will require details on (but not limited to) the likely contaminants, type of treatment that will be installed, the proposed sampling and testing regime, detail on the maintenance, servicing and cleaning of the tanks, water treatment equipment, pumps, all pipework etc for the lifetime of the development, and measures to ensure continuity of supply.

BS 8515:2009 Rainwater harvesting systems - Code of practice protects the public by ensuring consistency of quality, installation, testing and maintenance of rainwater harvesting systems for non-potable (non-drinkable) water applications in the UK.

The systems will be installed in accordance with BS 8515:2009.

Above ground tanks

Above ground tanks will be securely mounted and supported on a firm level base capable of withstanding the weight of the tank when filled with water to the rim.

Contaminants

Hard roof surfaces are considered the most suitable for rainwater collection, although many common roofing materials may also be used.

Most collection surfaces are likely to be affected by some form of contamination, e.g. animal and bird faeces, soil, grit, hydrocarbons and various chemicals.

Pipes will not discharge into open gullies where splashing or additional contamination could occur.

All tanks will be fitted with lids that protect the water from contamination and prevent inadvertent human entry, and will be installed so that the stored water does not attain temperatures that could encourage multiplication of Legionella.

Water quality and Testing Regime

BS 8515:2009 states that frequent water sample testing is not necessary; however, observations for water quality should be made during maintenance visits to check the performance of the system. Tests should then be undertaken to investigate the cause of any system that is not operating satisfactorily and any complaints of illness associated with water use from the system.

BS 8515:2009 also states that testing immediately following the commissioning of systems is not recommended as systems are

Table 1 **Guideline values (G) for bacteriological monitoring**

Parameter	Guideline values by use		System type
	Pressure washers and garden sprinklers	Garden watering and WC flushing	
Escherichia coli number/100 mL	1	250	Single site and communal domestic systems
Intestinal enterococci number/100 mL	1	100	Single site and communal domestic systems
Legionella number/litre	100	—	Where analysis is necessary as indicated by risk assessment (see Clause 8)
Total coliforms number per 100 mL	10	1 000 for garden watering and WC flushing	Single site and communal domestic systems

Table 2 **Guideline values for general system monitoring**

Parameter	Guideline values	System type
Dissolved oxygen in stored rainwater	>10% saturation or >1 mg/L O_2 (whichever is least) for all uses	All systems
Suspended solids	Visually clear and free from floating debris for all uses	All systems
Colour	Not objectionable for all uses	All systems
Turbidity	<10 NTU for all uses (<1 NTU if UV disinfection is used)	
pH	5–9 for all uses	Single site and communal domestic systems
Residual chlorine	<0.5 mg/L for garden watering <2 mg/L for all other uses	All systems, where used
Residual bromine	<2 mg/L for all uses	All systems, where used

Table 3 **Interpretation of results from bacteriological monitoring**

Sample result [A]	Status	Interpretation
<G	Green	System under control
G to 10G	Amber	Re-sample to confirm result and investigate system operation
>10G [B]	Red	Suspend use of rainwater until problem is resolved

[A] G = guideline value (see Table 1).

[B] In the absence of *E.coli*, *Intestinal enterococci* and *Legionella*, where relevant, there is no need to suspend use of the system if levels of coliforms exceed 10 times the guideline value.

NOTE It might be necessary to include some type of UV or chemical disinfection to attain the more stringent bacteriological standards suggested, in situations where higher exposure might occur or for systems within public premises (see the Health and Safety Executive (HSE) Approved Code of Practice and guidance L8 [14]).

Table 4 **Interpretation of results from system monitoring [A]**

Sample result [B]	Status	Interpretation
<G	Green	System under control
>G	Amber	Re-sample to confirm result and investigate system operation

[A] When monitoring pH, the system is considered to be under control ("green" status) when levels are within the range recommended in Table 2. If levels are outside this range, the system status becomes "amber" and re-sampling is necessary. Where colour or suspended solids are present at levels which are objectionable, it is necessary to investigate the system operation to resolve the problem.

[B] G = guideline value (see Table 1).

generally filled with public mains water in order to facilitate the testing of components, and water quality is therefore not representative of the normal rainfall collection.

Water quality should be measured in relation to the guideline values given in Table 1 for parameters relating to health risk, and Table 2 for parameters relating to system operation, which provide an indication of the water quality that a well-designed and maintained system is expected to achieve for the majority of operating conditions.

The results of bacteriological monitoring should be interpreted with reference to Table 3. The results of general system monitoring should be interpreted with reference to Table 4.

NOTE Water quality will fluctuate particularly following rainfall events when there might be a short-term change.

Filtration and treatment
Filtration should be incorporated in the system before the collected rainwater enters the main body of stored water, to prevent debris accumulating in the tank e.g. a filter may be placed in the collection pipework upstream of the tank.

The filter system will include a filter which:

a) is water and weather resistant;
b) is removable and readily accessible for maintenance purposes;
c) has an efficiency of at least 90%;
d) passes a maximum particle size of <1.25 mm.

Additionally, to prevent any other floating debris from entering the distribution system, the storage tank should be fitted with a calmed inlet.

Where feasible, a floating extraction point from the tank should be used, which is approximately 100 mm to 150 mm below the surface of the water.

Guttering and collection pipework

Roof outlets, guttering and pipework will function as an integral part of the whole system, with access for routine maintenance and cleaning. Collection pipework will allow the rainwater to flow from the collection surface to the storage tank by gravity or syphonic action.

Pipework will be free draining to avoid stagnation and should prevent contaminated water entering the system from other sources.

In addition, sealed gullies will be used at ground level to minimize the risk of pollutants entering the system.

NOTE under BS 8515:2009 Conventional rainwater goods and drainage pipes may be used.

Overflow and drainage

An overflow will be fitted to all tanks/cisterns to allow excess water to be discharged during extreme rainfall events. The overflow will be such that any backflow is prevented and vermin are unable to enter the tank/cistern. Overflows fitted to above ground tanks/cisterns will be screened.

The capacity of outlet pipe on the overflow will be equal to or greater than the capacity of the inlet pipe.

Where appropriate, the overflow to a drain or sewer will be fitted with an anti-surcharge valve conforming to BS EN 13564 (all parts).

Commissioning

Commissioning of the system can only be undertaken by qualified personnel authorised by the manufacturer. The system requires flushing and testing, prior to handover, to ensure watertightness of the pipework and containers. There should be no cross-connections in accordance with BS 6700 and the manufacturer's instructions - running coloured dye through the system in conjunction with a visual check is acceptable. All pipework and fittings should be tested to and comply with BS 6700:2006, 6.1.12.3. Electrical wiring should be tested to BS 7671.

Labelling and identification

Where two or more water systems, i.e. potable and non-potable, supply one property, all pipework, fittings and points of use for the rainwater harvesting system will be marked and/or labelled, in order to facilitate identification, to prevent inadvertent consumption or cross-connection between the systems, and to avoid operating errors

Maintenance

Human entry into tanks should be avoided, wherever possible. Where entry is essential, it should only be undertaken by trained personnel with personal protection equipment suitable for confined spaces.

Maintenance procedures should be in accordance with manufacturer's maintenance recommendations.

In the absence of any manufacturer's recommendations, the maintenance schedule given in Table 5 should be followed. The maintenance intervals listed here are for initial guidance but the frequency should be modified in the light of operational experience.

A log should be kept of inspections and maintenance.

Please note: the advice of the manufacturer/ supplier, and Building Control will be followed.

Table 5 Maintenance schedule

System component	Operation	Notes	Frequency [A)]
Gutters/downpipes	Inspection/ Maintenance	Check that there are no leaks or blockages due to build up of debris; clean the gutters if necessary	Annually
Filter	Inspection/ Maintenance	Check the condition of the filter and clean, if necessary	Annually
Storage tank/cistern	Inspection	Check that there are no leaks, that there has been no build up of debris and that the tank is stable and the cover correctly fitted	Annually
	Maintenance	Drain down and clean the tank	Every 10 years
Pumps and pump control	Inspection/ Maintenance	Check that there are no leaks and that there has been no corrosion; carry out a test run; check the gas charge within the expansion vessel or shock arrestors	Annually
Back-up water supply	Inspection	Check that the back-up supply is functioning correctly, that there are no leaks and that the air gaps are maintained	Annually
Control unit	Inspection/ Maintenance	Check that the unit is operating appropriately, including the alarm function where applicable	Annually
Water level gauge	Inspection	Check that the gauge indication responds correctly to the water level in the tank	Annually
Wiring	Inspection	Visually check that the wiring is electrically safe	Annually
Pipework	Inspection	Check that there are no leaks, that the pipes are watertight and that overflows are clear	Annually
Markings	Inspection	Check that warning notices and pipework identification are correct and in place	Annually
Support and fixings	Inspection/ Maintenance	Adjust and tighten, where applicable	Annually
UV lamps	Inspection/ Maintenance	Clean and replace, if necessary	Every 6 months

[A)] These frequencies are recommended if no information is given by the manufacturer.

Offsetting measures

The final step to achieving water neutrality is offsetting any residual demand by making savings in the existing local community. Importantly, these savings must be made within the same water resource zone.

However, in this instance the proposed development is achieving water neutrality through the specification of highly efficient fixtures, and rainwater harvesting.

Therefore, offsetting measures would not be required.

3. Conclusions

This Water Neutrality Strategy (Rev0) has been prepared to support the planning application for the proposed residential dwelling on land adjacent to 26 South Street, Partridge Green, Horsham.

The site is a vacant portion of land adjacent to 26 South Street.

Proposals are for a 3-bedroom dwelling with associated hard and soft landscaped areas.

The current water demand is nil.

A water efficiency calculation has been carried out, based on highly efficient fixtures and fittings. The proposed total internal water consumption has been calculated as 99.17 litres/person/day. The dwelling will have an average occupancy of 2.47, and therefore the total daily water consumption is 244.94 litres/day/dwelling.

In order to reduce the total daily water consumption of 244.94 litres/day/dwelling, a rainwater harvesting system is to be installed.

Horsham Council and Natural England require the rainwater harvesting capacity to include 35-day drought storage - the storage capacity should be reflective of both the future development's water usage (that will be provided via rainwater harvesting) and the 35 day drought storage requirement.

Following consultation with Natural England, Natural England has confirmed the calculations as follows:

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However, in this instance the proposed development is achieving water neutrality through the specification of highly efficient fixtures, and rainwater harvesting.

Therefore, offsetting measures would not be required.

Please note: the advice of the manufacturer/ supplier, and Building Control will be followed.

Appendices

Appendix A - Natural England Position Statement – September 2021

Natural England's Position Statement for Applications within the Sussex North Water Supply Zone

September 2021 – Interim Approach

Please take the following as Natural England's substantive advice for all applications which fall within Sussex North's Water Supply Zone.

Sussex North Water Supply Zone

Arun Valley SPA, SAC and Ramsar Site- Sussex North Water Supply Zone

The Sussex North Water Supply Zone includes supplies from a groundwater abstraction which cannot, with certainty, conclude no adverse effect on the integrity of;

- Arun Valley Special Area Conservation (SAC)
- Arun Valley Special Protection Area (SPA)
- Arun Valley Ramsar Site.

As it cannot be concluded that the existing abstraction within Sussex North Water Supply Zone is not having an impact on the Arun Valley site, we advise that developments within this zone must not add to this impact. This is required by recent caselaw, Case C-323/17 People over wind and Sweetman. Ruling of CJEU (often referred to as sweetman II) and Coöperatie Mobilisation for the Environment and Vereniging Leefmilieu Case C-293/17 (often referred to as the Dutch Nitrogen cases).

Between them these cases require Plans and Projects affecting sites where an existing adverse effect is known (i.e. the site is failing its conservation objectives), to demonstrate certainty that they will not contribute further to the existing adverse effect or go through to the latter stages of the Regulations (no alternatives IROPI etc).

Developments within Sussex North must therefore must not add to this impact and one way of achieving this is to demonstrate water neutrality.

In addition, the Gatwick Sub regional Water Cycle Study concluded that water neutrality is required for Sussex North to enable sufficient water to be available to the region.

The definition of water neutrality is the use of water in the supply area before the development is the same or lower after the development is in place.

Strategic approach

Natural England has advised that this matter should be resolved in partnership through Local Plans across the affected authorities, where policy and assessment can be agreed and secured to ensure water use is offset for all new developments within Sussex North. To achieve this Natural England is working in partnership with all the relevant authorities to secure water neutrality collectively through a water neutrality strategy.

Whilst the strategy is evolving, Natural England advises that decisions on planning applications should await its completion. However, if there are applications which a planning authority deems critical to proceed in the absence of the strategy, then Natural England advises that any application needs to demonstrate water neutrality. We have provided the following agreed interim approach for demonstrating water neutrality;

Minimising water use of new builds.

- Complete a water budget (based on occupancy)
- All new builds to demonstrate that they can achieve strict water targets (e.g., 85L/pp/day*)

  This can be achieved by measures such as:

- Grey water recycling (advantage of being reliable in hot dry weather);
- Rainwater harvesting;
- Water efficient fixings (such as shower aerators) to demonstrably reduce demand-this would need to be suitably certain.

In addition, water offsetting is required

- One way to achieve this is retrofitting of council owned properties/commercial buildings-located within Sussex North. Examples include:

- Grey water recycling- (for example there are clear opportunities for commercial properties).
- Rainwater harvesting of commercial settings;
- Installation of water reduction fittings in Council-owned buildings.

These measures need to be implemented until such time as a more sustainable water supply has been secured.

It will also need to be ensured that measures are not already proposed (for example in Southern Water's Management Plan) to avoid double-counting.

Any mitigation must be suitably certain in order to comply with the Habitats Regulations and Caselaw.

If the application cannot demonstrate, through an appropriate assessment, the required water neutrality, we advise that it is either revised to achieve this in line with the above or awaits completion of the strategic approach.

The securing of water neutrality is a matter which needs to be resolved at a strategic level and Natural England is working with the relevant authorities and the water company to achieve this. In light of this, Natural England will not be engaging with individual planning applications whilst the strategy is evolving.

***This this is the reasonably achievable figure with the above measures based on the early data from the strategic solution and may be subject to change as the strategic solution evolves.**

Appendix B - Part G Water Efficiency Calculation for Dwellings

Installation Type	Unit of Measure	Capacity/Flow rate (1)	Use Factor (2)	Fixed use (litres/person/day) (3)	Litres/person/day = [(1)x(2)] + (3) (4)
WC (single flush)	Flush Volume (litres)		4.42	0.00	0
WC (dual flush)	Full flush Volume (litres)	4	1.46	0.00	5.84
	Part flush Volume (litres)	2.6	2.96	0.00	7.70
WC (multiple fittings)	Average effective flushing Volume (litres)		4.42	0.00	0
Taps (excluding kitchen/utility room taps)	Flow rate (litres/min)	6.00	1.58	1.58	11.06
Bath (where shower also present)	Capacity to overflow(litres)	180.00	0.11	0.00	19.80
Shower (where bath also present)	Flow Rate(litres / minute)	8.00	4.37	0.00	34.96
Bath Only	Capacity to overflow(litres)		0.50	0.00	0
Shower Only	Flow Rate (litres/minute)		5.60	0.00	0
Kitchen/Utility room sink taps	Flow rate (litres/minute)	6.00	0.44	10.36	13.00
Washing Machine	(Litres/kg dry load)	6.20	2.1	0.00	13.02
Dishwasher	(Litres/place setting)	1.00	3.6	0.00	3.60
Waste disposal unit	(Litres/use)	☐ Present	3.08	0.00	0
Water Softener	(Litres/person/day)		1.00	0.00	0
	(5)	Total Calculated use (litres/person/day) =SUM(column 4)			108.98
	(6)	Contribution from greywater (litres/person/day)			0
	(7)	Contribution from rainwater (litres/person/day)			0
	(8)	Normalisation factor			0.91
	(9)	Total internal water consumption = [(5)-(6)-(7)]x(8) (litres/person/day)			99.17
	(10)	External water use			5.0
	(11)	Total water consumption (Building Regulation 17.K) =(9)+(10)(litres/person/day)			104.2

Installation Type	Make/Model (mandatory)	Litres/Person/Day
WC (dual flush)	TBC	13.54
Taps	TBC	11.06
Baths (shower(s) present)	TBC	19.80
Showers (bath(s) present)	TBC	34.96
Kitchen Taps	TBC	13.00
Washing Machines	TBC	13.02
Dishwasher	TBC	3.60

Terms and Conditions
System Requirements

Appendix C - Harlequin PW9250VT Vertical Potable Water Tank Manufacturers Literature

Harlequin

Rotationally Moulded Storage Solutions

CLAREHILL PLASTICS LTD WARRANTY

PRODUCT REGISTRATION

To register your Harlequin product and receive an extended warranty, please visit us at **www.harlequinplastics.co.uk** where you can submit this form online.

Alternatively, you can detach this form and return it by post to us at : Warranty Department, Clarehill Plastics Ltd, 21 Clarehill Road, Moira, Co Armagh, BT67 OPB.

- Warranty will only apply to the original purchaser.
- In order to qualify for the extended guarantee, this product must be installed and commissioned by a competent person and the product registration card returned within 30 days of installation.
- Proof of purchase and evidence of annual inspection by a registered competent person will be required in the event of a claim.

TANK OR PRODUCT PURCHASED

Serial Number :

Model :

PURCHASED BY

Name:

Address:

Telephone:

Email:

INSTALLED BY

Tank Installer Name:

OFTEC Number:

Address:

PLACE OF PURCHASE

Purchased From:

Address:

AGREEMENT

I have read and understand the terms and conditions of the warranty provided by Clarehill Plastics Ltd. I acknowledge that if I fail to comply with the terms and conditions, I will void the product warranty.

Signature: **Date:**

Print:

WARRANTY – TERMS AND CONDITIONS

Subject to the conditions below, your product is supplied with a warranty against material defects in workmanship or materials from the date of manufacture for the following warranty period:

PRODUCT	WARRANTY PERIOD IF REGISTERED	WARRANTY PERIOD IF NOT REGISTERED
BUNDED HEATING OIL TANKS	10 years	5 years
BUNDED FUEL STATIONS	10 years	5 years
BUNDED ADBLUE FUEL STATIONS & TANKS	10 years	5 years
BUNDED WASTE OIL TANKS	10 years	5 years
BUNDED BIOFUEL STATIONS & TANKS	2 years	1 year
SINGLE SKIN HEATING OIL TANKS	2 years	1 year
ALL ABOVE GROUND WATER TANKS	10 years	2 years
COAL BUNKERS	3 months	3 months
ACCESSORIES		**WARRANTY PERIOD**
FUEL STATION SUCTION/DELIVERY HOSES		90 days
ALL OTHER FUEL STATION ACCESSORIES		1 year
NIHE INSTALLED APOLLO OIL MONITORS		5 years
ALL OTHER APOLLO OIL MONITORS		1 year

The warranty is subject to the following conditions:
To qualify for the extended guarantee this product must be installed by a registered competent person in accordance with prevailing statutory requirements. The period of the warranty will commence from the date of invoice. The warranty is provided to the original purchaser only. Proof of purchase and evidence of annual inspection by a registered competent person will be required in the event of a claim.

To obtain the longer warranty period for your product, you must register the purchase and installation of your product with us within 30 days from date of purchase. To register, please complete and submit our registration form. Registration forms can be obtained and submitted online at www.harlequinplastics.co.uk or by post from/to Clarehill Plastics Ltd, 21 Clarehill Road, Moira, BT67 0PB. Failure to register the purchase and installation of your product (or incomplete registration) within the 30 day period will mean that the shorter warranty period (above) only will apply to your product.

During the warranty period, any component of your product which is proved to contain any material defect in workmanship or materials will be exchanged or repaired, at our sole discretion, by us free of charge for material or labour.

In respect of your product, the warranty does not cover (and we will not accept responsibility for) any consumable items, any component which has not been manufactured by us (please refer to the manufacturer's warranty supplied with the relevant component), fair wear and tear, or any fault:
- in respect of any component not forming part of your product; or
- arising from any cause other than defect in original workmanship or materials; or
- caused by improper installation, maintenance, neglect, misuse or wilful or accidental damage; or
- caused by alteration or repair by you or by a third party who is not one of our authorised repairers; or
- caused by non-observance of either any applicable statutory requirement or any of the instructions contained in the installation and operating instructions appropriate to your product, and in this respect, we would draw particular attention to the fact that your product must not be used in conditions which are either below -17°C or which are above 35°C without protection from exposure to direct sunlight.

Your product has been used only for the purpose for which it is designed, and that any terms and conditions held with your installer have also been adhered to.
To the maximum extent permitted by UK law:
- the warranty is given in lieu of all other warranties, express or implied by statute or common law, including implied warranties or conditions of satisfactory quality and fitness for a particular purpose, provided that this warranty is in addition to your legal rights in relation to goods that are faulty or not as described; and
- we shall not in any circumstances be liable to you or any other party, whether in contract, tort (including for negligence and breach of statutory duty howsoever arising), misrepresentation (whether innocent or negligent), restitution or otherwise, for any special, indirect or consequential loss or damage.

FOR ALL OIL TANKS AND FUEL STATIONS

Risk Assessment

- Prior to installation, a risk assessment should be completed in accordance with OFTEC Technical Instruction Book 3.

Installation Instructions

This tank must be installed by a registered competent person in accordance with prevailing statutory requirements.

- This tank must be supported over its entire base by level, fireproof materials capable of supporting the weight of the tank and its contents.
- Always clamp the feed pipe to the base or plinth.
- For bottom outlet tanks, the outlet should be firmly secured when connecting oil supply line fittings.
- This tank should be inspected annually by an OFTEC qualified (or similarly competent) person in accordance with OFTEC Technical books 2 and 5. This inspection must be recorded.
- When lightly loaded, this tank should be protected from high winds.
- Suitable for the storage of fuel types C1 (Paraffin), C2 (Kerosene), A2 & D (Agri and Derv) to BS 2869; and non-potable water.
- NOT SUITABLE for connection to a diesel delivery system incorporating a trigger nozzle and flexible delivery hose.
- NOT SUITABLE for the storage of potable water.
- NOT SUITABLE for underground installation.

HARLEQUIN PLASTICS from Clarehill Plastics Ltd
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Harlequin

WATER
Potable & Non Potable Storage

Harlequin StorageTanks
RELIABLE CONTAINERS

Harlequin Water Tanks

Manufactured for over 20 years, Harlequin Water Tanks are the best in class. Providing both aboveground potable and non-potable water tanks, Harlequin also manufacture water tanks for underground non-potable storage. Harlequin's Water Tanks range from 650 litres right up to 9250 litres, with all potable tanks being KIWA Watertec and WRAS approved.

Potable Tanks

Potable water storage tanks have been designed to store water which is suitable for all potable applications. All Harlequin Potable water tanks have been approved by KIWA Watertec and WRAS.

Non Potable Tanks

Non Potable Water storage tanks are designed to hold water for non-potable applications. Harlequin Non-Potable water tanks are available for above and below ground storage.

Benefits of a Harlequin Water Tank:

- **Various Applications** - Can be used for agricultural, domestic, commerical or industrial applications.
- **KIWA & WRAS Approved** - All Harlequin potable water tanks have been confirmed to comply with UK Water Supply Regulations 1999, Water Byelaws 2004 Scotland and Water Supply Regulations (Northern Ireland).
- **Non Corrosive** - Manufactured from Medium Density Polyethylene (MDPE) your Harlequin tank will not corrode.
- **Underground Option** - Underground water tanks provide discreet storage and are popular for smaller gardens and sensitive landscapes.
- **Slimline & Low Profile Options** - For more awkward installations we provide slim and low to ground tank designs.
- **Protection against Sunlight** - They are manufactured from UV stabilised polymer protecting your tank against potentially damaging effects of sunlight.

WRAS APPROVED PRODUCT

All Harlequin Potable Water Tanks are approved by KIWA Watertec and WRAS.

kiwa approved product
UK WATER SUPPLY REGULATIONS

ABOUT HARLEQUIN MFG

Being one of Europe's largest manufacturers of rotationally moulded plastic tanks, we've been at the forefront of product developments for over 35 years. From our base in Northern Ireland we design, manufacture and deliver our tanks all over the world.

With your Harlequin tank you can be assured you have the best solution for your needs. Our unrivalled reputation for quality is backed up by our 9001, 14001 and 18001 Management System Certifications.

Visit our website to find out about our full range of products:

Fuel/Diesel Tanks | Hot Water Storage | AdBlue Tanks | Water Tanks | Rainwater Harvesting | Sewage Treatment | Bunkers

Follow Us:
@HarlequinMFG

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For the latest product information give us a call or visit our website:

T 028 9261 1077 E info@harlequin-mfg.com
www.harlequin-mfg.com

Harlequin®
MANUFACTURING FOR TOMORROW

Aboveground

PW = Potable NP = Non-Potable
***moulded in lifting eyes**

The Harlequin range of aboveground water tanks are available as potable or non-potable. The tanks are suitable for Agricultural, Domestic, Commercial and Industrial purposes.

650LT PW NP
SLIMLINE

Length	1,510mm
Width	525mm
Height	1,160mm
Capacity	673 litres
Weight	46kg

920LT PW NP
SLIMLINE

Length	1,530mm
Width	715mm
Height	1,165mm
Capacity	951litres
Weight	58kg

1100LT PW NP
SLIMLINE

Length	1,650mm
Width	690mm
Height	1,420mm
Capacity	1,097litres
Weight	60kg

1200LT PW NP
LOW PROFILE

Length	1,795mm
Width	1,250mm
Height	1,020mm
Capacity	1,170litres
Weight	58kg

1400LT PW NP

Diameter	1,290mm
Height	1,400mm
Capacity	1,417litres
Weight	38kg

1800LT* PW NP

Diameter	1,400mm
Height	1,570mm
Capacity	2,043litres
Weight	50kg

2700LT* PW NP

Diameter	1,580mm
Height	1,760mm
Capacity	2,817litres
Weight	65kg

3800LT* PW NP

Diameter	1,800mm
Height	1,880mm
Capacity	3,915litres
Weight	85kg

5700LT* PW NP

Diameter	2,000mm
Height	2,290mm
Capacity	6,100litres
Weight	120kg

7500LT* PW NP

Diameter	2,085mm
Height	2,530mm
Capacity	7,360litres
Weight	170kg

9250LT* PW NP

Diameter	2,325mm
Height	2,510mm
Capacity	9,255litres
Weight	180kg

Standard with all Water Tanks:

- Made from medium density polyethylene
- 2” outlet; 2” BSP(F) thread
- 2” screened vent

Access Points - The 650LT and 920LT have a 4” access opening with screw cap. The 1100LT has a 12” access lid. All other tanks have a 500mm access opening with manhole lid.

Underground

A popular choice for small gardens and sensitive landscapes, a Harlequin Underground Water Tank offers you a discreet storage option. Underground water tanks are **not suitable for potable water**.

1400UGW

Length	2,020mm
Width	1,140mm
Height	1,940mm
Capacity	1,465litres
Weight	120kg

2500UGW

Length	2,400mm
Width	1,350mm
Height	2,135mm
Capacity	2,655litres
Weight	150kg

3200UGW

Length	3,250mm
Width	1,350mm
Height	2,135mm
Capacity	3,700litres
Weight	200kg

4500UGW

Diameter	2,165mm
Height	2,915mm
Capacity	4,600litres
Weight	230kg

6000UGW

Diameter	2,365mm
Height	3,155mm
Capacity	6,100litres
Weight	280kg

Standard with all Water Tanks:

- Made from medium density polyethylene
- 500mm access opening manhole lid
- Moulded in lifting eyes

Please note: All capacities are brimful. All aboveground water tanks are available for either potable or non-potable water storage. Underground water tanks are not suitable for potable water storage. All information contained herein is understood to be correct at time of publication.

For the latest product information give us a call or visit our website:

T 028 9261 1077 E info@harlequin-mfg.com
www.harlequin-mfg.com

Harlequin® StorageTanks
RELIABLE CONTAINERS

WRAS APPROVED PRODUCT

This certifies that

HARLEQUIN MANUFACTURING LIMITED

has had the undermentioned product examined, tested and found, when correctly installed, to comply with the requirements of the United Kingdom Water Supply (Water Fittings) Regulations and Scottish Water Byelaws.

PW650SL, PW920SL, PW1100SL, PW1200LP, PW1400VT, PW1800VT, PW2700VT PW7500VT & PW10000VT RANGE OF ONE PIECE PLASTIC STORAGE CISTERNS

The certificate by itself is not evidence of a valid WRAS Approval. Confirmation of the current status of an approval must be obtained from the WRAS Directory (www.wras.co.uk/directory)

The product so mentioned will be valid until the end of:

June 2023

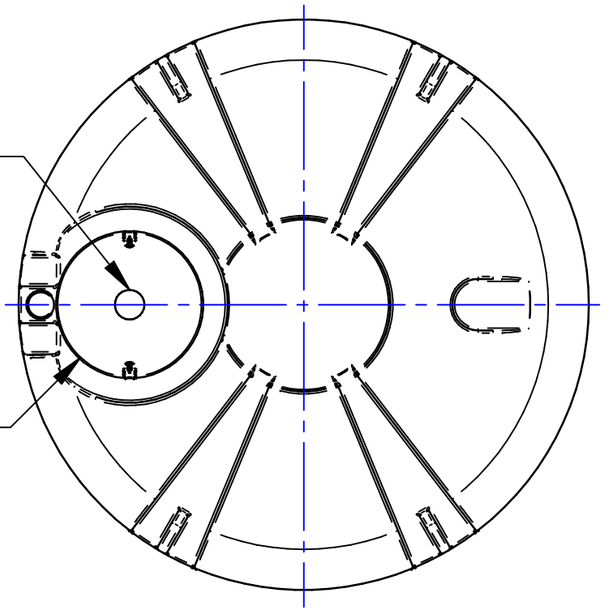
1806337

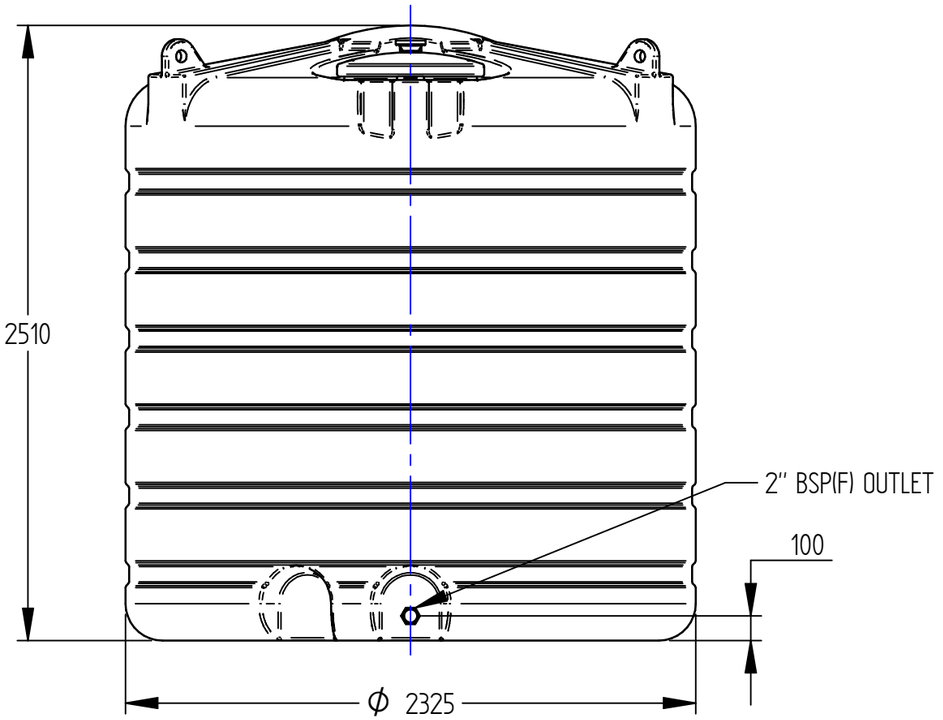
Certificate No.

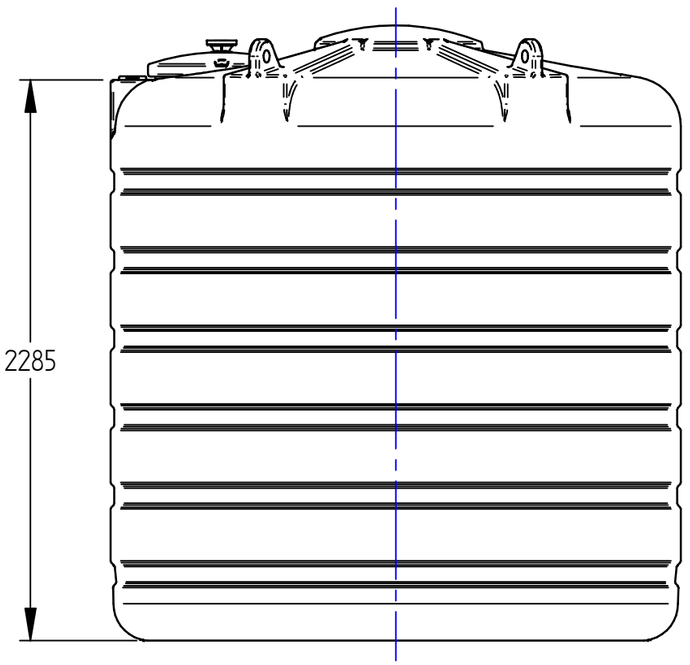
J Furnival

Secretary

Chairman, Product Assessment Group







Revision	Issue Date	ECN Reference

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MM
LINEAR TOLERANCE ± 0.25mm, ANGLES ±0.5°

DO NOT SCALE DRAWING – Use Figure Dimensions Only

IF IN DOUBT, ASK

TITLE: 9250LT Water Tank

NOTES:

DWG NO: 11-016-001
ISSUE DATE: 01/06/2019
REVISION: 00
DRAWN BY: JC
SHEET: 1 of 1
FILE NAME: 9250LT Water Tank.dft

Harlequin® MANUFACTURING FOR TOMORROW

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Harlequin® StorageTanks
RELIABLE CONTAINERS

Harlequin PW9250VT Potable Water Tank

Tank Dimensions:

- Diameter: 2325mm
- Height: 2510mm
- Brimful Capacity: 9,255L
- Net Weight: 180kg

Harlequin's range of premium quality water tanks have been available for over 20 years. The wide range of sizes includes the popular larger tanks for commercial applications and small slimline tanks convenient for domestic applications.

Standard Features:

- Moulded in one piece from durable medium density polyethylene material
- WRAS approved
- 2" outlet; 2" BSP(F) thread
- 500mm access opening with manhole lid
- 2" screened vent
- Lifting eyes

WRAS APPROVED PRODUCT

Issued By:
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