



**CHURCH LANE,
ASHINGTON,
PULBOROUGH,
WEST SUSSEX,
RH20 3DL**

Water Neutrality & Water Offsetting Report

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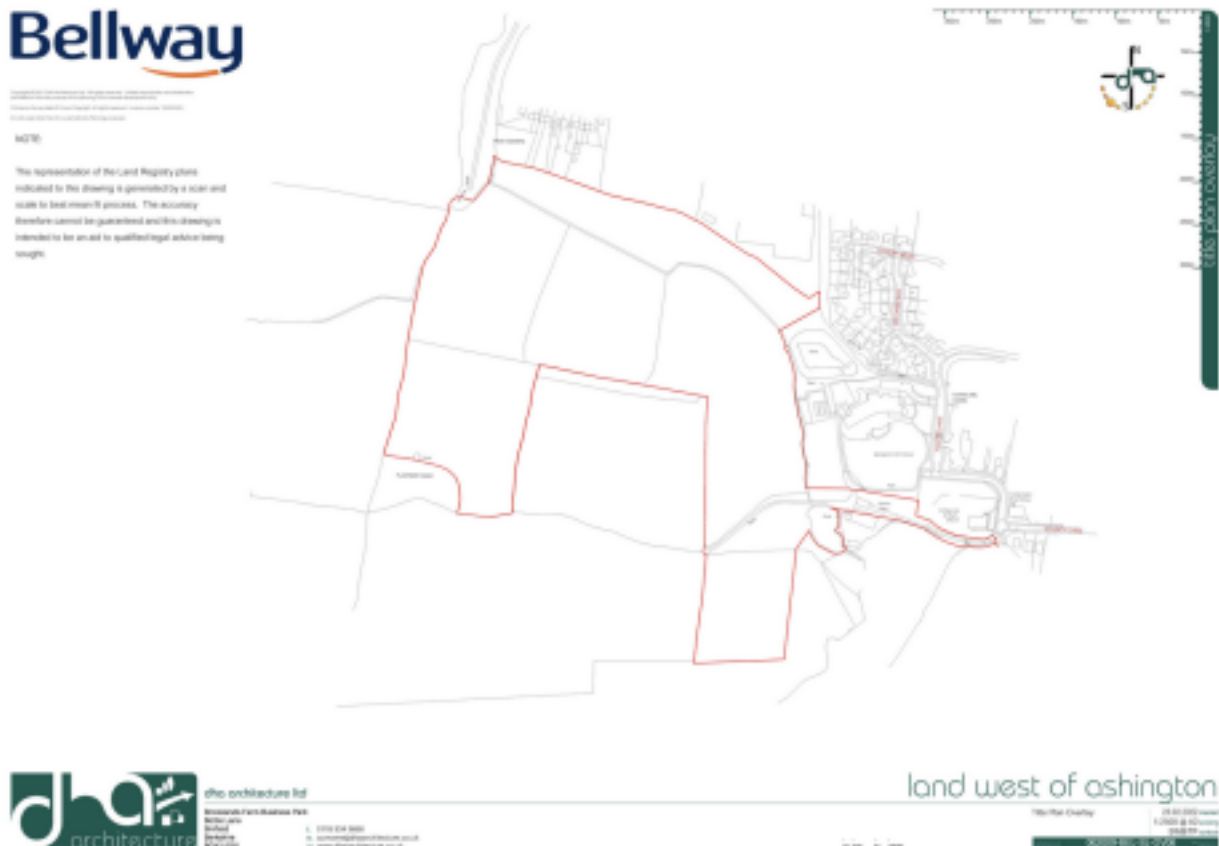
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1.0 EXISTING SITE DESCRIPTION

The existing site consists of existing farm land, measuring approximately 36 acres and forms an irregular L-shape and is situated immediately west of the Ashington in Horsham. Access to the property is directly off Church Lane which runs into the from the eastern boundary. Further east Church Lane leads into the existing properties of Ashington.



1.1 PROPOSED DEVELOPMENT SITE

The proposed development site, involves the construction of 180 residential homes along with essential infrastructure elements such as landscaping, parking facilities, highway enhancements, drainage solutions, lighting provisions, and new access points. This holistic proposal ensures compliance with factors like access, landscaping, scale, layout, and appearance. The overarching goal is to create a cohesive residential community while providing necessary amenities and access improvements.

A schedule of accommodation provided below and the proposed site layout can be found in Appendix A.

Table 1.1: Accommodation Schedule

Type of Accommodation	No. of Units	No. Of Residents/ Unit	No. Of Residents
<i>1b2p - Apartments</i>	<i>22</i>	<i>1.32</i>	<i>29.04</i>
<i>2b4p - Apartments</i>	<i>11</i>	<i>1.88</i>	<i>20.68</i>
<i>2b3p - Coach Houses</i>	<i>5</i>	<i>1.88</i>	<i>9.40</i>
<i>2b4p - Houses</i>	<i>22</i>	<i>1.88</i>	<i>41.36</i>
<i>3b5p - Houses</i>	<i>69</i>	<i>2.47</i>	<i>170.43</i>
<i>4b7p - Houses</i>	<i>48</i>	<i>2.86</i>	<i>137.28</i>
<i>5b8p - Houses</i>	<i>3</i>	<i>3.09</i>	<i>9.27</i>
Total	180		417.46

(Note: Occupancy Rates based on 2011 Census data that has been adopted by Horsham District Council

<https://www.horsham.gov.uk/planning/water-neutrality-in-horsham-district/water-neutrality-and-planning-applications>)

1.4 NATURAL ENGLAND WATER NEUTRALITY

The proposed new home development site falls within the Sussex North Water Resource Supply Zone. A recent directive from Natural England states that all new residential and commercial accommodations, with high-water uses, in this area will need to meet the new Habitat Regulations Assessment (HRA) requirement to demonstrate water neutrality. This measure has been stipulated to protect ecological flows and reduce the demand for increased water abstraction from the wells at Hardham. As this could potentially adversely impact the integrity of the Arun Valley which has the following protected designations; Sites of Special Scientific Interest, Special Protected Area, Special Area of Conservation and Ramsar.

Water neutrality needs to be demonstrated by the applicant by submitting a statement or water budget (including calculations) including all/some of the following measures:

- *Limiting water usage to 85 litres per person per day.*
- *Incorporating low water usage WCs, showers etc – these would be subject to a condition requiring a verification report to demonstrate the completion of the works before the first occupation.*
- *Incorporating rainwater harvesting.*
- *Incorporating greywater recycling.*
- *Offset the remainder of any budget.*

The HRA requirement for water neutrality covers both quantity and quality objectives. The protocol takes a catchment-wide approach highlighting that greenfield sites will be required to offset additional water demand to achieve neutrality. We have established that the site lies outside of the Solent Catchment, where there is an additional water nutrient neutrality requirement. Therefore, the only requirement applicable to the new home development site is water quantity.

2.0 EXISTING SITE WATER USE

There is no existing water usage associated with the site, as there are no facilities or infrastructure present that necessitate water consumption.

2.1 WATER SUPPLY - RAINWATER

The site is an existing farmland in which wheat and sweetcorn has been farmed over the last 5 to 10 years. These crops are rainfed crops as there is no irrigation system installed at the farm. Rainfall records for the past year have been obtained from the Center for Ecology and Hydrology and Met Office which indicate that between February 2021 and January 2022 this area received 1,133 mm of rainfall; representing 91% of typical rainfall for the south west of England according to office records.

Further details on the rainfall data are contained in Appendix B. Therefore, the current water use at the site based on the current existing use farming use can be calculated as follows:

Existing Farming Water Use:

Water demand and growing figures information obtained from the Food and Agriculture Organisation guidance included in Appendix B.

Sweet Corn

- *Growing period - 80 - 110 days*
- *Water needs - 500 - 800mm*
- *Average water needs - 650mm per season/annual*

Wheat

- *Growing period - 120 - 150 days*
- *Water needs - 450 - 650mm*
- *Average water needs - 550mm per season/annual*

1) Rainfed winter and summer crops

- a) Annual Rainfall - 1,133 mm*
- b) Annual Crop Water Demand - 550 mm*
- c) Area of Farm - 70,000 m²*
- d) Annual of Water Consumed - 38,500 m³*
- e) Annual crop water consumption - 38,500,000 litres*

As the farmed crops are only rainfed and do not benefit from an irrigation system where water is abstracted from an aquifer, reservoir or river. Therefore no historic water use can be offset.

2.1.1 2017, 2018, AND 2019 ANNUAL RAINFALL PATTERNS

During 2017 and 2018 significant areas of the UK experienced below-average rainfall, compounded by a very dry summer which resulted in rainfall being lost to high evaporation, evapotranspiration rates, and runoff resulting in reducing the groundwater recharge rates. This is highlighted in Figure 2.2 on the following page.

However, the annual rainfall in 2019 was significantly above the 1981 - 2010 average. This extreme variability in rainfall weather patterns owing to climate change makes rainwater an unreliable source of potable water supply for the proposed development. The major consideration is that when it is dry the aquifers become very susceptible to over-mining of dwindling water resources which threatens the aquatic environment and protected habitats that are dependent on natural water supply.

Figure 2.1 - 2017 Rainfall Maps

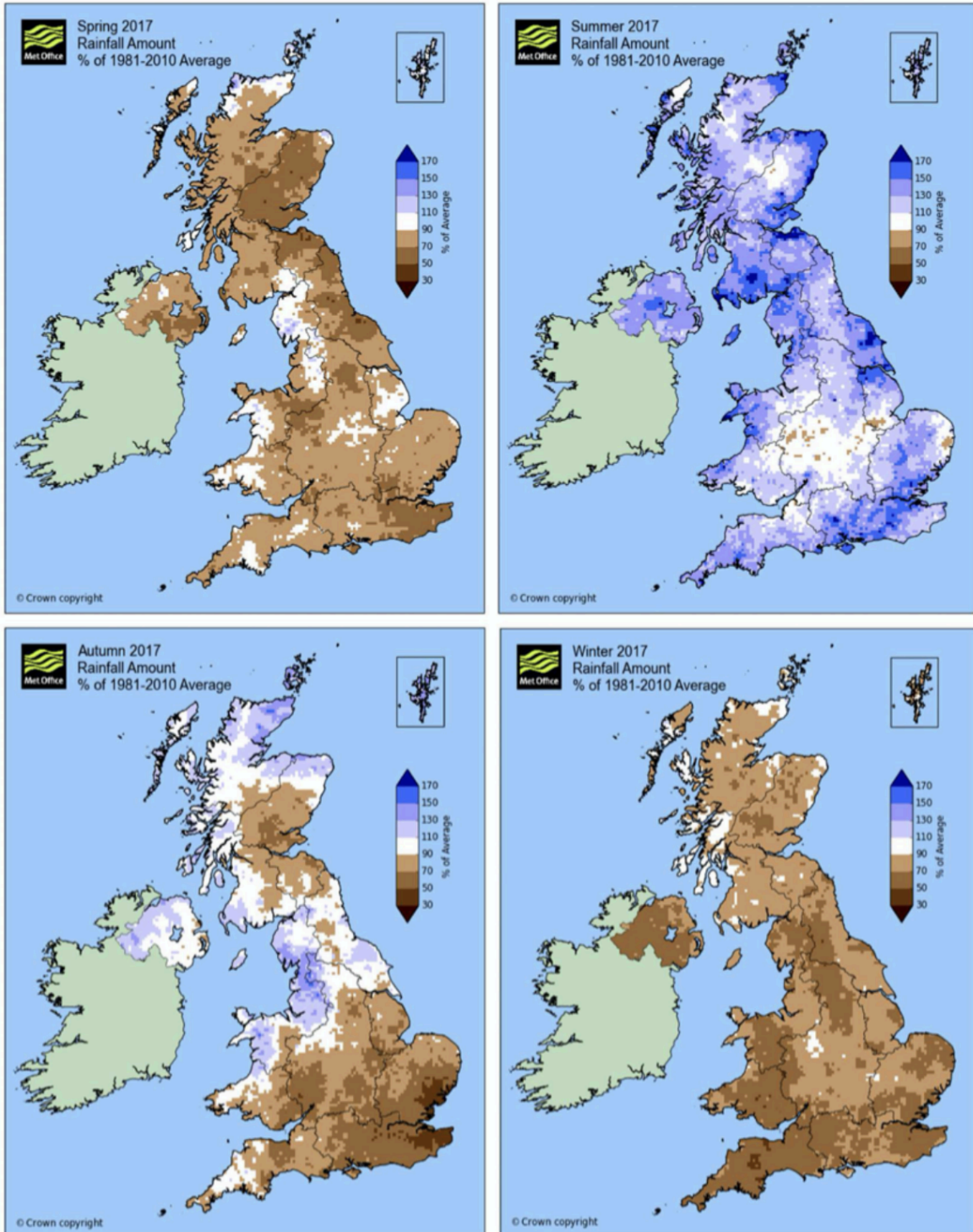
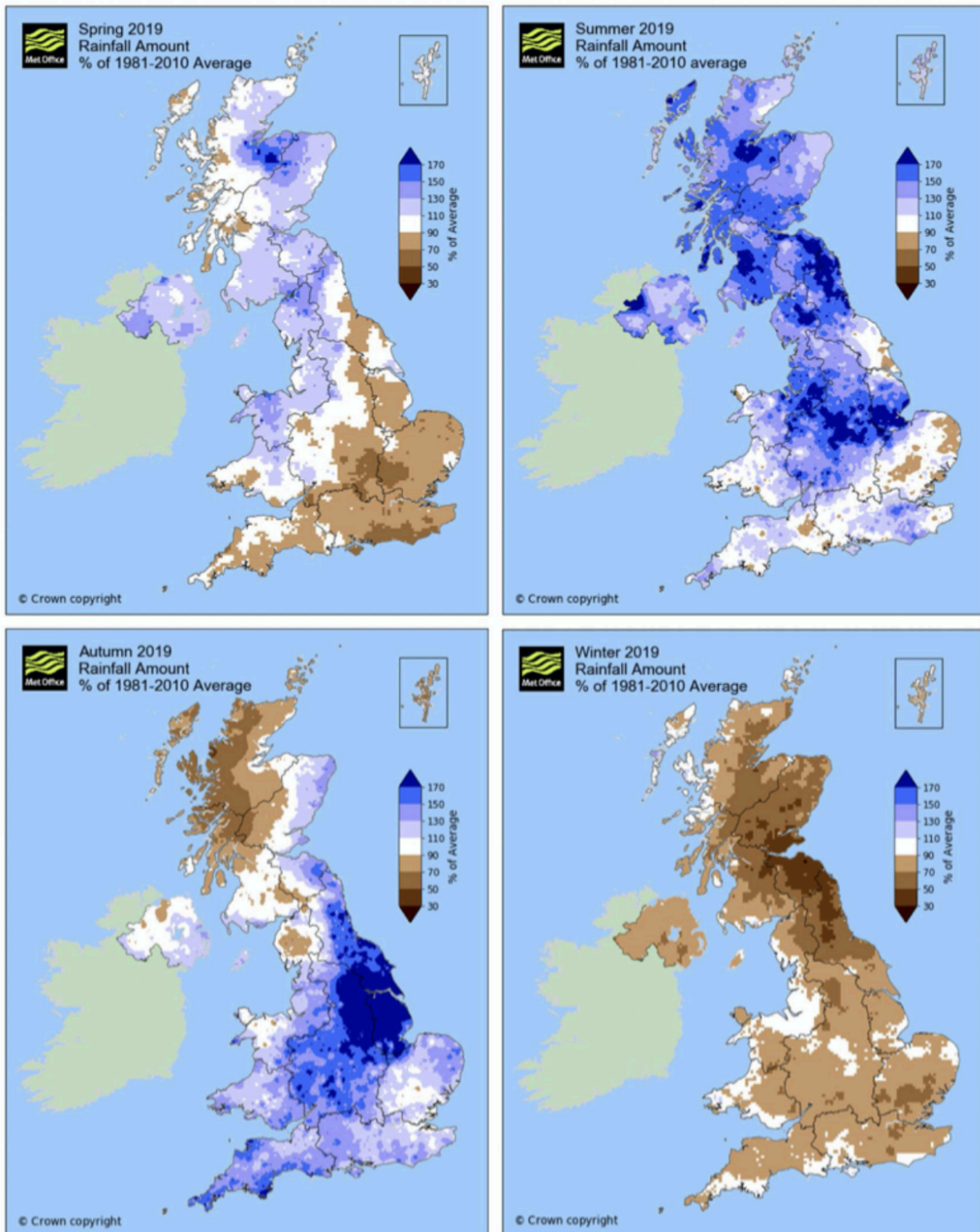


Figure 2.2 - 2019 Rainfall Maps



2.3 RAINWATER HARVESTING SYSTEM

Changes to our weather patterns, owing to global warming, have resulted in more intense rainfall events in some seasons and hotter and drier summers in other seasons as evidenced in the previous section. Therefore, in dry periods, it is not possible to “effectively” protect the ecological flows that have led to the enactment of the Water Neutrality directive. The implication is that this element of risk needs to be factored into the rainwater harvesting strategy that is going to be implemented on the development site. Therefore, in considering the Water Neutrality strategy for this site it is considered prudent to at least double the drought storage stated in BS 8515 from 18 to 36 days to increase the resilience of rainwater harvesting for non-potable water supply to the proposed new development.

Rainwater harvesting will be utilised and targeted for use in non-potable water uses such as:

- *Aquifer recharge.*
- *Landscape.*
- *Car washing.*
- *Laundry use.*
- *Toilet flushing.*

For internal non-potable uses like toilet flushing and laundry. The rainwater harvesting system will be backed up by utilising the proposed greywater recycling system. In addition, the carefully designed Suds Strategy with the appropriate SuDS attenuation features are capable of capturing rainwater making it available for landscaping and car washing uses.

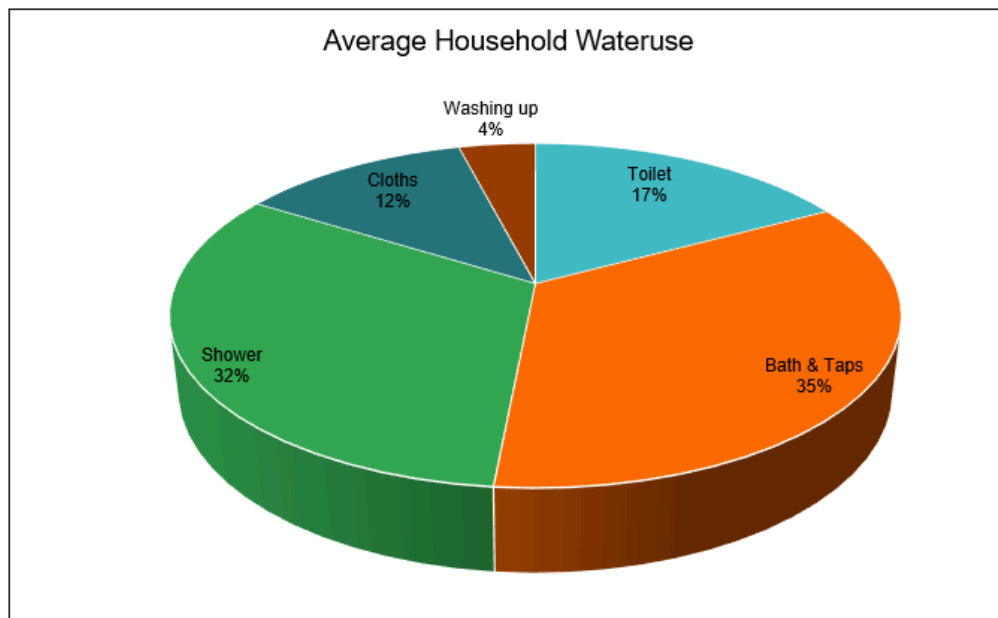
3.0 RESIDENTIAL WATER DEMAND

The proposed development will consist of 180 new residential dwellings, and this study considers how the proposed property may be serviced. Horsham District Council has stipulated that the preferred allowable daily water consumption for each new residential unit is 85 litres/person/day. Figure 3.1 is based on table 3.1 Building Regulations Part G calculator, which is on the next page.

The individual domestic water consumption uses are split as follows:

- 17% - Toilet
- 34% - Bath Taps
- 32% - Shower
- 12% - Clothes
- 4% - Washing up

Figure 3.1 - Average Household Water Use



3.1 RESIDENTIAL DAILY WATER DEMAND - SPECIFICATION 1

Horsham District Council has recently adopted 85l/p/d water demand criteria, below various water efficiency fittings are considered. The Building Regulations 2010 Part G2 calculator is used to demonstrate this requirement may be achieved.

Table 3.1 - Building Regulations Part G Calculator (Bath Specification)

WATER EFFICIENCY CALCULATOR - BATH SPECIFICATION					
Installation Type	Unit of Measure	Capacity/Flow Rate	Use Factor	Fixed Use (l/p/d)	Litres/person/day
WC (single flush)	Flush volume (l)	0.00	4.42	0.00	0.00
WC (dual flush)	Full flush volume (l)	6.00	1.46	0.00	8.76
	Part flush volume (l)	3.00	2.96	0.00	8.88
WCs (multiple fittings)	Ave. effective flush volume (l)	0.00	4.42	0.00	0.00
Taps (excluding kitchen/utility room taps)	Flow Rate (l/min)	5.00	1.58	1.58	9.48
Bath (where shower also present)	Capacity to Overflow (l)	180.00	0.11	0.00	19.80
Shower (where bath also present)	Flow Rate (l/min)	8.50	4.37	0.00	37.15
Bath Only	Capacity to Overflow (l)	0.00	0.50	0.00	0.00
Shower Only	Flow Rate (l/min)	0.00	5.60	0.00	0.00
Kitchen/Utility Room Sink Taps	Flow Rate (l/min)	5.00	0.44	10.36	12.56
Washing Machine	Litres/kg Dry Load	6.00	2.10	0.00	12.60
Dishwasher	Litres/ Place Setting	0.68	3.60	0.00	2.45
Waste Disposal Unit	Litres/Use	0.00	3.08	0.00	0.00
Water Softner	Litres/pers/day	0.00	1.00	0.00	0.00
Total Internal Calculated Use					111.67
Contribution from Greywater					23.94
Contribution from Greywater for External Use					0.00
Normalisation Factor					0.91
Total Internal Water Consumption					79.84
External Water Use					5.00
Effective Daily Water Demand l/p/d					84.84
GREYWATER YIELD - BATH SPECIFICATION					
Installation Type	Unit of Measure	Capacity/Flow Rate	Use Factor	Fixed Use (l/p/d)	Litres/person/day
WC (single flush)	Flush volume (l)	0.00	4.42	0.00	0.00
WC (dual flush)	Full flush volume (l)	6.00	1.46	0.00	8.76
	Part flush volume (l)	3.00	2.96	0.00	8.88
WCs (multiple fittings)	Ave. effective flush volume (l)	0.00	4.42	0.00	0.00
Taps (excluding kitchen/utility room taps)	Flow Rate (l/min)	5.00	1.58	1.58	9.48
Bath (where shower also present)	Capacity to Overflow (l)	180.00	0.11	0.00	19.80
Shower (where bath also present)	Flow Rate (l/min)	8.50	4.37	0.00	37.15
Bath Only	Capacity to Overflow (l)	0.00	0.50	0.00	0.00
Shower Only	Flow Rate (l/min)	0.00	5.60	0.00	0.00
Kitchen/Utility Room Sink Taps	Flow Rate (l/min)	5.00	0.44	10.36	12.56
Washing Machine	Litres/kg Dry Load	6.00	2.10	0.00	6.30
Dishwasher	Litres/ Place Setting	0.68	3.60	0.00	2.45
Waste Disposal Unit	Litres/Use	0.00	3.08	0.00	0.00
Water Softner	Litres/pers/day	0.00	1.00	0.00	0.00
Total Internal Calculated Use l/p/d					105.37
Contribution towards Greywater					69.58
% Greywater Contribution					51.45%

Tables 3.1 highlights the following:

- *The 85l/p/d water demand stipulated by Horsham District Council can be met using the above-stated specifications. The proposed bathroom specifications indicate that the effective daily water demand with the benefit of water efficiency fittings and greywater recycling is 84.84 l/p/d.*

It is anticipated that all of the 180 new homes will be serviced with washing machines. The allowable daily water demand for the residents will be 85l/p/d, which will be achieved by utilising a mixture of water-efficient fittings, spray taps, and showers together with greywater recycling. The maximum occupancy range based on the Horsham Census data is used to calculate the average daily and annual water demand for the new homes as shown in Table 3.2 below.

Table 3.2: Daily and Annual Water Demand for 180 Units (Proposed Development)

<i>Type of Accommodation</i>	<i>No. of Units</i>	<i>Total Cumulative Number of Residents</i>	<i>Daily Water Demand Per Resident</i>	<i>Daily Potable Water Demand (l/d)</i>
<i>Houses & Apartments</i>	<i>180</i>	<i>417.46</i>	<i>85</i>	<i>35,484.10</i>
<i>Total Units & Maximum Number of Residents</i>	<i>180</i>	<i>417.46</i>		
<i>Total Daily Water Consumption (litres)</i>				<i>35,484.10</i>
<i>Total Annual Water Consumption (litres)</i>				<i>12,951,697</i>

The annual water demand for the new 180 units development using the mains water supply option will be 35,445 litres/day and 12,951,697 litres/year.

3.2 RESIDENTIAL DAILY WATER DEMAND - SPECIFICATION 2

An alternative specification can be used to deliver 85 l/p/d to meet the Horsham District Council water demand criteria. Below water efficiency fittings are to be installed with restricted flow and a smaller bath than would usually be installed as

shown below. In Table 3.4 the Building Regulations 2010 Part G2 calculator is used to demonstrate this requirement may be achieved.

Table 3.3 Specification 2 - Restricted Flow Rates Installation

INSTALLATION TYPE	UNIT OF MEASURES	CAPACITY/FLOW RATE
Basin Taps	Flow Rate (litres/ min)	3
Bath	Capacity to Overflow	130
Shower	Flow Rate (litres/ min)	5
Toilet	Flush Volumes (litres)	4/2
Dishwasher	Flow Rate (litres/ place setting)	1
Washing Machine	Flow Rate (litres/ Kg Dry Load)	7
Sink Tap	Flow Rate (litres/ min)	4

Table 3.4 Specification 2 - Restricted Flow Rates Installation

BUILDING REGULATIONS PART G					
WATER EFFICIENCY CALCULATOR - 84.91 litres/person/day					
Installation Type	Unit of Measure	Capacity/Flow Rate	Use Factor	Fixed Use (l/p/d)	Litres/person /day
WC (single flush)	Flush volume (l)	0.00	4.42	0.00	0.00
WC (dual flush)	Full flush volume (l)	4.00	1.46	0.00	5.84
	Part flush volume (l)	2.00	2.96	0.00	5.92
WCs (multiple fittings)	Ave. effective flush volume (l)	0.00	4.42	0.00	0.00
Taps (excluding kitchen/utility room taps)	Flow Rate (l/min)	5.00	1.58	1.58	9.48
Bath (where shower also present)	Capacity to Overflow (l)	130.00	0.11	0.00	14.30
Shower (where bath also present)	Flow Rate (l/min)	5.00	4.37	0.00	21.85
Bath Only	Capacity to Overflow (l)	0.00	0.50	0.00	0.00
Shower Only	Flow Rate (l/min)	0.00	5.60	0.00	0.00
Kitchen/Utility Room Sink Taps	Flow Rate (l/min)	4.00	0.44	10.36	12.12
Washing Machine	Litres/kg Dry Load	7.00	2.10	0.00	14.70
Dishwasher	Litres/ Place Setting	1.00	3.60	0.00	3.60
Waste Disposal Unit	Litres/Use	0.00	3.08	0.00	0.00
Water Softner	Litres/pers/day	0.00	1.00	0.00	0.00
Total Internal Calculated Use					87.81
Contribution from Greywater					0.00
Contribution from Rainwater					0.00
Normalisation Factor					0.91
Total Internal Water Consumption					79.91
External Water Use					5.00
Effective Daily Water Demand l/p/d					84.91

4.0 WATER OFFSETTING OPPORTUNITIES

It is proposed to trade an existing surface water abstraction licence for the purposes of offsetting the water demand that is associated with the proposed new development at Church Lane, Ashington.

The surface water abstraction site for Licence No 10/41/435007 contained in Appendix C, is located along the River Western Rother, west of Rogate and also west of Hardham Abstraction location at the top of the catchment area. The licence characteristics are as follows:

• <i>License Holder</i>	-	<i>Slade Farm Rogate</i>
• <i>Annual Abstraction Volume</i>	-	<i>36,368 m³/year</i>
• <i>Easting</i>	-	<i>477,970</i>
• <i>Westing</i>	-	<i>123,320</i>
• <i>Current Daily Abstraction Volume</i>	-	<i>727.40 m³/daily</i>
• <i>Current Annual Abstraction Volume</i>	-	<i>33,324 m³/year</i>

The metered water use volume for the year 1 November 2021 to 31 October 2022 was **33,324 m³/year**.

The surface water abstraction licence is for a spray irrigation at Slade Farm Rogate. The allowable abstraction period is from 1 April to 30 September, which allows for irrigation at the farm during the driest period of the year; summer.

The water demand that is associated with the proposed development is **12,952 m³/year**. **This represents 39% of the abstracted water during the period 1 November 2021 to 31 October 2022.**

In addition it is also proposed to provide a 10% buffer to the water consumed at the new proposed development, which results in an annual water demand of **14,247 m³/year, 43% of the recorded abstracted volumes.**

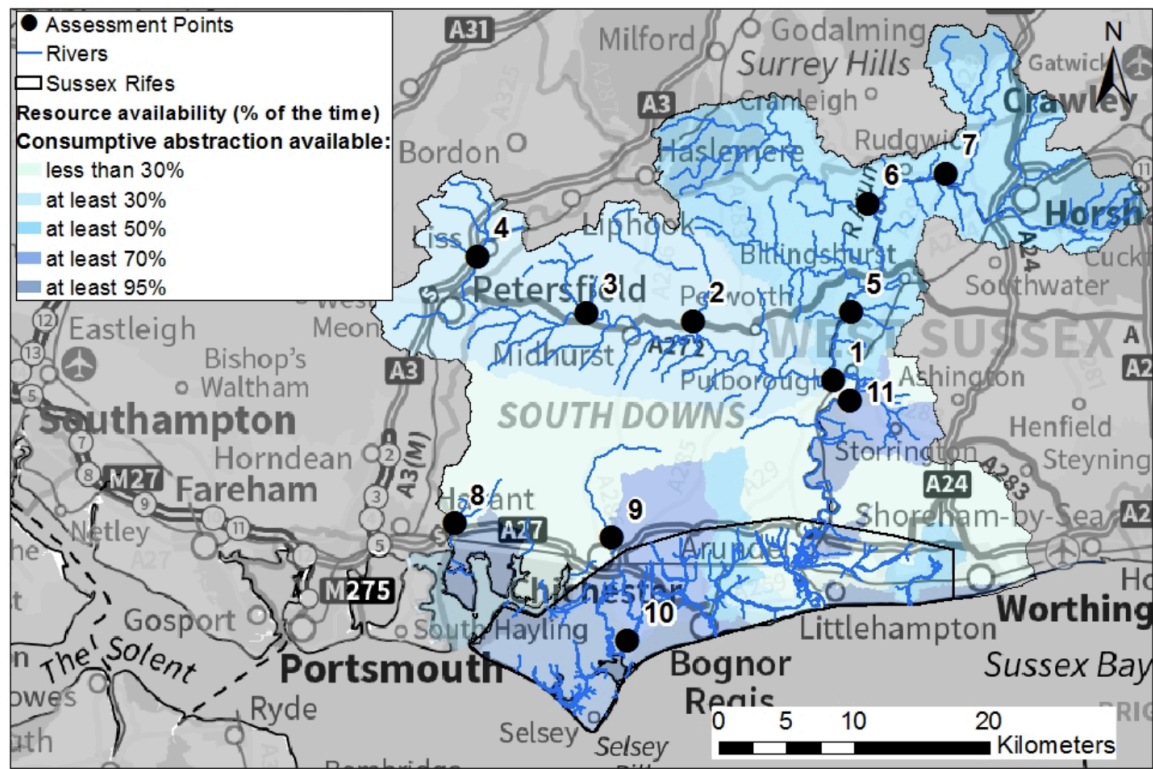
4.1 Environment Agency Transfer Implications

A copy of the Environment Agency surface water abstraction needs to be made available, in order to verify that there is no imminent applicable time limit associated with the licence.

In a letter dated 12 September 2023, Southern Water advised that they would support the proposed surface water abstraction licence reduction, to facilitate the delivery of water neutrality at the proposed development. Specifically Southern Water stated the following (Refer to for Southern Water Statement Appendix D);

“This note confirms and explains Southern Water’s view that a proposal which reduces abstraction in the Western River Rother catchment and results in an increase in volume of flow of the River Rother and River Arun could be accepted as a valid contribution towards a developer achieving water neutrality. This is because an increase in the volume of river flow in the River Western Rother to Hardham means that Southern Water has more available water to abstract at its licensed surface water abstraction points (subject to the permitted abstraction licence limits).”

Figure 4.1 - River Rother Western Catchment

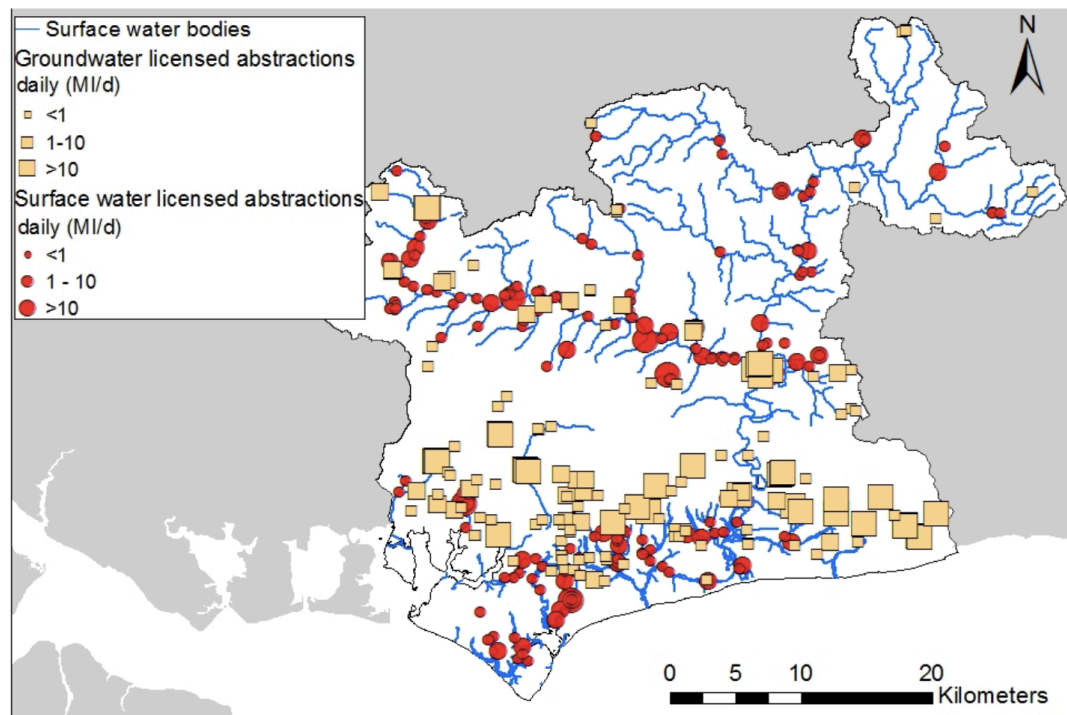


Southern Water abstracts both surface water and groundwater from abstraction points at Hardham which are closely linked. Therefore an increase in river flows owing to the proposed reduction at Slade Farm Rogate upstream of the River Rother western catchment, would allow Southern Water to reduce groundwater abstraction. Southern Water currently abstracts surface water at a point on the River Rother just upstream of the Hardham weir (licence reference 10/41/431001).

Thus Southern Water will be able to abstraction an additional equivalent amount further downstream of the River Western Rother Catchment thus protecting the vulnerable species that have been identified by Natural England in the Arun Valley. Appendix D, contains Southern Water's supporting statement.

Figure 3.2 - River Western Rother Abstraction Locations

Map 2: licensed groundwater and surface water abstractions in the Arun and Western Streams catchment



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Southern Water's two Hardham abstraction licences (groundwater and surface water) each has its own daily abstraction volume limits but are permitted to work within an overall aggregate daily and annual limits. The upper limit of

surface water abstraction is 139 MI/d, whilst the lower limit is 63.6 ML/d, which provides a 75MI/d maximum daily abstraction allowance.

Figure 3.4 highlights that river flows of less than 139 MI/d are experienced (on average) at least 50% of the time through July, August, and September; at least 20% of the time from June to late October and at least 10% of the time from May through to December.

The licence at Slade Farm Rogate operates from the 1 of April to the 30 of September, each year. Therefore coinciding with the period when Southern Water requires additional flows in River Rother in order to maximise or optimise their abstraction volumes from surface water sources.

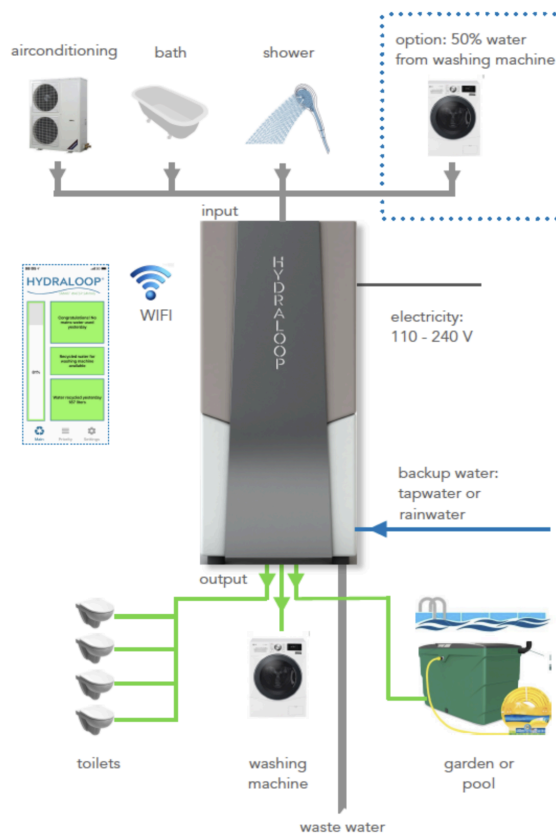
Therefore additional flows into the River Rother would benefit the abstraction management and also protect the environment and the vulnerable species at Hardham. Particularly noting that, abstraction must cease under both licences if the river Rother flow at Hardham weir falls to or below 63.6 million litres per day (MI/d).

It can be concluded that the transfer of the surface water abstraction volume from Slade Farm Rogate to Southern Water downstream on River Rother that would meet the demand for the Ashington, Bellway development, would make the proposed development water neutral.

5.0 GREYWATER RECYCLING

Greywater recycling facilitates utilising the same source of potable water twice by collecting, cleaning and re-using the “greywater” from showers, baths, washing machines, hand basins and air conditioning units. The cleaned and disinfected water could then be re-used for non-potable uses such as toilet flushing, washing machines, garden irrigation, laundry and topping up of swimming pools. Figure 4.1 below illustrates the various components of the Hydraloop greywater recycling system.

Figure 4.1 - Greywater Recycling System



Greywater recycling facilitates the saving of significant amounts of potable water. There are typically two greywater recycling systems; centralised and decentralised systems. The proposed development is better suited with decentralised greywater recycling units for houses owing to their sparse distribution. Whilst a centralised greywater system would suit the apartment blocks and care home.

The proposed Hydraloop greywater recycling system facilitates the saving of up to 45% of tap water, by recycling water from taps, showers, washing machines and baths which will be used for toilet flushing, washing machine, car-washing and garden irrigation. Subject to the final configuration of the proposed development, greywater recycling systems will be designed and installed appropriately using any of the three Hydraloop systems described below.

Figure 4.2 - Hydraloop Domestic System (H300 & H600)



5.1 TYPES OF HYDRALOOP SYSTEMS

The most efficient, affordable, and energy-efficient way of recycling water is at the source where it is used. The proposed Hydraloop system facilitates the recycling of greywater within the individual premises of the development. The Hydraloop system is a convenient and integrated system that looks and functions like any standard kitchen appliance. The Hydraloop system has an app that will empower residents to save water and energy by using the operational prompts recommended by the system. The Hydraloop greywater recycling system provides the following three options for domestic use:

- *H300 - 300 litre recycling capacity/day.*
- *H600 - 600 litre recycling capacity/day.*

- *Hydraloop Concealed - 150 litres recycling capacity/day.*
- *25% of this potable water demand will be saved, by recycling water from taps, showers, washing machines and baths which will be used for toilet flushing, washing machine, car-washing and garden irrigation.*

The detailed specifications for the Hydraloop Concealed, Hydraloop H300 and H600 are contained in Appendix E. This domestic greywater recycling system would facilitate the demand for potable water to be reduced by 24% in the new dwelling.

6.0 CONCLUSION

The annual water demand for the new 180 units development using the mains water supply option for 417.46 residents is 35,484.10 litres/day and 12,951,697 litres/year.

Southern Water is supportive of any reduction in third-party abstractions in the River Western Rother catchment as they have the effect of increasing the flow of the River Western Rother at the point of Southern Water's surface water abstraction point at Hardham. Thus creating an opportunity for Southern Water to reduce the volume of water it abstracts from its groundwater source at Hardham, which caused the enactment of the Water Neutrality requirements.

The metered water use volume for the year 1 November 2021 to 31 October 2022 was **33,324 m³/year**. If the metered water abstraction volume for the subsequent year, this would strengthen the evidence case for the proposed offsetting opportunity. Including a 10% buffer **the** water demand at the new proposed development, which results in an annual water demand of **14,247 m³/year, 43% of the current recorded abstracted volumes at Slade Farm.**

It is proposed that the surface water abstraction licence at Slade Farm Rogate be reduced by **14,247 m³/year**. In turn the surface water abstraction licence for Southern Water would need to be increased by a similar amount. This would in effect allow Southern Water to draw an additional **14,247 m³/year or 39.03 m³/day** from its surface water abstraction point on River Western Rother at Hadham. This additional water supply would be treated and made available to the Bellway Development at Ashington via the water mains. The volume abstraction at Slade Farm would need to be reduced by an equal amount, but the varied licence would maintain the current operational season; 1 April to 30 September as this coincides with the period when Southern Water mostly needs additional surface water.

It can be concluded that the transfer of the surface water abstraction volume from Slade Farm Rogate to Southern Water downstream on River Rother that would meet the demand for the Ashington, Bellway development, would make the proposed development water neutral.



APPENDIX A

PROPOSED DEVELOPMENT



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SCHEDULE OF ACCOMMODATION		
Housetype	Description	Qty
PRIVATE		
SA	The Saddler - 2 Bed Coachouse - 2B3P	4
CN	The Coiner - 2 Bed House - 2B4P - M4(2)	14
TE	The Tentener - 3 Bed House - 3B4P	2
BM	The Blemmere - 3 Bed House - 3B5P - M4(2)	7
HA	The Harper - 3 Bed House - 3B5P - M4(2)	16
HI	The Hillard - 3 Bed House - 3B5P - M4(2)	7
FM	The Framer - 3 Bed House - 3B4P - M4(2)	4
LA	The Lacemaker - 3 Bed House - 3B4P	16
RE	The Reedmaker - 4 Bed House - 4B5P - M4(2)	9
PG	The Pargeter - 4 Bed House - 4B5P - M4(2)	13
AR	The Arkwright - 4 Bed House - 4B6P - M4(2)	12
WE	The Weaver - 4 Bed House - 4B5P	10
WA	The Watchmaker - 5 Bed House - 5B6P	3
Private Total		117
SHARED OWNERSHIP		
APARTMENTS BLOCK 2		
1BF	1 Bed Apartment - 1B2P - The Pitcher	2
1BF	1 Bed Apartment - 1B2P - The Bumisher	6
2BF	2 Bed Apartment - 2B4P - The Lathe	2
2BWCF	2 Bed Apartment - 2B3P - The Whetstone M4(3) - Bespoke	1
Apartments Total		11
HOUSES		
BA	The Baker - 2 Bed House - 2B4P - M4(2)	2
TI	The Tillman - 3 Bed House - 3B5P - M4(2)	3
PW	The Ploughwright - 3 Bed House - 3B5P - M4(2)	1
CT	The Cartographer - 4 Bed House - 4B5P - M4(2)	2
Houses Total		8
Shared Ownership Total		19
AFFORDABLE RENT		
APARTMENTS BLOCK 1		
1BF	1 Bed Apartment - 1B2P - The Pitcher	2
1BF	1 Bed Apartment - 1B2P - The Bumisher	9
2BF	2 Bed Apartment - 2B4P - The Lathe	4
2BWCF	2 Bed Apartment - 2B3P - The Whetstone M4(3) - Bespoke	1
BLOCK 2		
1BF	1 Bed Apartment - 1B2P - The Pitcher	3
2BF	2 Bed Apartment - 2B4P - The Lathe	3
Apartments Total		22
HOUSES		
SA	The Saddler - 2 Bed Coachouse - 2B3P	1
BA	The Baker - 2 Bed House - 2B4P - M4(2)	6
TI	The Tillman - 3 Bed House - 3B5P - M4(2)	13
CT	The Cartographer - 4 Bed House - 4B5P - M4(2)	2
Houses Total		22
Affordable Rent Total		44
Overall Total		180

062009-BEL-SL-180-LINKED - 15.11.22-JH



dha architecture ltd

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Bottle Lane
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Berkshire
RG42 5QX

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land west of ashington

tenure layout

D 07.06.24 JeH Updated to accord with Planning Layout 01-D
C 12.12.23 JeH Updated to accord with Planning Layout 01-C
B 09.11.23 JeH Updated to accord with Planning Layout 01-B
A 17.08.23 JeH Updated to accord with Planning Layout 01-A
rev date by details

Tenure Layout

reference 062009-BEL-SL-04

22.12.2022 created
NTS @ A1 scaling
JeH contact
D revision



APPENDIX B

Rainfall . . . Rainfall . . .



Rainfall accumulations and return period estimates

Percentages are from the 1991-2020 average.

Region	Rainfall	Jan 2022	Nov21 – Jan22		Aug21 – Jan22		May21 – Jan22		Feb21 – Jan22	
			RP		RP		RP		RP	
United Kingdom	mm	61	251		558		793		1000	
	%	51	68	10-20	83	5-10	88	2-5	87	2-5
England	mm	32	159		389		627		761	
	%	38	60	15-25	79	5-10	92	2-5	89	2-5
Scotland	mm	110	384		792		1007		1319	
	%	62	75	2-5	86	2-5	84	2-5	85	2-5
Wales	mm	69	322		723		1045		1313	
	%	45	66	8-12	84	2-5	93	2-5	92	2-5
Northern Ireland	mm	53	259		578		777		983	
	%	47	73	10-15	88	2-5	86	5-10	85	5-10
England & Wales	mm	37	182		435		684		836	
	%	40	62	10-20	80	5-10	92	2-5	89	2-5
North West	mm	61	288		675		928		1197	
	%	49	72	5-10	91	2-5	93	2-5	95	2-5
Northumbria	mm	26	187		407		603		781	
	%	32	70	5-10	80	5-10	85	5-10	87	2-5
Severn-Trent	mm	29	151		349		573		689	
	%	40	66	8-12	80	5-10	91	2-5	87	5-10
Yorkshire	mm	33	165		375		614		764	
	%	42	64	10-20	78	5-10	91	2-5	89	2-5
Anglian	mm	17	109		253		443		527	
	%	31	64	10-15	73	8-12	88	2-5	84	5-10
Thames	mm	20	102		312		553		643	
	%	28	46	20-35	76	5-10	97	2-5	89	2-5
Southern	mm	27	125		359		622		716	
	%	31	45	20-30	73	5-10	96	2-5	88	2-5
Wessex	mm	34	137		392		646		773	
	%	36	46	20-30	74	5-10	91	2-5	86	2-5
South West	mm	65	257		602		954		1133	
	%	47	60	10-20	81	5-10	98	2-5	91	2-5
Welsh	mm	64	301		691		1009		1264	
	%	43	65	10-15	84	2-5	93	2-5	92	2-5
Highland	mm	172	528		953		1171		1536	
	%	79	85	2-5	87	2-5	84	2-5	83	2-5
North East	mm	45	225		525		781		964	
	%	45	72	8-12	87	2-5	95	2-5	92	2-5
Tay	mm	62	265		624		902		1209	
	%	38	58	20-35	77	5-10	84	2-5	88	2-5
Forth	mm	56	230		592		807		1059	
	%	41	59	15-25	83	2-5	84	2-5	86	2-5
Tweed	mm	36	204		533		733		959	
	%	33	62	10-20	86	2-5	87	2-5	89	2-5
Solway	mm	70	319		812		1009		1336	
	%	42	63	10-15	89	2-5	84	2-5	86	2-5
Clyde	mm	134	441		928		1114		1489	
	%	62	71	5-10	83	2-5	77	5-10	79	5-10

% = percentage of 1991-2020 average

RP = Return period



APPENDIX C

SLADE FARM LICENCE



APPENDIX D

SOUTHERN WATER STATEMENT



Water Neutrality

Context

In September 2021 Natural England (NE) issued a Position Statement for applicants of new developments within Sussex North Water Supply Zone (the NE Position Statement). This assumed that some of the abstractions that support the existing water supply in the Sussex North water supply zone cannot be ruled out as contributing to the decline in wildlife within internationally protected sites¹ in the Arun Valley, Sussex. As detrimental impact on the Arun Valley sites cannot be ruled out, Natural England has advised that developments within this zone must not add to those abstractions and must achieve 'water neutrality' in order for development to proceed.

There is uncertainty over the root cause of the wildlife decline at these sites and NE thinks that this could be linked to Southern Water's groundwater abstraction activity at its Hardham water supply works (WSW).

Developers are currently required to demonstrate water neutrality by showing that any additional water demand arising from their developments has been suitably offset and secured so as not to cause increase in the Southern Water groundwater abstraction at Hardham.

Benefits of proposals that increase the flow of the River Western Rother.

This note confirms and explains Southern Water's view that a proposal which reduces abstraction in the Western Rother catchment and results in an increase in volume of flow of the River Western Rother and River Arun could be accepted as a valid contribution towards a developer achieving water neutrality. This is because an increase in the volume of river flow in the River Western Rother to Hardham means that Southern Water has more available water to abstract at its licensed surface water abstraction points (subject to the permitted abstraction licence limits).

The volume of water that Southern Water abstracts from its surface water and groundwater abstraction points at Hardham are closely linked. When the volume of river flow increases, this increases the availability of water to abstract from the surface water abstraction points, which in turn reduces the reliance on the alternative groundwater abstraction source at Hardham. It is this groundwater abstraction which Natural England cannot rule out as having a detrimental impact on the protected sites of the Arun Valley.

This note does not assess any specific scheme and it is acknowledged that some schemes could have bigger benefits than others. The note is written in the sense of providing a theoretical review of the benefits of such schemes.

¹ Arun Valley Special Area of Conservation (SAC), Arun Valley Special Protection Area (SPA) and Arun Valley Ramsar Site



Southern Water's licensed abstractions

Southern Water's Hardham WSW receives and treats water from both groundwater and surface water sources. The groundwater is abstracted under licence (reference 10/41/431002) from the Folkestone Beds groundwater aquifer beneath and immediately next to the Hardham WSW site. The surface water is abstracted from the following two locations:

- i. an abstraction point on the River Rother just upstream of the Hardham weir (licence reference 10/41/431001); and
- ii. an abstraction point on the tidal reach of the River Arun, approximately 1.5 km south west of the Hardham WSW at Church Farm (licence reference SO/041/0024/001).

The abstractions under the two Hardham licences (surface water and groundwater) and the river Arun licence are strategic water sources for the company's Sussex North water supply area. Weirwood reservoir is another strategic source, but it is currently out of service.

The two Hardham abstraction licences (groundwater and surface water) each have their own daily limits of abstraction but must both work within an overall aggregate daily and annual limits. As mentioned above, the volume of water abstracted at each point is closely linked. Also, abstraction must cease under both licences if the river Rother flow at Hardham weir falls to or below 63.6 million litres per day (ML/d).

The Environment Agency (EA) is currently finalising its determination of an application from Southern Water to vary its Hardham groundwater abstraction licence which seeks to voluntarily reduce the daily and annual groundwater abstraction limits. The overall current and expected (variation application) licence conditions are summarised in Table 1 below.

Additionally, Southern Water is enacting a commitment to minimise groundwater abstraction at Hardham and has achieved a rolling average abstraction of 4.97 ML/d (at the time of writing) since November 2021. This is 40% of typical average abstraction that was occurring prior to Southern Water making this commitment.

Table 1:- Hardham abstraction licence conditions.

Hardham licence conditions		Surface water licence	Groundwater licence	
		(10/41/431001)	(1/41/431002)	
Condition	units	Existing	Existing	Expected
Annual	ML	27375	13271	6000
Annual aggregate (surface water and groundwater)	ML	27375	27375	27375
Maximum daily	ML/d	75	36	30
Daily aggregate (surface water and groundwater)	ML/d	75	75	75
Average daily (over a year)	ML/d	75	36	16
Hands off' river flow	ML/d	63.6	63.6	63.6



Operational options to minimise groundwater abstraction at Hardham.

Southern Water is committed to minimising its groundwater abstraction at Hardham. The opportunities to help achieve this are listed below in order of preference:

- Reduce demand within the Sussex North water supply area.
- Maximise (where possible and within licence conditions) the volume of water abstracted under the Hardham surface water abstraction.
- Maximise (where possible and within licence conditions) the volume of water abstracted under the river Arun surface water abstraction.
- Transfer treated water from Sussex Worthing water supply area to Sussex North water supply area.
- Take (if available) a bulk supply of water from Portsmouth Water (max 15 Ml/d)
 - It is important to ensure the maximum amount will be available in times of serious drought and, has not been exhausted before.
- Use supply (when available) from Weirwood reservoir so as to reduce dependency on Hardham; and
- Maximise other groundwater abstractions in Sussex North (although this provides a minimal benefit to reduction of Hardham's groundwater abstraction).

Southern Water's surface water abstraction licences operate in such a way that the maximum volume of water permitted to be abstracted varies according to the volume of river flow. Generally speaking, when the river flow is higher, more surface water can be abstracted. As mentioned above, the surface water abstraction licence at the River Western Rother (Hardham) and River Arun are closely linked to the Hardham groundwater abstraction licence. In circumstances where lesser flows are experienced on the river – for example during drier months - and Southern Water is restricted from abstracting the maximum permitted amounts under its surface water licences, greater reliance may be placed on the Hardham groundwater source, and the volumes abstracted within its licence may be increased to balance any shortfall to demand.

A key opportunity to minimise Hardham groundwater abstraction by use of alternative supplies arises from the ability to maximise the volume of water abstracted from our surface water points on the River Western Rother and River Arun. There is a potential benefit from any third-party scheme that has the potential to reduce other (non-Southern Water) abstractions in the River Western Rother catchment to such an extent that it increases the volume of flow of the River Western Rother. This is because if the river flow is higher, Southern Water can abstract more surface water (within licence limits) thus placing less reliance on the requirement to abstract from the alternative groundwater abstraction source.

Such third-party schemes could include the reduction or surrender of third-party (non-Southern Water) abstraction licences (including for irrigation purposes) which abstract from the River Western Rother,

Figure 1 shows the daily range of flow (daily main flows in cubic metres per second (cumecs) as measured at the EA's Hardham river flow gauging station over the 63 years period of historical data.

Figure 2 is an illustration of how increased river flow is beneficial across the year. The river flow data is from 2022, with artificial low flow recession extension sketched.

Figure 3 shows representation of the likelihood of low flows occurring month by month across the year. That is, the '50 percentile' line means that flows less than that (those flows of that graph line) occur 50% of the time within the 63 years of historical record assessed to produce the data shown on the graph.

This data provides confirmation that any third-party scheme that reduces surface water abstraction from upstream of the river Rother to increase the volume of river flow downstream of Southern Water's surface water abstraction point at Hardham could in turn allow Southern Water to increase the volume of surface water



it abstracts, thus reducing the reliance on and the actual volume of water it abstracts from the groundwater abstraction point.

The potential benefits exist whenever the river flow to Hardham is less than 139 MI/d. That is, 75MI/d (the licensed maximum daily abstraction) above 63.6 MI/d, the flow at or below which the Southern Water abstractions have to cease. Figure 3 shows that river flows of less than 139 MI/d are experienced (on average) at least 50% of the time through July, August, and September; at least 20% of the time from June to late October and at least 10% of the time from May through to December.

When river flows on the Western Rother are greater than 139 MI/d, this does not create any opportunity to reduce the groundwater abstraction at Hardham. This is because when these higher river flows are experienced, Southern Water can already abstract the maximum possible amount of surface water allowed within its surface water abstraction licence and any increase to river flows upstream would not impact upon the volume of water that Southern Water is abstracting, because it is already able to abstract the maximum amount permitted under its licence. However, any third-party scheme which has the effect of increasing river flow will nevertheless provide environmental benefits in the form of that additional natural flow to downstream. Reducing the reliance on the groundwater abstraction across the critical drier summer months and any other period of extended low flow recession, would create benefits. This also coincides with the most sensitive time for the protected sites of the Arun Valley.

Risk of river pollution events

River pollution events are a risk to any water supplies that are dependent on river actions. A normal response to poor river water quality at Hardham would be to temporarily cease the river (surface water) abstraction and, in the first instance, aim to make use of the bankside storage (Church Farm reservoir). However, a river pollution event could result in a need to abstract more groundwater. Southern Water recognises such risk exists but, but considers that if it occurs, it will be temporary, typically ranging from river quality events passing within one to three days in duration. Southern Water believes that such short increases in groundwater abstraction are not a critical issue in terms of the risk of impacts on the Arun Valley protected sites. The risk of river pollution events should not be a factor against third-party schemes that increase river flows by reducing upstream abstractions. Any increase in river flow should be beneficial in the sense of providing more capacity to dilute pollution.

Southern Water's conclusion

As the above information has demonstrated, any reduction in third-party abstractions in the River Western Rother catchment that have the effect of increasing the flow of the River Western Rother at the point of Southern Water's surface water abstraction point at Hardham will create an opportunity for Southern Water to reduce the volume of water it abstracts from its groundwater source at Hardham.

The reduction in volume and rate of the surface water that is abstracted under third-party licenses should provide a direct quantification of the contribution. It should also be mentioned that any reduction in third-party groundwater abstractions in the upstream catchment area may also provide benefit, though indirectly, via assessment of its benefit to the river flow. Any such benefits will depend on the degree of connectivity between the groundwater aquifer of the abstraction and the river Rother.

Figure 1 - River Western Rother at Hardham, daily flow range of 63 year historical record

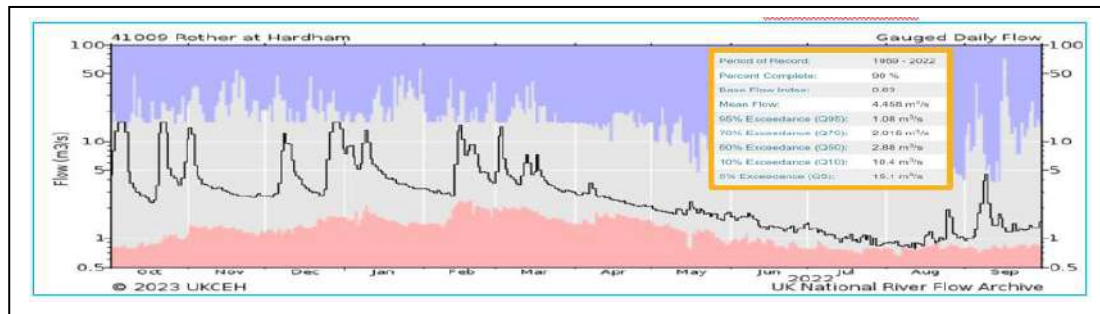


Figure 2 – Conceptual representation of benefits of increased river flow

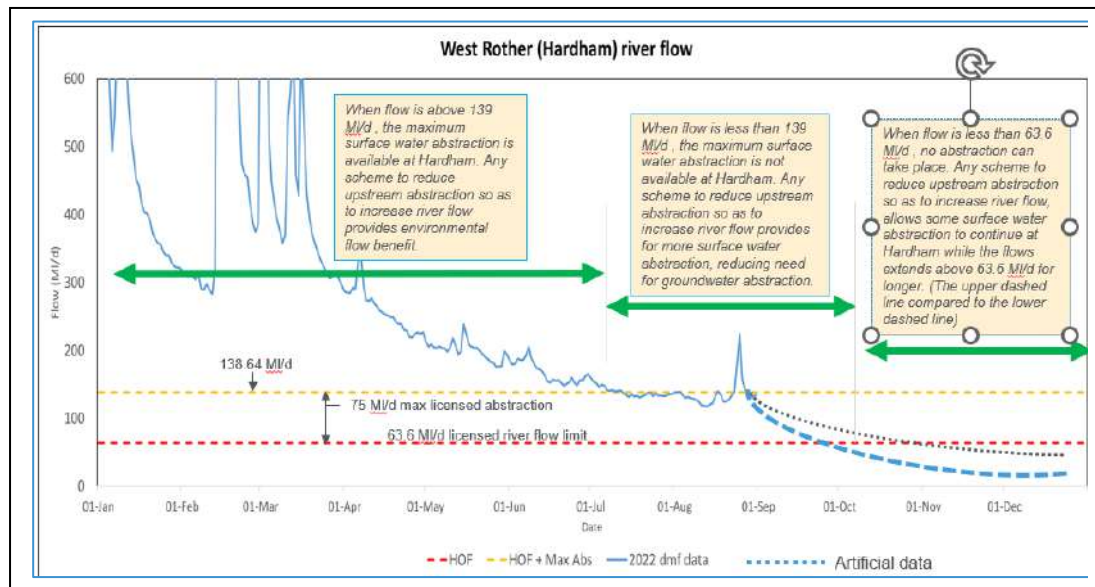
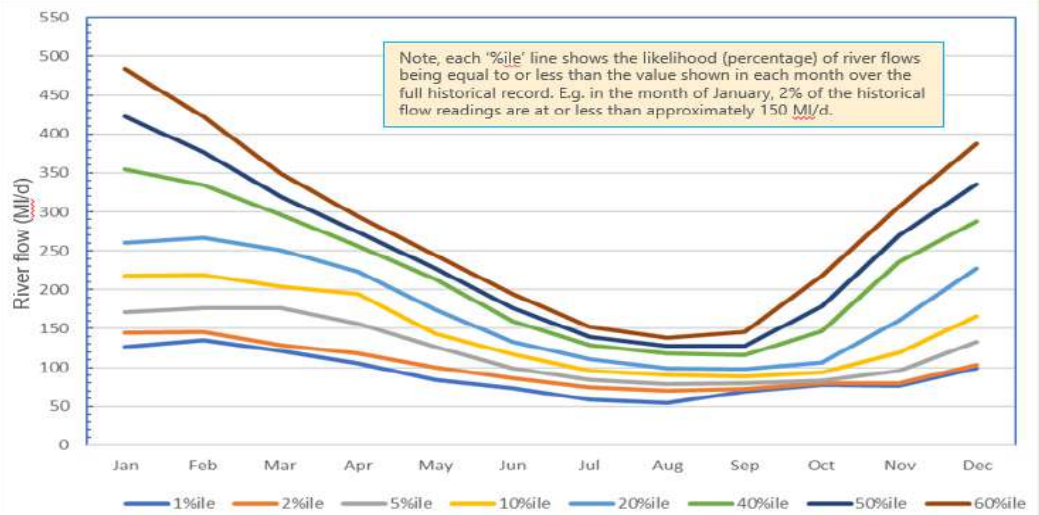


Figure 3 – Likelihoods of low flows – Western Rother at Hardham

River Western Rother at Hardham – representative low flow likelihoods by month.



APPENDIX B

Changing Water Abstraction & Impoundment Licences

Background

We want to make sure that the amount of water being taken from rivers or out of the ground can be sustained without damaging the environment. Where it can't, we may need to adjust the amount of water that is being taken under the **Restoring Sustainable Abstraction (RSA) programme**.

This leaflet explains how those adjustments can be made when your abstraction or impoundment licence needs to be changed to protect the environment.

How will I know if my licence needs changing?

We carry out detailed investigations and consider possible options to balance the needs of the environment and water users. If our investigations show that your licence needs to be changed we will talk to you about this change and the best way for this to happen.

How can I change my licence?

The easiest way to change your licence is to apply voluntarily to vary it under Section 51 of the Water Resources Act 1991. We will explain how your licence needs to be changed and you will need to fill in a short form to say you want your licence to change in this way. We will then consider your application, and if satisfied with the proposals change your licence and issue the varied version to you.

If you vary your licence voluntarily we will not add a time limit to your licence, if it does not already have one. If you are reducing the quantities on your licence or revoking it entirely then you will benefit from reduced or cancelled abstraction charges.



You can appeal if you do not agree with the revised licence but you are unable to claim any compensation for the licence change.

How will the Environment Agency propose changes to my licence?

If you do not volunteer to change your licence then we will make a proposal to change it under Section 52 of the Water Resources Act 1991. Our proposals will include adding a time limit to your licence if it does not already have one. The Section 52 process can take a long time and is more complex. There are a number of steps involved in this process:

Step 1: We serve notice

We will serve notice of our proposed change to your abstraction or impoundment licence in writing and deliver this letter to you, in most cases in person. We also advertise details of the proposed licence change on our website and in a newspaper in the local area to the abstraction or impounding.



Step 2: You respond to our proposal

You have 28 days to respond in writing to our proposal. You have three options:

1. **no objection** – if you do not object then we will change your licence and issue it to you, this means you will not be able to claim compensation and the process ends;
2. **compensation only objection** – you agree to the change to your licence but you think you have a valid claim to compensation if the change goes ahead;
3. **technical and compensation objection** – you do not think the basis for changing your licence is correct and you think you have a valid claim to compensation if the change goes ahead.

What do I put in my objection letter?

You should include your name, address and licence number(s) and tell us which of the options for objection you are making. If you think option 3 is appropriate you should also tell us if you would like your case to be heard i.e. in person rather than in writing. Your case would be heard by means of either a hearing or inquiry (see Step 4 for more details).

Important! Remember you must get your response to us within 28 days. If we do not receive an objection letter from you, or it is late, we will change your licence as we proposed and you will not be entitled to compensation.

Step 3: Referral to the Secretary of State

When we have received your objection letter and the 28 day representation period has finished we will refer the case to the Secretary of State (SoS) within an additional 28 days.

Step 4: Secretary of State decides how to review your case

The Secretary of State will look at our proposal, your objection letter any representations and decide how the case will proceed. There are three options:

written representations – the case is decided using written evidence from you and us, for example your objection letter and our proposal information. This is most likely when you have a compensation only objection.

hearing – discussion of the case led by an inspector from the Planning Inspectorate, appointed by the Secretary of State. This will often include a site visit.

inquiry – longer, more formal discussion of the case with cross-examination and evidence taken under oath. An inquiry may be required if there is substantial interest in the case from third parties.

You will receive a letter telling you which of these methods your case will follow. If a hearing or inquiry is required it will give a date and venue which can be changed if required.

Step 5: Case is conducted

The case will be considered by one of the three methods listed in Step 4. You will need to provide your evidence in a statement of case explaining your objection to the licence change and your reasoning behind it. If a hearing or inquiry is chosen you will also need to provide your evidence in person. The evidence discussed will relate only to the licence change. For those who are eligible, compensation is not discussed at this stage.



Step 6: Direction given on how to change your licence

The Secretary of State will direct us to either:

- change the licence as we proposed;
- change the licence in a different way or
- not change the licence (the process would now stop).

They will write to you and to us with their final decision.

Step 7: Licence changed

Once we receive this letter we will follow the direction given, so if it is to change your licence we will make those changes and issue it to you as soon as possible. In some cases the changes may come into effect at a future date to give you time to adapt to the changes. If the change is to revoke your licence we will issue a notice of revocation. If the direction is not to change the licence then the process ends.

Step 8: Claiming compensation

If you are eligible, once you have received your amended licence or notice of revocation you can submit your claim for compensation in writing to us. You will need to explain why you have claimed that amount and show evidence of your calculations. We will review your claim and if necessary discuss and negotiate the amount of compensation that is appropriate for the impact of the licence change on your business. If we agree on a compensation sum this is paid to you and the process ends.

Can I claim compensation?

Not all licence holders are eligible to claim compensation under Section 61 Water Resources Act 1991. If you are eligible the basis of any compensation paid to you will be, as far as is reasonably possible, to provide you with a financial equivalent of your loss. This is so that, in effect, you are no worse or better off than you were before the licence change. Please see the separate leaflet Restoring Sustainable Abstraction: Compensation for more details.

Can I claim for my costs?

You are entitled to obtain professional advice, for example an agent, solicitor or valuer to help you prepare and support your compensation claim.

You will be able to claim back reasonable costs as part of your compensation claim.

What happens if we cannot agree on compensation?

We will make every effort to try and reach agreement on a compensation figure. If this is not possible we would try to resolve the matter through arbitration. If for any reason this is not successful the matter could be referred by you or us to the Upper Tribunal (Lands Chamber).

Step 9: Decision on compensation by the Upper Tribunal (Lands Chamber)

The Upper Tribunal is a formal judicial body and a hearing by the tribunal will involve additional costs –

<http://www.justice.gov.uk/tribunals/lands>, tel. 020 7612 9710. The tribunal will decide on the amount of compensation payable to you and how the costs incurred at the tribunal should be paid.

Their decision on compensation is final. An appeal against a decision made by the tribunal can only be made to the Court of Appeal. The compensation is then paid to you and the process ends.

How long will this process take?

In most cases we expect direction from the Secretary of State within 6-12 months after serving notice to you. If we cannot agree on compensation with

you then additional time will be needed when the case is referred to the Upper Tribunal (Lands Chamber).



Where can I go for help?

If you have queries about the licence change itself please contact your local Area Environment Agency office.

Remember we cannot act as your agent. We suggest that you seek independent professional advice and possibly representation in relation to any compensation claim.

To find a solicitor contact the Law Society of England and Wales - www.lawsociety.org.uk, tel. 020 7320 5650.

If you do not have a land agent or surveyor who advises you on your business activities the Royal Institution of Chartered Surveyors (RICS) will be able to provide a list of appropriate contacts: www.rics.org, tel. 024 7686 8555.

Alternatively, for agricultural licence holders please contact the Central Association of Agricultural Valuers (CAAV) - www.caav.org.uk, tel. 01452 831815.

Further information

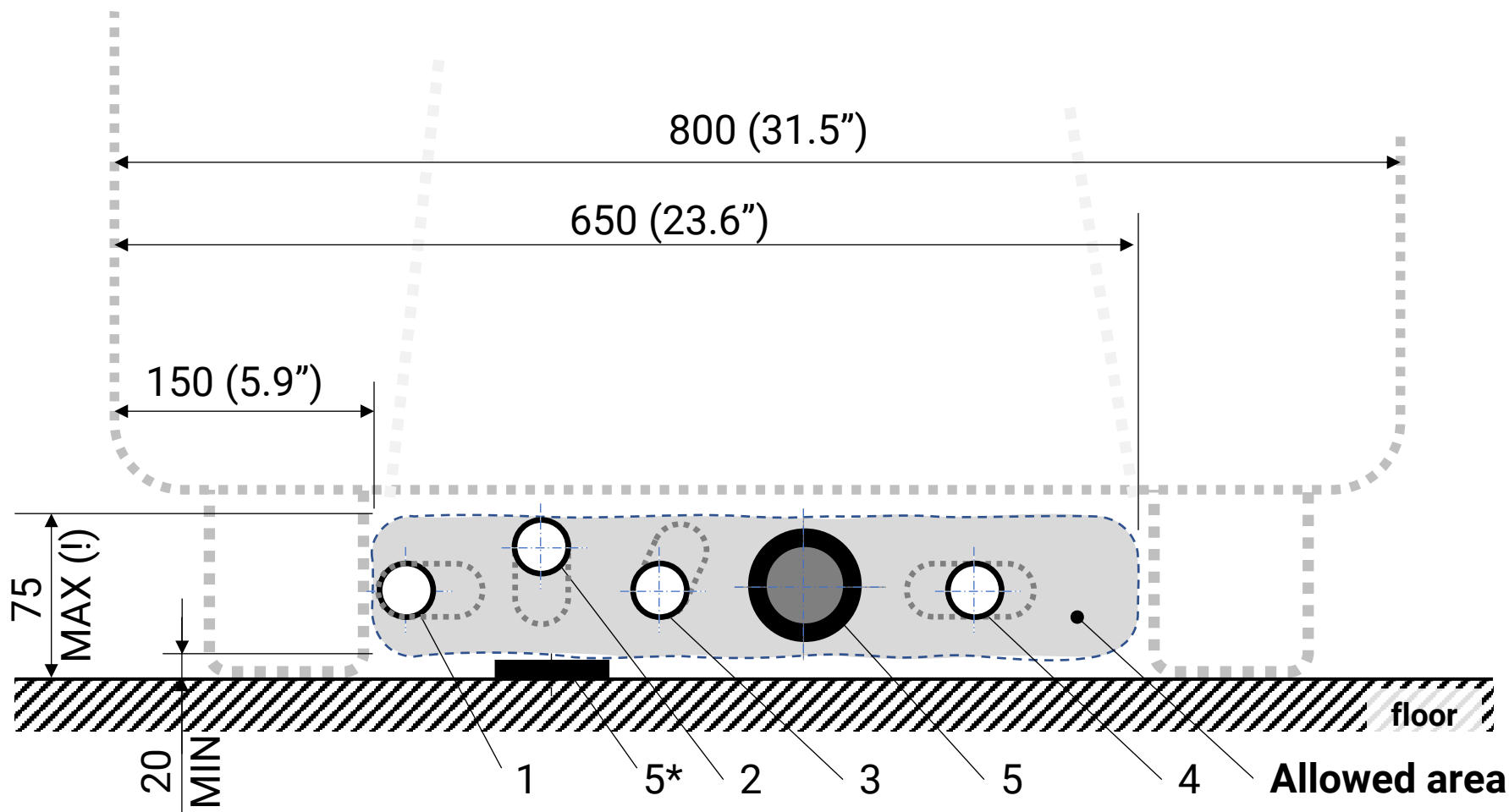
If you have any questions about this leaflet please email rsa@environment-agency.gov.uk





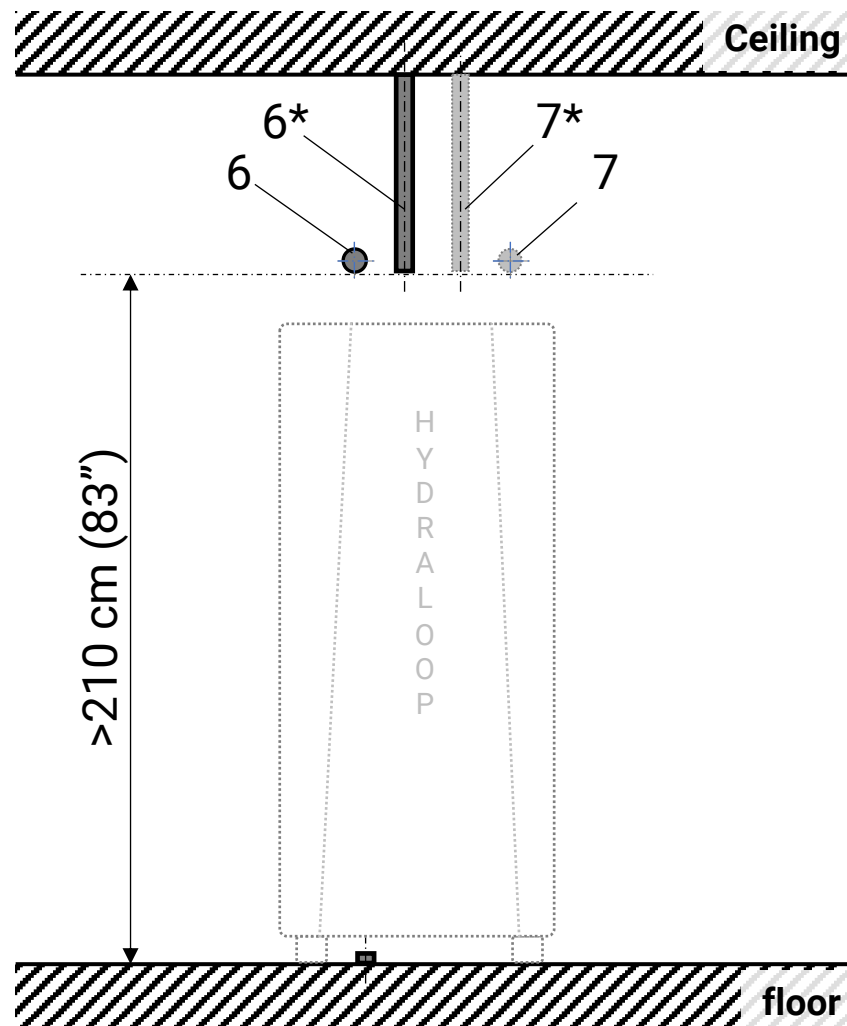
APPENDIX E

HYDRALOOP SYSTEM



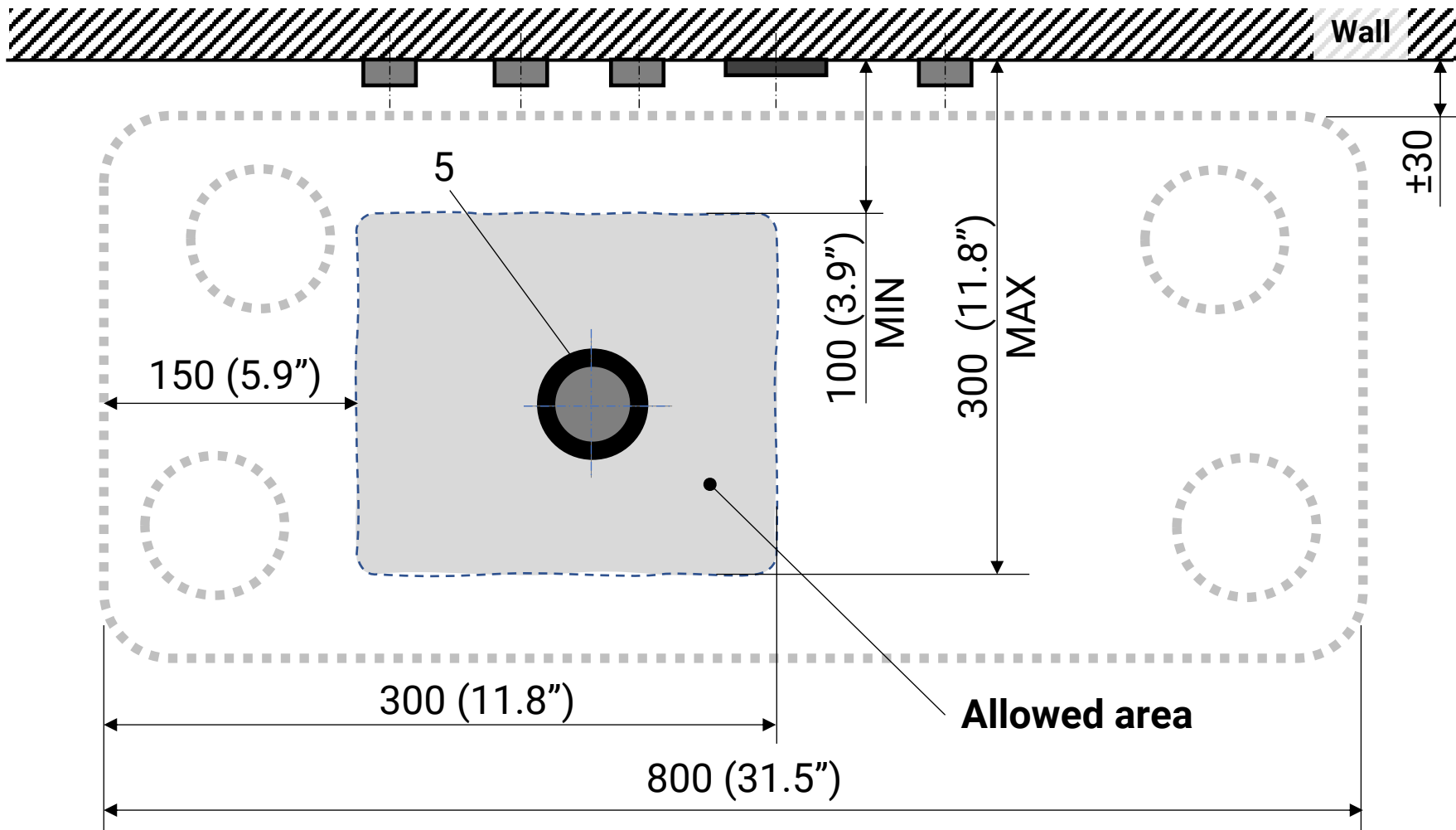
Front view - H300 / H600

All dimensions in mm (inches)

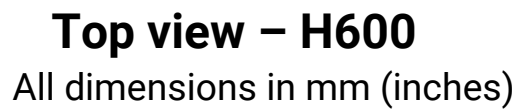


Front view - H300 / H600

All dimensions in mm (inches)



Top view - H300
All dimensions in mm (inches)





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BEST OF THE BEST



WINNER
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Hydraloop H300

Cleaning capacity per day*:
360 liters | 95 gallons
Average power consumption
per year: 220 kWh/year
*depending on user behaviour

FOR SINGLE-FAMILY HOMES



Hydraloop H600

Cleaning capacity per day*:
850 liters | 225 gallons
Average power consumption
per year: 460 kWh/year
*depending on user behaviour

FOR SINGLE-FAMILY HOMES
AND SMALL BUSINESSES LIKE
OFFICE BUILDINGS, GYMS
AND BOUTIQUE HOTELS



Hydraloop Concealed

Cleaning capacity per day*:
200 liters | 53 gallons
Average power consumption
per year: 180 kWh/year
*depending on user behaviour

FOR APARTMENTS,
SMALL HOMES,
TINY HOUSES &
RETROFIT BATHROOMS



Hydraloop Cascade

Modular, scalable, and
made-to-measure

FOR MULTI-FAMILY HOMES
AND LARGE BUSINESSES LIKE
HOTELS, STUDENT HOUSING,
SPORTS CLUBS AND MORE

Hydraloop designs and manufactures decentralized water recycling products for new builds and retrofits. We offer a wide range of innovative, sustainable, and IoT-connected water recycling devices for residential and commercial real estate.

ACT WISE
USE WATER TWICE



The easiest and most efficient way to reuse water is to clean it right where you use it – decentralized.

A Hydraloop device cleans greywater from shower, bath, and washing machine, as well as condensation water from tumble dryer, heat pump, and air conditioning. It can be reused for toilet flushing, washing machines, garden irrigation, and topping up swimming pools.

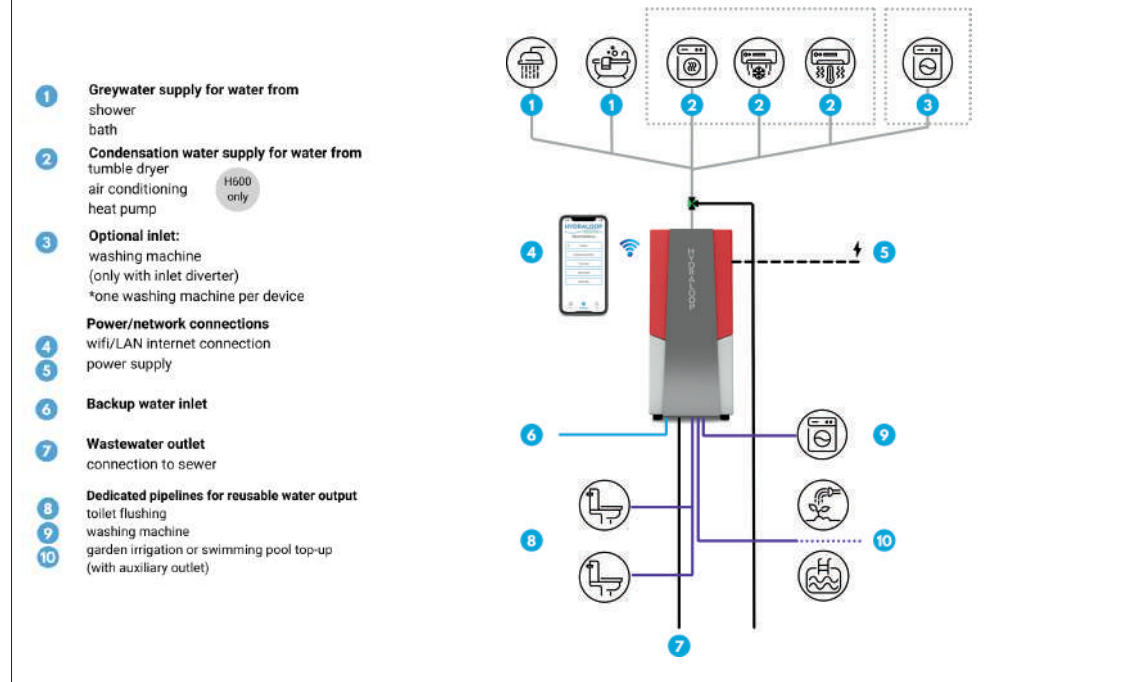
Our devices use a unique, patented combination of sustainable water treatment technologies that ensure the highest water quality and create a sustainable future.

We offer turn-key products and made-to-measure solutions for projects of any size. Give water a second life. Together, we drastically reduce worldwide water consumption.

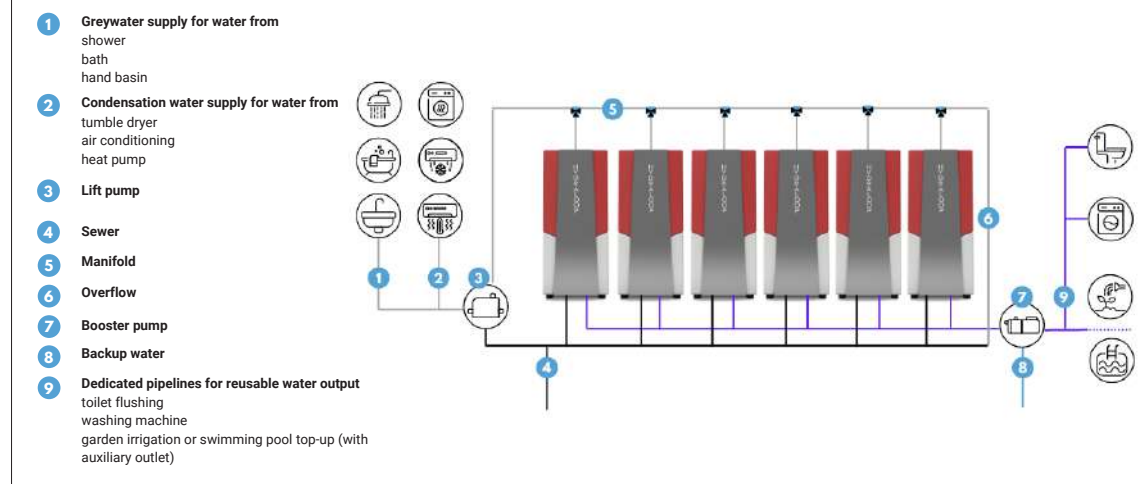
CONSUMER FRIENDLY & SUSTAINABLE

- Save water and energy
- Reduce wastewater
- Reduce carbon footprint
- No compromise on living comfort
- Hydraloop reuse water is clean, clear, safe, and disinfected
- Patented, award-winning technology
- Certified to the highest international standards
- Low energy consumption
- Compact units with stylish design
- IoT-connected
- Easy installation
- Fully automatic
- No filters to replace
- No chemicals to add
- Self-cleaning
- Low maintenance
- Low cost of ownership
- 24/7 Online performance monitoring
- Smartphone app
- Affordable

Hydraloop H300 and H600 Connection Overview



Hydraloop Cascade Connection Overview



Your Hydraloop Partner:

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