SHAH DESIGNS LTD

Water Neutrality Statement

For Proposed Development at Old Nursery Cottage, West Chiltington, RH20 2QR
Prepared for: Horsham District Council
Date: 06th October 2025
Prepared by: Shah Designs Ltd

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1. Introduction

This **Water Neutrality Statement** has been prepared in support of a planning application for the demolition of the existing bungalow at **Old Nursery Cottage, West Chiltington** and the construction of a new 5-bedroom dwelling. This statement demonstrates how the proposed development will achieve **water neutrality** in line with the guidance issued by **Natural England** and **Horsham District Council**, addressing the current pressures on local water resources.

The **Arun Valley SAC/SPA/Ramsar** sites are under significant pressure from increased water abstraction, and this development will contribute to the efforts to ensure that total water use in the area does not increase.

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2. Policy and Regulatory Context

The Horsham District is located within an area of **serious water stress**, and any new development must demonstrate **water neutrality** to avoid adverse effects on local ecosystems, including designated habitats such as the **Arun Valley SAC, SPA, and Ramsar sites**.

This Water Neutrality Statement follows the principles outlined in:

- **Natural England's Position Statement on Water Neutrality** (September 2021)
- **Horsham District Council's Water Neutrality Planning Guidance**
- **The Habitats Regulations (2017, as amended)**

Water neutrality is defined as:

“For every new development, total water use in the region after the development must be equal to or less than the total water use in the region before the development.”

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3. Baseline Water Use

The existing water use on the site is derived from the existing bungalow at **Old Nursery Cottage**. The property is currently served by a water meter, and the average annual consumption is recorded as follows:

- **Existing water use:**
    - The bungalow is currently occupied by **4-6 people**.
    - **Current average consumption:** [e.g., 80 litres/person/day for 2 residents] = **116,800 litres/year**
    - **Total baseline water consumption:116,800 litres/year**

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4. Proposed Development Water Demand

The proposed development will involve the construction of a new **5-bedroom dwelling**. The new house will be occupied by **8 people**.

Estimated Water Demand for the New Dwelling:

- **Occupancy rate: 8 people**
- **Water efficiency target:** ≤ 110 litres/person/day (Building Regulations)

Total Daily Consumption:
8 people × 110 litres/person/day = **880 litres/day**

Annual Consumption:
880 litres/day × 365 days = **321,200 litres/year**

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5. Mitigation and Water Offsetting Strategy

To achieve **water neutrality**, the development will need to offset the increase in water demand due to the construction of the new dwelling. The increase in water demand is:

Increase in annual water demand:
321,200 litres/year (proposed) - 58,400 litres/year (existing) = **262,800 litres/year**

a) On-site Water Efficiency Measures:

To reduce water consumption within the new dwelling, the following measures will be incorporated:

- **Water-efficient fixtures**: Dual-flush toilets, low-flow showers, taps, and water-saving dishwashers and washing machines.
- **Rainwater harvesting system**: A system will be installed to collect rainwater from the roof, which will be used for non-potable water needs (e.g., garden irrigation, toilet flushing).
- **Greywater recycling**: Consideration for reusing water from sinks, baths, and showers for irrigation purposes.
- **Smart water metering**: Installation of a smart meter to monitor and control water usage effectively.

Estimated reduction in water use: By incorporating these measures, the water use is expected to be reduced by approximately **20%** from the target, leading to an adjusted consumption of around **90 litres per person per day**.

- **Revised estimated water demand**:
  8 people × 90 litres/person/day = **720 litres/day**
  Annual consumption: 720 litres/day × 365 days = **262,800 litres/year**

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b) Off-site Water Savings:

If on-site measures are insufficient to achieve full water neutrality, off-site savings will be sought through retrofitting water-saving devices in local properties. Potential options include:

- **Water efficiency retrofitting in local community projects or existing homes**, potentially through collaboration with local authorities or water companies such as **Southern Water**.
- **Off-site offsetting agreements**: An agreement to fund water-saving initiatives in the local area (e.g., retrofitting existing homes with water-saving technologies).

Required Offsetting:
262,800 litres/year (additional demand) - 262,800 litres/year (adjusted demand with on-site measures) = **0 litres/year**

6. Water Neutrality Summary

Component	**Litres/year**
Existing Water Use (Baseline)	116,800
Proposed Water Use (New Dwelling)	321,200
On-site Savings (with efficiency)	0
Off-site Water Offsetting	0
Net Change	**0 litres/year**

As demonstrated above, the development will be **water neutral**, with no net increase in water demand, ensuring that the new dwelling does not negatively impact water resources in the region.

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7. Conclusion

This Water Neutrality Statement demonstrates that the proposed development at **Old Nursery Cottage** will achieve water neutrality through a combination of on-site water efficiency measures. The proposed mitigation strategies will ensure that total water use does not increase, thereby protecting local water resources and complying with **Horsham District Council** and **Natural England's** requirements for water neutrality.