Water Neutrality Statement

To accompany a Planning and Listed Building Application at;

32 High Street Steyning BN44 3YE

The site lies within the Sussex North Water Resource Zone.

The requirement for development is maintain 'water neutrality' i.e. the development will impose no greater water usage or load on the water supply.

Please read this document in conjunction with Application drawings/plans.

The Current Use

The current use at first and second floor is Domestic/Residential at first and second floors which includes a kitchen and bathroom with bath, wc and basin

The current use at ground floor and basement is commercial, operating as a Tea Room,and includes a commercial kitchen and a customer wc in the rear part of the ground floor, a washing up/utility area in the rear central part of the groundf loor and in the basement there is a cleaners sink.

Current Water Usage – Residential

Based on Building regulations Approved Document G, Requirement G2 Regulation 36 allows in new dwellings 125 litres per person per day water usage. This data is used to estimate the current water usage of the existing first and second floor dwelling.

The existing dwelling is three bedrooms, using extrapolated 2011 census data for Horsham District this assumes occupancy of 2.47 people, giving a daily water total usage of 125 litres x 2.47 people = 308 litres per day.

308 per day x 365 days per year = 112,420 litres per annum water consumption

Current Water Usage – Commercial

Water bills and evidence of actual consumption is not available as the the Tea Room business is no longer in existence therefore estimates and assumptions have been made as follows;

The Tea Rooms had 20 covers (table places), estimate average use/occupancy 40% occupancy per hour therefore 8 customers per hour.

Estimated customer wc usage and water consumption

wc is used is flushed by 40% of customers, therefore 3.2 people/flushes per hour x 6 litre cistern = 18 litres

handwash basin with a tap flow rate of 6 litres/minute for 30 seconds per user therefore 3.8 x 3 litres = 11.4 litres

Customer washroom water consumption – average between the 8 and 9 hour opening days – 8.5 hours

8.5 x 18 litres wc and 11.4 litres basin = 249.9 litres per day customer water usage

The commercial kitchen serving drinks, cooking and food preparation, washing up etc is estimated to use 2.5 litres per customer per hour therefore 8 customers per hour x 2.5 litres = 20 litres x 8.5 hours opening time = 170 litres

Dishwasher water usage (estimated/average) is 12 litres per wash/cycle, assume the machine is operated four times per day = 48 litres.
General cleaning, floor washing etc – assume one mop bucket 10 litres per day

Estimated Tea Room water usage per day is;

Customer washroom wc	249.9 litres
Kitchen drinks and food preparation etc	170 litres
Dishwashing	48 litres
Cleaning	10 litres
total commercial water usage per day	477.9 litres

Assuming the business operated as per the existing Planning Permit which is 6 days per week excluding public holidays this is 306 'open' days in a year

477.9 litres per day x 306 days per year = 146,237.4 litres per annum water consumption

Proposed water Usage – Residential

The existing dwelling is three bedrooms, the proposed plans show the bedroom as four bedrooms, or three plus a study. This document will work on the basis of a four bedroom house therefore using extrapolated 2011 census data for Horsham District this assumes occupancy of 2.86 people, giving a daily water total usage of 125 litres x 2.86people = 357.5 litres per day.

357.5 per day x 365 days per year = 127,270 litres per annum water consumption

Water Usage for Construction

Stated on Horsham District Coucil's website 'Water neutrality and Plannign Applications'

'*At this stage we consider that most construction timeframes are relatively short therefore we will not be actively seeking water neutrality for the construction phase*'.

Water Usage Comparison - Existing and Proposed

existing commercial use/area water usage per day	477.9 litres per day / 146,237 litres p/a
existing residential use first and second floors	308 litres per day / 112,420 litres p/a
	146,237 + 112,420
	258,657 litres per annum
proposed residential use whole building	357.5 litres per day / 127,270 litres p/a
	127,270 litres per annum

Conclusion

The calculations for residential use is based on extrapolated 2011 census data for Horsham District therefore these figures are assumed to be reliable and acceptable.

The calculations for the commercial uses is based on estimated data as water bills and 'evidence' is not available. To counter any perceived 'over estimation' use 50% of the estimated commercial use figures above above i.e. 50% of 146,237 p/a = 73,118 litres p/a

73,118 litres p/a commercial use plus 112,420 litres p/a residential use = 185,538 litres p/a

Even with the existing commercial use estimated figures halved the existing building's water use still exceeds that of the whole building with residential use.

The calculations and data above show that the building used wholly as residential will use less water than the current/existing commercial/residential mixed use and therefore demonstrates this proposal achieves water neutrality and will impose no greater water load/demand on the Sussex North WRZ.

End document 26 03 24
Rathbone Miller

The details given in this document including the length of time the property has been marketed (coming up for 16 months) and price reductions are justification for the loss of the Commercial space and change to residential.

end document 21 03 24 Rathbone Miller