

[REDACTED]

From: Alice.Johnson
Sent: 19 November 2025 16:37
To: Planning
Subject: FW: DC/25/1146, Leonardslee Gardens
Attachments: Water Neutrality Assessment V6.pdf

Categories: Index to I@W

Good afternoon ,

[REDACTED]

Kind regards,

Alice Johnson
Planning Officer

[REDACTED]
[REDACTED]



Horsham District Council, Albery House, Springfield Road, Horsham, West Sussex RH12 2GB
Telephone: 01403 215100 (calls may be recorded) www.horsham.gov.uk Chief Executive: Jane Eaton

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From: [REDACTED]
Sent: 28 October 2025 03:31
To: Alice.Johnson <Alice.Johnson@horsham.gov.uk>
Cc: [REDACTED]
Subject: RE: DC/25/1146, Leonardslee Gardens

Good morning Alice,

Thank you for your email and confirming our options.

On the basis that the statement can be withdrawn following updated government advice, please find attached the revised Water neutrality report which has been recalculated using the average occupancy (as per Part G) and included the Part G calculation as an appendix.

We have also prepared a concise table, which explains how the visitor numbers referenced in the Water Neutrality report have been derived. Fundamentally the proposals at Leonardslee are the service the existing demand that cannot be met due to the constraints of the existing buildings; growing the business by increasing the average spend per visitor as opposed to relying on increasing visitor numbers. This is set out in the design & access statement.

	Estimated average site users per day as Existing	Estimated average site users per day in 5 years
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Relevant part	Number (People)	Source	Number (People)	Source
General Garden Admission Visitors	682	Average daily visitor numbers for 2024, divided by 364 (Leonardslee does not open Christmas Day)	714	Number increased by anticipated growth as set out in the design & access statement: <ul style="list-style-type: none">- 5% Year on year increase to Summer Months- 10% Year on year increase to Winter Months- 5% Year on year decrease to Events (all year) This equates to a 4.61% increase in visitors over the 5 year period.
Engine House Accessible WC	0	Existing plans	30	Usage was reviewed as part of a review of the <i>Engine House STP (April 2024) - D. Duade</i> . Sizing, identified a maximum 80 café users, 40 non café users and 4 staff members. Given it is highly unlikely these number will be achieved on a daily basis (the café is mainly staffed during summer weekends or school holidays), an average of 30 uses per day reflects the seasonality of the offering at Leonardslee.
Clocktower Café Diners	94	Existing capacity of restaurant as shown in existing floor plans	104	Proposed floor plans. Occupancy will not increase over time due to spatial constraints
Former Generator Block	128.25	80 in courtyard 60 in lean to 11 Outside. 75% occupancy applied to external seating due to weather	171	Proposed floor plans. Occupancy will not increase over time due to spatial constraints
Potters Cottage	4	The maximum existing capacity for occupancy based upon existing floor plans. Two couples sharing.	4	Proposed floor plans. Occupancy will not increase over time due to spatial constraints
Carriage Cottage	0		2	Proposed floor plans. Occupancy is independent of increases in visitor numbers
Honey Cottage	4	The maximum existing capacity for occupancy based upon existing floor plans. Two couples sharing.	4	Proposed floor plans. Occupancy is independent to increase in visitor numbers
Red House	15	Staff with access to the WC in close proximity. The 20 uses a day calculated by EAS reflects staff uses per day, which reflects the occasional drop in nature of the WCs	2	Staff will no longer partially use this welfare, they will utilise other facilities in the grounds

We trust this addresses the previous concerns highlighted, however please do let us know if you need any additional information.

Kind regards,

[Redacted Signature]

[Redacted Line]

[Redacted Name]
Heritage Specialist

[Redacted Line]

[Redacted Line]
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Architects, Masterplanners, Heritage Consultants

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LEONARDSLEE GARDENS

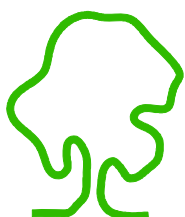


LOWER BEEDING, HORSHAM, RH13 6PP

Water Neutrality

May 2024


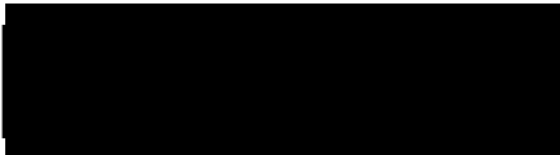
(Revised July 2024, August 2024, October 2024, May 2025, October 2025)



eas ltd

Environmental Assessment Services Ltd

REPORT DATA SHEET

Requirement	Data
Report Reference	688/LeonardsleeGardens/WNA
Date	May 2024
Client	Leonardslee Gardens
Report type	Water Neutrality
Purpose	Redevelopment
Revisions	July 2024, August 2024, October 2024, May 2025, October 2025
Prepared by	Xanthe Lyford BSc (Hons) 
Approved by	Eur Ing Malcolm McKemey BSc (Hons), CEng, CEnv, MICE, MCIWEM, MIEnvSc 

LEONARDSLEE GARDENS

LEONARDSLEE GARDENS, BRIGHTON ROAD, LOWER BEEDING,
HORSHAM, WEST SUSSEX, RH13 6PP

Water Neutrality Assessment

May 2024

(Revised July 2024, August 2024, October 2024, May 2025, October 2025)

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LEONARDSLEE GARDENS

LEONARDSLEE GARDENS, BRIGHTON ROAD, LOWER BEEDING,
HORSHAM, WEST SUSSEX, RH13 6PP

Water Neutrality Assessment

May 2024

(Revised July 2024, August 2024, October 2024, May 2025, October 2025)

1. BACKGROUND

- 1.1 Environmental Assessment Services Ltd has been instructed to prepare a Water Neutrality Assessment for submission to Horsham District Council in relation to the proposed developments of the site at Leonardslee Gardens, as detailed below.
- 1.2 The site is set within the grounds of Leonardslee Gardens, located on Brighton Road, Lower Beeding. The estate area is approximately 240 acres. The Ordnance Survey map reference for the site is TQ 22108 26043, the site elevation is approximately + 99m OD. See Figure 1 in Appendix A for the Site Location Map. The site hydrology is given in Appendix A.
- 1.3 It was originally proposed to redevelop eight areas of the Leonardslee site listed below (now reduced to seven):
 1. Car Park WC Block (no longer included in the development plans).
 2. The Engine House.
 3. The Stable Block – Clocktower Café.
 4. The Stable Block – Potters Cottage.
 5. The Stable Block – Staff Office/Carriage Cottage.
 6. The Stable Block – Honey Cottage.
 7. Former Generator Block (Includes the Function Room/Dolls House Museum/Alpine House Café).
 8. Red House (staff welfare building).
- 1.4 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 new development.*

- 1.5 The site was visited on 2 May 2024. See Figure 4 in Appendix A for photographs taken at the time of visit.

2. EXISTING SITE USE

- 2.1 The existing layout and usage of the areas of Leonardslee Gardens that are to be redeveloped are listed below:

1. **Car Park WC Block:**

An existing WC block (with five female toilets, 3 urinals, two male toilets and associated washbasins) attached to the car park. There were two approximately 3.5 m³ tanks to the rear of the building at the time of the site visit. There is potential for these to be used to store harvested rainwater. (This building has since been dropped from the renovation plans and will remain as existing, so is no longer considered in the calculations for water neutrality).

2. **The Engine House:**

There is a mains water supply to this building. No present water use.

3. **The Stable Block – Clocktower Café:**

An existing café with a kitchen including dishwasher and sinks, staff and public WCs. The existing facilities are to be reconfigured and newer, more water efficient toilets and sinks are to be fitted.

4. **The Stable Block – Potters Cottage:**

An existing four-bedroom, self-contained flat with ground floor bathroom and kitchen. Currently used as accommodation for Leonardslee staff, to be redesigned for use as three-bedroom (four-person) guest accommodation.

5. **The Stable Block – Staff Office/Carriage Cottage:**

The staff office with no current water or sewerage provision, to be reconfigured for use as one-bedroom (two-person) guest accommodation.

6. **The Stable Block – Honey Cottage:**

An existing self-contained, two-bedroom, historic cottage. Currently used as accommodation for Leonardslee staff to be reconfigured with new appliances for use as two-bedroom (four-person) guest accommodation.

7. **Former Generator Block (Includes the Function Room/Dolls House Museum/Alpine House Café):**

An existing café with indoor and outdoor dining areas, kitchen with glasswasher, dishwasher, sinks and coffee machines and a bar area attached to the courtyard dining area. The Dolls House Museum to the rear of the building is to remain. The attached mains water irrigated

greenhouse adjacent to the museum is to be removed, and the irrigation water will no longer be required.

8. Red House:

An existing semi-detached residence to the northwest of the site, near to the evening exit gate from the grounds. Currently used as a staff welfare building, it is to be renovated to create staff accommodation for two persons on the first floor and the relocated dolls house museum on the ground floor.

- 2.2 Water meters were installed to measure the existing water use at the abovementioned locations. Unfortunately, the meter covering the majority of the above locations malfunctioned and the data could not be used. It has been necessary to estimate the existing water use. Water bills were also provided by Leonardslee for 2023-2024, however these were for the whole site including the hotel, irrigation for the gardens, animals watering and the vineyard, so were deemed unsuitable for use in the calculations for the eight developments. See Appendix D for the Southern Water bills.

3. PROPOSED REDEVELOPMENT

- 3.1 It is proposed to redevelop the sites as detailed below, including the proposed changes in water use.

1. Car Park WC Block:

This proposal has now been removed, and the WC block is to remain as existing, so is no longer included in the water neutrality calculations.

2. The Engine House:

Creation of a new accessible WC with wash hand basin, there is a mains water supply to this building. The foul sewage is to be treated in a below ground package sewage treatment plant.

3. The Stable Block – Clocktower Café:

Reordering of existing café with new kitchen spaces, new staff WC, and reconfiguration of the current guest WC provisions. There are to be an increased number of guest toilets (currently 9 changing to 12) and sinks (currently 4 changing to 12) and the removal of 2 urinals. They are to be of a more water efficient (low volume) design, reducing the water usage. The kitchen space is to have a new dishwasher and glasswasher in a water efficient design, and low volume taps in the kitchen sinks replacing the existing, less efficient ones.

4. The Stable Block – Potters Cottage:

The existing self-contained four-bedroom flat is to have an additional en-suite fitted with WC/shower/basin. The existing kitchen will be unchanged; the ground floor bathroom and WC are to be reconfigured with no change to the usage of water from this room. The property is to

be renovated for use as a three-bedroom (four-person) Air B & B, reducing the amount of residency from a permanent staff residence to a holiday let and therefore reducing the water usage. The en-suite bathroom will have low volume, water saving taps, toilet and shower.

5. The Stable Block – Staff Office/Carriage Cottage:

The staff office is to become a new self-contained one-bedroom flat with a new kitchen and bathroom with WC/basin/shower/ (low volume) and possibly a bath if the water constraints allow. This will be for use as an Air B & B.

6. The Stable Block – Honey Cottage:

Existing self-contained, two-bedroom cottage is to be reconfigured with a new kitchen and a new shower room with shower/WC/basin, using water efficient low-volume toilets and low-pressure taps. The property is to be renovated for use as an Air B & B, reducing the amount of residency from a permanent residence to a holiday let and therefore reducing the water usage.

7. Former Generator Block (Includes the Function Room/Dolls House Museum/Alpine House Café):

Reconfiguration and extension of the spaces, including new WCs (containing 3 WCs and 3 sinks) to rear of Alpine House Café (no WCs here at present). The new visitor toilets are to be of a water-controlled design, using low-volume toilets and low-pressure tap sinks. A new kitchen is to replace the existing kitchen with dishwasher, glasswasher, sinks and coffee machine and the existing bar is to be relocated to serve the new Function Room. A “Costa” style café bar is to be built in the Alpine Cafe. The greenhouse that relies on mains water irrigation to the rear of the building is to be removed and no mains water irrigation will continue at this location. The area is to be used for educational proposes.

8. Red House:

Reconfiguration of internal spaces to change the number of WCs (from 3 to 2), sinks (to remain at 2) and showers (no showers at present to be increased to 2) and an additional kitchen. The new toilets, taps and showers will be of a low volume, water saving design. This will be used as staff accommodation for two staff and a new location for the relocated Dolls House Museum.

3.2 All things being equal, it is apparent that the redevelopment would be anticipated to increase water usage compared with the existing. The increase in water use is to be mitigated by the use of water saving models of appliance and offsetting against the saving made from the removal of the irrigation in the greenhouse.

3.3 The increased water usage for the proposed redevelopment would consist of water associated with the additional accessible toilet and basin at the Engine House, the additional toilet, sink and shower in Potters Cottage, the new toilet,

sink and shower (possibly bath), washing machine, dishwasher and kitchen sink for Carriage Cottage, the 3 new toilets and sinks behind the Alpine House Café, the additional showers, dishwashers, kitchen sink and washing machine for Red House. However, savings are being made in the form of the removal of a toilet in the Red House and the removal of the mains irrigation for the greenhouse to the rear of the former Generator Block.

- 3.4 Water usage within the proposed redevelopment is to be reduced to below the existing by a combination of new water fittings, which use less water or use water more efficiently, and removal of water use for irrigation of the greenhouse.
- 3.5 This has been discussed with Leonardslee Gardens, exploring potential water saving options within the wider site, specifically the use of more water efficient fittings; harvested rainwater for the flushing of toilets in the public areas was also considered, this was discounted due to the amount of storage required.
- 3.6 The comparison between existing older style fittings and appliances (*taken from Home Water Works. Org*) and the new low pressure/volume types proposed to be used are taken from *Building Regulations Part G Document table 2.2* are summarised in Table 3.1 below:

TABLE 3.1
USE FROM EXISTING APPLIANCES AND LOW PRESSURE/VOLUME
APPLIANCES

Old Appliance	Water per single use (litres) Old existing types	New Appliance	Water per single use (litres) New Low Volume
Toilet (per flush)	13	Low volume toilet (full flush/part flush)	4 / 2.6
Basin Sink (30 sec hand wash)	4	Low pressure sink (30 sec hand wash)	2.5
Kitchen Sink (per minute)	8	Kitchen Sink (per minute)	6
Shower (19 l/min - 6 mins)	144	Low volume shower (8 l/min - 6 mins)	48
Bath	170	Bath	170
Washing machine	82	Washing machine (8.17l/kg – 10kg)	82
Dishwasher (1.25l/place setting - 12 settings)	15	Dishwasher (1.25l/place setting - 12 settings)	15
Glass Washer (1.25l/place setting – 8 settings)	10	Glass Washer (1.25l/place setting – 8 settings)	10

- 3.7 The frequency of use of the appliances and fittings used in the water use calculations are given in Table 3.2 below:

TABLE 3.2
APPLIANCE USES PER DAY

Appliance	Uses per day/week
Low volume toilet	5 residential uses per person per day / 1 per visitor per day
Low pressure sink (hand wash)	5 residential uses per person per day / 1 per visitor per day
Low volume shower (6 mins)	1 per person per day
Bath	1 per week
Washing up dishes	2 per household per day/ 10 per cafe
Washing machine	1 per week
Dishwasher	1 per household per day / 5 per café per day
Glass Washer	5 per café per day

(estimated uses from Davidsonmorris.com)

3.8 The areas of the new development where water use is being saved or offset are:

- The new staff and guest WCs and sinks in the Clocktower Café will be fitted with more efficient fixtures than the existing, saving water from the existing consumption.
- The removal of the greenhouse with the mains irrigation system to the rear of the Alpine House Café will save water compared with the existing usage.

3.9 Leonardslee have provided us with site visitor numbers and customer numbers for the Clocktower and Generator cafes, see Table 3.3 below. See Appendix E for the calculation of predicted customer numbers provided by Leonardslee Gardens and the Part G calculation form the WRC water neutrality calculation tool for the residential dwellings.

TABLE 3.3
VISITOR AND CUSTOMER NUMBERS

		Estimated average site users per day	Estimated average site users per day in 5 years	Estimated Average occupancy for accommodation	Notes
1	Total site users (data from car park)	682	714	-	Average figures per day based on annual figures increased over 5 years
2	Engine House accessible WC	-	30	-	Estimated usage (based on 4.2% of UK using disabled WC)
3	Clocktower Café	94	104	-	Existing and proposed use the same
4	Potters Cottage	4	4	2.86	Existing staff accommodation to proposed guest accommodation

5	Carriage Cottage	0	2	1.88	Existing storage to proposed guest accommodation
6	Honey Cottage	4	4	2.86	Existing staff accommodation to proposed guest accommodation
7	Alpine Café / former generator block	128.25	171	-	Existing use as a café increased use due to predicted increase in covers.
8	Red House	15	2	1.88	Existing staff welfare to proposed staff accommodation

- 3.10 We have been informed by the site owners that the visitor numbers to Leonardslee is expected to rise by 4.61% (net over 5 years), Leonardslee have provided visitor information (see above) consisting of an estimated average of 682 visitors per day, expected to rise by to 714, this has been included in the calculations for the proposed usage. Current and proposed water usage from the development is summarised in Table 3.4 below. The water usage is based on of the public toilets and hand washing facilities, at 13 litres per flush and 4 litres per hand wash for an old-style toilet and sink, and 4 litres per flush and 2.5 litres per hand wash for a water saving toilet and sink. (*Building Regulations Document G table 2.2*). Based on a worst-case scenario (all visitors to the gardens using the facilities). Leonardslee have stated a current occupancy level for the hotel as 49%; this has been assumed as a baseline for the proposed accommodation occupancy and the occupancy for the proposed guest accommodation is reduced to 49% occupancy accordingly. The residential toilet usage is based on the NHS England the average toilet uses per day being 6 times per day reduced to 5 times to account for usage outside the accommodation. The calculation for the residential use are based on the average occupancy rates as stated in the Part G document and shown in Table 3.3 above. See Appendix E for the calculations from the Part G calculator tool from WRC, which gives the litres per person per day. This has been used to calculate the litres per day for each of the proposed development areas shown in Table 3.4 below. Please note the usage for the car park toilets (1) is not included in the calculations for water neutrality, as this development is no longer going ahead.

TABLE 3.4
DAILY WATER USAGE FROM THE CURRENT & PROPOSED FACILITIES

Proposed redevelopment	Water use		Average litres/day		Change
	Current	Proposed	Current	Proposed	
1. No Change	Flushing 9 WCs, 3 urinals and 5 sinks for visitors	No change (proposal no longer under consideration)	(682 visitors in total)	(714 visitors in total)	The usage from this building is no longer considered as the development is no longer proceeding.
2. Accessible WC	No water use	wheelchair accessible WC and sink (30 uses)	Nil	166.2	+166.2
3. Clocktower Café Renovation	Glasswasher, dishwasher, 2 kitchen sinks, 9 WCs, 2 urinals 4 sinks (94 uses)	Glasswasher, dishwasher, kitchen sink, 12 WCs, 0 urinals, 12 sinks (104 uses)	185 (kitchen use) 1598 (toilets)	204.61 (kitchen use) 575.96 (toilets)	- 1002.43
4. Potters Cottage redeveloped	Washing machine, dishwasher, kitchen sink, shower, 2 x WC, sink	Additional washing machine, dishwasher, kitchen sink, 2 x shower, 2 x WC, 2 x sink	555.98 (kitchen use and bathroom use)	266.84 (kitchen use and bathroom use)	- 289.14
5. Carriage Cottage redeveloped	No existing water use	Dishwasher, kitchen sink, shower, WC, sink	Nil	161.12 (kitchen use and bathroom use)	+ 161.12
6. Honey Cottage reconfigured	Washing machine, dishwasher, kitchen sink, shower, WC, sink	New washing machine, dishwasher, kitchen sink, shower, WC, sink	500.24 (kitchen use and bathroom use)	266.84 (kitchen use and bathroom use)	- 233.4
7. Alpine Café redeveloped with bar and function room and additional WC block	Glasswasher, dishwasher, 2 kitchen sinks, coffee maker. 0 WCs, 0 sinks, watering greenhouse	New glasswasher, dishwasher, 2 kitchen sinks, 3 WCs and 3 sinks	266.95 (kitchen use) 800 (greenhouse irrigation)	295.25 (kitchen use) 945.63 (toilet use) Nil (greenhouse irrigation removed)	+ 173.93
8. Red House renovation	Dishwasher, kitchen sink, 3 WCs, 2 sink, 0 showers (20 staff uses per day)	Washing machine, dishwasher, kitchen sink, 3 WCs, 2 sinks, 2 showers, additional dishwasher & washing machine, kitchen sink	434.75 (kitchen use and toilet use)	266.84 (kitchen use and toilet and shower use)	- 167.91
Total daily water			4340.92	3149.29	- 1191.63

3.11 Leonardslee Gardens has provided water bills for the last year, from which we can see an estimated consumption (some readings taken from the meter, some estimated by the water provider) for the whole site. The differences in daily consumption shown in the bills reflect the differing usage due to varying occupancy and opening times throughout the year. The water usage shown in the bill would also include use for the hotel, watering the livestock, (wallabies, chickens etc), water consumption by the vineyard and watering the gardens and propagation houses/greenhouses, so will not be an accurate representation of the consumption by the existing units that have been proposed to be redeveloped. The bills are shown in Appendix D and summarised below.

- 29/06/2023 - 28/09/2023 (92 days) 888 m³/9.7 m³ per day (9700 litres p/d)
- 29/09/2023 - 28/12/2023 (91 days) 1191 m³/13.1 m³ per day (13100 litres p/d)
- 29/12/2023 - 28/03/2024 (77 days) 588 m³/7.2 m³ per day (7200 litres p/d)
- 29/03/2024 – 28/06/2024 (89 days) 1162 m³/13 m³ per day (13000 litres p/d)

3.12 Current water usage at the seven development locations on site is estimated at 4340.92 litres per day. The water usage with the proposed low pressure/flow fittings, removal of the greenhouse irrigation arrangements is estimated to be 3149.29 litres per day, making a total saving of 1191.63 litres per day. See Table 3.5 below for a summary of the existing water use, proposed water use and offset water savings.

TABLE 3.5
SUMMARY OF CHANGES IN WATER USE

	Water use	Average litres/day
Current water usage	Kitchens and bathrooms in the residences and kitchens, public toilets in the cafes and greenhouse irrigation.	4340.92
Proposed water usage	Kitchens and bathrooms in the air B & Bs and kitchens and public toilets in the cafes.	3149.29
Offset water saving	Loss of greenhouse irrigation with mains water.	-800

3.13 Leonardslee Gardens has shown a commitment to reducing water usage by the replacement of the existing inefficient models with low-volume, water saving models of appliance and the removal of the existing greenhouse, which currently uses mains water for irrigation.

3.14 The replacement of the toilets and sinks with low-volume flushing toilets and low-pressure sinks and showers in the developments will result in a decrease in daily water usage (an older style toilet or sink will use approximately 13 litres of water per flush and 4 litres per hand wash, as stated in waterwise.org.uk, as opposed to approximately 4 litres per flush for a new low-volume toilet and 2.5

litres per hand wash for a low pressure, aerator sink as suggested in *Building Regulations Document G table 2.2*). See Appendix F.

- 3.15 Further savings are to be made by redeveloping the existing greenhouse, to the rear of the Alpine Café, which is to be redeveloped for educational use and the water currently used for irrigation is to be offset against the proposed usage. It is estimated that the irrigation of a typical greenhouse of comparable size to the current greenhouse uses approximately 800 litres of water per day (as stated in *www.gardencentermag.com 0.4 gallons per square foot/ 1.82 per 3.28 m*). See Table 3.5 above for details of the water usage and offsetting and Figure 4 for photographs of the existing greenhouse.

4. WATER NEUTRALITY ASSESSMENT

- 4.1 The existing water use for the current facilities at the site has been estimated at 4340.92 litres per day.
- 4.2 The water use for the site developed as proposed (including all the water saving measures described above) has been estimated as an average of 3149.29 litres per day.
- 4.3 To add headroom and robustness to the water neutrality from the proposed developments the following measures are to be implemented:
- The proposed bathrooms and replacement visitor WCs and sinks will implement water saving design: low volume toilet flushing, low volume taps and reduced pressure showers designed to save water. The appropriate water saving devices as shown in Appendix C.
 - Offsetting options have been explored across the wider site. The current greenhouse is irrigated from the mains water system. It is proposed to redevelop this greenhouse for use as an educational building. This will result in a saving of 800 litres per day, which will help to offset the water usage from the other proposed redevelopments.
- 4.4 On the basis of the above, the proposed redevelopment would achieve (better than) water neutrality.
- 4.5 It should be noted that the above is a worst-case scenario based on the highest calculated proposed water usage. It had been calculated that the proposed water usage will be 3149.29 litres per day. This could provide a headroom of 1191.63 litres per day.

5. CONCLUSIONS

- 5.1 It is proposed to redevelop the site at Leonardslee Gardens, Brighton Road, Lower Beeding as detailed above. To include the renovation and expansion of the Generator building currently housing the courtyard and Alpine Café and the reconfiguration of the Clocktower Café. The cottages: Potters, Honey, Carriage

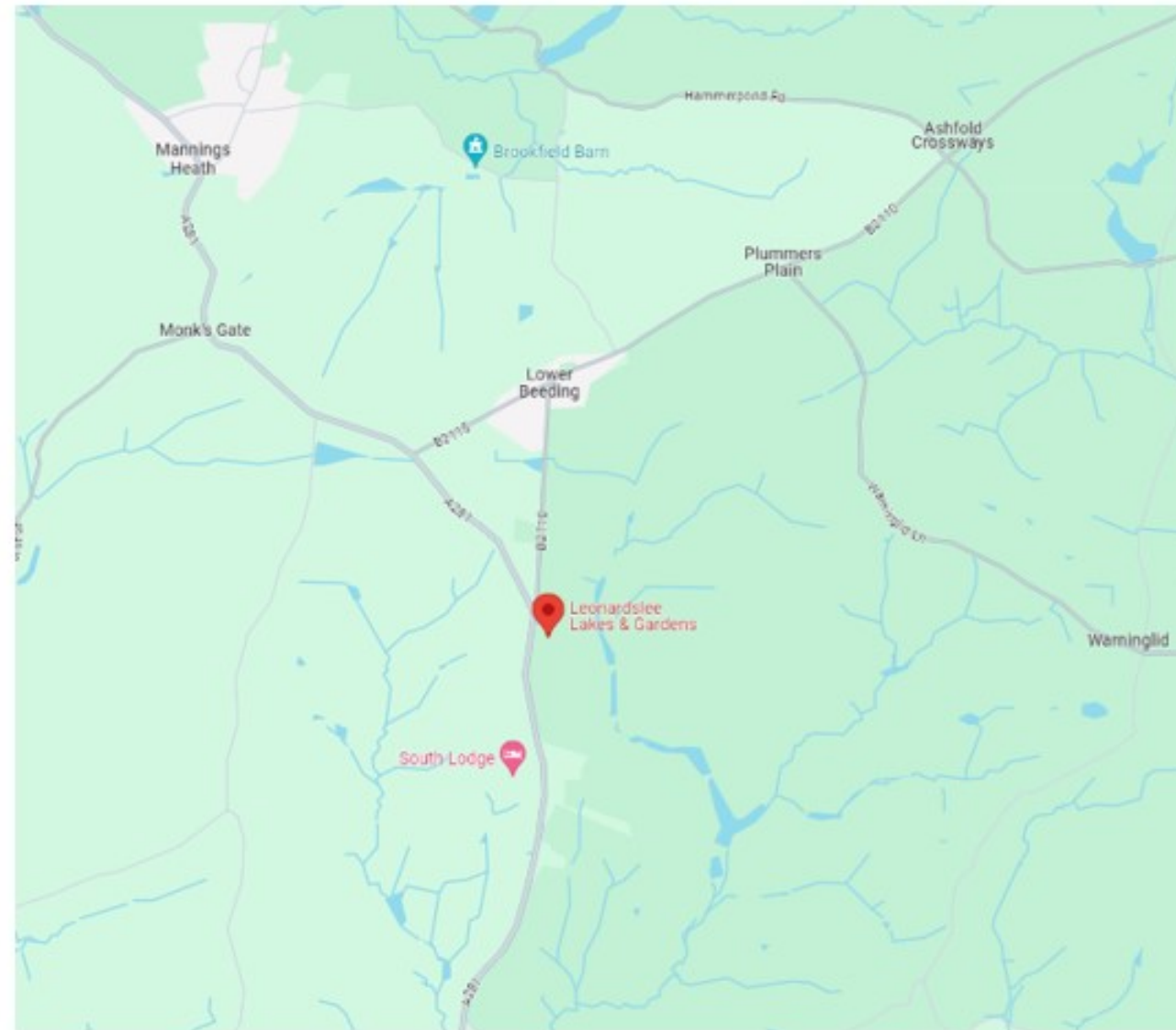
and the Red House are undergoing some redevelopment with reference to bathroom and kitchens as detailed above in Section 1.3.

- 5.2 Existing water consumption is estimated as 4340.92 litres per day; the estimation is achieved using the Part G calculator tool from WRC (see Appendix E for the calculations from the part G calculator tool). The water consumption post redevelopment is estimated as 3149.29 litres per day, these savings have been made by the introduction of water saving models of appliance throughout the developments. The development plans include the redevelopment of the existing greenhouse to the rear of the Alpine House café (into an educational unit), which currently uses an estimated 800 litres of water per day from the mains water supply to irrigate. This is to be offset against the usage from the proposed developments resulting in a saving of -1191.63 litres per day when compared with the existing usage. This is better than water neutral.
- 5.3 On this basis water neutrality would be more than achieved
- 5.4 To achieve water neutrality, water efficient fixtures and fittings will be used throughout this redevelopment, examples of which can be seen in Appendix D. The upgrading of the appliances to low volume and water saving designs, coupled with the offsetting, will provide a saving of 1191.36 litres per day compared to the existing situation.
- 5.5 The proposed redevelopment should have its own water supply account and water meter. A smart meter would be recommended.

☆☆☆☆☆☆

APPENDIX A

FIGURE 1:	Site Location Map
FIGURE 2:	Site Map
FIGURE 3:	Proposed Development
FIGURE 4:	Photographs



Leonardslee Gardens
Lower Beeding, Horsham, RH13 6PP

Figure 1: Site Location

Scale as shown

May 2024



Leonardslee Gardens Lower Beeding, Horsham, RH13 6PP

Figure 2: Site Map

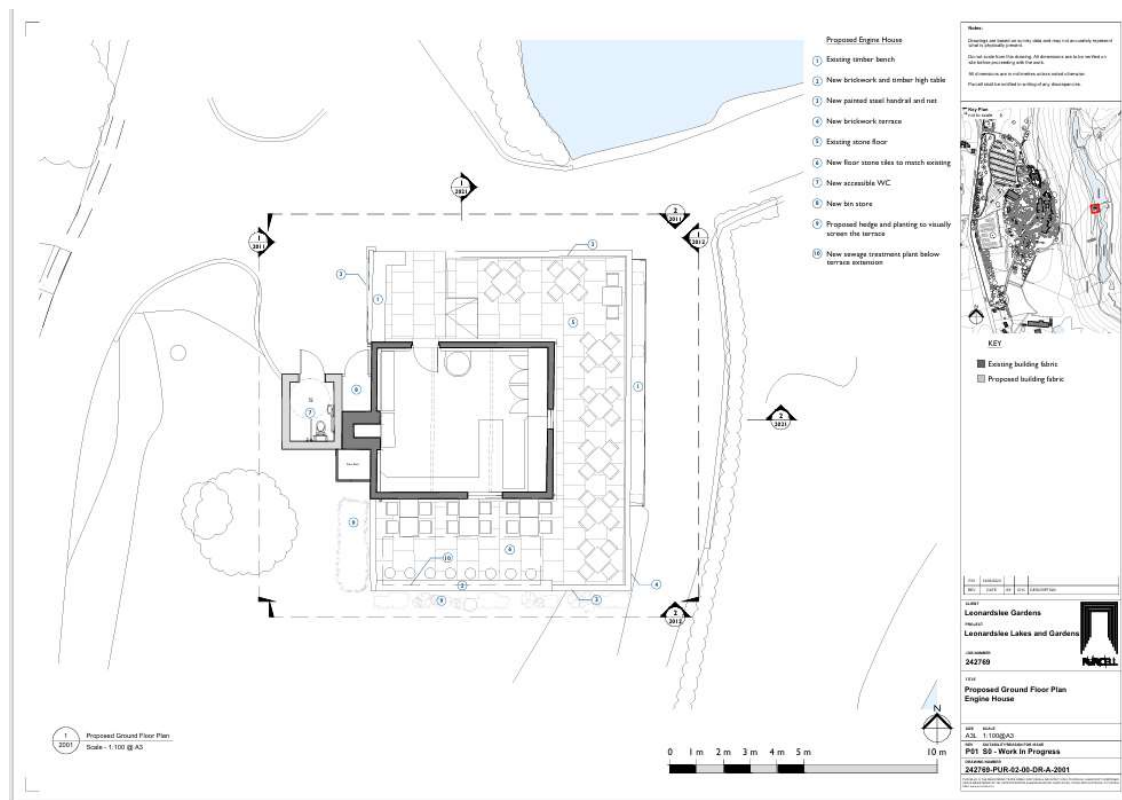
Scale as shown

May 2024

FIGURE 3: Proposed Redevelopment

1. Car Park Toilets (as existing, no longer included in the redevelopment)

2. The Engine House



Proposed Stable Block

- 1 New roofed seating cobbles to form level access to courtyard entrance.
- 2 New extended courtyard cobbles surface using proposed cobbles to match existing.
- 3 New modern surface treatment to entrance into courtyard.
- 4 New glazed entrance with restrained timber posts to existing structure.
- 5 New window to reinstatement original blocked up window opening.
- 6 New unroofed kitchen layout with new P&B services.
- 7 Existing electrical pole retained.
- 8 New back of house area for staff and storage with external access route.
- 9 Existing containers repurposed and enclosed with timber fencing/shading.
- 10 Back of house access and fire escape from new service extension.
- 11 New hot area with red level flooring to keep out of sight from guests.
- 12 New extended internal seating area with bar to accommodate numbers of guests visiting the restaurant.
- 13 New terrace extension to create outdoor seating overlooking gardens.
- 14 New fabric with access to a cleaners cupboard, mechanical plant and an accessible WC with a baby change.
- 15 7 x new urinals VCs and 1 x accessible WC with baby change.
- 16 New help to screen. Barit access from public view.
- 17 New opening formed in existing wall 2.3m x 1m with oak beam to both faces.
- 18 New infold timber doors to create table for out of hours WC access. Doors in line with historic interior frame to roof on outside.
- 19 New extended ground floor with glass roof entrance and pathways.
- 20 New entrance extension replacing the conservatory and providing level access to interior.
- 21 Lightweight timber frame and clad extension to accommodate new entrance and sun room.
- 22 New open plan living space containing a kitchen, dining and seating areas.
- 23 Existing timber stairs up to entrance on first floor.
- 24 Existing terrace stairs up to entrance on first floor.

Proposed Money Cottage

- 1 New open plan living space containing a kitchen, dining and seating areas.
- 2 Existing timber stairs up to entrance on first floor.
- 3 Existing terrace stairs up to entrance on first floor.

Proposed Cottage Cottages

- 1 Existing terrace stairs up to entrance on first floor.

KEY

- Existing building fabric
- Proposed building fabric

Note:

Three pile foundations to new proposed terrace posts to avoid existing tree roots. Arboriculturist Specialist to confirm.

Leonardslee Gardens
Leonardslee Lakes and Gardens

DATE
24/7/19

PROJECT
Proposed Ground Floor Plan
Stable Block

SCALE
1:200

CLIENT
C61 A2 - For Client Information

PROJECT NO.
H4719-FUR-01-00-DR-A-2001

Proposed Stable Block

- 1 New courtyard timber structure with glazed roof covering.
- 2 New metal roofing to existing structure with 3 x new conservation roof lights and metal panning.
- 3 Existing telephone pole retained.
- 4 New roofing over existing conservatory.
- 5 New savings over service extension.

Proposed Pastor's Cottage

- 1 New entrance lobby with new opening to new WC and storage cupboard in place of existing WC.
- 2 Existing kitchen stays as is and previous opening in WC is removed.
- 3 Under-stair storage as existing.
- 4 Large living room in place of previous bedroom.

Proposed Carriage Cottage

- 1 All bedrooms on second floor stay the same as their existing layout.
- 2 New ensuite bathroom to Bedroom 1 in place of existing storage.
- 3 New bathroom layout.
- 4 New partitions to replace existing modern partitions and create new appropriate layout.
- 5 New entrance lobby leads onto:
- 6 Large bedroom.
- 7 Modern bathroom and
- 8 Open plan living space.

Proposed Honey Cottage

- 1 New partitions to replace existing partitions and create new appropriate modern layout.
- 2 New hallway leads onto:
- 3 Bedroom 1.
- 4 Bedroom 2 and
- 5 A modern bedroom.
- 6 Extra roof to lightweight extension.

Proposed Second Floor Plan
Scale: 1:200 @ A2

Proposed First Floor Plan
Scale: 1:200 @ A2

KEY

- Existing building fabric
- Proposed building fabric

Leonardslake Gardens
Leonardslake Lakes and Gardens

242769

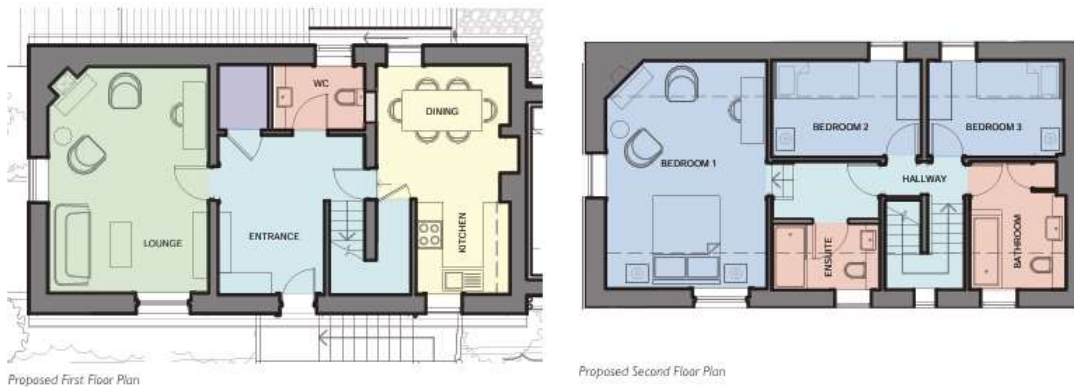
Proposed First & Second Floor Plan Stable Block

Scale: 1:200

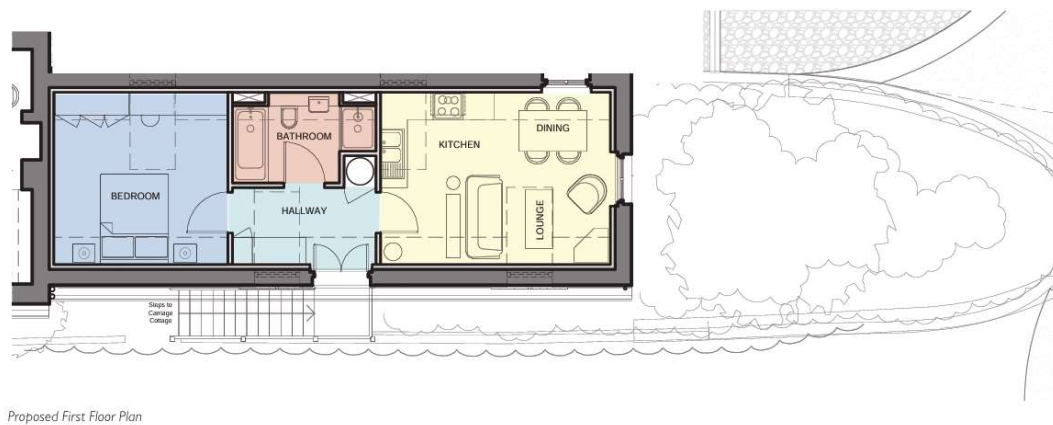
C01 A2 - For Client Information

242769-PUR-01-01-ORA-2002

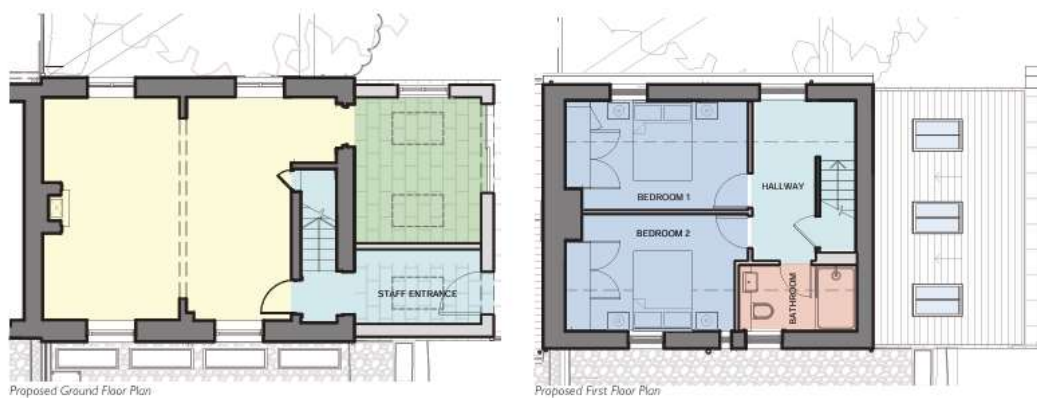
4. Potters Cottage



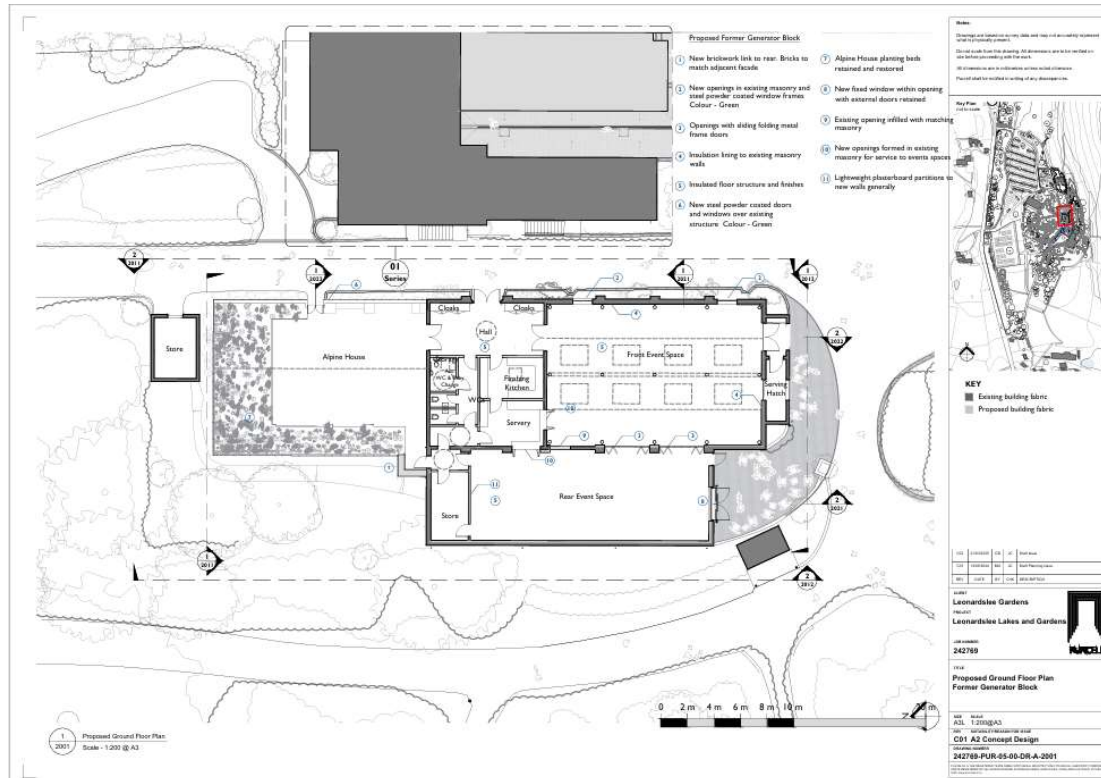
5. Carriage Cottage



6. Honey Cottage



7. Former Generator Block



8. Red House Ground Floor



FIGURE 4: Photographs

The Potters Cottage and Carrier Cottage to the left of the photo



Honey Cottage



Potters Cottage



Clocktower Café entrance and existing WC



The courtyard to the rear of Alpine House Café



The courtyard bar (to be extended)



The Red House



Existing mains water irrigated greenhouse (to be removed)



Gardeners building to the south of the site



Attenuation pond near gardeners building



APPENDIX B

Hydrology



MasterDrain
HY 11.0

Environmental Assessment Services Ltd

<http://www.easltd.co.uk>

London Rd, Hickstead
Haywards Heath,
West Sussex, RH17 5LZ
Tel: 01444 882552
email: info@easltd.co.uk

Job No. 688		
Sheet no. 1		
Date 08/07/24		
By XL	Checked	Reviewed

Project **Leonardslee**
Title **Hydrological data for Horsham**

Data:-

FSR values

Location = Horsham

Grid reference = TQ1328

M5-60 (mm) = 20.0

SAAR (mm/yr) = 800

r = 0.36

Soil = 0.45

Long reference = 513128

Area = England and Wales

Hydrological area = 7

Hydrological zone = 1

Soil classification for WRAP type 4

Clayey, or loamy over clayey soils with an impermeable layer at shallow depth.

FEH values

No FEH data available in this file.



MasterDrain
HY 11.0

<div>Environmental Assessment Services Ltd</div> <div>http://www.easltd.co.uk</div>		London Rd, Hickstead Haywards Heath, West Sussex, RH17 5LZ Tel: 01444 882552 email: info@easltd.co.uk		Job No. 688	
				Sheet no. 2	
				Date 08/07/24	
Project Leonardslee			By XL	Checked	Reviewed
Title Hydrological data for Horsham					

<- Soil

×

M5-60 ->

×

<- SAAR

×

r x 100 ->

×

Map extracts reproduced by permission of H R Wallingford.

APPENDIX C

Water Use Data

Low Volume Taps

1. Flow Rate: 3.5 lpm

2. Spout Height:
94mm

3. 5 Year Warranty

4. German Quality



Reduced pressure showers



Product Details

Height - 705mm

Product Code - A3064

Brand - Hudson Reed

Colour/Finishes - Chrome

Material - Brass & ABS

Product Type - Water saving shower kit - air induction handset for up to 25% water saving.

Water Pressure - MP - 0.5 bar pressure minimum

Requirement - Suitable for all plumbing systems

Hudson Reed multi-function shower heads have three settings for a choice of showering experiences

Soak - The classic shower jet

Champagne - A gentle spray

Massage - A muscle relaxing stimulating jet



Flowpoint Shower Head

The details and benefits of this Shower Head:

- ✓ **Saves Water** - With a regulated flow rate of 7 litres per minute, compared to a standard 15 litres per minute flow rate.
- ✓ **Easy To Fit** - Comes with standard ½" thread to fit all shower hoses (hose not supplied).
- ✓ **Self Cleaning** - Self-cleaning rubber nozzles allow easy cleaning to prevent limescale build up.
- ✓ **Flexible** - Will work with any standard ½" hose thread and Combi condensing boilers and gravity showers with a pump fitted*
- ✓ **Guarantee** - This model comes with a 1-year guarantee.
- ✓ **WRAS Approved** - Meaning the Flowpoint Single Setting Shower Head is approved to be safe, durable, water-efficient, built to a high standard and compliant with UK plumbing regulations as set out by our Water Companies.

*Not suitable for Electric or Digital showers and requires 0.5 bar water pressure.

product id: 3518

Low flush WCs


SPECIFICATION

Brand	Twyford
Button/Handle	Psh Button
Cistern Depth	160mm
Cistern Height	374mm
Cistern Width	366mm
Colour	White
Flush Capacity	4/2.6 Litre
Flush Mechanism?	Included
Flush Type	Dual Flush
Guarantee	1 year
Material(s)	Vitreous China
Range	Alcona
Type	Close Coupled Cistern

Specification				^
Ideal Standard Concept Arc Close Coupled 4/2.6 Litre Dual Flush Cistern - E785501				
EAN	5017830390459	Height (mm)	380	
MPN	E785501	Depth (mm)	160	
Product Code	165245	Weight (Kg)	11.36	
Type	Toilet	WRAS Approved	1	
Sub Type	Close Coupled Toilet	Flow Rate (L/min)	2.6	
Colour	White	Capacity (Litres)	4	
Style	Contemporary	Mounting	Wall	
Finish	Gloss	Material	Vitreous China	
Warranty (Years)	25	Range	Concept Arc	
Width (mm)	320			

APPENDIX D

Water Bills from the Site



Clarbow Limited
FAO Accounts
Leonards Lee Gardens
Brighton Road
Horsham TH13 6PP

18/005257
99900/00084

business-stream.co.uk

0330 123 2000

For emergencies, please contact your:
Water wholesaler: Southern Water
Visit business-stream.co.uk/emergencies

Customer reference / Invoice no
[REDACTED]

Invoice / tax point date: 29 September 2023

Supply address: LEONARDSLEE ESTATE
LIMITED LEONARDSLEE HOUSE BRIGHTON
ROAD, LOWER BEEDING HORSHAM SW, RH13
6PP

Water supply point ID [REDACTED]

Our VAT number 945 8508 85


Page 1 of 3

Your water services invoice

29 June - 28 September 2023 (92 days, average [REDACTED] per day)

Your account summary

Your previous balance	[REDACTED]
Payments received	[REDACTED]
Your balance brought forward	[REDACTED]
Your charges this period (see page 2 for details)	
Water services charges	[REDACTED]
VAT	[REDACTED]
Total charges this period	[REDACTED]

 We look forward to receiving your payment of [REDACTED]

Ways to pay

Direct Debit Paying by Direct Debit is the quickest and easiest way to pay your bills. Visit business-stream.co.uk/direct-debit or call us on 0330 123 2000.	Online Visit business-stream.co.uk/pay online with your debit or credit card details.	By phone Call 0330 123 2000 to pay over the phone using your debit or credit card details.	By bank transfer Sort code: 30-00-02. Account number: 09099999. Account name: Business Stream Revenue Account. Please include this reference number [REDACTED].	Payment slip Complete the enclosed payment slip and present it, with your invoice, to your bank branch or to a post office, to pay by cash, card or cheque. You may be charged for this service.
---	---	--	---	--

Alternatively, you can send a cheque, and the completed payment slip enclosed, to Business Stream, PO Box 07980, Edinburgh EH6 6ST. Cheques should be payable to 'Business Stream' and include your customer reference number on the back. Please don't send cash in the post and allow 10 days for payment to be processed. For more information, visit business-stream.co.uk/ways-to-pay

7 Lochside View, Edinburgh, EH12 9DH | business-stream.co.uk

Naturally different.

Scottish Water Business Stream Limited trading as Business Stream, Registered in Scotland, Company no. SC949312. Registered office address and principal place of business: 7 Lochside View, Edinburgh, EH12 9DH. Ofwat, the Water Services Regulation, is the regulator of the water sector in England and Wales. For more information visit ofwat.gov.uk. Unless otherwise agreed, Scottish Water Business Stream Ltd provides services to pay in accordance with our standard terms and conditions, a copy of which is available at business-stream.co.uk/yorkshire/useful-info. Copies are also available on request. Through your continued receipt and acceptance of our services, you are deemed to have accepted our standard terms and conditions.

Customer reference / Invoice number [REDACTED] Invoice / tax point date: 29 September 2023 Page: 2 of 3

Your charges in detail

Meter number / meter size: 4A022302 / 20mm

Water charges	Units	Rate	VAT	Charge
Fixed water charge				
Yearly fee	29 Jun 23 - 28 Sep 23	92 days	[REDACTED]	[REDACTED]
Volumetric water charge				
Actual reading	15 Sep 23	4626		
Estimated reading	29 Jun 23	3738		
+ volume used this period		888 m ³		
Estimated reading	29 Sep 23	4761		
Actual reading	15 Sep 23	4626		
+ volume used this period		135 m ³		
Charges	29 Jun 23 - 14 Sep 23	762.317 m ³	[REDACTED]	[REDACTED]
Charges	29 Jun 23 - 14 Sep 23	125.683 m ³	[REDACTED]	[REDACTED]
Charges	15 Sep 23 - 28 Sep 23	135 m ³	[REDACTED]	[REDACTED]
Total water charges				[REDACTED]
Subtotal				[REDACTED]
VAT				[REDACTED]
Total charges this period				[REDACTED]

This is a fee for the upkeep of external pipes and pumps that supply water to your premises.

This is a charge for the amount of water you've used, as recorded by your water meter. The rate you are charged is as varied based on your location and your water consumption. Find out more at business-stream.co.uk/yorkshire/useful-info

Most of our services are zero-rated (0) but some are standard rate (5) or outside scope (0). See business-stream.co.uk/vat

© Environmental Assessment Services Limited

May 2024 (Revised July 2024, August 2024, October 2024, May 2025, October 2025)

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business stream
A SCOTTISH WATER COMPANY



Clarbow Limited
FAO Accounts
Leonards Lee Gardens
Brighton Road
Horsham TH13 6PP
18007758
9990000076



business-stream.co.uk



0330 123 2000

For emergencies, please contact your
Water wholesaler: Southern Water
Visit business-stream.co.uk/emergencies

Customer reference / invoice no
[REDACTED]

Invoice / tax point date: 29 December 2023

Supply address: LEONARDSLEE ESTATE
LIMITED LEONARDSLEE HOUSE BRIGHTON
ROAD, LOWER BEEDING HORSHAM SW, RH13
6PP

Water supply point ID: [REDACTED]

Our VAT number: 945 8508 85

Page 1 of 3

Your water services invoice

29 September - 28 December 2023 (91 days, average [REDACTED] per day)

Your account summary

Your previous balance	[REDACTED]
Payments received	[REDACTED]
Your balance brought forward	[REDACTED]

Your charges this period (see page 2 for details)

Water services charges	[REDACTED]
VAT	[REDACTED]
Total charges this period	[REDACTED]

 We look forward to receiving your payment [REDACTED]

Ways to save

With a rise in the cost of living and energy rates higher than ever, we want to help you cut costs whenever we can. View our ways to save tips for help in reducing your water costs. Visit business-stream.co.uk/ways-to-save

Carbon consumption

Based on this period your annual carbon consumption is 1443.3kgCO₂e/yr, based on National Government statistics.

Ways to pay

Direct Debit Paying by Direct Debit is the quickest and easiest way to pay your bills. Visit business-stream.co.uk/direct-debit or call us on 0330 123 2000.	Online Visit business-stream.co.uk/pay online with your debit or credit card details.	By phone Call 0330 123 2000 to pay over the phone using your debit or credit card details.	By bank transfer Sort code: 30-00-03. Account number: 03029999. Account name: Business Stream Revenue Account. Please include this [REDACTED] when [REDACTED].	Payment slip Complete the enclosed payment slip and present it, with your invoice, to your bank branch or to a post office, to pay by cash, card or cheque. You may be charged for this service.
---	---	--	--	--

Alternatively, you can send a cheque, and the completed payment slip enclosed, to Business Stream, PO Box 10790, Edinburgh EH10 1GT. Cheques should be payable to 'Business Stream' and include your customer reference number on the back. Please don't send cash in the post and allow 10 days for payment to be processed. For more information, visit business-stream.co.uk/ways-to-pay

PO Box 17381, Edinburgh, EH12 1GT | business-stream.co.uk

Scottish Water Business Stream Limited trading as Business Stream. Registered in Scotland. Company no. SC294544. Registered office address and principal place of business: 25 Leithside Crescent, Edinburgh, EH13 9SE. Ofwat, the Water Services Regulation Authority, is the regulator of the water sector in England and Wales. For more information visit ofwat.gov.uk. Unless otherwise agreed, Scottish Water Business Stream Ltd provides services to you in accordance with our standard terms and conditions, a copy of which is available at business-stream.co.uk/terms. Copies are also available on request. Through your continued receipt and acceptance of our services, you are deemed to have accepted our standard terms and conditions.

Naturally different.

Customer reference / invoice number [REDACTED] Invoice / tax point date: 29 December 2023 Page: 2 of 3

Your charges in detail

Meter number / meter size: 4A022302 / 20mm

Water charges	Units	Rate	VAT	Charge
Fixed water charge				
Yearly fee	29 Sep 23 - 28 Dec 23	91 days	[REDACTED]	[REDACTED]
Volumetric water charge				
Estimated reading	29 Dec 23	5952		
Estimated reading	29 Sep 23	4761		
Volume used this period		1191 m ³		
Charges	29 Sep 23 - 28 Dec 23	1066.683 m ³		
Charges	29 Sep 23 - 28 Dec 23	124.117 m ³		
Total water charges				[REDACTED]
Subtotal				[REDACTED]
VAT				[REDACTED]
Total charges this period				[REDACTED]

This is a fee for the upkeep of essential pipes and pumps that supply water to your premises.

This is a charge for the amount of water you've used, as recorded by your water meter. The rate you are charged can vary based on your location and your water consumption. Find out more at business-stream.co.uk/yorkshire/watfab info

Most of our services are zero-rated (0) but some are standard rate (5) or outside scope (0%). See business-stream.co.uk/vat for more information.

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APPENDIX E:

**Estimated Visitor Numbers and Accommodation Occupancy from Leonardslee
Gardens and Part G Usage Calculations for Residential Accommodation**

		Estimated average users per day EXISTING	Estimated average users per day In 5 years	Notes
1	<i>Car Park (Which serves entrance café) thus captures total users.</i>	682	714	Average visitors per day based on annual figures, increased over the 5 year period
2	<i>Engine House Accessible WC</i>	-	30	Estimated usage
3	<i>Clocktower Café</i>	94	104	Existing and proposed use the same
4	<i>Potters Cottage</i>	4	4	Existing use as staff accommodation. Proposed use as Guest Accommodation
5	<i>Carriage Cottage</i>	0	2	Existing use as redundant office space. Proposed use as guest accommodation
6	<i>Honey Cottage</i>	4	4	Existing use as staff accommodation. Proposed use as Guest Accommodation
7	<i>Alpine Café / Former Generator block</i>	128.25	171	Existing use as café overspill with some outdoor seating, proposed use as events space. Existing use shared the stables toilets. Increase in users due to covered nature
8	<i>Red House</i>	15	2	Existing use as staff welfare, proposed use as staff accommodation

Potters Cottage - Existing

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)	13.00	4.42	0.00	57.46
WC (dual flush)	Full flush Volume (litres)		1.46	0.00	0
	Part flush Volume (litres)		2.96	0.00	0
WC (multiple fittings)	Average effective flushing Volume (litres)		4.42	0.00	0
Taps (excluding kitchen/utility room taps)	Flow rate (litres/min)	8.00	1.58	1.58	14.22
Bath (where shower also present)	Capacity to overflow(litres)		0.11	0.00	0
Shower (where bath also present)	Flow Rate(litres / minute)		4.37	0.00	0
Bath Only	Capacity to overflow(litres)		0.50	0.00	0
Shower Only	Flow Rate (litres/ minute)	19.00	5.60	0.00	106.40
Kitchen/Utility room sink taps	Flow rate (litres/ minute)	8.00	0.44	10.36	13.88
Washing Machine	(Litres/kg dry load)	8.17	2.1	0.00	17.16
Dishwasher	(Litres/place setting)	1.25	3.6	0.00	4.50
Waste disposal unit	(Litres/use)	<input type="checkbox"/> 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)			213.62
	(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)			194.39
	(10)	External water use			5.0
	(11)	Total water consumption (Building Regulation 17.K) =(9)+(10)(litres/person/day)			199.4

Installation Type	Make/Model (mandatory)	Litres/ Person/Day
WC (single flush)	Existing	57.46
Taps	Existing	14.22
Showers Only	Existing	106.40
Kitchen Taps	Existing	13.88
Washing Machines	Existing	17.16
Dishwasher	Existing	4.50



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Pottage Cottage - Proposed

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)	5.00	1.58	1.58	9.48
Bath (where shower also present)	Capacity to overflow(litres)		0.11	0.00	0
Shower (where bath also present)	Flow Rate(litres / minute)		4.37	0.00	0
Bath Only	Capacity to overflow(litres)		0.50	0.00	0
Shower Only	Flow Rate (litres/ minute)	8.00	5.60	0.00	44.80
Kitchen/Utility room sink taps	Flow rate (litres/ minute)	6.00	0.44	10.36	13.00
Washing Machine	(Litres/kg dry load)	8.17	2.1	0.00	17.16
Dishwasher	(Litres/place setting)	1.25	3.6	0.00	4.50
Waste disposal unit	(Litres/use)	<input type="checkbox"/> 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)			102.48
	(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)			93.26
	(10)	External water use			5.0
	(11)	Total water consumption (Building Regulation 17.K) =(9)+(10)(litres/person/day)			98.3

Installation Type	Make/Model (mandatory)	Litres/ Person/Day
WC (dual flush)	Proposed	13.54
Taps	Proposed	9.48
Showers Only	Proposed	44.80
Kitchen Taps	Proposed	13.00
Washing Machines	Proposed	17.16
Dishwasher	Proposed	4.50



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Carriage Cottage - Proposed

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)	5.00	1.58	1.58	9.48
Bath (where shower also present)	Capacity to overflow(litres)	170.00	0.11	0.00	18.70
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)		2.1	0.00	0
Dishwasher	(Litres/place setting)	1.25	3.6	0.00	4.50
Waste disposal unit	(Litres/use)	<input type="checkbox"/> 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)			94.18
	(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)			85.70
	(10)	External water use			5.0
	(11)	Total water consumption (Building Regulation 17.K) =(9)+(10)(litres/person/day)			90.70

Installation Type	Make/Model (mandatory)	Litres/ Person/Day
WC (dual flush)	Proposed	13.54
Taps	Proposed	9.48
Baths (shower(s) present)	Proposed	18.70
Showers (bath(s) present)	Proposed	34.96
Kitchen Taps	Proposed	13.00
Dishwasher	Proposed	4.50



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Honey Cottage - Existing

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)	13.00	4.42	0.00	57.46
WC (dual flush)	Full flush Volume (litres)		1.46	0.00	0
	Part flush Volume (litres)		2.96	0.00	0
WC (multiple fittings)	Average effective flushing Volume (litres)		4.42	0.00	0
Taps (excluding kitchen/utility room taps)	Flow rate (litres/min)	8.00	1.58	1.58	14.22
Bath (where shower also present)	Capacity to overflow(litres)		0.11	0.00	0
Shower (where bath also present)	Flow Rate(litres / minute)		4.37	0.00	0
Bath Only	Capacity to overflow(litres)	170.00	0.50	0.00	85.00
Shower Only	Flow Rate (litres/ minute)		5.60	0.00	0
Kitchen/Utility room sink taps	Flow rate (litres/ minute)	8.00	0.44	10.36	13.88
Washing Machine	(Litres/kg dry load)	8.17	2.1	0.00	17.16
Dishwasher	(Litres/place setting)	1.25	3.6	0.00	4.50
Waste disposal unit	(Litres/use)	<input type="checkbox"/> 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)			192.22
	(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)			174.92
	(10)	External water use			5.0
	(11)	Total water consumption (Building Regulation 17.K) =(9)+(10)(litres/person/day)			179.9

Installation Type	Make/Model (mandatory)	Litres/ Person/Day
WC (single flush)	Existing	57.46
Taps	Existing	14.22
Bath Only	Existing	85.00
Kitchen Taps	Existing	13.88
Washing Machines	Existing	17.16
Dishwasher	Existing	4.50



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Honey Cottage - Proposed

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)	5.00	1.58	1.58	9.48
Bath (where shower also present)	Capacity to overflow(litres)		0.11	0.00	0
Shower (where bath also present)	Flow Rate(litres / minute)		4.37	0.00	0
Bath Only	Capacity to overflow(litres)		0.50	0.00	0
Shower Only	Flow Rate (litres/ minute)	8.00	5.60	0.00	44.80
Kitchen/Utility room sink taps	Flow rate (litres/ minute)	6.00	0.44	10.36	13.00
Washing Machine	(Litres/kg dry load)	8.17	2.1	0.00	17.16
Dishwasher	(Litres/place setting)	1.25	3.6	0.00	4.50
Waste disposal unit	(Litres/use)	<input type="checkbox"/> 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)			102.48
	(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)			93.26
	(10)	External water use			5.0
	(11)	Total water consumption (Building Regulation 17.K) = (9)+(10)(litres/person/day)			98.3

Installation Type	Make/Model (mandatory)	Litres/Person/Day
WC (dual flush)	Proposed	13.54
Taps	Proposed	9.48
Showers Only	Proposed	44.80
Kitchen Taps	Proposed	13.00
Washing Machines	Proposed	17.16
Dishwasher	Proposed	4.50



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Red House - Existing

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)	13.00	4.42	0.00	57.46
WC (dual flush)	Full flush Volume (litres)		1.46	0.00	0
	Part flush Volume (litres)		2.96	0.00	0
WC (multiple fittings)	Average effective flushing Volume (litres)		4.42	0.00	0
Taps (excluding kitchen/utility room taps)	Flow rate (litres/min)	8.00	1.58	1.58	14.22
Bath (where shower also present)	Capacity to overflow(litres)		0.11	0.00	0
Shower (where bath also present)	Flow Rate(litres / minute)		4.37	0.00	0
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)	8.00	0.44	10.36	13.88
Washing Machine	(Litres/kg dry load)		2.1	0.00	0
Dishwasher	(Litres/place setting)	1.25	3.6	0.00	4.50
Waste disposal unit	(Litres/use)	<input type="checkbox"/> 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)			90.06
	(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)			81.95
	(10)	External water use			5.0
	(11)	Total water consumption (Building Regulation 17.K) =(9)+(10)(litres/person/day)			86.95

Installation Type	Make/Model (mandatory)	Litres/ Person/Day
WC (single flush)	Existing	57.46
Taps	Existing	14.22
Kitchen Taps	Existing	13.88
Dishwasher	Existing	4.50



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Red House - Proposed

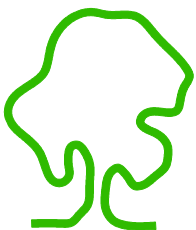
Installation Type	Unit of Measure	Capacity/Flow rate (1)	Use Factor (2)	Fixed use (litres/ person/day) (3)	Litres/person/ day = [(1)x(2)] + (3) (4)
WC (single flush)	Flush Volume (litres)		4.42	0.00	0
WC (dual flush)	Full flush Volume (litres)	4	1.46	0.00	5.84
	Part flush Volume (litres)	2.6	2.96	0.00	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)	5.00	1.58	1.58	9.48
Bath (where shower also present)	Capacity to overflow(litres)		0.11	0.00	0
Shower (where bath also present)	Flow Rate(litres / minute)		4.37	0.00	0
Bath Only	Capacity to overflow(litres)		0.50	0.00	0
Shower Only	Flow Rate (litres/ minute)	8.00	5.60	0.00	44.80
Kitchen/Utility room sink taps	Flow rate (litres/ minute)	6.00	0.44	10.36	13.00
Washing Machine	(Litres/kg dry load)	8.17	2.1	0.00	17.16
Dishwasher	(Litres/place setting)	1.25	3.6	0.00	4.50
Waste disposal unit	(Litres/use)	<input type="checkbox"/> 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)			102.48
	(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)			93.26
	(10)	External water use			5.0
	(11)	Total water consumption (Building Regulation 17.K) =(9)+(10)(litres/person/day)			98.3

Installation Type	Make/Model (mandatory)	Litres/ Person/Day
WC (dual flush)	Proposed	13.54
Taps	Proposed	9.48
Showers Only	Proposed	44.80
Kitchen Taps	Proposed	13.00
Washing Machines	Proposed	17.16
Dishwasher	Proposed	4.50



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