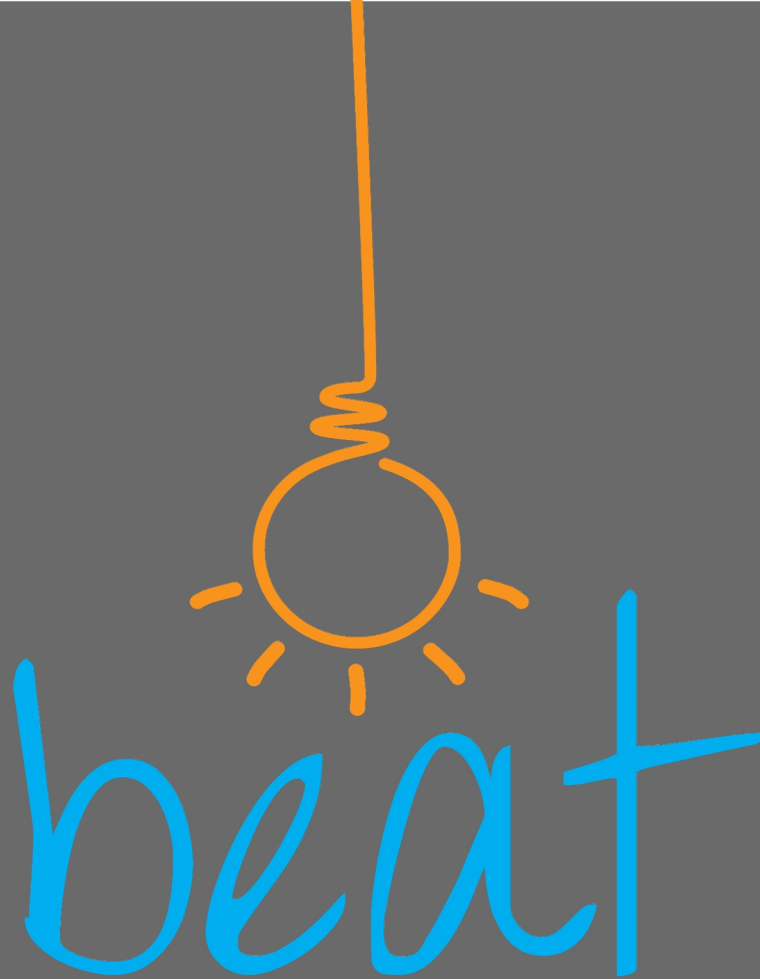




Your sustainable partner

**POST-PLANNING (SIMPLE CALC)
WATER EFFICIENCY
CALCULATION REPORT**

FOR

COAST ARCHITECTURE

AT

**PLOT 1
242 LEIGH ROAD
CHANDLERS FORD
EASTLEIGH
SO53 3AW**

1. Executive Summary

This report has been produced by BEAT Solutions Ltd on 10th July 2023 for Coast Architecture to demonstrate for planning purposes that the predicted water usage for the dwelling will be 109.7 litres/person/day.

2. Introduction

BEAT Solutions have been instructed to calculate the predicted water usage for the dwelling using maximum flow rates and capacities detailed within this report. This report has been produced by Sophie Pinnick

The methodology used to calculate the water usage is the national approved BRE water efficiency calculation procedure.

A copy of this report should be submitted to the Local Planning Authority for conditional approval.

3. Predicted Water Fittings Specification

Coast Architecture hasn't completed a schedule to confirm the water usage fixtures and fittings. Therefore this calculation is based on an assumed water usage target for each of the fitting types.

4. Compliance Summary

BEAT Solutions Ltd hasn't received sufficient information from the client to enable the internal water usage to be calculated. Therefore this calculation is based on an assumed water usage target for each of the fitting types. The schedule below confirms these target figures would achieve the following:-

Plot Type:	Detached House
Targeted Water Usage:	110.0 litres/person/day
Predicted Water Usage:	109.7 litres/person/day
Building Reg Compliant:	Yes
Planning Requirement:	110.0 litres/person/day
Planning Compliant:	Yes

PREDICTED SCHEDULE OF WATER FIXTURES & FITTINGS

Plot / Address	Plot 1, 242 Leigh Road, Chenders Ford, Eastleigh, SO53 3AW,				Our Reference	WAT-0541/PLOT 1	
No. of Bedrooms	4	Plot/House No.	Plot 1	Plot Type	Detached House	Occupancy rate for Calculation Purposes	5
Basin Taps		Flow Rate	Quantity				
Fitting Type		Litres/Min	(No.)				
Flow Rate Not to Exceed (5l/min)		5.00	4				
Total No. of Fittings (No.)			4				
Total Flow (l/m)			20.00				
Maximum Flow (l/m)			5.00				
Average Flow (l/m)			5.00				
Weighted Average Flow (l/m)			3.50				
Flow for Calculation (l/m)			5.00				
Bath		Capacity to	Quantity				
Type		Overflow	(No.)				
Capacity Not to Exceed (190L)		190.00	1				
Total No. of Fittings (No.)			1				
Total Capacity (l)			190.00				
Maximum Capacity (l)			190.00				
Average Capacity (l)			190.00				
Weighted Average Capacity (l)			133.00				
Capacity for Calculation (l)			190.00				
Dishwasher		L per Place	Quantity				
Type		Setting	(No.)				
l/p/s							
Total No. of Fittings (No.)			0				
Total Consumption (l)			1.25				
Maximum Consumption (l)			1.25				
Average Consumption (l/m)			1.25				
Weighted Average Consumption (l)			0.88				
Consumption for Calculation (l/m)			1.25				
Kitchen & Utility Taps		Flow Rate	Quantity				
Type		Litres/Min	(No.)				
Flow Rate Not to Exceed (10l/min)		10.00	2				
Total No. of Fittings (No.)			2				
Total Flow (l/m)			20.00				
Maximum Flow (l/m)			10.00				
Average Flow (l/m)			10.00				
Weighted Average Flow (l/m)			7.00				
Flow for Calculation (l/m)			10.00				
Showers		Flow Rate	Quantity				
Fitting Type		Litres/Min	(No.)				
Flow Rate Not to Exceed (7l/min)		7.00	3				
Total No. of Fittings (No.)			3				
Total Flow (l/m)			21.00				
Maximum Flow (l/m)			7.00				
Average Flow (l/m)			7.00				
Weighted Average Flow (l/m)			4.90				
Flow for Calculation (l/m)			7.00				
W/C		Full Flush	Part Flush				
Type		Volume	Volume	Quantity (No)			
Flow Rate Not to Exceed (6/3)		6.00	3.00	4			
Total number of fittings				4			
Average effective flushing volume				3.99			
Washing Machine		L per Kg	Quantity				
Type		Dry Load	(No.)				
(l/kg)							
Total No. of Fittings (No.)			0				
Total Consumption (l)			8.17				
Maximum Consumption (l)			8.17				
Average Consumption (l/m)			8.17				
Weighted Average Consumption (l)			5.72				
Consumption for Calculation (l/m)			8.17				
Waste Disposal Y/N			N				
Water Softner							
Consumption beyond 4% l/p/d							
Grey water and harvested rainwater							
Total Grey water from WHB taps (l)							
Total Available Grey Water Supply (l)					257.45		
Possible Demand (l)					173.96		
Grey/Rain Installed Capacity (l)							
Figure for Calculation lit/person/day					0.00		

PREDICTED WATER EFFICIENCY CALCULATION

Water Use Assessment

Installation Type	Unit	Capacity/ Flow Rate	Use Factor	Fixed use (l/p/day)	Total Use (l/p/day)
WC Single Flush	Volume (l)	0.00	4.42	0.00	0.00
WC Dual Flush	Full Flush (l)	0.00	1.46	0.00	0.00
	Pt Flush (l)	0.00	2.96	0.00	0.00
WC's (Multiple)	Volume (l)	3.99	4.42	0.00	17.64
Taps Exc. Kitchen	Flow Rate	5.00	1.58	1.58	9.48
Bath (shower present)	(l/s)	190.00	0.11	0.00	20.90
Shower (bath present)	(l/s)	7.00	4.37	0.00	30.59
Bath Only	(l)	0.00	0.50	0.00	0.00
Shower Only	(l/s)	0.00	5.60	0.00	0.00
Kitchen Taps	(l/s)	10.00	0.44	10.36	14.76
Washing Machines	(l/kgdry)	8.17	2.10	0.00	17.16
Dishwashers	(l/place)	1.25	3.60	0.00	4.50
Waste Disposal	(l/s)	0.00	3.08	0.00	0.00
Water Softner	(l/s)	0.00	1.00	0.00	0.00
Total Calculated Water Use (l/p/day)					115.0
Grey/RainWater Reused (l)					0.0
Normalisation Factor					0.91
Total Consumption CSH (l/p/day)					104.7
External Water Use Allowance (l)					5.0
Total Consumption Part G (l/p/day)					109.7
Assesment Result					PASS

<< Note - these are default values.

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