



Project Title: Canford EFW Facility
Calculations Title: Proposed Foul Flow Estimate

Sheet No: 2 of 2 Project No: WIE18671
 By: S Whelan Date: 02/08/2022
 Checked: B McCarthy Date: 02/08/2022

	Dry Weather Flow Rate (per day)	Source	Number of	Factor	Profile (hours)	Peak Flow Rate (litres/second)
Residential				2.12	24	
Existing property = 160 litres/person/day	400.0 litres per unit	Thames Water Guidelines (2016)	0 existing units			0.0
New property = 125 litres/person/day	312.5 litres per unit	Thames Water Guidelines (2016)	0 proposed units			0.0
Occupancy = 2.5 persons						
Hotel	500.0 litres per room	British Water (2013)	0 rooms		3	24
Student Accommodation	200.0 litres per bed	Thames Water Guidelines (2016)	0 beds		3	24
Offices	750.0 litres per 100m ²	Jones (1992)	0 m ²		3	10
Retail	400.0 litres per 100m ²	Jones (1992)	0 m ²		3	12
Cinema	10.0 litres per seat	Jones (1992)	0 seats*		3	8
Health Club/Sports Centre	50.0 litres per customer	British Water (2013)	0 customers**		3	16
Day School	90.0 litres per pupil	British Water (2013)	0 pupils		3	10
Boarding School	175.0 litres per pupil	British Water (2013)	0 pupils		3	24
Hospital	625.0 litres per bed	Jones (1992)	0 beds		3	24
Nursing Home	350.0 litres per bed	British Water (2013)	0 beds		3	24
Restaurant	30.0 litres per cover	British Water (2013)	0 covers		3	8
Pub/Club	15.0 litres per customer	Butler and Davies (2004)	0 customers***		3	12
Warehouse	150.0 litres per 100m ²	Jones (1992)	0 m ²		3	12
Manufacturing	550.0 litres per 100m ²	Jones (1992)	9135 m ²		3	12
Commercial	300.0 litres per 100m ²	Jones (1992)	0 m ²		3	12
SUB TOTAL						3.5
Infiltration percentage	10%					0.3
TOTAL						3.8

* Foul flow rate needs to be calculated based on number of seats. An allowance of 4m² has been made for each seat.

Floor area = 1606 m² 4 m² per person

** Foul flow rate needs to be calculated based on number of customers. An allowance of 4m² has been made for each customer.

Floor area = 0 m² 4 m² per person

*** Foul flow rate needs to be calculated based on number of customers. An allowance of 4m² has been made for each customer.

Floor area = 0 m² 4 m² per person