

	Project			Job Ref.	
	48 Alexandra Rd, Wrexham			22044	
	Section			Sheet no./rev.	
	Foul Calculations - Proposed			1	
		Calc. by	Date	App'd by	Date
		LG	June '22	AV	June '22

The proposal involves the following :

- Conversion of existing apartment (previously used as a HMO) to a supported living accommodations.

The following design calculations apply to the **proposed** foul discharge only.

Calculations are compiled in accordance with BS EN 12056 PT2 and assume that the property will contain the following:

5 × 1 Bed 2 Person Apartment

1 × Wash Hand Basin	= 1 × 0.3 = 0.3
1 × WC with 6L Cistern	= 1 × 1.8 = 1.8
1 × Kitchen Sink	= 1 × 0.6 = 0.6
1 × Washing Machine (<6kg)	= 1 × 0.6 = 0.6
1 × Shower without plug	= 1 × 0.4 = 0.4
Total Flow	= 3.7 L/S
Total Flow For Apartments Combined	= 5 × 3.7 = 18.5 L/S

1 × Second Floor Apartment

1 × Wash Hand Basin	= 1 × 0.3 = 0.3
1 × WC with 6L Cistern	= 1 × 1.8 = 1.8
Total Flow	= 2.1 L/S

$$Du = 18.5 + 2.1 = 20.6 \text{ L/S}$$

$$\text{Frequency Factor} = 0.5$$

$$\text{Wastewater Flow Rate (Total)} = 0.5\sqrt{20.6} = 2.27 \text{ L/S}$$

Capacity of Pipework

$$100\text{mm @ } 1:80 = 5.7 \text{ L/S}$$

$$150\text{mm @ } 1:120 = 14.25 \text{ L/S}$$

$$150\text{mm @ } 1:150 = 12.92 \text{ L/S}$$