

KANE DESIGN

Civil Engineering Design Services

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CESS TANK DESIGN

Project

**BETTISFIELD
WHITCHURCH**

Scheme number

1549

DATE

24 December 2021

BY

AK

Sheet 1 of 1

checked

NOTES

1 DESCRIPTION:

Foul drainage from 4 proposed residential properties to drain to a cess tank

2 REFERENCES

Reference 1: B. Regs: Building Regulations (2008 Part H: Item 1.61

Reference 2: PPG4: Environment Agency PPG 4 (2006)

Treatment of Sewerage where no foul sewer is available"

Reference 3: BWB: British Waterways Flows and Loads - 4

3 PROPOSED FLOW

From B. Regs (2015) 1.61: "Cess pools should have a capacity below the invert of at least 18000 litres for two people, increasing by 6800 litres for each additional user.

Peak flows:

From PPG4: Domestic flows allow 200 litres/person / day

From BWB: Residential flows allow 150 litres/person / day

Per dwelling: All houses are 5 bedroom

BWB item 5:

Allow 6 persons for a 4 bedroom house, allow 8 persons for 6 bedroom house"

- therefore, in this case, allow 7 persons

7 persons: = $7 \times 200 =$ 1400 litres / day

For 3 persons B. Regs require $18000 + 5 \times 6800 =$ 35800 Litres

Therefore emptying (assuming peak discharge) = 25.57 Days

say, 3.6 weeks

4 SIZING

Size for 35800 Litres

Use "PremierTech Alpha Ltd" Cesspool tank CP36 GRP tank

= 7.784 X 3500 X 2500 mm diameter 36,000 litres capacity

B. Reg: 1.59/ 160: To be located 7m from any habitable building and not more than 30m from the access road