

Topological data for proposed drainage scheme

Heights (m) taken from Google Earth

S***d 15m
Cricket Club 25m
Field on right of road to S*** opposite bungalows 30m
Next to churchyard 32m
First proposed site 25m
Second proposed site 25m
Third proposed site 26m

These heights will be checked with a Garmin device

Straight line distance from centre of B to S 2000m

If a 1% gradient is required for gravity flow a head of 2000/100 is needed in B*** (20m)

Measured head:

B*** centre 10m 0.5%

At church or field 17m 0.85%

Research suggests that a 110:1 0.91% gradient is regarded as a workable minimum for large pipes. Church height gives 0.85% so gravity probably not possible even if pipe depth is gradually increased towards S***.

However it is surely possible to have a pump half-way to S*** to raise the level of the water and provide an adequate head. This could be sited almost anywhere unobtrusive that has a nearby electricity supply.

Summary

1 Head is inadequate for a single gravity (un-pumped) pipe run to S***

2 An intermediate pump should be investigated allowing a pump-less gravity run from B* to be raised for a further gravity run to S*****

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