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A to Z of Church Maintenance

Sewage Solutions

ENVIRONMENTALLY FRIENDLY SEWAGE SOLUTIONS FOR RURAL CHURCHES

"We've got on for a thousand years without one" is becoming a threadbare argument against the cost and disruption of installing a loo in or near a church. Men and boys can go behind a tree, but women can't be expected to, nor can a wheelchair user for that matter. Besides, we could have said the same about electric lighting, organ blowers or fire extinguishers.

The problems of providing loos for churches - particularly rural churches - are several:

- It is almost exclusively "pee not poo" so biological solutions may not work.
- Archaeology will loom large, and excavation must be kept to a minimum.
- Increasingly elderly congregations need something, but ...
- on the other hand people are not prepared to accept "bucket and chuck it" solutions. We want a proper porcelain pedestal, with a proper flush and the waste disappearing accordingly.

A potential solution to these problems may be seen at the church of Abberley in the Worcester diocese. This was an ingenious arrangement involving a separator (an hourglass-shaped "wall of death") and a GRP canister containing a colony of special worms.

The Abberley solution depended on siting considerations - the works is below the floor level of the church, and the fluids then pass out through an existing drain. The disgruntled parties are the worms, who are not getting enough nutrient to work on, for the reason already touched on.

Forget reedbed solutions: these will require a great deal of space and disruption in a churchyard, and, again, the lack of manure will rapidly reduce the army of bacteria to a "skeleton staff".

"Trench Arch" is the name of the solution which may well be the best for church work. It involves shallow excavation, and relies on the willing help of earthworms for disposal of the very few solids involved. Provided that vehicles do not need to move over the trench, it can use as little as 300 mm cover, so is far less disruptive than a sealed cesspool or a septic tank. Unlike both of those solutions, it requires no emptying or tankers, and is easily maintained. A further refinement would be to fit the loo with a water saving dual flush cistern, using only two litres for a short flush.

There is no reason why rainwater should not be collected and filtered for flushing and hand washing. This offers an independent and low cost option for the church that needs a loo and running water, but is prepared to continue importing drinking water for tea urns (or alternatively use an existing churchyard standpipe if there is one).

DACs and the CCC are following these developments with great interest as a means of cutting down the capital and archaeological costs of bringing loos into churches.

This brief guidance note is based on a paper given by Mark Moodie at a recent Gloucester DAC Architect's day. Mark is co-author of a book entitled *Sewage Solutions: Answering the call of nature* published by the Centre for Alternative Technology, Machynlleth, Powys SY20 9AZ, ISBN 1-898-04913-0.

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