

# PLOTS WITH NO MAINS SERVICES

This fact sheet has been put together to equip you with knowledge of how to cope with no mains service, and the alternatives available.

## KEY POINTS:

1. Although a plot may have no mains electricity, this does not affect it's desirability
2. Lack of water mains on a plot can be easily solved through use of a borehole
3. Geothermal sources are becoming increasingly popular
4. Cheap alternatives are available if a plot has no access to a mains sewer

## ELECTRICITY:

At first sight, a plot without the benefit of mains electricity may seem a hopeless case, however the fact of the matter is that many sites which qualify for planning permission, but have no mains electricity, can be the most sought after. There are many solutions that exist which can help resolve these situations:

- Generators can be housed in an outhouse with back up batteries that sense when a switch is turned on and start up the machinery. They are not cheap to buy, and they do obviously cost to run, but if they are a means to an end then they are certainly worthy of consideration, especially if used in conjunction with other generating methods.
- Much is being made of the use of renewables such as solar power, wind and water power and there are various grants towards the cost of installation. Solar panels on the roof can, at peak times of the year, provide up to 40% of the hot water requirements for a home. There are grants available of up to £400 on the British mainland, with an additional £500 available for those building in Northern Ireland.
- Photovoltaic cells, which convert sunlight into electricity, can provide most, if not all of the daytime electricity requirements for a home, especially when combined with batteries. Grants towards the installation costs can be in the region of between 40% and 50%. Wind and water power can also be harnessed, and once again there are grants of between £1000 and £5000 with further top ups in Northern Ireland of £200 for wind power, and £1000 for hydro schemes.

In all these cases the original capital costs need to be amortised and set against the possible savings. But if there is no power available, then their provision becomes a necessity and, therefore, an indisputable component of the cost of developing the home.

## WATER:

Not having mains water on site may, at first, seem an intractable problem. But in close to 90% of the British Isles, a borehole will not only work but will provide potable water with little or no need for filtering. A borehole will cost anywhere between £5000 and £20,000 depending on the water table and the ground conditions; a sum that whilst it can seem enormous, may be dwarfed by the cost of bringing in a mains supply. If treatment is needed in order to satisfy the requirements of the local authority Environmental Health department, then this can be done by chemical, filtration or ultra violet methods (there are companies offering this type of service in the Yellow Pages). Rainwater can also be harvested in order to save on water, but if it is used as drinking water it may need simple filtration.

## GAS:

Not having gas on site may seem like a disaster to town dwellers, but the fact of the matter is that most rural sites do not have access to this fuel source. Oil or liquid petroleum gas (LPG) are the most common alternative fuel sources, but geothermal sources, using a heat pump to extract the latent heat from the ground or a water source, are gaining in popularity.

## SEWERS:

Not having access to a mains sewer can actually prove to be quite beneficial on many plots as the cost of opening up and connecting to a sewer in the road can be considerably greater than the alternatives. The cheapest 'alternative' solution is a septic tank where the effluent runs into a series of chambers where it is settled out and the actions of anaerobic bacteria are allowed to break it down into a non sterile outflow, which is then discharged into the subsoil. These are the fibre glass bottle shaped vessels that are so common.

The costs of the installed system will vary from between £1000 and £1500 for a single dwelling with acceptable subsoil. If the subsoil will not take the final effluent, then there are bolt on alternatives such as filtration beds, reed beds and surface disposal. The only disadvantage of these is that they do increase the cost, and may not be acceptable to the Environment Agency. The solution may be to use a mini treatment plant, where the effluent is alternatively exposed to anaerobic and aerobic bacteria by the mechanical means, and then the eventual semi-sterile discharge can be sent to a watercourse, ditch or filtration bed. The costs of such a system would be around £4500 for a single house.

The third alternative, and one that is the least popular with the public, is the use of a cesspool. This is simply a holding tank that stores the effluent until such time as it is pumped out and taken away. These can be expensive to install at around £5000. There are many hybrids between these basic solutions; all need emptying from time to time, but the good news is that there is a saving on sewage rates.