



## Method Statement BRE 365 Soakage Test

This test is used to determine the infiltration rate of the soil in accordance with the BRE365 Standard. It is carried out in a machine excavated pit 0.3-1.0m wide, 1-3m long and of the same depth as anticipated in the final soakaway. The pit is filled and allowed to drain to empty or near empty, three times, on the same day or on consecutive days.

Each proposed location must be carefully checked for services using the CAT and Genny system before excavation of a test pit. Excavator drivers should be certified as competent and hold a valid CPCS card.

When the pit has been excavated to the required depth and dimensions, the sides will be trimmed vertical and square. If the pit sides are not stable, then it will be backfilled with granular material (gravel) with a temporary perforated vertical monitoring pipe placed in the pit at one end, from the base of the pit to ground level.

The gravel is usually delivered to site in advance in 1 tonne sacks, which are moved using the excavator. The pit will be filled with water to its maximum effective depth (i.e the depth below the lowest proposed invert) quickly, using a bowser or direct from a hydrant (where permission has been granted).

The levels of water are recorded with time in accordance with the specifications, which usually call for the pit to be left until it is empty, which may require it to be left unattended for a period of time (sometimes over night).

If the holes are left open or unattended for any time, appropriate fencing and warning signs are to be erected.

On completion of the tests in open pits, any remaining water in the pit will be pumped out, usually into the bowser for subsequent discharge. The pit will then be backfilled with the excavated material (unless specified otherwise) left mounded slightly to accommodate any further settlement, and the investigation site left tidy.

### Risk Scoring and Assessment

Health, Safety and Environmental Risk is measured using a 5 x 5 matrix to obtain a result that, after control measures have been applied is scored as: Low (Proceed with care), Medium (If no alternative, proceed with care), High (Do not proceed, seek alternative).

		Severity					
		1	2	3	4	5	
		No Injury or Impact	Minor Injury or Impact	Reportable Injury or Impact	Serious Injury or Impact	Fatality, Disability or Major Impact	
<b>Likelihood</b>	Unlikely or Rare	1	1 LOW	2 LOW	3 LOW	4 LOW	5 LOW
	Remote possibility	2	2 LOW	4 LOW	6 LOW	8 MED	10 MED
	Possibly occur	3	3 LOW	6 LOW	9 MED	12 MED	15 MED
	Probably occur	4	4 LOW	8 LOW	12 MED	16 HIGH	20 HIGH
	Certain to occur	5	5 LOW	10 MED	15 HIGH	20 HIGH	25 HIGH

  

Hazard/Risk	Type	Affected	Control Measures	Score	Residual Risk
Excavating equipment	H&S	Oprs	Trained and competent operators only.	2 x 3	Low
Contact with underground or overhead services	H&S	Oprs	Review positions with reference to utility plans and maintain safe distances. CAT scan each position prior to breaking ground.	1 x 5	Low
Pit collapse	H&S	Oprs	Supervise excavation only from end of pit. Stack material away from the excavation at a distance equivalent to its depth. Monitor stability at all times and batter sides if required	3 x 4	Med
Slips, Trips & Falls	H&S	Oprs	Keep working area clear. Do not stand close to pit sides. Fence and secure pit whenever unattended.	2 x 3	Low
Lifting bags of granular material	H&S	Oprs	Bags to be lifted by excavating machine. Once over the pit, the material is released by carefully cutting the bottom of the bag with a hand saw.	2 x 4	Med
Using a standpipe in a public area/road	H&S	Oprs Others	Park appropriately and with regard to traffic. Use warning signs where needed. Ensure hoses do not present a trip hazard to pedestrians or endanger traffic.	1 x 4	Low
Positioning bowser on site	H&S	Oprs	Ensure level and firm ground, close to borehole. Use banksman and take care whenever reversing	2 x 3	Low
Leaks and Spills	Env	Env	Maintenance of equipment and pumps. Check all hoses before use. Oil spill kits carried and available	1 x 2	Low