

3. Drainage

Method of works

Method of works to be followed when installing new drainage system underground on private property.

- Refer to CPP and PCI to establish where and what works will be carried out
- Ensure site is set up correctly with correct guarding and signage in place in accordance with the CPP
- Ensure there are no underground services present, refer to *Cat and Genny Procedure* along with utility providers drawings if present
- If a layer of stone, concrete or tarmac needs to be cut, refer to *Rotary Disc Cutter* and *Excavations*
- Dig the area
 - Machine Dig refer to *Excavations*
 - Dig the area to a depth accounting for the fall of the pipework, and/or inspection chamber and anything else being installed as per works, accounting for backfill of sand, pea-gravel and or spoil
- Install the drainage system as per manufactures instructions
 - Ensure correct fall of pipework using spirit level
 - If installing a chamber, use a spirit level to ensure cover is level with surrounding groundwork after backfill-this also applies if rodding points are being installed
 - If adhesives are used, follow all COSHH data sheets and ensure all PPE is work as per these instructions
 - Test the system, ensuring that the pipework is fully supported to prevent damage
- Ensure all covers are fitted, backfill the area using sand, pea-gravel or the spoil if fine soft soil ensuring the pipe work is fully covered
- Backfill with remaining spoil
- Compact spoil using hand tamp or Whacker plate/trench compactor-*Refer to HAVS*. If a layer of concrete or tarmac is to be used for the upper layer, mix as per manufacturer's instructions following all COSHH assessments and finish as per PCI/required finish
- Clean and sweep the area, disposing of any remaining spoil or rubble via site skips or as per CPP waste management plan

See additional docs

Permit to dig
 Cat and Genny procedure
 Excavations
 COSHH assessments
 HAVS procedure
 Rotary Disc cutter

Risk Assessment

| Hazard | Control Measures |
|------------------------|--|
| Falls from Height | Refer to <i>Working At Height</i> Extra care must be given around excavation considering uneven ground and loose spoil and additional trip hazards. Extra consideration must be given to the prevention of falls from MOP/tenants/building occupiers and guarding must be readily available before the dig commences |
| Chemicals | Refer to COSHH assessments and ensure additional PPE is worn if required. |
| Underground Services | Refer to site specific RAMS, Permit to dig and CAT and Genny Procedure |
| Weather | Sun: Advice will be taken from the H&S team when working outside and refer to TBT and contract managers advice Rain: Consider what actions will be taken in the event of excavation being filled with water and if there are any environmental implications with silt run off from the spoil |
| Falling objects | Ensure there is adequate distance between the excavation and the spoil to prevent objects falling back in on exposed services or personnel |
| Slips, trips and falls | Only persons working in the area will have access to the pipework in the ground. The pipework will not be used as a step |
| Manual Handling | Care will be taken when bending down in the excavation, fitting pipework. Bending using the knees and not the lower back |
| Respirable dust | Refer to RDC procedure, ensuring all dust is dampened down if floor cutting is be carried out |

PPE

